

### EXPLANATORY PLAN NOTES AND KEY

**A.** Subgrade preparation for road widening on both sides of Telegraph Bay road intrudes into the root zones of protected trees. It is recommended that the road not be widened in order to avoid significant impacts to the root systems of the affected trees. Failing this, efforts should be made to design the new road to bridge over the top of the tree root horizon and construct it using low-impact best practices under the supervision of the project arborist. Best practices include exploratory work to confirm sub-surface root elevations to inform design, supervised subgrade excavation, hydro-excavation where required by the project arborist, retain and augment existing roadbase.

**B.** Proposed Curb & Gutter Recommended for deletion adjacent to tree root zones by project arborist (see Aug 16th 2023 letter-report)

**C.** New hydrant and water connection shall be hydro-excavated under the supervision of the project arborist.

**D.** Off-site servicing works shall supervised by the project arborist. Low-impact best practices shall be employed to minimize root impacts to adjacent trees and large shrubs, including use of rubber-tracked mini-excavator, soil armoring and root pruning.

**E.** Servicing works shall supervised by the project arborist. Low-impact best practices shall be employed to minimize root impacts to adjacent trees.

**F.** Tree stumps located within the PRZ of protected trees shall be routed out with a stump chipper.

**G.** The drain service through this easement shall be excavated under the direct supervision of the project arborist. Low-impact best practices shall be employed to minimize root impacts to adjacent trees including use of rubber-tracked mini-excavator, hand-digging, hydro-excavation, soil armoring and root pruning. (See June 27th, 2023 Work Plan Report.)

CATEGORY	# OF TREES
On-site Bylaw-Protected Trees	78
Boundary Bylaw-Protected Tree	1
On-site Unprotected Trees	12
Municipal Boulevard Trees	9
Adjacent Off-site Trees (excluding easement trees)	23
Easement Trees	14
<b>Total trees indicated on Tree Management Plan:</b>	<b>137</b>

ANTICIPATED BUILD-OUT TREE PHASE STATISTICS	
Section 19 a) wildlife tree conversion	1
Section 19 h) removals	27
Unprotected tree removals	1
<b>TOTAL TREE REMOVALS ANTICIPATED FOR BUILD-OUT PHASE:</b>	<b>29</b>
Anticipated tree-by-law replacements required	55
Tree replacements proposed	27
Replacement trees to be provided cash-in-lieu	28
<b>TOTAL MITIGATION PROPOSED:</b>	<b>55</b>
Minimum tree replacement to satisfy Urban Forest Policy (including 2021 Section 19 a) removals:	29
<b>Net Surplus/(Deficit):</b>	<b>26</b>
Additional replacement trees required to satisfy UFS policy:	0

#### Tree Protection Fencing Detail

Modular steel panel fencing is recommended in order to reduce land-fill waste post-construction. Fencing panels shall be secured to the ground with rebar wired to panel frame.

16 x 24" all-weather signage will be attached with the following wording:  
 For protected trees: **DO NOT ENTER** - Tree Protection Zone  
 For replacement/landscape tree planting sites: **DO NOT ENTER** - Future Tree Planting Zone

In cases where steel-panel fencing is not practical or available, fencing shall be constructed with a wooden 2x4 frame (side, top and bottom rails) and back-bracing supports as required to ensure robust placement. Snow-fencing will then be affixed to the frame using battens, zip-ties, staples, wire or nails.

#### TREE PROTECTION FENCING SIGNAGE

(Signs shall be 16x24" and made to sustain all weather conditions)



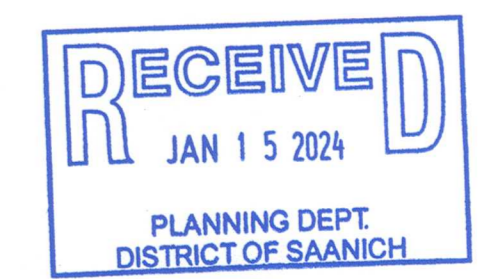
- ### TREE PRESERVATION MEASURES
- Site meeting to review Tree Plan:** Before site servicing begins, the relevant contractor shall meet with the arborist to review the placement of fencing and other tree protection measures within this plan.
    - The Project Arborist shall clearly mark the boundaries of all areas to be fenced and protected.
    - Access routes and areas for trade parking and materials storage will be identified with the contractor.
  - Tree Fencing:**
    - Tree protection fencing shall be installed to the District of Saanich standards at the locations indicated on this drawing prior to conditional approval being given (see fencing detail on plan).
    - Tree protection fencing shall be maintained in good condition throughout the duration of the project.
    - Requests to temporarily remove or move tree fencing must be reviewed by the project arborist for approval.
  - Soil protection:** If it is not possible to fence the entire PRZ, the unprotected portion of the PRZ shall be armoured with metal plating or two layers of 3/4" plywood or a temporary cover of geo-textile and 200mm of road-base, moderately compacted with a plate compactor.
  - Tree Management Plan posting:**
    - A full-sized weather-proof copy of this tree plan shall be posted in plain sight on site.
    - The general contractor shall ensure that all relevant sub-trades are familiar with the drawing and tree protection measures.
  - Site servicing and excavations:** The project arborist shall be present to oversee excavation, service trenching, stump removal, site grading or blasting within, or adjacent to, the tree protection areas (TPAs).
  - Root & branch pruning and protection:**
    - Any tree roots or branches damaged during site work shall be pruned back to undamaged tissue by the arborist.
    - The vertical face of excavated cuts adjacent to the TPAs shall be securely covered with non-permeable fabric by the project arborist to prevent soil desiccation and erosion.
  - Temporary access:** If temporary access is required within a tree protection area (TPA), the contractor shall notify the project arborist in advance and review the access requirements and any additional protective measures prescribed by the arborist.
  - Storage restrictions:** No equipment, materials or excavated soil shall be placed or stored within the TPA.
  - Site monitoring and reporting:** The District of Saanich requires the project arborist to make periodic site inspections to ensure ongoing compliance with all tree protection measures. The District also requires documentation by the arborist of supervised site work, such as noted in Item 4 above.
  - Replacement trees:** See G&A Replacement Tree Plan and Biologist's Report.

- ### GENERAL NOTES
- The applicable tree bylaw for this project is TREE PROTECTION BYLAW, 2014, NO. 9272.
  - Thirteen dead, dying and hazardous trees have been removed in 2021 under a separate tree cutting permit application.
  - Trees located within the off-site storm service easement R-17267 are shown as *Easement Trees* in the Tree Inventory Table.
  - Detailed biometric and tree risk assessment data is provided on Sheet-2 along with an overview of the tree risk and windthrow assessment method used.

SITE SERVICING PHASE TREE STATISTICS	
<b>PROTECTED TREE REMOVALS</b>	
Section 19 a. trees removed under permit in 2021 (Dead, Dying, Dangerous):	13
Additional Section 19 a. removals proposed (Dead, Dying, Dangerous):	3
Section 19 j/k removals (Site Servicing Phase): (includes 1 easement and 9 on-site trees)	10
<b>Total Protected tree removals at site servicing phase:</b>	<b>13</b>

<b>UNPROTECTED TREE REMOVALS</b>	
Site Servicing Phase (Easement):	1
Site Servicing Phase (On-site):	2
<b>Total Unprotected tree removals at site servicing phase:</b>	<b>3</b>

<b>REPLACEMENT TREES</b>	
Section 19 a. (Dead, Dying or Dangerous) 1:1 replacement	3
Section 19 j+k (Site Servicing Phase) 3:1 replacement	30
Additional replacement trees req'd for UFS policy:	0
<b>Total Bylaw-Replacement trees req'd at completion of site servicing phase:</b>	<b>33</b>
Number of bylaw-replacement trees proposed for planting:	17
Replacement trees to be provided cash-in-lieu	16
<b>Total mitigation proposed:</b>	<b>33</b>
Minimum tree replacement to satisfy Urban Forest Policy (including 2021 Section 19 a) removals:	29
<b>Net Surplus/(Deficit):</b>	<b>4</b>
Additional replacement trees req'd to satisfy "No Net Loss" policy at site servicing phase:	0



### LEGEND

Trees to be retained

- CONIFEROUS TREE CANOPY: Green circle with '20' and a crosshair.
- TREE CENTRE: Green circle with a crosshair.
- PROTECTED ROOT ZONE: Green circle with a crosshair.
- TREE TAG #: Green circle with '20' and a crosshair.
- BROADLEAF TREE CANOPY: Green circle with a crosshair.
- REMOVE TREE SYMBOL (Site servicing): Orange 'X'.
- REMOVE TREE SYMBOL (Bylaw-Protected Trees - BP phase): Blue 'X'.
- REMOVE TREE SYMBOL (Dead, Dying or Dangerous): Red 'X'.

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PROJECT  
**3986 Telegraph Bay Rd, Saanich, BC**

SHEET TITLE  
**Tree Management Plan for Subdivision & Site Servicing**

REV NO	DESCRIPTION	DATE
6	RESUBMISSION FOR SUBDIVISION	Nov 28, 2023
5	RESUBMISSION FOR SUBDIVISION	April 21, 2023
4	FOR INTERNAL REVIEW	Jan 23, 2023
3	FOR INTERNAL REVIEW	Nov 25, 2022
2	SUBDIVISION APP.	May 21, 2021
1	FOR INTERNAL REVIEW	May 12, 2021

PROJECT NO. 20-060  
 DATE April 27, 2021  
 SCALE 1:250  
 DRAWN BY JG  
 SHEET NO. T-1 of 3  
Scaled to print on 24 x 36" sheet

**GENERAL NOTES**

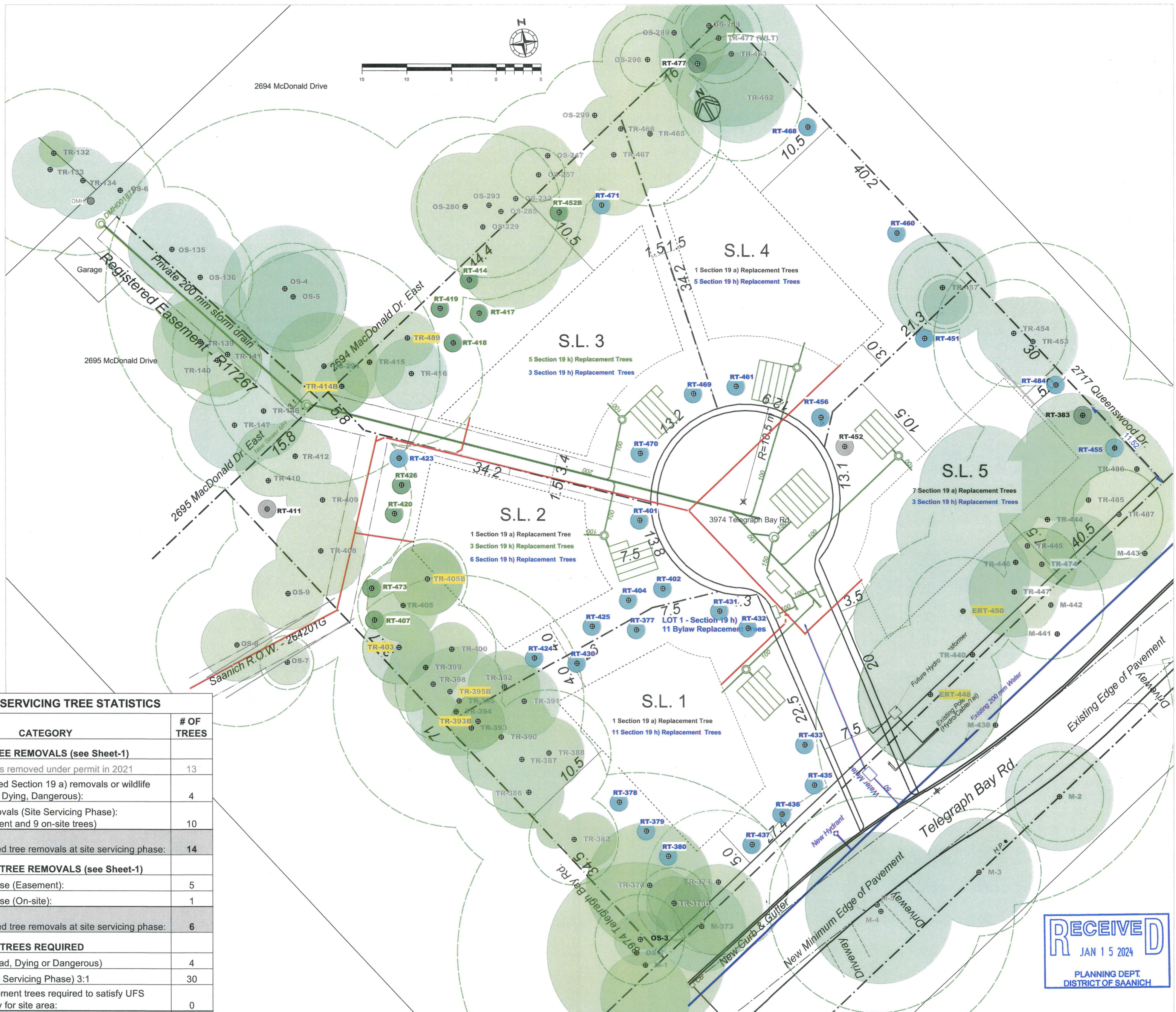
- The applicable tree bylaw for this project is TREE PROTECTION BYLAW, 2014, NO. 9272.
- Thirteen dead, dying and hazardous trees have been removed in 2021 under a separate tree cutting permit application. An exemption for replacement trees is requested under Section 40 c) of the Tree Bylaw.
- Trees located within the off-site storm service easement R-17267 are shown as *Easement Trees* in the Tree Inventory Table of the associated Tree Management Plan drawing.
- Replacement trees shall meet minimum size standards specified within the Tree Bylaw and plant characteristic standards specified in Section 6.2.5 of the Canadian Landscape Standard (see text box below).
- It is recommended that replacement-tree stock selection focus on native species representative of Coastal Douglas Fir moist maritime zonal sites toward the back of the building lots and a diversity of native & introduced species immediately around the house sites, which are well-adapted to the local climate and soils and with good floristic attributes for pollinator habitat. The native understorey on the site has suffered badly from over-grazing by domesticated deer.

**TREE REPLACEMENT STRATEGY**

SITE SERVICING:	Bylaw status	# of Trees Removed	Removed	Location	Replaced	Location	Required Replacement	Proposed Replacement	Cash-in-lieu Trees
<b>Offsite Trees</b>		0							
<b>Onsite Trees to be removed for site servicing</b>	Protected Trees	9	TR-407	S.L. 2	RT-407	S.L. 2	27	9	18
			TR-420	S.L. 2	RT-420	S.L. 2			
			TR-473	S.L. 2	RT-473	S.L. 2			
			TR-426	S.L. 2	RT-426	S.L. 2			
			TR-414	S.L. 3	RT-414	S.L. 3			
			TR-417	S.L. 3	RT-417	S.L. 3			
			TR-418	S.L. 2/3	RT-418	S.L. 3			
			TR-419	S.L. 2	RT-419	S.L. 3			
			TR-452B	Driveway	RT-452B	S.L. 3			
	Undersize Trees	1	TR-421	S.L. 2			0	0	0
<b>Dead, Dying or Dangerous Trees to be removed at site servicing phase</b>		4	TR-383	S.L. 1	RT-383DD	S.L. 5	4	4	0
			TR-411	S.L. 2	RT-411DD	S.L. 2			
			TR-477	S.L. 4	RT-477DD	S.L. 4			
			TR-452	S.L. 5	RT-452DD	S.L. 5			
<b>Total Tree Removals Anticipated at Site Servicing:</b>		14					31	13	18
	(13 Protected and 1 Undersized)								

FUTURE BUILD-OUT:									
(Blue Xs)	Bylaw status	# of Trees	Removed	Location	Replaced	Location	Required Replacement	Proposed Replacement	Cash-in-lieu Trees
<b>S.L. 1</b>	Protected Trees	11	TR-430	S.L. 1	RT-430	S.L. 1	22	11	11
			TR-431	S.L. 1	RT-431	S.L. 1			
			TR-432	S.L. 1	RT-432	S.L. 1			
			TR-433	S.L. 1	RT-433	S.L. 1			
			TR-435	S.L. 1	RT-435	S.L. 1			
			TR-436	S.L. 1	RT-436	S.L. 1			
			TR-437	S.L. 1	RT-437	S.L. 1			
			TR-379	S.L. 1	RT-379	S.L. 1			
			TR-377	S.L. 1	RT-377	S.L. 1			
			TR-378	S.L. 1	RT-378	S.L. 1			
			TR-380	S.L. 1	RT-380	S.L. 1			
	Undersized Tree	1	TR-434	S.L. 1	RT-434	S.L. 1	0	0	0
<b>S.L. 2</b>	Protected Trees	6	TR-401	S.L. 2	RT-401	S.L. 2	12	6	6
			TR-402	S.L. 2	RT-402	S.L. 2			
			TR-404	S.L. 2	RT-404	S.L. 2			
			TR-423	S.L. 2	RT-423	S.L. 2			
			TR-425	S.L. 2	RT-425	S.L. 2			
			TR-424	S.L. 2	RT-424	S.L. 2			
	Undersized Tree	1	TR-405B	S.L. 2	RT-405B	S.L. 2	0	0	0
<b>S.L. 3</b>	Protected Trees	3	TR-469	S.L. 3	RT-469	S.L. 3	6	3	3
			TR-470	S.L. 3	RT-470	S.L. 3			
			TR-471	S.L. 3	RT-471	S.L. 3			
<b>S.L. 4</b>	Protected Trees	4	TR-456	S.L. 4	RT-456	S.L. 4	8	4	4
			TR-460	S.L. 4	RT-460	S.L. 4			
			TR-461	S.L. 4	RT-461	S.L. 4			
			TR-468	S.L. 4	RT-468	S.L. 4			
<b>S.L. 5</b>	Protected Trees	3	TR-451	S.L. 5	ERT-450	S.L. 5	6	3	3
			TR-484	S.L. 5	ERT-448	S.L. 5			
			TR-455	S.L. 5	RT-455	S.L. 5			
	Undersized Tree	1	TR-448	S.L. 5			0	0	0
<b>Total Tree Removals &amp; Mitigation Anticipated for Buildout:</b>		30					54	27	27
	(27 Protected and 3 Undersized)								
<b>TOTAL PROJECT TREE REMOVALS &amp; MITIGATION:</b>		44					85	40	45
	(40 Protected and 4 Undersized)								

The above figures indicate that a total of 44 trees are anticipated to be removed from the site at full build-out (40 bylaw-protected and 4 undersized trees). The tree bylaw requires 85 replacement-trees to be planted or provided cash-in-lieu. To achieve this target on such a heavily treed site, the applicant proposes to plant 40 trees and pay cash-in-lieu for the remaining 45 trees. This exceeds the Urban Forest Policy minimum 1:1 requirement of 50 replacement trees (so no additional replacement trees are required to meet this important policy).



**SITE SERVICING TREE STATISTICS**

CATEGORY	# OF TREES
<b>PROTECTED TREE REMOVALS (see Sheet-1)</b>	
Section 19 a) trees removed under permit in 2021	13
Additional proposed Section 19 a) removals or wildlife conversion (Dead, Dying, Dangerous):	4
Section 19 j) removals (Site Servicing Phase): (includes 1 easement and 9 on-site trees)	10
<b>Total Protected tree removals at site servicing phase:</b>	<b>14</b>
<b>UNPROTECTED TREE REMOVALS (see Sheet-1)</b>	
Site Servicing Phase (Easement):	5
Site Servicing Phase (On-site):	1
<b>Total Unprotected tree removals at site servicing phase:</b>	<b>6</b>
<b>REPLACEMENT TREES REQUIRED</b>	
Section 19 a) (Dead, Dying or Dangerous)	4
Section 19 j) (Site Servicing Phase) 3:1	30
Additional replacement trees required to satisfy UFS "no net loss" policy for site area:	0
<b>Total bylaw-replacement trees req'd at completion of site servicing phase:</b>	<b>34</b>
Number of bylaw-replacement trees proposed for planting:	17
Replacement trees to be provided cash-in-lieu	17
<b>Total mitigation proposed:</b>	<b>34</b>

**ANTICIPATED BUILD-OUT TREE STATISTICS**

Section 19 a) wildlife tree conversion	1
Section 19 h) removals	28
Unprotected tree removals	2
<b>TOTAL TREE REMOVALS ANTICIPATED FOR BUILD-OUT PHASE:</b>	<b>31</b>
Anticipated tree-bylaw replacements required	56
Tree replacements proposed	28
Replacement trees to be provided cash-in-lieu	28
<b>TOTAL MITIGATION PROPOSED:</b>	<b>56</b>
Minimum tree replacement to satisfy Urban Forest Policy (including 2021 Section 19 a) removals:	31
<b>Net UFS Policy Surplus/(Deficit):</b>	<b>25</b>
Additional replacement trees required to satisfy UFS policy:	0

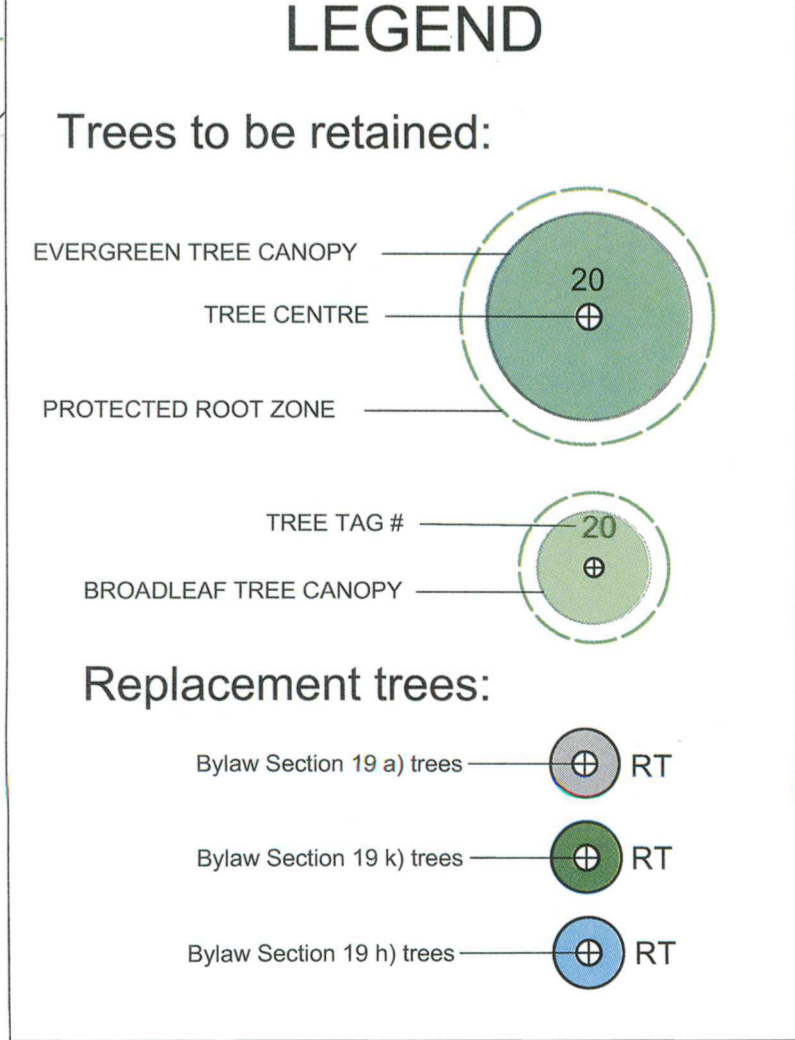
**REPLACEMENT TREE STANDARDS**

Replacement trees shall meet minimum size standards specified within the Tree Bylaw:  
 Minimum Replacement Tree Size for Introduced Species:  
 Broadleaf trees: 4 cm. in diameter measured 15 cm. above grade.  
 Coniferous trees: 3 m. in height  
 Due to supply constraints, minimum sizes for native species are smaller. (See Schedule 'D' table below.)

Replacement trees shall meet plant characteristic standards specified in Section 6.2.5 of the Canadian Landscape Standard:  
 1. Plants shall be true to name, type and form, and representative of their species or variety.  
 2. Plants shall be compact and suitably proportioned, not weak or thin, or adversely affected from being planted too closely in nursery rows; plants shall have healthy roots and tops and be suitably proportioned as typical of the species or variety.  
 3. Conifers shall have a healthy single leader [unless intended for a hedging form] and overall natural form characteristic of the species or variety. The leader shall have well-spaced whorls of vigorous newly growing branches, such that normal development of the plant's form can be expected.  
 4. Plants shall have well-developed branches and vigorous, fibrous root systems typical to the species or variety. They shall be healthy, vigorous plants, free from defects, decay, girdling roots, sunscald injuries, abrasions of the bark, plant diseases, insect pests' eggs, borers, and all forms of infestation.

Replacement trees shall not be planted:  
 a) in the case of trees having a mature height of eight (8) metres or less, within two (2) metres of a building foundation wall; or  
 b) in the case of trees having a mature height of greater than eight (8) metres, within three (3) metres of a building foundation wall; or  
 c) within one (1) metre of a property line;  
 d) closer than 3.5 metres of another replacement tree.

**LEGEND**



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PROJECT  
 3986 Telegraph Bay Rd,  
 Saanich, BC

SHEET TITLE  
 Replacement Tree Plan for  
 Site Servicing & Build-out

REV NO	DESCRIPTION	DATE
1	SUBMISSION FOR SUBDIVISION	Sept 4, 2023

PROJECT NO. 20-060  
 DATE April 21, 2023  
 SCALE 1:250  
 DRAWN BY JG  
 SHEET NO. T-3 of 3  
 Scaled to print on 24 x 36" sheet

**TREE INVENTORY TABLES**

**WINDTHROW RISK OBSERVATIONS**

**Topographic Hazard and Wind Exposure**

The property is located on the south-west face of a gently sloping hill along the mid-level and upper contours. The site is exposed to winds from the north-east and south-west. (Prevailing storm winds during the winter months are generally out of the south-east, from which the site is sheltered by 10 Mile Point.) The open stand character of the site along the north, east and south aspects and the well-treed adjoining properties combine with the somewhat sheltered position of the north-west and south-east portions of the site help to moderate storm-force wind exposure and risk.

**Soil Characteristics**

The site as whole is dominated by sandy loam soils with good water percolation and a generous rooting depth. The north section of the site occupies a slightly lower slope position that may result in higher volumes of rainwater interflow. The size and abundance of arbutus trees in this area would appear to confirm the free-draining and slightly greater moisture regime of the soils.

**Stand Characteristics and Tree Mechanics**

The forest stand itself is uneven aged and sized, with a range of native species typical of the Coastal Douglas Fir Moist Maritime biogeoclimatic zone with a 02 Site Association (very dry moisture regime; poor nutrient regime). Exotic species are a minor element. The trees that currently interface with the interior of the lot and exterior boundaries are well-adapted and windfirm. The density of the stand varies across the site, with trees along much of the north, east and south aspects, exhibiting a relatively open character, generous live crown ratios and resistant slenderness co-efficients (height: girth ratios). Trees along the west side of the site are more closely spaced and exhibit the tall, drawn up forms that arise where there is inter-tree competition for light. Likelihood of Failure ratings have been elevated for the trees affected by new edge conditions that will result from clearing required for the sewer and drain services at the rear of Lot 2 and at build-out stage for Lots 1 & 2.

**Site alteration**

There is an existing opening in the centre of the parent property that has allowed more widely-spaced or open-grown trees a level of resilience and adaptation to the anticipated new edge conditions. All trees have experienced some edge effect during their early growth, as the existing house and yard are many decades old. The size of the expanded opening is less than two tree lengths. As noted above, Likelihood of Failure ratings have been adjusted upwards for new edge trees in affected portions of the parent property and adjacent properties to the north and east for codominant and intermediate crown class trees.

**TREE RISK & WINDTHROW RISK ASSESSMENT METHOD OVERVIEW**

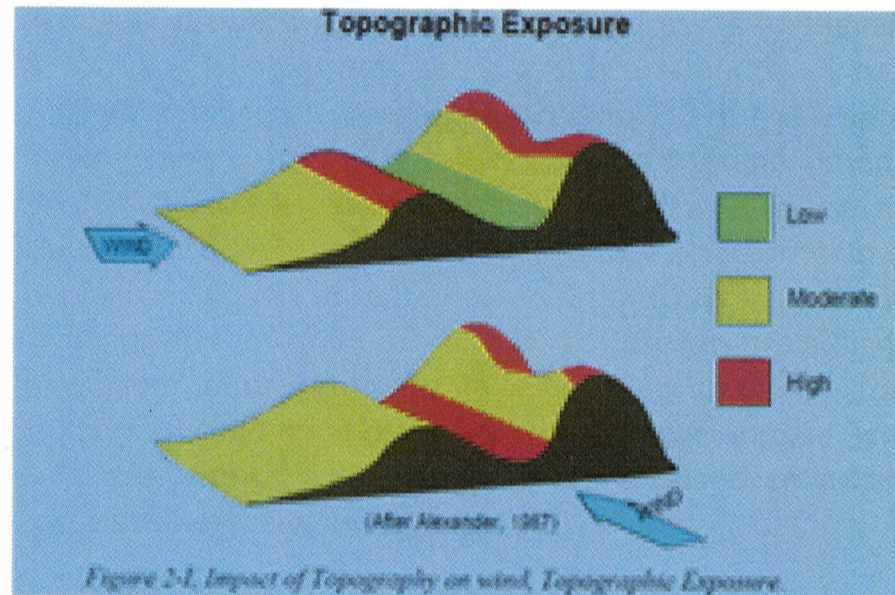
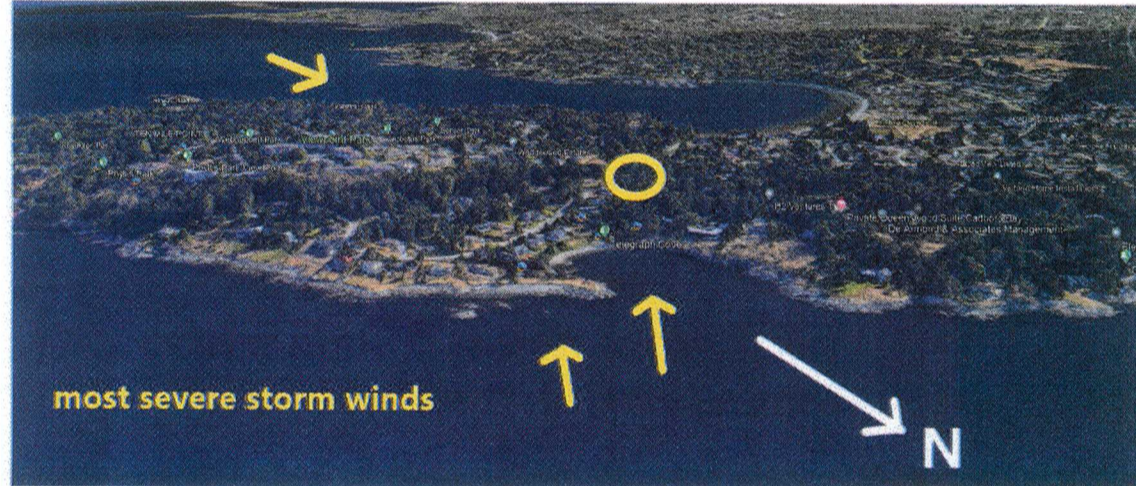
The International Society of Arboriculture's *TRAQ protocol* is the current standard of care for arborist's undertaking tree risk assessments. While TRAQ is a strong tool for quantifying the risk associated with individual trees, the BC Timber Sales 2010 *Windthrow Analysis protocol* is designed to address stand-level and landscape scale risk factors that may predispose a site or stand(s) of trees to biophysical hazard. Climate, weather, wind exposure and storm track patterns, topography, soils and recent or proposed changes to stand conditions (particularly clearing that results in new forest edges) and/or land-use are all considered. Both protocols are similar in their effort to assess factors that affect the probability of tree failure and its consequences in order to arrive at an overall risk rating. The assessment method and reporting format used in this assignment considers risk-use from both protocols in evaluating tree risk for the anticipated land-use and site conditions proposed for the development scheme. The **Probability of Failure ratings** for trees in areas exposed to additional windthrow risk factors have been elevated.

**Typical individual tree risk rating risk factors:**

Decay, Cracks, Health, Branch architecture, Live crown ratio, Slenderness, Species failure profiles, growing site conditions, historical changes to site condition or land use

**Typical stand-level windthrow risk factors:**

- ? **Topographic Exposure** (local land forms, site location (aspect, slope position) wind exposure (prevailing and less frequent storm tracks))
- ? **Stand Characteristics and Tree Mechanics** (adaptive resistance to endemic wind loads, new stand openings or edges, local tree failure history, live crown ratio, slenderness co-efficient, species considerations, structural defect and decay processes, tree position within the stand, crown class and stem density)
- ? **Soil** (texture, drainage, moisture content, effective rooting depth, rock extrusions)



G&A Tree ID	Common Name	DBH (cm)	PRZr (m)	Health	Structural Condition	Bylaw Tree?	Defect of Concern	Likelihood of Failure	TRAQ & Windthrow Hazard Rating	Comments	Action
<b>On-site Trees</b>											
374	M/S Arbutus	50	8	fair	poor	Yes	Poor Structure	Possible	Low	Large cantilevered leader over road.	Retain and prune to reduce end-weight of cantilevered leader over road
376	Arbutus	47	7	fair	fair	Yes	Poor Structure	Improbable	Low	Multi-stemmed, asymmetric crown; cavity on backside (ftension side) of largest stem	Retain and Protect
377	Bigleaf maple	138	21	good	fair	Yes				Large cavity extends up 5M, good reaction wood, medium deadwood over forest floor	Anticipated Removal at BP Phase
378	Bigleaf maple	74	11	good	good	Yes					Anticipated Removal at BP Phase
379	Bigleaf maple	66	10	good	fair	Yes					Anticipated Removal at BP Phase
380	Bigleaf maple	65	10	good	good	Yes				Large deadwood over driveway	Anticipated Removal at BP Phase
382	Bigleaf maple	34	5	fair	poor	Yes	None	Improbable	Low		Retain and Protect
383	m/s Bigleaf maple	47	7	poor	poor	Yes	Radial Stem Crack	Possible	Low	Defective stems, Deadwood over neighbouring property	Remove - both stems defective
386	Bigleaf maple	59	9	poor	fair	Yes	Dangerous Deadwood	Probable	Low		Retain and Protect
387	Bigleaf maple	38	6	poor	fair	Yes	Dangerous Deadwood	Probable	Low		Retain and Protect
388	Bigleaf maple	48	7	fair	fair	Yes	New Edge Tree	Possible	Low		Retain and Protect
390	Arbutus	57	9	fair	good	Yes	None	Improbable	Low		Retain and Protect
391	Douglas fir	39	6	fair	fair	Yes	New Edge Tree	Possible	Low		Retain and Protect
392	Arbutus	48	7	good	good	Yes	New Edge Tree	Possible	Low		Retain and Protect
393	Arbutus	51	8	fair	fair	Yes	Poor Structure	Improbable	Low		Retain and Protect
394	Arbutus	25	4	good	fair	Yes	Poor Structure	Improbable	Low		Retain and Protect
395B (no tag)	Bigleaf maple	47	7	good	good	No	None	Improbable	Low		Retain and Protect
398	Bigleaf maple	71	11	fair	fair	Yes	Root Decay	Possible	Low		Retain and Protect
399	Grand fir	80	12	good	fair	Yes	Narrow Stem Attachment	Possible	Low	Double leader at 7M, bulge at joint	Retain and Protect
400	Bigleaf maple	30	5	fair	fair	Yes	New Edge Tree	Possible	Low		Retain and Protect
401	Arbutus	75	11	good	good	Yes					Anticipated Removal at BP Phase
402	Arbutus	96	14	good	good	Yes					Anticipated Removal at BP Phase
404	Arbutus	55	8	poor	fair	Yes				In decline	Anticipated Removal at BP Phase
405	Bigleaf maple	31	5	fair	fair	Yes	New Edge Tree	Possible	Low		Retain and Protect
407	Bigleaf maple	67	10	good	fair	Yes					Remove - Site Servicing
408	Bigleaf maple	50	7	poor	fair	Yes	Narrow Stem Attachment	Improbable	Low	Multi-stem from coppice	Retain and prune
409	Bigleaf maple	65	10	fair	fair	Yes	New Edge Tree	Possible	Low		Retain and Protect
410	Bigleaf maple	48	7	fair	fair	Yes	Root Decay	Possible	Low	Low target and likelihood of failure and impact ratings	Retain and Protect
411	Bigleaf maple	37	6	poor	poor	Yes	Radial Stem Crack	Imminent	Moderate	Longitudinal cracks, dead crown leans over neighbouring property.	Remove - Defective tree
412	Bigleaf maple	35	5	poor	fair	Yes	New Edge Tree	Improbable	Low		Retain and Protect
414	Arbutus	38	5.7	fair	poor	Yes					Remove - Site Servicing
415	Arbutus	36	5.4	fair-poor	fair	Yes	New Edge Tree	Improbable	Low		Retain and Protect
416	Douglas fir	52	8	good	good	Yes	New Edge Tree	Improbable	Low		Retain and Protect
417	Douglas fir	46	7	fair	fair	Yes					Remove - Site Servicing
418	Arbutus	49	7	fair	poor	Yes				Decay in holding wood of lean at side, large wound from former split	Remove - Site Servicing
419	Douglas fir	32	5	fair	fair	Yes					Remove - Site Servicing
420	Douglas fir	30	4	fair	fair	Yes					Remove - Site Servicing
423	Douglas fir	44	7	fair	fair	Yes					Anticipated Removal at BP Phase
424	Douglas fir	86	13	good	good	Yes					Anticipated Removal at BP Phase
425	Douglas fir	31	5	fair	fair	Yes					Anticipated Removal at BP Phase
426	Arbutus	110	17	poor	good	Yes				3 large stems from coppice well attached, significant dieback of crown	Remove - Site Servicing
430	Douglas fir	73	11	good	good	Yes					Anticipated Removal at BP Phase
431	Bigleaf maple	51	8	fair	fair	Yes					Anticipated Removal at BP Phase
432	Bigleaf maple	67	10	good	good	Yes					Anticipated Removal at BP Phase
433	Douglas fir	69	10	good	good	Yes					Anticipated Removal at BP Phase
435	Douglas fir	42	6	fair	good	Yes					Anticipated Removal at BP Phase
436	Grand fir	97	15	good	fair	Yes				Subordinate at 10M, good attachment	Anticipated Removal at BP Phase
437	Bigleaf maple	65	10	good	good	Yes					Anticipated Removal at BP Phase
440	Douglas fir	90	14	good	good	Yes	Deadwood	Possible	Low	Potential future boulevard tree. Some deadwood over forest floor-low target exposure.	Retain and prune out any dead limbs > 2" dia.
444	Douglas fir	72	11	good	fair	Yes	New Edge Tree	Possible	Low		Retain and Protect
445	Douglas fir	75	11	good	good	Yes	None	Improbable	Low		Retain and Protect
446	Douglas fir	69	10	good	fair	Yes	Narrow Stem Attachment	Possible	Low	Possible codominant issues in upper crown	Retain and Protect
447	Arbutus	50	8	fair	good	Yes	Poor Structure	Possible	Low		Retain and Protect
451	Douglas fir	133	20	good	good	Yes					Anticipated Removal at BP Phase
452	Japanese maple	95	8	dead	dead	Yes	None	None	Low	Declined in 2022, suspected drought stress, after water service to lot turned off.	Remove - Dead tree
452B	Arbutus	15	3	fair	fair	Yes					Remove - Site Servicing
453	Douglas fir	70	11	good	good	Yes	None	Possible	Low	Boundary tree	Retain and Protect
454	Douglas fir	37	6	good	good	Yes	New Edge Tree	Possible	Low		Retain and Protect
455	Douglas fir	95	14	good	good	Yes					Anticipated Removal at BP Phase
456	Douglas fir	113	17	good	good	Yes					Anticipated Removal at BP Phase
457	Douglas fir	34	5	good	good	Yes	New Edge Tree	Possible	Low		Retain and Protect
460	Douglas fir	91	14	good	good	Yes					Anticipated Removal at BP Phase
461	Douglas fir	80	12	good	good	Yes					Anticipated Removal at BP Phase
462	Douglas fir	51	8	good	good	Yes	None	Improbable	Low	Tree occupies a key adapted edge position buffering adjacent interior trees that would be exposed by its removal.	Retain and Protect
463	Douglas fir	65	10	good	good	Yes	None	Improbable	Low		Retain and Protect
465	Arbutus	56	8	fair	fair	Yes	New Edge Tree	Possible	Low	Codominant leaders, narrow stem union with included bark, tree exhibits strong phototropic lean over Lot 4.	Retain and reduce leader end-weight
466	Arbutus	26	4	poor	poor	Yes					Retain and reduce crown
467	Arbutus	29	4	poor	fair	Yes	New Edge Tree	Probable	Low		Retain and prune out deadwood
468	Douglas fir	82	11	good	good	Yes					Anticipated Removal at BP Phase
469	Douglas fir	49	7	fair	poor	Yes					Anticipated Removal at BP Phase
470	Douglas fir	91	14	good	fair	Yes				Multiple leaders in upper crown, U-shaped joints	Anticipated Removal at BP Phase
471	Douglas fir	70	11	fair	poor	Yes				History of large topping cuts, codominant with cracks	Anticipated Removal at BP Phase
473	Bigleaf maple	62	9	fair	good	Yes					Remove - Site Servicing
474	Arbutus	28	4	fair	poor	Yes	Poor Structure	Possible	Low		Retain and prune
477	Douglas fir	36	5	poor	poor	Yes				2M from NE corner post (SW)	Convert to wildlife tree. Tree replacement required.
484	Douglas fir	71	11	fair	poor	Yes				Suppressed, poor upper crown structure	Anticipated Removal at BP Phase
485	Arbutus	90	14	good	good	Yes	New edge tree	Probable	Low	2 large stems attached at base, strong stem union, phototropic lean over road R.O.W., dangerous deadwood	Retain and prune out dangerous deadwood.
486	Douglas fir	66	10	fair	good	Yes	None	Improbable	Low		Retain and Protect
487	Douglas fir	35	5	fair	poor	Yes	Old topping wound	Improbable	Low	Potential future boulevard tree	Retain and reduce upper cantilevered scaffold limb.

G&A Tree ID	Common Name	DBH (cm)	PRZr (m)	Health	Structural Condition	Bylaw Protected?	Defect of Concern	Likelihood of Failure	TRAQ & Windthrow Hazard Rating	Comments	Action
<b>Municipal Trees</b>											
M-2	Oriental spruce	32	5	good	good	No	None	Possible	Low	Boulevard tree	Retain and Protect
M-3	Deodar cedar	42	7	fair	fair	No	None	Possible	Low	Boulevard tree	Retain and Protect
M-4	Douglas fir	103	15	fair	fair	Yes	Dangerous Deadwood	Possible	Low	Boulevard tree	Retain and Protect
M-5	Douglas fir	81	12	fair	fair	Yes	Dangerous Deadwood	Improbable	Low	Boulevard tree	Retain and Protect
M-373	Douglas fir	85	13	good	good	Yes	None	Possible	Low	Boulevard tree	Retain and Protect
M-438	Douglas fir	135	18	good	fair	Yes	Poor Structure	Possible	Low	Boulevard tree. Old growth bark and branching habit	Retain and Protect
M-441	Douglas fir	71	11	fair	fair	Yes	Limb shear	Possible	Low	Boulevard tree	Retain and Protect
M-442	Douglas fir	38	6	poor	poor	Yes	Limb shear	Possible	Low	Boulevard tree	Retain and Protect
M-443	Douglas fir	77	12	fair	fair	Yes	Old Topping Wound	Improbable	Low	Boulevard tree. Old growth bark and branching habit	Retain and Protect
<b>Small Unprotected Trees</b>											
376B	Bigleaf maple	18	3	good	good	No	None	Improbable	Low		Retain and Protect
384	Bigleaf maple	28	4	fair	fair	No	Dangerous deadwood	Probable	Low	Large deadwood	Retain and prune out large deadwood
385	Bigleaf maple	23	3	fair	fair	No	Dangerous deadwood	Probable	Low	Large deadwood	Retain and prune out large deadwood
393B	Bigleaf maple	14	3	good	fair	No	None	Improbable	Low		Retain and Protect
395	Douglas fir	90	14	good	good	Yes	Limb shear	Probable	Low		Retain and Protect
403	Grand fir	27	4	good	good	No	Poor structure	Improbable	Low		Retain and Protect
405B	Bigleaf maple	24	4.5	good	good	No	None	Improbable	Low		Retain and Protect
414B	Douglas fir	23	3.5	good	good	No	New Edge Tree	Improbable	Low		Retain and Protect
421	Douglas fir	24	9	good	good	No	None	Improbable	Low		Remove - Site Servicing
434	Bigleaf maple	27	4	poor	fair	No	None	Improbable	Low		Anticipated Removal at BP Phase
448	Blue Atlas cedar	50	7	fair	good	No	Whole tree	Possible	Low	Poor structure (asymmetric crown)	Remove - Site Servicing
450	Deodar cedar	41	5	fair	good	No	Edge tree	Possible	Low		Retain and Protect
489	Big-leaf maple	29		fair	poor	No	Narrow stem attachment	Improbable	Low	Double-stemmed (13 + 16 cm DBH) Located in Lot 3 beside Tree 415.	Retain and Protect
<b>Off-site Trees</b>											
OS-1	Arbutus	52	8	good	fair	Yes	Poor branch structure	Improbable	Low	Boulevard tree	Retain and Protect
OS-2	Arbutus	136	20	good	good	Yes	None	Possible	Low	Off-site tree	Retain and Protect
OS-3	Cryptomeria	30	5	fair	fair	No	None	Improbable	Low	Off-site tree	Retain and Protect
OS-4	Douglas fir	110	20	good	good	Yes	Dangerous deadwood	Possible	Low	Off-site tree	Retain and Protect
OS-5	Grand fir	36	6	good	good	Yes	Dangerous deadwood	Probable	Low	Off-site tree	Retain and Protect
OS-6	Douglas fir	25	5	fair	poor	No	Dangerous deadwood	Possible	Low	Off-site tree; topped	Retain and Protect
OS-7	Deciduous sp.	15	3	good	good	No	None	Possible	Low	Off-site tree	Retain and Protect
OS-8	Big-leaf maple	50	9	good	good	Yes	None	Possible	Low	Off-site tree	Retain and Protect
OS-9	Arbutus	50	9	good	good	Yes	None	Possible	Low	Off-site tree	Retain and Protect
OS-135	Douglas fir	40	7	good	good	Yes	None	Possible	Low	Off-site tree	Retain and Protect
OS-136	Deodar cedar	35	6	good	good	Yes	None	Possible	Low	Off-site tree	Retain and Protect
OS-229	Arbutus	60, 45, 30	18	good	fair	Yes	Poor structure	Possible	Moderate	Off-site tree; asymmetric crown	Retain and prune to relieve end-weight and remove dangerous deadwood to reduce TRAQ rating to low.
OS-232	Arbutus	70	13	fair	poor	Yes	Narrow stem attachments	Possible	Moderate	Off-site tree; 3 stems	