

# 961 Mckenzie Avenue, 3986 & 3990 Saanich Road, Saanich BC

Demolition Impact Assessment, Construction Impact Assessment



Tree Management Plan

PREPARED FOR: Seba Construction c/o Jamie Gill

201-1001 Cloverdale Avenue

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ISA Certified # PN-9812A

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# **REVISION RECORD**

REVISION	DESCRIPTION	DATE (YYYY-MM-DD)	ISSUED BY
R0	Original Issuance	2023 -11-28	NT+CC
R1	Revision	2024-10-11	CC+TT
R2	Revision based on design changes	2025-06-27	CC + TT
R3	Revision based on design changes	2025-11-06	CC + TT

#### 1. INTRODUCTION

Talmack Urban Forestry Consultants Ltd. (Talmack) was retained to complete a tree inventory, construction impact assessment and tree management plan for the trees at the following proposed project:

Site: 961 Mckenzie Avenue, 3986 & 3990 Saanich Road Saanich, BC

Municipality District of Saanich

Client Name: Seba Construction c/o Jamie Gill

Dates of Site Visit(s): May 26<sup>th</sup>, 2023, September 04 & 05, 2024

Site Conditions: Three lots with existing dwellings, pre-construction

Weather During Site Visit: Various

The purpose of this report is to address the tree inventory and arborist report requirements of the District of Saanich Tree Protection Bylaw No. 9272. The construction impact assessment section of this report (section 8) is based on plans reviewed to date, which included: Overall Site Plan (Gauthier & Associates Landscape Architects Inc, October 29<sup>th</sup>, 2025), Architectural plans (Koka Architecture & Design Inc., November 3<sup>rd</sup>, 2025), and Site Servicing Plan (McElhanney, November 4<sup>th</sup>, 2025).

#### 2. TREE INVENTORY METHODOLOGY

The size, health, and structural conditions of trees within influencing distance of the proposed development and civil construction were documented. For ease of identification in the field, numerated metal tags were attached to the lower trunks of onsite trees that were not surveyed. Trees that were surveyed and given a numerical # where identified as such. Trees located along municipal frontages were not tagged but identified as M# and municipal hedges were not tagged but identified as hedge#. Trees located on neighbouring properties were not tagged but were identified as OS# and in some cases identified by the numerical # given when surveyed. Each tree was visually examined on a limited visual assessment basis (level 1), in accordance with Tree Risk Assessment Qualification (TRAQ) methods (Dunster *et al.* 2017) and ISA Best Management Practices.

In some cases, prior to an updated survey some trees were initially believed to be municipal or private trees. Once a new survey was provided said trees appeared to not be located where originally thought and thus their identification numbers have changed. In order to avoid changing all the drawings to match these new numbers, the new identification is followed by the original in brackets. For example, OS8 believed to be an off-site tree has now been proven to be a municipal tree. It's ID# goes as M6 (OS8). There are three other trees with similar identification reference.

#### 3. EXECUTIVE SUMMARY

The tree inventory documented forty-four (44) trees and one (1) hedge within influencing distance of the proposed project. Twenty-eight (28) trees were considered onsite or shared with the subject site, of which twenty-three (23) trees were considered bylaw protected. Thirteen (13) trees were located off-site, of which all are considered bylaw protected. Three (3) trees and one (1) hedge were located on municipal property that were considered within influencing distance of the proposed project.

All onsite trees are proposed for removal due to being located within the proposed building, parkade, driveway, or landscape feature (e.g., retaining walls) footprints. Municipal hedge, hedge1 is recommended for removal due to the proposed driveway and sidewalk along Saanich Road. All off-site trees and the remaining municipal trees are located where retention may be possible if the mitigations outlined in this report are adhered to.

Twenty-two (22) onsite bylaw protected trees (Tree ID: 47, 50-53, 55-70, 252) are proposed for removal due to being located within the proposed building and driveway footprints (19h,19i, & 19j). Based on bylaw criteria (District of Saanich Tree bylaw No. 9272.), forty-five (45) replacement trees, calculated at a 2:1 ratio for twenty-two (21) trees and one (1) tree at 3:1 ratio, are required to compensate for the proposed removals. In the event the site cannot accommodate the required quantity of replacement trees, any replacement tree planting shortfall will be compensated to the District of Saanich via cash in lieu payment. Compensation for the removal of municipal hedge (hedge 1) will be left to the District of Saanich parks department to determine.

#### 4. TREE INVENTORY DEFINITIONS

**Tag:** Tree identification number on a metal tag attached to tree with nail or wire, generally at eye level. Trees on municipal or neighboring properties are not tagged.

**DBH:** Diameter at breast height – diameter of trunk, measured in centimeters at 1.4m above ground level. For trees on a slope, it is taken at the average point between the high and low side of the slope. \* Measured over ivy, ~ Approximate due to inaccessibility or on neighbouring property **Dripline:** Indicates the radius of the crown spread measured in meters to the dripline of the longest limbs. \*\* Dripline is expressed as a diameter in this report.

**Relative Tolerance Rating:** Relative tolerance of the tree species to construction related impacts such as root pruning, crown pruning, soil compaction, hydrology changes, grade changes, and other soil disturbance. This rating does not consider individual tree characteristics, such as health and vigor. Three ratings are assigned based on our knowledge and experience with the tree species: Poor (P), Moderate (M) or Good (G).

**Critical Root Zone:** A calculated radial measurement in meters from the trunk of the tree. It is the optimal size of tree protection zone and is calculated by multiplying the DBH of the tree by 10, 12 or 15 depending on the tree's Relative Tolerance Rating. This methodology is based on the methodology used by Nelda Matheny and James R. Clark in their book "Trees and Development:

A Technical Guide to Preservation of Trees During Land Development."

• 15 x DBH = Poor Tolerance of Construction

• 12 x DBH = Moderate

10 x DBH = Good

To calculate the critical root zone, the DBH of multiple stems is considered the sum of 100% of the diameter of the largest stem and 60% of the diameter of the next two largest stems. It should be noted that these measures are solely mathematical calculations that do not consider factors such as restricted root growth, limited soil volumes, age, crown spread, health, or structure (such as lean).

**Health Condition:** 

Poor - significant signs of visible stress and/or decline that threaten the long-term survival

of the specimen

Fair - signs of stress

• Good - no visible signs of significant stress and/or only minor aesthetic issues

**Structural Condition:** 

Poor - Structural defects that have been in place for a long period of time to the point that

mitigation measures are limited

Fair - Structural concerns that are possible to mitigate through pruning

Good - No visible or only minor structural flaws that require no to very little pruning

Suitability ratings are described as follows:

**Retention Status:** 

Remove - Not possible to retain given proposed construction plans

Retain - It is possible to retain this tree in the long-term given the proposed plans and

information available. This is assuming our recommended mitigation measures are

followed

Retain \* - See report for more information regarding potential impacts

Construction Impact Assessment and Tree Management Plan for 961 Mckenzie Avenue, 3986 & 3990 Saanich Road Prepared for Seba Construction

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Table 1. Tree Inventory

T #	Surveyed	Location (On,	Bylaw		Name	DDU (am)	Crown	Critical	Con	dition	Relative		Data wife we at a true
Tag #	(Yes/No)	Off, Shared, City)	protected (Yes/No)	Common	Botanical	DBH (cm)	radius (m)	root zone radius (m)	Health	Structural	tolerance	General field observations/remarks	Retention status
47	Y	On	Y	Garry oak	Quercus garryana	69	9	6.9	Fair	Fair	Good	Some die back within canopy, epicormic growth, dead wood, past failures, existing driveway within 1m north of root flare, nesting activity in upper dead wood	Remove, Building envelope
Hedge1	Y	M	M	Western Red cedar	Thuja plicata	Multiple stems (13) between 10cm and 15cm	1mx14m	1.8	Fair	Fair	Moderate	DBH measured at 1.0m and focus on primary stem prior to branching, surface rooting, some sections of die back, regularly pruned	Remove, Proposed sidewalk
48	Υ	On	N	Cherry sp.	Prunus sp.	24	3	N/A	Dead	Dead	Moderate	Tree is dead	Remove, Building envelope
50	Y	On	Y	Garry oak	Quercus garryana	63	10	6.3	Fair	Fair	Good	Dead wood, some die back, acute stem unions, newer driveway on south side of root flare possible root pruning	Remove, Building envelope
49	Y	On	N	Lawson cypress	Chamaecyparis lawsoniana	27	3	2.7	Fair to	Fair	Good	Surface rooting with mechanical damage, wound on lower trunk with reaction wood, historical pruning, irregular taper on lower trunk, generally fully canopy, grade change with new driveway south of the root flare possible historical root pruning	Remove, Building envelope
51	Y	On	Y	Garry oak	Quercus garryana	62	10	6.2	Fair	Fair	Good	Existing driveway immediately south of root flare, southern portion of root flare with mechanical damage, slight lean to the north, historical pruning wounds, some die back, deadwood, past failures, codominant with adjacent oaks	Remove, Building envelope
249	N	On	N	English holly	llex aquifolium	13,14	3	2.18	Fair	Fair	Good	Included union at base, past stem removal with surface decay, lower stem wounds, historical pruning, intertwined stem growth pattern, suppressed, yellowing foliage	Remove, Building envelope
250	N	On	N	English Hawthorn	Crataegus monogyna	5,5,5,3,3,3,3,2	2	1.32	Fair to	Fair	Moderate	Historically topped at 1m, multiple stems emerged, acute stem attachments, historically two stems, DBH measured above topping wound	Remove, Building envelope
52	Y	On	Y	Garry oak	Quercus garryana	42	9	4.2	Fair	Fair	Good	Dieback throughout canopy, lean towards the north, bird house, deadwood, epicormic growth, ivy, thinning canopy, narrow canopy	Remove, Building envelope
53	Y	On	Y	Garry oak	Quercus garryana	29	4	2.9	Fair to poor	Fair to poor	Good	Dead top, lean to northwest, epicormic growth, surface root to the south with mechanical damage, irregular growths and bark loss along trunk, health stress	Remove, Building envelope
54	Y	On/Off	Y	Garry oak	Quercus garryana	22,28	8	4.12	Poor	Poor	Good	Both tops have historically failed, low lcr, heavy lean over property to the west, shared with offsite. Mostly dead	Remove, Building envelope
55	Y	On	Y	Western Red cedar	Thuja plicata	68,31	5	9.096	Fair	Fair to poor	Moderate	Multiple stems at 2m on the larger stem, active inclusions between multiple stems at 2m, surface roots with mechanical damage, small pile of fill positioned adjacent to the root flare on west side, cracking, and wounds along one of the stems on the nw side of the tree, some of the stems have past top failure. Bark stripped from 31 cm stem and bark damage on other stems stem	Remove, Building envelope

- "	Surveyed	Location (On,	Bylaw		Name	<b>77</b> 117	Crown	Critical	Con	dition	Relative		<b>-</b>
Tag #	(Yes/No)	Off, Shared, City)	protected (Yes/No)	Common	Botanical	DBH (cm)	radius (m)	root zone radius (m)	Health	Structural	tolerance	General field observations/remarks	Retention status
56	Y	On	Y	Garry oak	Quercus garryana	42	8	4.2	Fair	Fair to poor	Good	Surface roots with mechanical damage, deadwood, epicormic growth, suppressed by larger oak, possibly calloused seem or wound along upper limb, abundance of bark lost along lower trunk	Remove, Building envelope
57	Y	On	Υ	Garry oak	Quercus garryana	55	7	5.5	Fair	Fair	Good	Slight lean towards the house, past failures, dieback, acute stem unions, some health stress	Remove, Building envelope
58	Y	On	Y	Garry oak	Quercus garryana	48	10	4.8	Fair to poor	Fair to poor	Good	Large dead wood, heavy epicormic growth, die back, evidence of health stress, less than robust canopy, narrow branch attachments with possible included bark, Recent failure of c0-dominant stem from canopy.	Remove, Building envelope
251	N	On	N	English Hawthorn	Crataegus monogyna	5,7,4,4,5	2	1.56	Fair to good	Fair	Moderate	Multiple stems, one stem growing through the fence, historical pruning, possible included bark at lower union	Remove, Building envelope
59	Y	On	Y	Garry oak	Quercus garryana	58	8	5.8	Fair	Fair to poor	Good	Possible included union at 6m, dieback, dead wood, historical failures, some epicormic growth, historical ivy, hanging dead wood,	Remove, Building envelope
60	Y	On	Y	Garry oak	Quercus garryana	123	15	12.3	Fair to good	Fair	Good	Large wound at base with reaction wood, large wound is about 1.5m in length and 0.3m width and 15cm depth, historical ivy, historical pruning of large scaffold limbs, pruning wounds with callous, past failure of large scaffold limbs, some die back in crown, possible included back between primary union at 6m, dominant tree,	Remove, Building envelope
61	Y	On	Y	Garry oak	Quercus garryana	41	7	4.1	Fair	Fair	Good	Slight lean to the left, deadwood, dieback, some epicormic growth, mount of material over the southern critical root zone, historical ivy,	Remove, Building envelope
62	Y	On	Y	Garry oak	Quercus garryana	37	4	3.7	Fair to poor	Fair to poor	Good	Turkey tail fruiting bodies along western side of lower trunk, mechanical damage of 2cm depth along lower western trunk, ivy, epicormic growth, thin canopy, narrow canopy, dead wood, moderate dieback, past failures, extended limbs, possible historical limb, and top failures, lean to the west	Remove, Building envelope
69	Y	On	Y	Garry oak	Quercus garryana	68,54	12	10.04	Fair to poor			DBH measured over ivy, included union at base, 54cm stem topped at 6m with possible internal decay, historical failure of large limbs, very sparse canopy, rooted within a retaining wall, possible fill placement over northern and eastern critical root zone, substantial dieback, moderate to advanced health stress, epicormic growth	Remove, Building envelope
68	Y	On	Y	Western Red cedar	Thuja plicata	37	3	4.44	Fair	Fair	Gravel driveway placed over the northern western and southern critical root zones, possible root compaction, historical vehicle clearance pruning, thinning canopy,		Remove, Building envelope
63	Y	On	Y	Garry oak	Quercus garryana	52	10	5.2	Fair to poor	Fair	Good	Sparse canopy, moderate die back , dead wood, end weighted limbs to the north and south over homes, buttress roots to the south	Remove, Building envelope
64	Y	On	Y	Garry oak	Quercus garryana	60	10	6	Fair to poor	Fair	Good	Historical heavy ivy infestation, small cuts along lower trunk related to ivy removal, moderate die back, thin canopy, extended declining limbs, moderate health stress	Remove, Building envelope

	Surveyed	Location (On,	Bylaw		Name		Crown	Critical	Con	dition	Relative		
Tag #	(Yes/No)	Off, Shared, City)	protected (Yes/No)	Common	Botanical	DBH (cm)	radius (m)	root zone radius (m)	Health	Structural	tolerance	General field observations/remarks	Retention status
252	N	On	Υ	Western Red cedar	Thuja plicata	33	0	N/A	Dead	Dead	Moderate	Standing deadwood damage to lower trunk. Hazard tree.	Remove, Building envelope
65	Y	On	Y	Douglas-fir	Pseudotsuga menziesii	45	6	5.4	Fair	Fair to poor	Moderate	Multiple trunk deflections, deflected leader or failed leader, some twig dieback, suppressed by adjacent Garry oak, deadwood,	Remove, Building envelope
66	Y	On	Y	Western Red cedar	Thuja plicata	40	6	4.8	Fair to poor	Fair	Moderate	Possible fill over east critical root zone, past branch pruning, leader in decline, lateral limbs growing vertically possibly to resume apical dominance, moderate health stress, surface roots	Remove, Building envelope
67	Y	On	Y	Garry oak	Quercus garryana	78	10	7.8	Fair to poor	Fair to poor	Good	Buttress roots to the east with some damage, dieback throughout canopy, callused pruning wounds, medium to large deadwood, some large dead wood over back yard with fungal fruiting bodies, possible included union at 6m, retaining wall to the west of root flare, health stress	Remove, Building envelope
70	Y	On	Y	Garry oak	Quercus garryana	119	10	11.9	Fair to	Fair	Good	Possible included union at 1m, past failures some with callus, some epicormic growth, historical utility pruning, medium deadwood, some die back, relatively full crown	Remove, sidewalk/water lateral
11	Y	Off	Y	Garry oak	Quercus garryana	38	6	3.8	Fair to poor	Fair	Good	End weighted leading branch, epicormic growth, lean to the south, die back, health stress, narrow canopy, approximately 2.0 metres from property boundary.	Retain
13	Y	Off	Y	Garry oak	Quercus garryana	42	9	4.2	Good	Fair	Good	3980 Saanich. Canopy Asymmetry heavily weighted limbs. 5.0 metres from property corner	Retain
OS1	Y	Off	· ·	Garry oak	Quercus garryana	24	3	2.4	Good	Fair	Good	Nelthorpe canopy asymmetry. 3.0 m from property corner	Retain
	v		Y		Quercus		7					3981 Nelthorpe Lakeview Place. Canopy Asymmetry	
OS2	Y	Off Off	Y	Garry oak	Quercus	<b>42</b> 44,45	6	7.1	<b>Fair</b> Fair	<b>Fair</b> Fair	<b>Good</b> Good	3981 Nelthorpe Lakeview Place. Canopy asymmetry health. 8. m from pl	Retain Retain
084	Y	Off	Y	Garry oak  Garry oak	garryana Quercus	30	0	3	Fair to	Fair	Good	3981 Nelthorpe Lakeview Place. 4.0 m from pl	Retain
OS5	Y	Off	Y	Garry oak	Quercus garryana	49	6	4.9	Good	Fair	Good	3981 Nelthorpe Lakeview Place. Canopy asymmetry health stress low lcr. 3.1 from pl	Retain

	Surveyed	Location (On,	Bylaw		Name		Crown	Critical	Con	dition	Relative		Detention status
Tag #	(Yes/No)	Off, Shared, City)	protected (Yes/No)	Common	Botanical	DBH (cm)	radius (m)	root zone radius (m)	Health	Structural	tolerance	General field observations/remarks	Retention status
OS6	Y	Off	Y	Garry oak	Quercus garryana	58	7	5.8	Good	Good	Good	3981 Nelthorpe Lakeview Place. 3.6 m from pl	Retain
OS7	Y	Off	Y	Garry oak	Quercus garryana	45	5	4.5	Fair to poor	Fair to poor	Good	3981 Nelthorpe health stress. Cavity low on trunk where stem removed. 5.0 m from pl	Retain
M6 (OS8)	N	Off	Y	Douglas-fir	Pseudotsuga menziesii	~55	7	6.6	Fair to good	Fair to good	Moderate	Small deadwood in crown	Retain
OS9	Y	Off	Y	Garry oak	Quercus garryana	~80	8	8	Fair	Fair	Good	Asymmetric crown on North side due to shading.	Retain
OS10 (M1)	Y	Shared or Off	Y	Western Red cedar	Thuja plicata	53	8	6.36	Fair to poor	Fair	Poor	Heath stress - weak vigour. Codominant leaders form at 5m above grade - narrow angle of attachment.	Retain
OS11 (M2)	Y	Off	Y	Western Red cedar	Thuja plicata	60	8	7.2	Fair to poor	Fair	Poor	Health stress - weak vigour.	Retain
OS12 (M3)	Y	Off	Y	Western Red cedar	Thuja plicata	75	5	9	Fair	Fair	Poor	Foliage on one co-dominant stem on private side of canopy mostly dead	Retain
<b>M</b> 4	Y	Municipal	Y	Garry oak	Quercus garryana	79	11	7.9	Good	Fair	Good		Retain
M5	Y	Municipal	Y	Garry oak	Quercus garryana	85	10	8.5	Good	Fair	Good	Scaffold limb failure in canopy	Retain

## 5. SITE INFORMATION & PROJECT UNDERSTANDING

The proposed development will occur within the lots at 961 Mckenzie Avenue, 3986 & 3990 Saanich Road, Saanich, BC. It is our understanding that the proposal is to remove the existing residences and to create a multifamily building with underground parking and connecting utilities, along with upgrading the sidewalk and roadways along Saanich Road and McKenzie Avenue,

## 6. FIELD OBSERVATIONS

The tree inventory documented forty-four (44) trees and one (1) hedge within influencing distance of the proposed project (*Figure 1*). These trees were predominantly identified as native Garry oaks, red cedars, and non-native ornamental trees (cherry, Hawthorne, Lawson cypress, and English holly). All three lots were relatively flat with the existing single-family residences situated within the middle of each lot.



Figure 1: Site context air photo of 961 Mckenzie Avenue, 3986 & 3990 Saanich Road, Saanich BC. The approximate boundary of the subject site is outlined in Yellow.

## 7. TREE RISK ASSESSMENT

During our May 26th, 2022, site visit and in conjunction with the tree inventory, onsite trees were assessed for risk, on a limited visual assessment basis (level 1), and in the context of the existing land uses (*Figure 2*). The time frame used for the purpose of our assessment is one year (from the date of the tree inventory). Unless otherwise noted herein, we did not conduct a detailed (level 2) or advanced (level 3) risk assessment, such as resistograph testing, increment core sampling, aerial examinations, or subsurface root/root collar examinations.

#### **Existing Land Uses**

We did not observe other trees deemed to be moderate, high, or extreme risk (in the context of the existing land uses, which would require hazard abatement to eliminate present and/or future risks (within a 1-year timeframe). Targets considered during this TRAQ assessment which included: occupants of the existing residence (constant use), occupants of vehicles travelling on Mckenzie Avenue and Saanich Road (frequent use), pedestrians travelling along existing sidewalks (frequent use), hydro lines (constant use).

#### Matrix I. Likelihood matrix.

Likelihood	Likelihood of Impact								
of Failure	Very low	Low	Medium	High					
Imminent	Unlikely	Somewhat likely	Likely	Very likely					
Probable	Unlikely	Unlikely	Somewhat likely	Likely					
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely					
Improbable	Unlikely	Unlikely	Unlikely	Unlikely					

# Matrix 2. Risk rating matrix.

Likelihood of	Consequences of Failure							
Failure & Impact	Negligible	Minor	Significant	Severe				
Very likely	Low	Moderate	High	Extreme				
Likely	Low	Moderate	High	High				
Somewhat likely	Low	Low	Moderate	Moderate				
Unlikely	Low	Low	Low	Low				

Figure 2: Likelihood and Risk Rating Matrices used to evaluate tree risk in the ISA Tree Risk Assessment Manual, Second Edition (Dunster et al. 2017).

## 8. CONSTRUCTION IMPACT ASSESSMENT

#### 8.1. RETENTION AND REMOVAL OF ONSITE TREES

The following <u>bylaw protected</u> onsite and shared trees are located where they will likely be impacted by the proposed onsite construction and have been recommended for removal (shown on the tree management plan (T1) in *Appendix A*):

#### Remove twenty-three (23) bylaw protected onsite and shared trees:

47, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 252

**Tree ID:** 47, 50-69, 252 – Reason for Removal: 19h

**Tree ID:** 70 – Reason for Removal: 19j. This tree is located where it will be significantly impacted by the proposed municipal frontage upgrades, water service connections, underground parkade, and overall site changes within its critical root zone. Garry oaks typically have a good tolerance to root disturbance, however the drastic changes to the site will alter hydrology, soil composition, and likely result in significant root loss to this tree. Mature trees are not as adaptable to drastic changes in their environment. We anticipate, that even if mitigation options were explored, this tree would not be suitable for retention in the short term, let alone long term.

**Tree ID:** 54 is a shared tree and written consent prior to the removal is required from the neighbouring properties who have shared ownership with this tree. It is to be noted that this tree has had a top failure since our previous inventory and report.

#### **General Notes**

- The stumps of trees 53 & 54 are to either be grounded in place or removed under arborist supervision.

The following <u>non bylaw protected</u> onsite (indicated by ID number) are located where they will likely be impacted by the proposed construction and have been proposed for removal (shown on the tree management plan (T1) in *Appendix A*):

#### Remove five (5) non-bylaw protected onsite trees:

48, 49, 249, 250, 251

#### 8.2. RETENTION AND REMOVAL OF PRIVATE OFFSITE TREES

The following private off-site trees (indicated by OS#) are located within influencing distance of the proposed development and civil construction, where they are possible for retention providing that their critical root zones can be adequately protected during construction. The project arborist must be onsite to supervise all excavation or fill placement required within the critical root zone (shown on the tree management plan (T1) in *Appendix A*):

#### Retain and protect thirteen (13) private offsite trees:

11, 13, OS1, OS2, OS3, OS4, OS5, OS6, OS7, OS9, OS10 (M1), OS11 (M2), OS12 (M3)

#### 8.2.1. Additional Mitigation and Information for Off-site Trees

Off-site trees **OS1**, **OS5**, & **OS6** are located where the excavation for capping of existing utilities, proposed parkade and building footprint may impact them. The project arborist is to supervise any excavation within the critical root zones of these trees. (See on the tree management plan (T1) in *Appendix A*).

Off-site trees **11**, & **13** are located where they may be impacted by the excavation for the proposed underground parkade. Given that two other trees 53 & 54 are being removed and are located on or close to the southwestern property line, we anticipate the rooting structures that may be encountered during the parkade excavation will likely originate from these two trees. The project arborist is to supervise the excavation for the underground parkade and the removal of the stumps of oak #53 and #54 within the CRZ of trees 11 & 13. There is to be no excavation beyond the property boundary. Shoring will likely be required. (See on the tree management plan (T1) in *Appendix A*).

Off-site trees **OS9** are located on neighbouring property 3978 Saanich Road. This tree may be impacted by the proposed sanitary connection. The project arborist is to supervise the excavation within the critical root zones. (See on the tree management plan (T1) in Appendix A).

Off-site trees **OS10 (M1) & OS11** (M2) are located where they may be impacted by the proposed storm connection along Saanich Road. Tree barrier fencing is to be installed, along with hydro-vac excavation and arborist supervision for the storm connection within their critical root zones along Saanich Road. (See on the tree management plan (T1) in Appendix A).

#### 8.3. RETENTION AND REMOVAL OF MUNICIPAL TREES

The following municipal hedge (indicated by Hedge #) is located where it will likely be impacted by the proposed onsite construction and has been recommended for removal (shown on the tree management plan (T1) in *Appendix A*):

#### Remove one (1) municipal hedge:

Hedge 1

Hedge ID: Hedge 1 - Reason for removal: 19h

The following municipal trees (indicated by M #) are located within influencing distance of the proposed development and civil construction, where they are possible for retention providing that their critical root zones can be adequately protected during construction. The project arborist must be onsite to supervise all excavation or fill placement required within the critical root zone (shown on the tree management plan (T1) in *Appendix A*):

#### Retain and Protect three (3) municipal trees:

M4, M5, M6 (OS8)

#### 8.3.1. Additional Mitigation and Information for Municipal Trees

Municipal trees M4 & M5 are located where the impacts from the proposed construction are negligible.

Off-site trees **M6** (**OS8**) is located where it may be impacted by the proposed sanitary connection. The project arborist is to supervise the excavation within the critical root zone. (See on the tree management plan (T1) in Appendix A).

#### 8.4. TREE REPLACEMENT

Pursuant to District of Saanich Tree Protection Bylaw No. 9272, the tree replacement calculations are as follows:

<b>Quantity of Existing trees</b>	# of Trees	# of Trees	Relevant Bylaw	Replacement	Replacement
	Retained	Removed	section (if	Tree Ratio	Trees Required
			applicable)		
		Onsite (Byla	w protected)		
22	0	22	3x19i	2:1	45
			18x19h	2:1	
			1x19j	3:1	
		Onsite (Non-By	ylaw protected)		
5	0	5	N/A	0	0
		City own	ned trees		
3 + 1 Hedge	3	1 Hedge	19i	DoS to determine	Dos to Determine
	•	Private of	ffsite trees		
13	13	0	N/A	N/A	0
			Total:		45

Twenty-two (22) onsite bylaw protected trees (Tree ID: 47, 50-53, 55-70, 252) are proposed for removal due to being located within the proposed building footprint, water lateral connections and driveway footprint (19h,19i & 19j). Based on bylaw criteria, forty-five (45) replacement trees, calculated at a 2:1 and one (1) tree (70) at a 3:1 ratio, are required to compensate for the proposed removals. In the event the sites cannot accommodate the required quantity replacement trees, any replacement tree planting shortfall will be compensated to the District of Saanich via cash in lieu payment. Compensation for the removal of municipal hedge (hedge 1) will be left to the District of Saanich parks department to determine.

#### 9. IMPACT MITIGATION

**Tree Protection Barrier:** The areas, surrounding the trees to be retained should be isolated from the construction activity by erecting protective barrier fencing (see *Appendix A*) for municipal barrier specifications). Where possible, the fencing should be erected at the perimeter of the critical root zone. The barrier fencing to be erected must be a minimum of 4 feet in height, of solid frame construction that is attached to wooden or metal posts. A solid board or rail must run between the posts at the top and the bottom of the fencing. This solid frame can then be covered with flexible snow fencing. The fencing must be erected prior to the start of any construction activity on site (i.e., demolition, excavation, construction), and remain in place through completion of the project. Signs should be posted around the protection zone to declare it off limits to all construction related activity. The project arborist must be consulted before this fencing is removed or moved for any purpose.

**Arborist Supervision:** All excavation occurring within the critical root zones of protected trees should be completed under supervision by the project arborist. Any severed or severely damaged roots must be pruned back to sound tissue to reduce wound surface area and encourage rapid compartmentalization of the wound. In particular, the following activities should be completed under the direction of the project arborist:

- During any excavation within CRZ of off-site bylaw protected trees #11, #13 OS5, OS6
- During excavation of the removal of existing sanitary cleanout within CRZ of M6 & OS9
- During excavation of new storm lateral connection within CRZ of OS10 (M1) & OS11 (M2)

**Methods to Avoid Soil Compaction:** In areas where construction traffic must encroach into the critical root zones of trees to be retained, efforts must be made to reduce soil compaction where possible by displacing the weight of machinery and foot traffic. This can be achieved by one of the following methods:

- Installing a layer of hog fuel or coarse wood chips at least 20 cm in depth and maintaining it in good condition until construction is complete.
- Placing medium weight geotextile cloth over the area to be used and installing a layer of crushed rock to a depth of 15 cm over top.
- Placing two layers of 19mm plywood.
- Placing steel plates.

**Demolition of the Existing Buildings:** The demolition of the existing houses, driveways, and any services that must be removed or abandoned, must take the critical root zone of the trees to be retained into account. If any excavation or machine access is required within the critical root zones of trees to be retained, it must be completed under the supervision and direction of the project arborist. If temporarily removed for demolition, barrier fencing must be erected immediately after the supervised demolition.

#### **Paved Surfaces Above Tree Roots:**

If the new paved surfaces within the critical root zones of trees to be retained require excavation down to bearing soil and roots are encountered in this area, this could impact their health and structural stability. If tree retention is desired, a raised and permeable paved surface should be constructed in the areas within the critical root zone of the trees. The "paved surfaces above root systems" diagram and specifications is attached.

The objective is to avoid root loss and to instead raise the paved surface and its base layer above the roots. This may result in the grade of the paved surface being raised above the existing grade (the amount depending on how close roots are to the surface and the depth of the paving material and base layers). Final grading plans should take this potential change into account. This may also result in soils which are high in organic content being left intact below the paved area.

To allow water to drain into the root systems below, we also recommend that the surface be made of a permeable material (instead of conventional asphalt or concrete) such as permeable asphalt, paving stones, or other porous paving materials and designs such as those utilized by Grasspave, Gravelpave, Grasscrete and open-grid systems.

**Mulching:** Mulching can be an important proactive step in maintaining the health of trees and mitigating construction related impacts and overall stress. Mulch should be made from a natural material such as wood chips or bark pieces and be 5-8cm deep. No mulch should be touching the trunk of the tree. See "methods to avoid soil compaction" if the area is to have heavy traffic.

**Blasting:** Care must be taken to ensure that the area of blasting does not extend beyond the necessary footprints and into the critical root zones of surrounding trees. The use of small low-concussion charges and multiple small charges designed to pre-shear the rock face will reduce fracturing, ground vibration, and overall impact on the surrounding environment. Only explosives of low phytotoxicity and techniques that minimize tree damage should

be used. Provisions must be made to ensure that blasted rock and debris are stored away from the critical root zones of trees.

**Scaffolding:** This assessment has not included impacts from potential scaffolding including canopy clearance pruning requirements. If scaffolding is necessary and this will require clearance pruning of retained trees, the project arborist should be consulted. Depending on the extent of pruning required, the project arborist may recommend that alternatives to full scaffolding be considered such as hydraulic lifts, ladders, or platforms. Methods to avoid soil compaction may also be recommended (see "Minimizing Soil Compaction" section).

Landscaping and Irrigation Systems: The planting of new trees and shrubs should not damage the roots of retained trees. The installation of any in-ground irrigation system must consider the critical root zones of the trees to be retained. Prior to installation, we recommend the irrigation technician consult with the project arborist about the most suitable locations for the irrigation lines and how best to mitigate the impacts on the trees to be retained. This may require the project arborist supervise the excavations associated with installing the irrigation system. Excessive frequent irrigation and irrigation which wets the trunks of trees can have a detrimental impact on tree health and can lead to root and trunk decay.

**Windthrow:** Where Forest edge trees are proposed to be removed, we recommend that trees that may experience an increase in wind exposure be re-examined, once tree clearing has taken place, to ensure that they are structurally stable, and suitable for retention as leading-edge trees.

**Arborist Role:** It is the responsibility of the client or his/her representative to contact the project arborist for the purpose of:

- Locating the barrier fencing
- Reviewing the report with the project foreman or site supervisor
- Locating work zones, where required
- Supervising any excavation within the critical root zones of trees to be retained
- Reviewing and advising of any pruning requirements for machine clearances

**Review and site meeting:** Once the project receives approval, it is important that the project arborist meet with the principals involved in the project to review the information contained herein. It is also important that the arborist meet with the site foreman or supervisor before any site clearing, tree removal, demolition, or other construction activity occurs and to confirm the locations of the tree protection barrier fencing.

## 10. DISCLOSURE STATEMENT

This arboricultural field review report was prepared by Talmack Urban Forestry Consultants Ltd. for the exclusive use of the Client and may not be reproduced, used, or relied upon, in whole or in part, by a party other than the Client without the prior written consent of Talmack Urban Forestry Consultants Ltd. Any unauthorized use of this report, or any part hereof, by a third party, or any reliance on or decisions to be made based on it, are at the sole risk of such third parties. Talmack Urban Forestry Consultants Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report, in whole or in part.

Arborists are professionals who examine trees and use their training, knowledge, and experience to recommend techniques and procedures that will improve a tree's health and structure or to mitigate associated risks. Trees are living organisms whose health and structure change and are influenced by age, continued growth, climate, weather conditions, and insect and disease pathogens. Indicators of structural weakness and disease are often hidden within the tree structure or beneath the ground. The arborist's review is limited to a visual examination of tree health and structural condition, without excavation, probing, resistance drilling, increment coring, or aerial examination. There are inherent limitations to this type of investigation, including, without limitation, that some tree conditions will inadvertently go undetected. The arborist's review followed the standard of care expected of arborists undertaking similar work in British Columbia under similar conditions. No warranties, either express or implied, are made as to the services provided and included in this report.

The findings and opinions expressed in this report are based on the conditions that were observed on the noted date of the field review only. The Client recognizes that passage of time, natural occurrences, and direct or indirect human intervention at or near the trees may substantially alter discovered conditions and that Talmack Urban Forestry Consultants Ltd. cannot report on, or accurately predict, events that may change the condition of trees after the described investigation was completed.

It is not possible for an Arborist to identify every flaw or condition that could result in failure, nor can he/she guarantee that the tree will remain healthy and free of risk. The only way to eliminate tree risk entirely is to remove the entire tree. All trees retained should be monitored on a regular basis. Remedial care and mitigation measures recommended are based on the visible and detectable indicators present at the time of the examination and cannot be guaranteed to alleviate all symptoms or to mitigate all risk posed.

Immediately following land clearing, grade changes or severe weather events, all trees retained should be reviewed for any evidence of soil heaving, cracking, lifting or other indicators of root plate instability. If new information is discovered in the future during such events or other activities, Talmack Urban Forestry Consultants Ltd. should be requested to re-evaluate the conclusions of this report and to provide amendments as required prior to any reliance upon the information presented herein.

## 11. IN CLOSING

We trust that this report meets your needs. Should there be any questions regarding the information within this report, please do not hesitate to contact the undersigned.

Yours truly,

Talmack Urban Forestry Consultants Ltd.

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In Talles

ISA Certified Arborist: PN-0211A

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# 12. REFERENCES

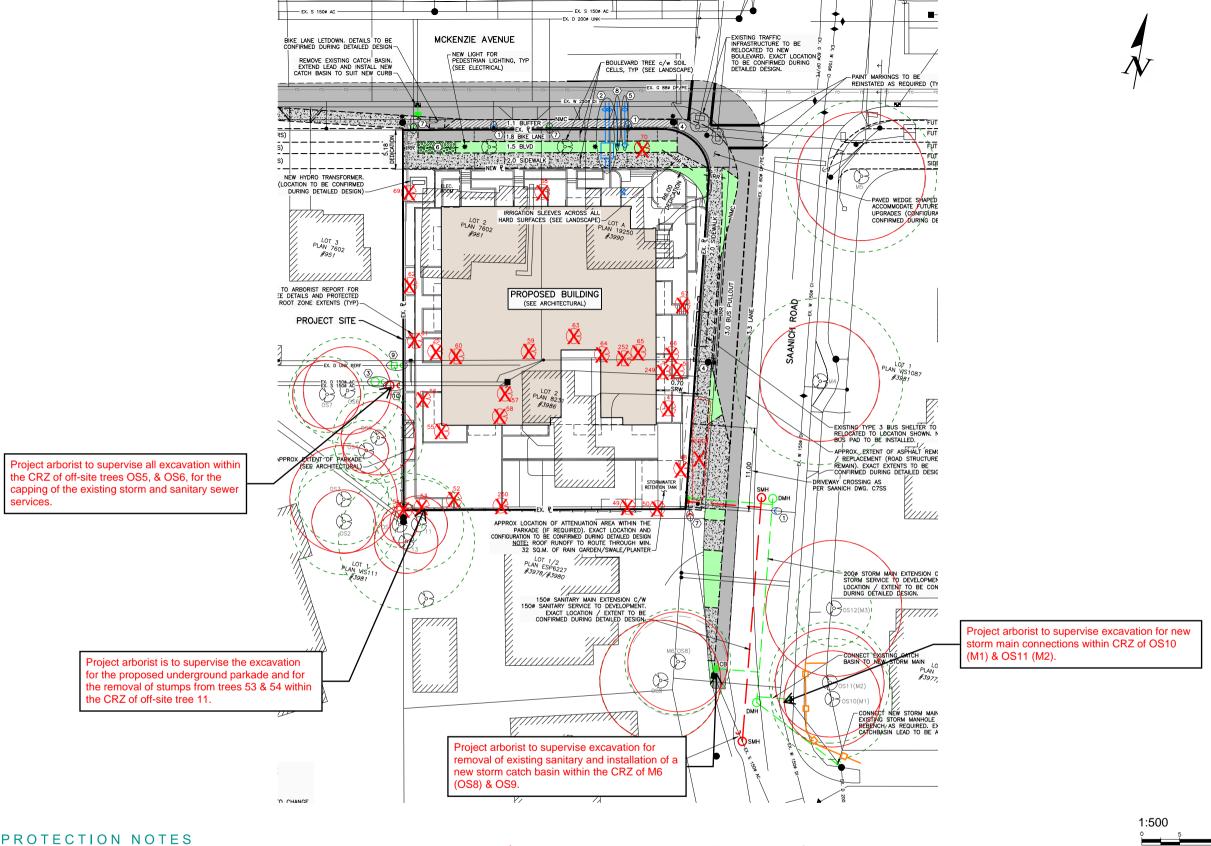
Capital Regional District (CRD). 2022. CRD Regional Map. Retrieved data from https://maps.crd.bc.ca/Html5Viewer/?viewer=public&

Dunster, J.A., E.T. Smiley, N. Matheny, and S. Lily. 2017. Tree Risk Assessment Manual, International Society of Arboriculture (ISA).

District of Saanich, Tree protection Bylaw No. 9272.

Saanich GiS

# APPENDIX A - TREE MANAGEMENT PLAN (T1)



#### TREE PROTECTION NOTES

should be isolated from the construction activity by erecting protective barrier fencing. Where possible, the fencing should be erected at the be a minimum of 1200mm in height, of solid frame construction that is retained, it must be completed under the supervision of the project the posts at the top and the bottom of the fencing. This solid frame can erected immediately after the supervised demolition. then be covered with flexible snow fencing. The fencing must be erected prior to the start of any construction activity on site (i.e. demolition. off limits to all construction related activity. The project arborist must be methods: consulted before this fencing is removed or moved for any purpose. Arborist supervision: All excavation occurring within the critical root zones of protected trees must be completed under the supervision of the project arborist. Any severed or severely damaged roots must be pruned back to • sound tissue to reduce wound surface area and encourage rapid compartmentalization of the wound.

Tree protection barrier: The areas, surrounding the trees to be retained. Demolition: The demolition of the existing houses, driveways, and any services that must be removed or abandoned must take the critical root zone of the trees to be retained into account. If any excavation or perimeter of the critical root zone. The barrier fencing to be erected must machine access is required within the critical root zones of trees to be attached to wooden or metal posts. A solid board or rail must run between arborist. If temporarily removed for demolition, barrier fencing must be

Methods to avoid soil compation: In areas where construction traffic must performed to ANSI A300 standards and Best Management Practices. encroach into the critical root zones of trees to be retained, efforts must be Paved surfaces above tree roots: Where paved areas cannot avoid excavation, construction), and remain in place through completion of the made to reduce soil compaction where possible by displacing the weight encroachment within critical root zones of trees to be retained, project. Signs should be posted around the protection zone to declare it of machinery and foot traffic. This can be achieved by one of the following construction techniques, such as floating permeable paving, may be

- Installing a layer of hog fuel or coarse wood chips at least 20cm in depth and maintaining it in good condition until construction is
- Placing two layers of 19mm plywood.
- Placing steel plates.

Mulching: Mulching can be an important proactive step in maintaining the be made of a permeable material (instead of conventional asphalt or health or trees and mitigating construction related impacts and overall stress. Mulch should be made from a natural material such as wood chips paving materials and designs such as those utilitzed by Grasspave, or bark pieces and be 5-8cm deep. No mulch should be touching the trunk of the tree. See "methods to avoid soil compaction" if the area is to have heavy traffic.

Pruning: We recommend that any pruning of bylaw-protected trees be

required. The "paved surfaces above tree roots" detail above offers a compromise to full depth excavation (which could impact the health or structural stability of the tree). The objective is to avoid root loss and to nstead raise the paved surface above the existing grade (the amount Placing medium weight geotextile cloth over the area to be used and depending on how close roots are to the surface and the depth of the installing a layer of crushed rock to a depth of 15cm over top.

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to drain into the root systems below, we also recommend that the surface

concrete) such as permeable asphalt, paying stones, or other porous Gravelpave, Grasscrete and open-grid systems.

blasting does not extend beyond the necessary footprints and into the critical root zones of surrounding trees. The use of small low-concussion charges and multiple small charges designed to pre-shear the rock face for the irrigation lines and how best to mitigate the impacts on the trees to will reduce fracturing, ground vibrations and overall impact to the surrounding environment. Only explosives of low phytotoxicity and techniques that minimize tree damage should be used. Provisions must

Scaffolding: This assessment has not included impacts from potential scaffolding including canopy clearance pruning requirements. If scaffolding is necessary and this will require clearance pruning of retained •

platforms. Methods to avoid soil compaction may also be recommended (see "Minimizing Soil Compaction" section).

Landscaping and irrigation systems: The planting of new trees and shrubs should not damage the roots of retained trees. The installation of any Blasting and rock removal: Care must be taken to ensure that the area of in-ground irrigation system must take into account the critical root zones of the trees to be retained. Prior to installation, we recommend the irrigation technical consult with the project arborist about the most suitable locations be retained. This may require the project arborist supervise the excavations associated with installing the irrigation system. Excessive

frequent irrigation and irrigation which wets the trunks of trees can have a be made to ensure that blasted rock and debris are stored away from the cerimental impact on the tree health and can lead to root and trunk decay critical root zones of trees.

Arborists role: It is the responsibility of the client or his/her representative to contact the project arborist for the purpose of:

- Locating the barrier fencing.
- Reviewing the report with the project foreman or site supervisor.

  Locating work zones and machine access corridors where required.
- Supervising excavation for any areas within the critical root zones of trees to be retained including any proposed retaining wall footings and review any proposed fill areas near trees to be retained.

#### **LEGEND**



DRIPLINE OF TREE



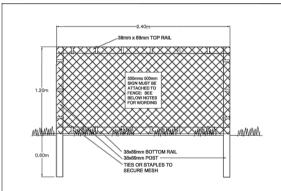
CRITICAL ROOT ZONE

**UN-SURVEYED TREE** 

TREE SELECTED FOR REMOVAL



TREE BARRIER **FENCING** 



#### TREE PROTECTION FENCING

- ATTACH A 500mm X 500mm SIGN WITH THE FOLLOWING WORDING: PROTECTED ROOT ZONE NO ENTRY. THIS SIGN MUST BE AFFIXED ON EVERY FENCE OR AT LEAST EVER 10 LINEAR METERS.
- IN ROCKY AREAS, METAL POSTS (T-BAR OR REBAR) DRILLED INTO ROCK WILL BE

#### TREE MANAGEMENT PLAN

961 Mckenzie Avenue Saanich, BC November 6th, 2025 Prepared for: Seba Construction Scale: 1:500 @11" X 17"

Drawn By: CC

Reference Drawings: Civil Plan (McElhanney; November 4th, 2025)



Victoria, BC V8Z 7H6 TEL: 250-479-8733 EMAIL: trees@talmack.ca www.talmack.ca

## **APPENDIX B - PHOTOGRAPHS**



Photograph 1 - Municipal hedge 1 (Red dot)



Photograph 3 & 4 - Garry oak 47 (Red dot) & Garry oak 50 (Blue dot). Both proposed for removal.



Photograph 5 & 6 – Red cedar 55 (Red dot) & Garry oak 59 (Blue dot). Both proposed for removal.



Photograph 7, 8 & 9 – Garry oak 60 (Red dot). Proposed for removal.



Photograph 10, 11 & 12 – Garry oak 61 (Red dot), Garry oak 62 (Blue dot) & Garry oak 63 (Orange dot). All proposed for removal.



Photograph 13, 14 & 15 – Garry oak 67 (Red dot), Garry oak 70 (Blue dot) Red Cedar 252 (Orange dot), Douglas fir 65 (Yellow dot), & Red cedar 66 (Green dot). All proposed for removal.