

# arboricultural report and inventory

**DUNDARAVE**  
**2452-2490 MARINE DRIVE, WEST VANCOUVER, BC**

**Project No:**  
19060 / 1.3

**Client:**  
Dundarave Beachside LP

**Report Date:**  
Updated May 26, 2021

**Arborist Fieldwork / Report completed by:**  
Florian Fisch, ISA Certified Arborist PN – 7921A, ISA TRAQ

**Assessment Date:**  
September 19, 2019

**Survey by:**  
Underhill Geomatics Ltd.

**Survey Date:**  
February 28, 2019

**Architectural background by:**  
IBI Group

**Background Date:**  
April 16, 2020

## 1.0 INTRODUCTION

Durante Kreuk Ltd. was requested by the client to carry out a visual tree assessment and review of site conditions for all existing trees on and adjacent to the subject site to assess potential for tree retention within the proposed development.

The observations consist of a Level 2 visual assessment of individual trees using criteria set out by the International Society of Arboriculture (ISA). The objective of this review is to determine the species, size and general condition of each tree, and suitability for retention within the proposed new development of the subject site. Following parameters are taken into consideration during the evaluation process:

- Species, age, size, health, condition and anticipated longevity
- Visible indicators of structural defects in individual trees
- Location, exposure
- Current and potential hazard to persons or property
- Windfirmness or potential for blowdown in the area

The accompanying Existing Trees Management Plan (Appendix B) shows the tree locations, diameters at breast height (DBH) and tree numbers corresponding to this report. The tree locations are based on a survey plan provided by company as noted above unless noted otherwise on the drawings. The plan also shows the proposed retention or removal status for each tree in the proposed development. Further, the plan outlines the extent of the tree protection areas and specific tree protection measures, if applicable.

As a base for our recommendations outlined in this report, we use the District of West Vancouver Tree Bylaw No. 4892, 2016 amended November 02, 2020.

This report and the corresponding Existing Trees Management Plan are not a tree removal permit. Obtaining a proper tree removal permit from the relevant municipal authority prior to removal of any tree shall be the responsibility of the owner of the property or their representatives.

## 2.0 GENERAL OBSERVATIONS

### 2.1 The Subject Site

The site is part of a commercial area with surrounding mixed users and falls within the the Dundarave neighbourhood, District of West Vancouver. This site is part of a residential neighborhood. One block south and across the train tracks lies Dundarave park and Dundarave Beach.

The subject site is located on Marine Drive, the main road through lower West Vancouver and 25<sup>th</sup> Street, a neighbourhood access road. The site is bound by a lane on the south side. A mixed use low rise building occupies the adjacent lot to the east.

The subject site consists of multiple lots, currently occupied with single story commercial buildings. The site slopes in a general direction to the south by approximately one full floor elevation difference between Marine Drive and the Lane.

### 2.2 Tree Inventory

A detailed Tree Inventory (Appendix A), including all notes from field observations, is attached at the end of this report.

### 2.3 Existing Trees on Subject Site

Existing trees on the subject site can be summarized into 2 general groups as outlined below:

- .1 Trees within the parking area along the Lane:  
Trees within this group consist of broadleaves only. The dominant tree within this group is tree #1 (arbutus). It is located within a small planting area surrounded by the parking lot and retaining wall along the property line. Other trees within this group are sub-dominant trees #2 and #3 (mountain ash). These trees are located within small planting areas within the the parking lot. These trees are in fair condition.
- .2 Trees within the corner plaza near the intersection of Marine Drive and 25<sup>th</sup> Street:  
Trees within this group consist of broadleaves only. Trees #4 and #5 (fragrant snowbell) form a joint crown and are located in a dominant location at the entry of the Dundarave commercial strip. These trees are in good condition.

### 2.4 Existing Trees within adjacent Road Allowance

Existing trees within the adjacent road allowance can be summarized into 2 general groups as outlined below:

- .1 Trees within the Lane:  
Trees within this group consist of broadleaves only. Trees #101 - #104 (amur maples) are all located within small planting areas between the lane and the parking area. All trees have heavily been pruned for overhead line clearance. These trees are generally in fair condition.
- .2 Trees within the Marine Drive Street Frontage:  
Trees within this group consist of a broadleaves only. They are organized into two sub groups, one towards the west end of the site and the other one towards the east end of the site. Trees #105 (red maple), #106 (whitebeam mountainash) and #107 (Norway maple) form a less uniform western group. These trees are located in small planting wells. These trees are generally in fair to good condition. Trees #108 (Norway maple) and #109 - #111 (red maple) form a more uniform eastern group. Some of these trees are located in small planting wells, others are located in more spacious planting areas. These trees are generally in fair to good condition.

**3.0 TREE MANAGEMENT RECOMMENDATIONS WITHIN THE PROPOSED DEVELOPMENT**

The proposed mixed use building and underground parking structure would replace the existing buildings. The underground parking structure is proposed to cover almost the entire site, with the exception of a small triangular area near the northwest corner. The above ground building is proposed to be set back by approximately 6' from the northern property line to allow for a more generous and open sidewalk with structural soil and new street trees.

The following recommendations take the proposed site development as well as other site conditions and trees health into account:

- a) Trees #1 - #4 are falling within or immediately next to the proposed footprint of the underground parking structure. These trees are recommended for removal.
- b) Trees #101 - #104 are falling immediately next to the proposed footprint of the underground parking structure. These trees are recommended for removal.
- c) Tree #105 - #110 are falling immediagely next to the proposed footprint of the underground parking structure and within an area of significant off site improvements. These trees are recommended for removal.
- d) Tree #111 is located within the street frontage of the adjacent lot. The critical root zone of this tree will not be impacted by the proposed development and off site improvements. No work is proposed within the street frontate of the adjacent site and businesses within this building will be operating. Tree Protection Fencing as shown on complementing Tree Management Plan shall be installed to District Requirements.

**4.0 SUMMARY OF TREE REMOVAL AND REPLACEMENT TREES**

Table below shows a summary of trees recommended for removal and retention as well as municipal requirements for replacement trees or total of trees required on site after construction.

Description	On Site	Off Site
Existing Trees	5	11
Trees Recommended for Removal	5	10
Trees Recommended for Retention	0	1
Replacement trees required (one for each removed tree)	5	10
Trees proposed on ground level (per DK landscape drawings)	10	14

Tree replacement requirements are satisfied.

**5.0 LIMITATIONS OF THIS REPORT**

It shall be noted that site conditions and tree health can change over time. Prior to construction, the client shall contact DK to confirm the validity of this report and the corresponding Existing Trees Management Plan. Additional field observations and revisions to the documentations may be required at this point to ensure accuracy of this documentation. Any additional effort past the field observations and reporting for the initial submission are not included within the original proposal fee and may be charged to the client at an additional cost.

The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These include a visual examination of each tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of insect attack, discoloured foliage, the condition of any visible root structures, the degree and direction of lean

(if any), the general condition of the tree(s) in the surrounding site, and the proximity of property and people. Except where specifically noted in the report, none of the trees examined were dissected, cored, probed, or climbed, and detailed root crown examinations involving excavation were not undertaken.

The conclusions and recommendations made in this report are based on conditions as recorded on the date(s) of the field review. Notwithstanding the recommendations and conclusions, it must be realised that trees are living organisms, and their health and vigour constantly changes over time. They are not immune to changes in site conditions, or seasonal variations in the weather.

While reasonable efforts have been made to determine that the trees recommended for retention are healthy, no guarantees are offered, or implied, that these trees, or parts of them, will remain standing and whole. It is impossible to predict with absolute certainty the behaviour of any single tree or group of trees, or their component parts in all future circumstances. Inevitably any standing tree will pose some risk. In accordance with standard practice, the assessment presented in this report is valid at the time it was undertaken. Durante Kreuk Ltd. accepts no responsibility for subsequent damage or deterioration.

Notwithstanding the recommendations made in this report, Durante Kreuk Ltd. accepts no responsibility for the implementation of all or part of the recommendations, unless we have been specifically retained to review the implementation measures as they are carried out. Implementation of the recommendations in no way implies any supervisory or inspection role on the part of Durante Kreuk Ltd.

This report shall be considered a whole; no sections or parts are severable. The report shall be considered incomplete if any pages are missing, including the attached plan.

Yours truly,

**DURANTE KREUK LTD.**



Florian Fisch  
ISA Certified Arborist PN – 7921A

FF/jb

**TABLE OF APPENDICES:**

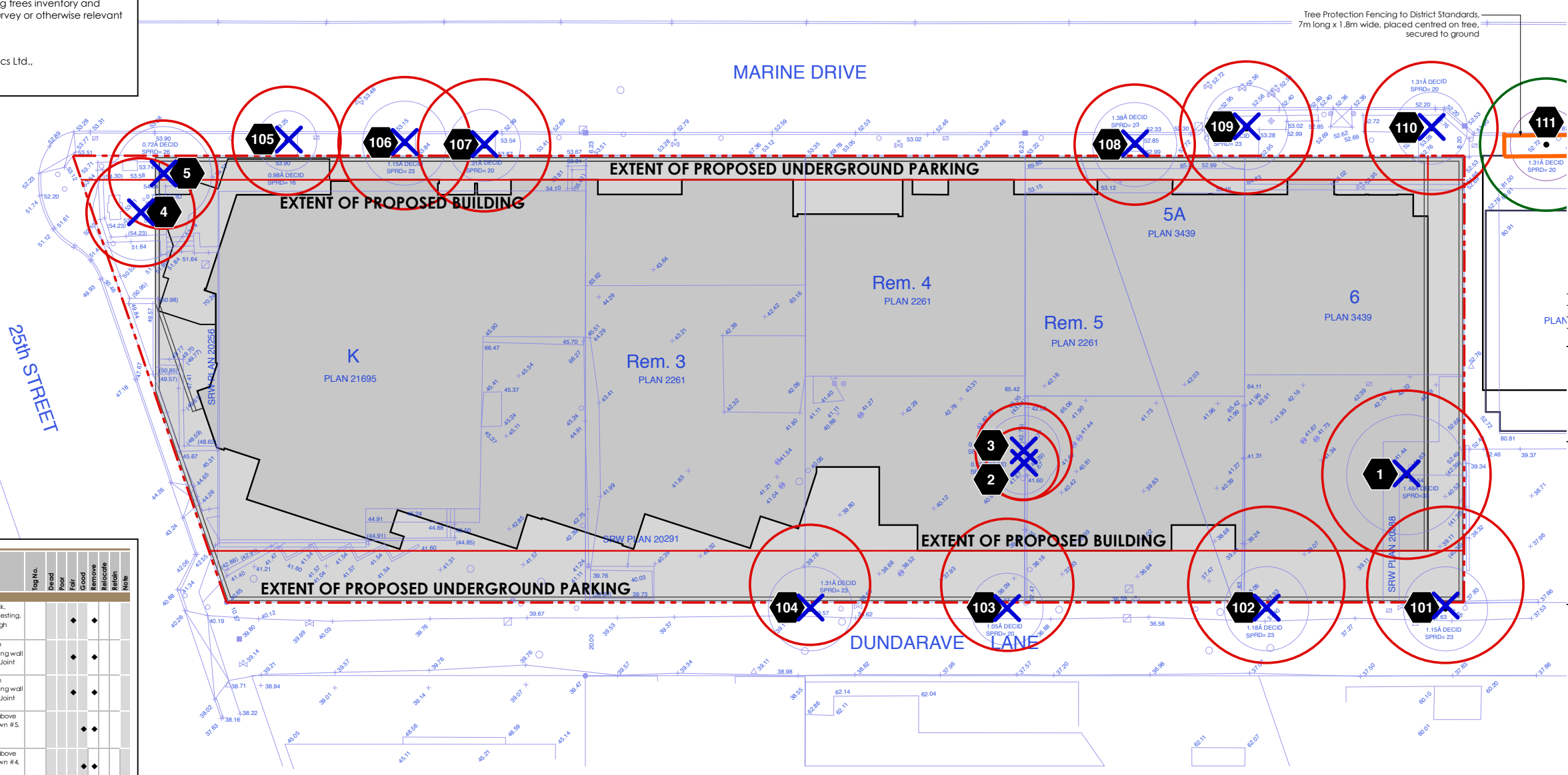
- A – EXISTING TREE INVENTORY**
- B – EXISTING TREE MANAGEMENT PLAN**

Tree No.	Species	# of Stems	DBH-cm	Spread - m	Height - m	Field Observations	Tag No.	Dead	Poor	Fair	Good	Remove	Relocate	Retain	Note
<b>ON SITE</b>															
1	<i>Arbutus menziesii</i> var. (arbutus)		55	14	8	Base in asphalt. Heaving dieback. Dieback minimal inner crown. Nesting. Light post near base. Lines through crown.				◆		◆			
2	<i>Sorbus aucuparia</i> var. (mountain ash)	6	30	6	8	Other stem(s) 5-10cm Ø. Base in narrow planting strip. Low retaining wall near base. Lines through crown. Joint crown with #3. Reduced vigor.				◆		◆			
3	<i>Sorbus aucuparia</i> var. (mountain ash)	9	36	8	8	Other stem(s) 5-10cm Ø. Base in narrow planting strip. Low retaining wall near base. Lines through crown. Joint crown with #2. Reduced vigor.				◆		◆			
4	<i>Styrax obassia</i> (fragrant snowbell)		26	9	6	3 co-dominant leader(s) at 1m above ground. Included bark. Joint crown #5. Pruning wound(s). Woundwood development is good.					◆	◆			
5	<i>Styrax obassia</i> (fragrant snowbell)		29	9	6	4 co-dominant leader(s) at 1m above ground. Included bark. Joint crown #4. Pruning wound(s). Woundwood development is good.					◆	◆			
<b>OFF SITE</b>															
101	<i>Acer ginnala</i> (amur maple)		38	13	7	Base in tree well. Heavily pruned for line clearance. Asymmetrical crown. Poor structure.	DHC 0331			◆		◆			
102	<i>Acer ginnala</i> (amur maple)		40	13	8	Base in tree well. Heavily pruned for line clearance. Base high. Asymmetrical crown. Poor structure.	DHC 0332			◆		◆			
103	<i>Acer ginnala</i> (amur maple)		39	11	8	Base in tree well. Heavily pruned for line clearance. Base high. Asymmetrical crown. Poor structure.	DHC 0333			◆		◆			
104	<i>Acer ginnala</i> (amur maple)		40	10	7	Base in tree well. Heavily pruned for line clearance. Asymmetrical crown. Poor structure.	DHC 0334			◆		◆			
105	<i>Acer rubrum</i> var. (red maple)		32	9	13	Base in tree well. Buttress raised with girdling root(s). Scaffold limb(s) upright. Included bark. Dieback upper crown.	DHC 0311			◆		◆			
106	<i>Sorbus aria</i> (Whitebeam Mountainash)		41	11	9	Base in tree well. Trunk wound(s) at base. Woundwood development is poor. Large pruning wound(s). Woundwood development is poor.	DHC 0312			◆		◆			
107	<i>Acer rubrum</i> var. (red maple)		46	11	15	Base in tree well. Surface root(s). Girdling root(s). Scaffold limb(s) upright. Included bark. Dieback minimal.	DHC 0313				◆	◆			
108	<i>Acer platanoides</i> (Norway maple)		46	10	10	Base in tree well. Girdling root(s). Scaffold limb(s) upright. Included bark. Dieback upper crown. Surface root(s)	DHC 0314			◆		◆			
109	<i>Acer rubrum</i> var. (red maple)		57	11	16	Scaffold limb(s) upright. Included bark.	DHC 0315				◆	◆			
110	<i>Acer rubrum</i> var. (red maple)		44	11	15	Girdling root(s). Old sun scalding. Wound closed. One scaffold limb(s) dead. Scaffold limb(s) upright. Included bark.	DHC 0316			◆		◆			
111	<i>Acer rubrum</i> var. (red maple)		41	11	14	Base in tree well. Girdling root(s). Surface root(s). Scaffold limb(s) upright. Included bark.	DHC 0317				◆			◆	

**DRAWING KEY**

- Extent of drip line of existing tree recommended for retention (location from survey by BCLS Land Surveyor)
- Extent of drip line of existing tree recommended for removal (location from survey by BCLS Land Surveyor)
- Tree Number referred to in existing trees inventory and report for all trees as shown on survey or otherwise relevant for the project
- Site Survey, by Underhill Geomatics Ltd., dated February 28, 2019

Observations and recommendations by Florian Fisch, ISA Certified Arborist PN-7921A.  
 Observations made September 19, 2019.  
 This drawing shall be read in conjunction with Existing Trees Report for this site by Durante Kreuk, dated May 26 2021.



02	28.05.2021	DP Re-Submission
01	30.11.2020	Issued for DP
no.:	date:	item:
Revisions:		

**dk** Durante Kreuk Ltd.  
 102 - 1637 West 5th Avenue  
 Vancouver BC V6J 1N5  
 t: 604 684 4611  
 f: 604 684 0577  
 www.dk.bc.ca

Project:  
**DUNDARAVE**  
**2452-2490 Marine Drive**  
**West Vancouver**

Drawn by: FF  
 Checked by: PK  
 Date: May 26, 2021  
 Scale: NTS  
 Drawing Title:  
**Existing Trees Management Plan**

Project No.:  
**19060**  
 Sheet No.:

Tree No.	Species	# of Stems	DH-cm	Height - m	Field Observations	Tag No.	Dead	Pruned	Feir	Good	Remove	Relocate	Retain	Note
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