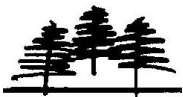


**Tree Evaluation Report for:
14205 – Malabar Avenue
White Rock, BC**

Prepared by:

**Mike Fadum and Associates Ltd.
#105, 8277-129 Street
Surrey, BC
Phone 778-593-0300
Fax 778-593-0302**



Date: January 5, 2023

1.0 INTRODUCTION

We attended the site on November 22, 2022 for the purpose of evaluating the tree resource and to make recommendations for removal and preservation for the development application proposed for 14205 – Malabar Avenue, White Rock, BC. The development plans include subdividing the one (1) lot into two (2). A plan showing the proposed building envelopes, topographical survey and lot lines was provided for our use and used as a resource for making recommendations pertaining to tree removal and retention.

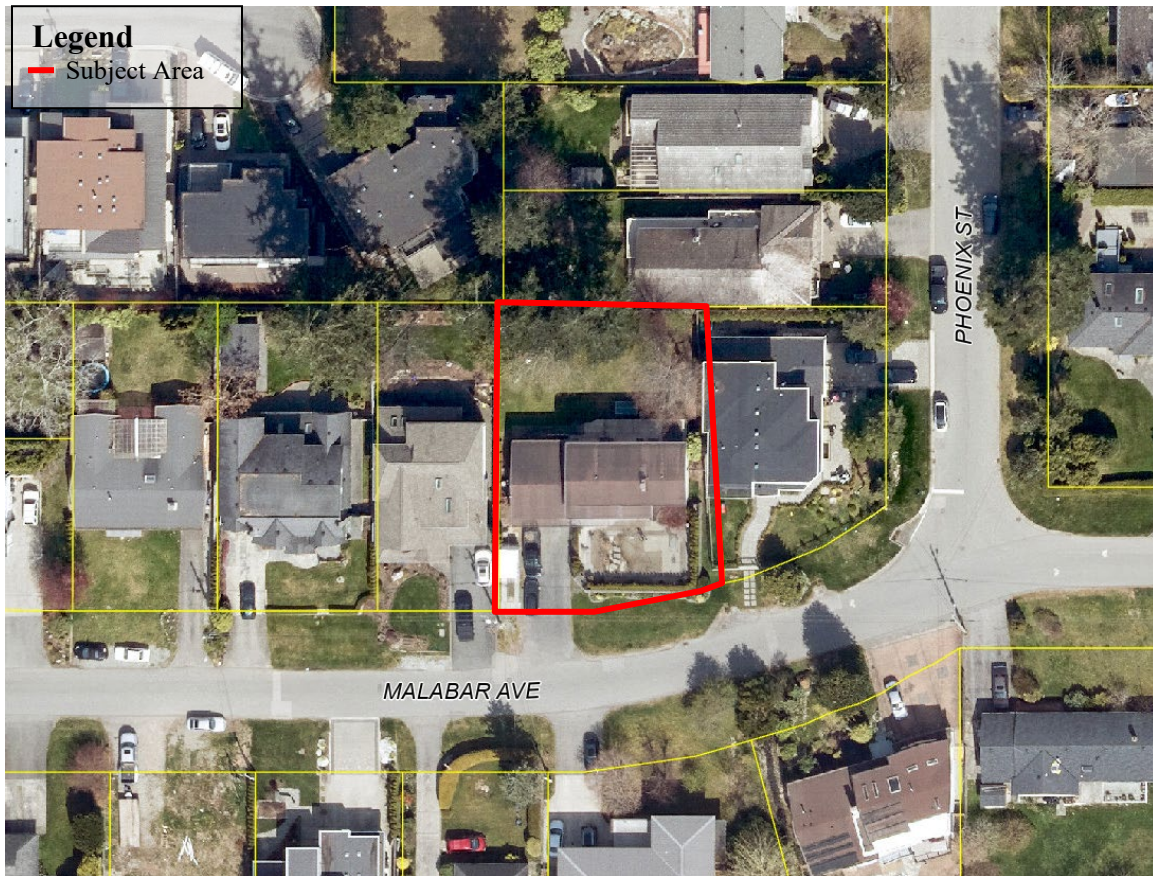


Figure 1. Aerial photograph of subject property (Wroms – April 2020).

2.0 FINDINGS

The site is accessed via the existing driveway at Malabar Avenue. The south half of the site includes the dwelling and garden areas including hardscaping. The north half of the site is open yard bordered with trees and includes an accessory building.

Table 1 provides individual tree data. Specific information includes tree type, diameter at breast height (DBH), structure and health rating (poor (P), moderate (M), good (G) or a combination of two), live crown ratio (LCR) and structural



observations. Health refers to the tree's overall health and vigor, while structure is a qualitative rating of a tree's shape and structure when compared to ideal trees of the same species and age class. Trees were evaluated for their preservation potential based on health, structure, location and species factors. Trees expected to be unsafe, conflicting with the proposed building plans, of poor health or of little long-term retentive value are recommended for removal and are shown on the attached Tree Preservation and Removal Plan.

3.0 TREE PROTECTION

Tree protection fencing is to be installed as per municipal standards prior to construction with no excavation, grade alterations or materials storage within the tree protection zone. The consulting Arborist should be contacted prior to and be onsite for any construction within the recommended no disturbance zone which is approximately 6x the tree diameter. Grade alterations and other construction works required to provide drainage are not to occur within the tree protection zone.

4.0 TREE PRESERVATION SUMMARY

Our plans have been provided to the design team and it is expected that all consultants and contractors adhere to the recommendations in this report and ensure there is no conflict with Tree Protection Zones. No ground disturbance or grade alterations are permitted within the Tree Protection Zones unless preapproved by the project arborist. Mechanical injuries caused to trees below or above ground cannot be repaired. All parties must be aware that long-term success in tree preservation efforts depends greatly on minimizing the impact caused during and post construction. Best efforts must be made to ensure that soils remain undisturbed within the tree protection zones. Ongoing monitoring and implementation of mitigating works, such as watering, mulching, etc., is essential for success.

5.0 LIMITATIONS

This Arboricultural field review report is based on site observations on the dates noted. Effort has been made to ensure that the opinions expressed are a reasonable and accurate representation of the condition of the trees reviewed. All trees or groups of trees have the potential to fail. No guarantees are offered or implied by Mike Fadum and Associates Ltd. or its employees that the trees are safe given all conditions. The inspection is limited to visual examination of accessible items without dissection, excavation, probing, coring or climbing. Trees can be managed, but they cannot be controlled. To live, work or play near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.



The findings and opinions expressed in this report are representative of the conditions found on the day of the review only. Any trees retained should be reviewed on a regular basis. The root crowns, and overall structure, of all of the trees to be retained must be reviewed immediately following land clearing, grade disturbance, significant weather events and prior to site usage changes.

Please contact the undersigned if you have any questions or concerns regarding this report.

Mike Fadum and Associates Ltd.



Tim Vandenberg

ISA Certified Arborist: PN-8565A

TRAQ

Attachment(s):

- 1) Table 1 – Inventory
- 2) Appendix A – Photos
- 3) Tree Preservation Summary
- 4) Tree Management Plans



Table 1- Tree Evaluation: 14205 – Malabar Avenue, White Rock, BC

Tree #	Type	DBH (cm)	Dripline (m)	LCR (%)	Condition (Structure, Health)	Comments	TPZ (m)	Recommendation
35	Western Redcedar (<i>Thuja plicata</i>)	58	4.5	98	M, G	Co-dominance forms at ~2.0m with inclusion – likely limb locked. Healthy foliage. Not surveyed at time of assessment, location approximate.	4.5	Retain
3969	Excelsa Redcedar (<i>Thuja plicata</i> 'Excelsa')	25	2.0	98	G, G	Healthy foliage. Not surveyed at time of assessment, location approximate.	2.0	Retain
3971	English Oak (<i>Quercus robur</i>)	54	7.4	NA	MG, G	Slightly phototropic.	6.0	Remove Expected to be significantly impacted by future house excavation. Canopy expected to conflict with future house.
3998	Red Alder (<i>Alnus rubra</i>)	45	8.7	NA	M, M	Highly phototropic. Exaggerated DBH due to heavy ivy infestation.	6.0	Retain
OS1	Douglas-Fir (<i>Pseudotsuga menziesii</i>)	~65	7.2	70	M, MG	Retaining wall on subject property likely limiting root growth to the south. Reaction wood at ~4.0m. Likely previously topped.	6.0	Retain
OS2	Douglas-Fir (<i>Pseudotsuga menziesii</i>)	~55	5.7	70	M, MG	Retaining wall on subject property likely limiting root growth to the south. Reaction wood at ~4.0m. Likely previously topped.	4.5	Retain
OS3	Douglas-Fir (<i>Pseudotsuga menziesii</i>)	~25	3.0	70	M, M	Suppressed. Retaining wall on subject property likely limiting root growth to the south. Not surveyed at time of assessment, location approximate.	2.5	Retain
OS4	Western Hemlock (<i>Tsuga heterophylla</i>)	~70	5.0	75	M, MG	Co-dominance forms at ~3.0m. Foliage appears healthy.	5.0	Retain
OS5	Douglas-Fir (<i>Pseudotsuga menziesii</i>)	~25	4.5	30	MP, M	Past topping cuts. Suppressed. Not surveyed at time of assessment, location approximate.	4.0	Retain

Table 1- Tree Evaluation: 14205 – Malabar Avenue, White Rock, BC

Tree #	Type	DBH (cm)	Dripline (m)	LCR (%)	Condition (Structure, Health)	Comments	TPZ (m)	Recommendation
OS6	Western Hemlock (<i>Tsuga heterophylla</i>)	~70	5.0	80	M, MG	Fusing with adjacent fence. Ivy infestation. Limited visual assessment due to canopy cover. Foliage appears healthy. Slightly phototropic.	5.0	Retain
ADDITIONAL RECOMMENDATIONS								
<ul style="list-style-type: none"> • In order to prevent root damage, which may adversely affect the health and or stability of the retained trees, any ground disturbance or grade alteration within the recommended Tree Protection Zone provided in the table above shall be under the direction of the project arborist. • Location is approximate for all non-surveyed trees. • Permission from the registered owner(s)/city is required prior to the removal of all city, offsite, and shared trees regardless of their size. 								

Note: 'OS' refers to Offsite trees and due to restricted access their diameters are approximate. An assessment of offsite trees does not imply they are safe as the restricted access prevented a thorough review. Shared trees/hedges have been assessed as onsite trees in the summary. 'C' refers to trees on City property.



Figure 1. Subject site.



Figure 2. OS1 and 3971 from left to right.





Figure 3. 3998, OS4, OS3, OS2 and OS1 from left to right,

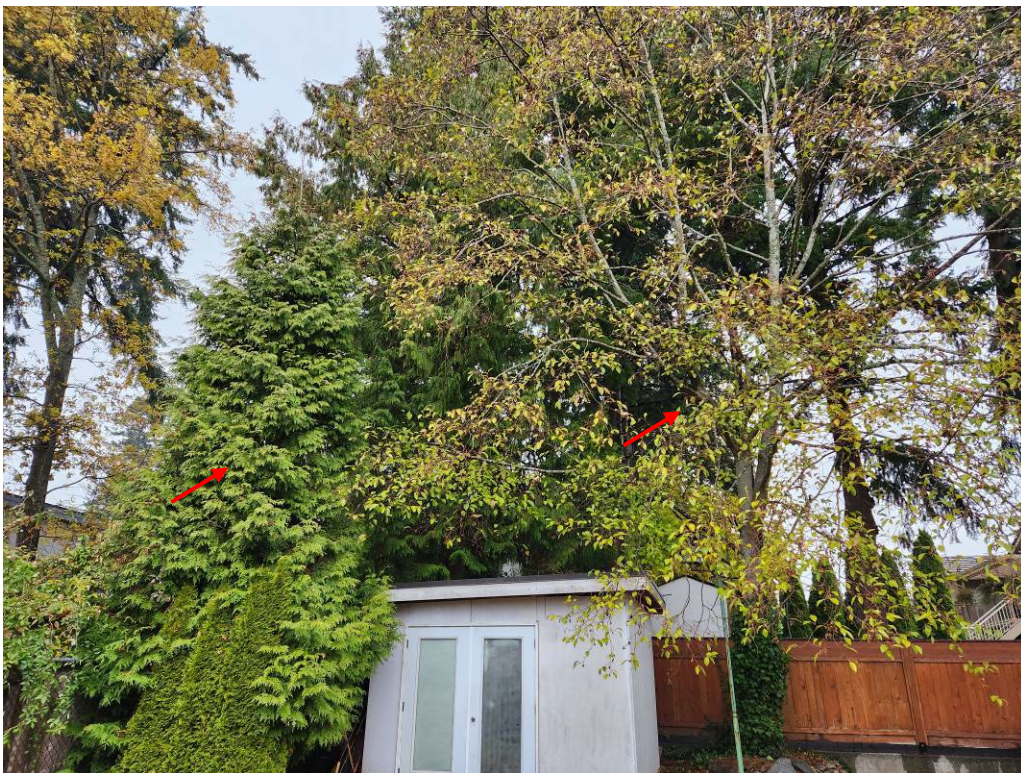


Figure 4. 3969 and 3998 from left to right.





Figure 5. Canopy of tree 35



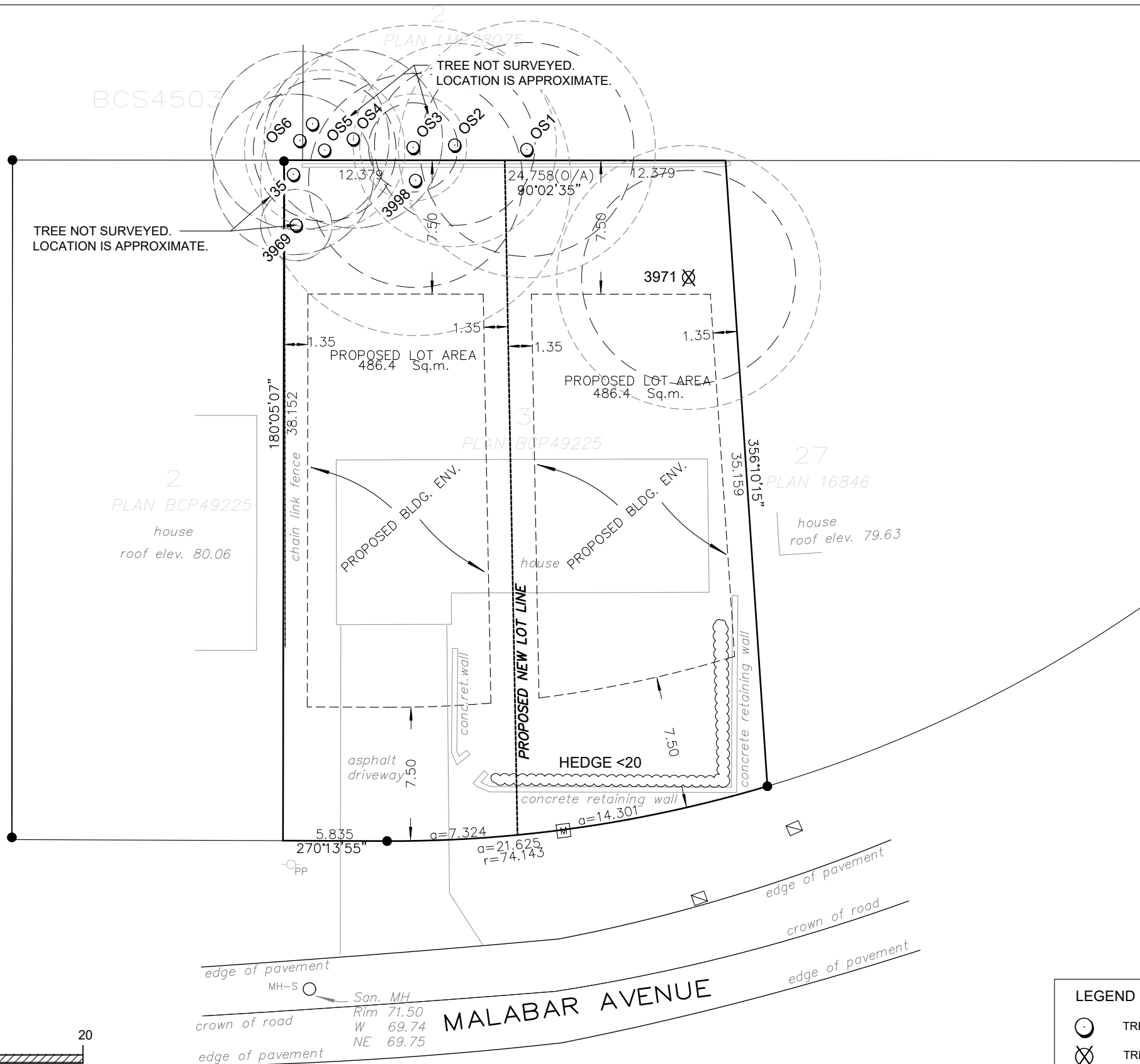
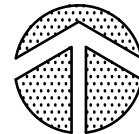
Figure 6. Canopies of trees to the north appear relatively healthy.



Summary of Tree Preservation by Tree Species:

Tree Species	Existing	Remove	Retain
Alder and Cottonwood Trees			
Alder / Cottonwood	1	0	1
Deciduous Trees (excluding Alder and Cottonwood Trees)			
Oak, English	1	1	0
Coniferous Trees			
Douglas-Fir	4	0	4
Hemlock, Western	2	0	2
Redcedar, Excelsa	1	0	1
Redcedar, Western	1	0	1
Total	10	1	9
Total Replacement Trees Required		3	
Total Replacement Trees Proposed		3	
Total Replacement Tees in Deficit		0	
Total Retained and Replacement Trees		12	





BCS4503

PLAN 1M28075

TREE NOT SURVEYED.
LOCATION IS APPROXIMATE.

TREE NOT SURVEYED.
LOCATION IS APPROXIMATE.

2
PLAN BCP49225
house
roof elev. 80.06

PROPOSED BLDG. ENV.

PROPOSED LOT AREA
486.4 Sq.m.

PLAN 30P49225

PROPOSED BLDG. ENV.

27
PLAN 16846
house
roof elev. 79.63

180'05'07"
chain link fence

1.35
PROPOSED LOT AREA
486.4 Sq.m.

1.35
PROPOSED LOT AREA
486.4 Sq.m.

asphalt driveway
7.50

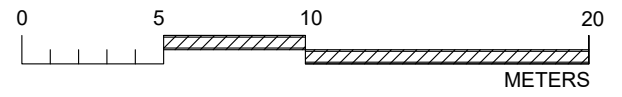
HEDGE <20

concrete retaining wall

356'10'15"
35.159
concrete retaining wall

5.835
270'13'55"
PP
a=7.324
a=21.625
r=74.143

edge of pavement
MH-S
San. MH
Rim 71.50
W 69.74
NE 69.75
edge of pavement
crown of road
edge of pavement
MALABAR AVENUE
edge of pavement



LEGEND			
	TREE TO BE RETAINED		MINIMUM NO DISTURBANCE ZONE
	TREE TO BE REMOVED		TREE DRIPLINE

STAMP	NO.	DATE	BY	REVISION

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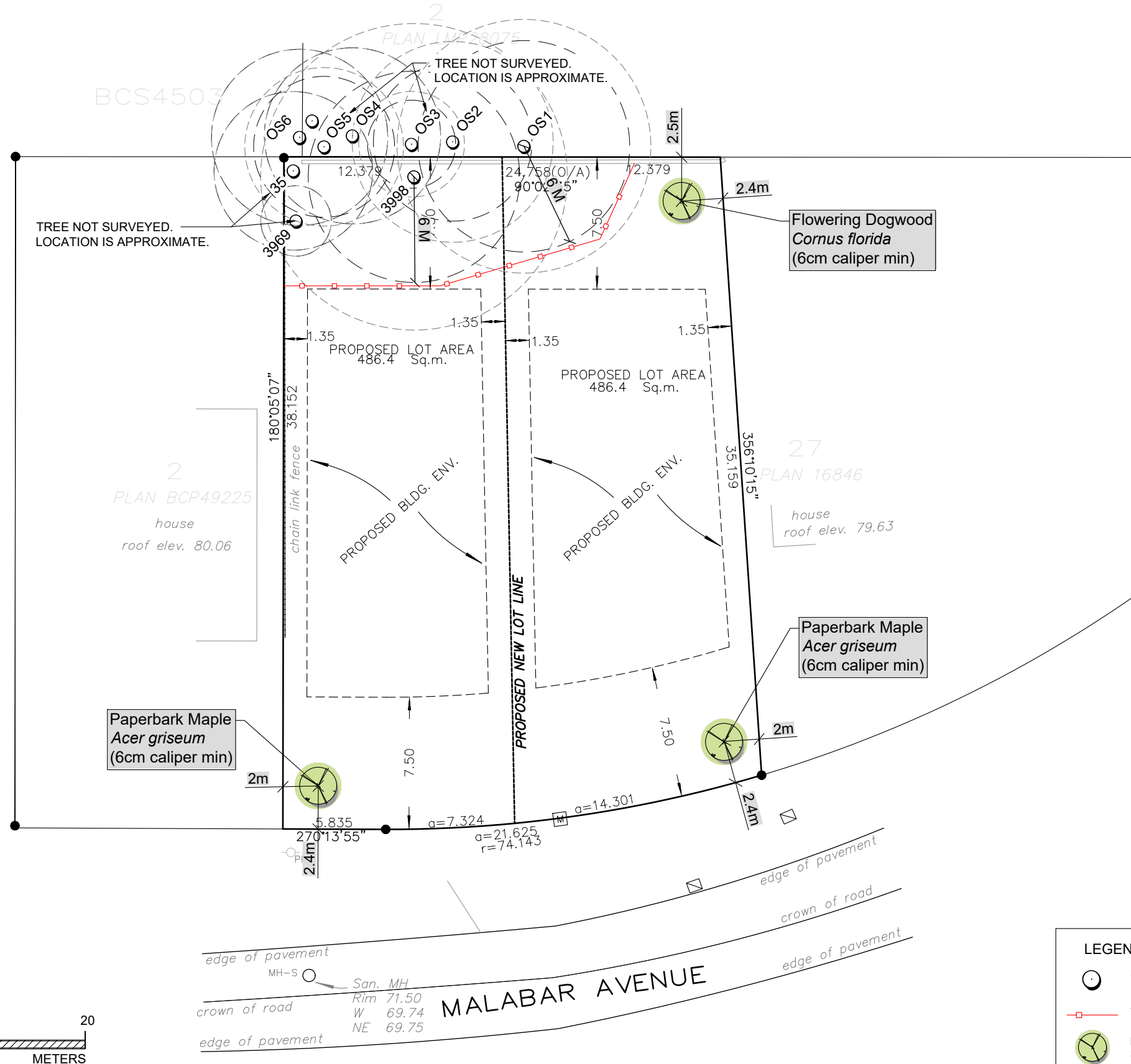
PROJECT TITLE
14205 MALABAR AVENUE
WHITE ROCK, B.C.

SHEET TITLE
T1 - TREE REMOVAL AND PRESERVATION PLAN

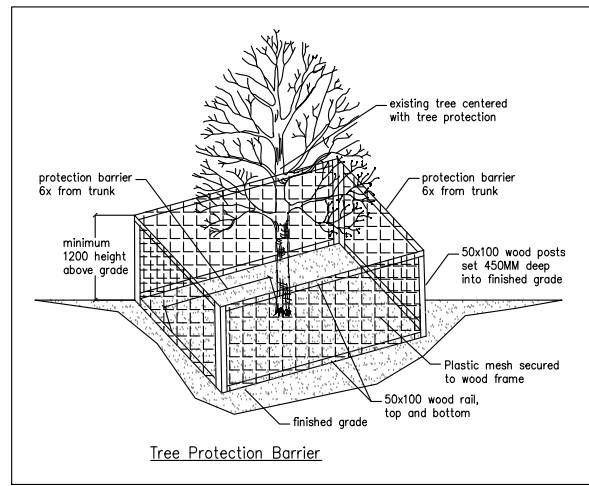
CLIENT

DRAWN MK
SCALE AS SHOWN
DATE JANUARY 04, 2023

T-1
SHEET 1 OF 2



- GENERAL NOTES:
- NON BY-LAW TREES HAVE BEEN REMOVED FROM THE PLANS.
 - TREE PROTECTION FENCING SHALL BE CONSTRUCTED TO MUNICIPAL STANDARDS.
 - REASSESS TREES WITH LOT GRADING PLANS.
 - REPLACEMENT TREES SHALL CONFORM TO CNLA LANDSCAPE STANDARDS. SPECIES AND LOCATIONS TO BE DETERMINED AT LANDSCAPE STAGE. REPLACEMENT TREES TO BE MIN. 3m FROM FOUNDATIONS AND MIN. 1m FROM PROPERTY LINES.



LEGEND

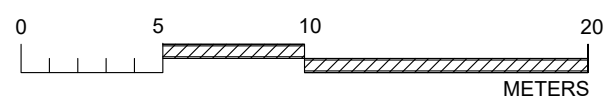
○ TREE TO BE RETAINED

○ MINIMUM NO DISTURBANCE ZONE

— TREE PROTECTION FENCING

○ TREE DRIPLINE

○ DECIDUOUS REPLACEMENT TREE (6 CM. DIA. MINIMUM)



STAMP	NO.	DATE	BY	REVISION

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PROJECT TITLE
14205 MALABAR AVENUE
WHITE ROCK, B.C.

SHEET TITLE
T2 - TREE PROTECTION PLAN

CLIENT

DRAWN MK

SCALE AS SHOWN

DATE JANUARY 04, 2023

T-2
SHEET 2 OF 2