Project #: 322
Site Address: 5920 Iona Drive, Vancouver B.C.
Date: February 11, 2022
Revised: November 15, 2022

GOODE
ARBORICULTURE CONSULTING

Tree Preservation Report

Submitted to:
University of British Columbia
1100-2329 West Mall
Vancouver, BC V6T 1Z4

Submitted by:
Goode Arboriculture Consulting
14186 25a Ave
Surrey, BC
V4P2E8
7788062470
info@goodearboriculture.com

Table of Contents

GOODE ARBORICULTURE CONSULTING

14186 25a Ave, Surrey B.C. V4P2E8 |7788062470|
info@goodearboriculture.com |

1. Introduction

Goode Arboriculture was asked to complete an assessment of the trees on a lot for a proposed development located on 5920 Iona Drive, Vancouver B.C. The purpose of this report is to assess the general health and condition of all the trees located on and adjacent to this site. The development site includes a large relatively flat lot west of Westbrook Mall Road. The development application proposes a new development site located in the yellow bordered area on the map below.

The objective of this report is to ensure that the proposed development complies with the UBC Land Use Plan. This assessment includes the proposed site plans and a tree inventory specifying: species, diameter at breast height (DBH), estimated height, structure, general health, and critical root zones. The trees were assessed according to the International Society of Arboriculture standards. This report outlines the existing trees on-site as well as trees off-site on adjacent properties on the date(s) noted in this report.

e

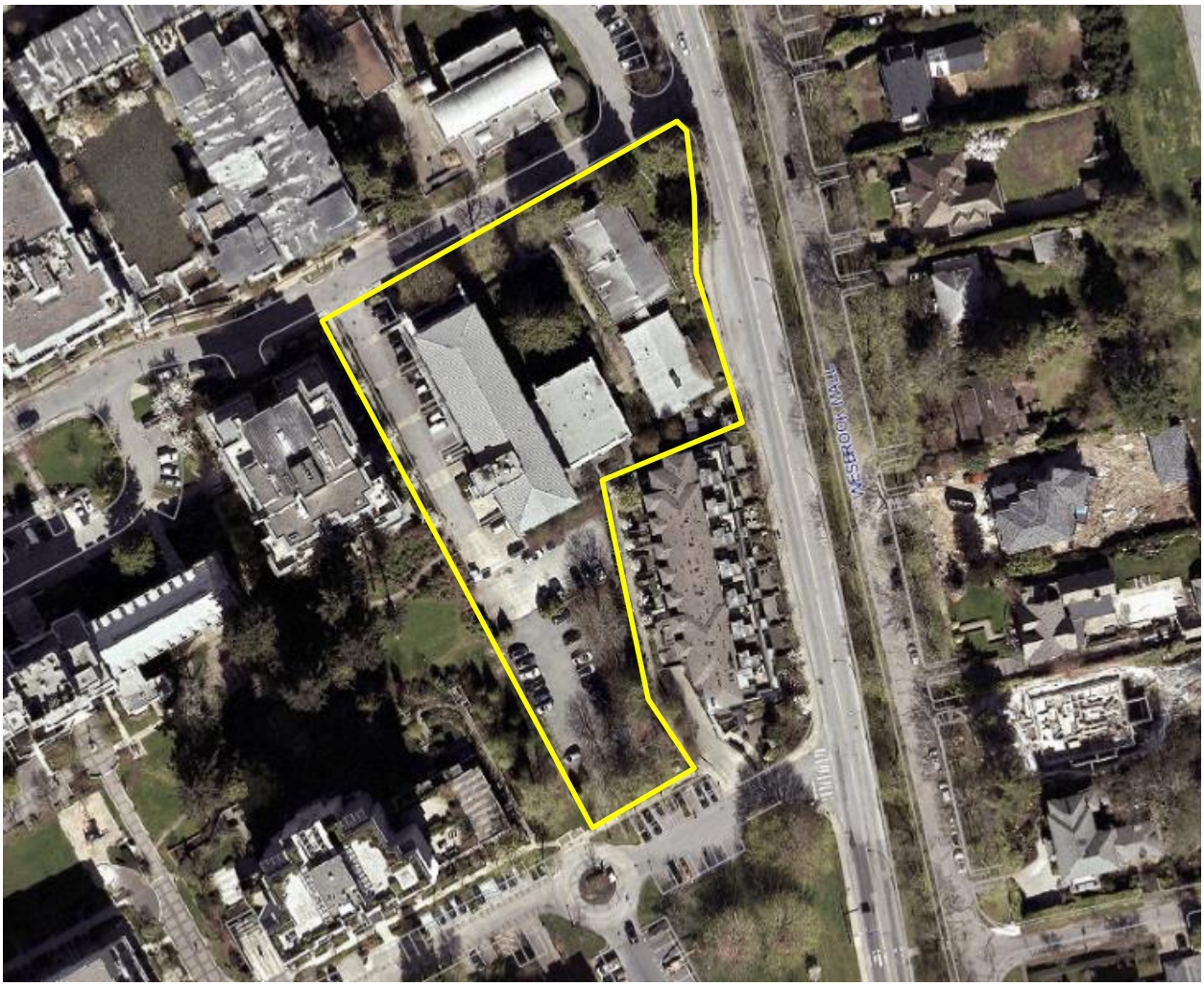


Image 1 – Aerial photograph was taken from the City of Vancouver GIS mapping system.

GOODE
ARBORICULTURE CONSULTING

14186 25a Ave, Surrey B.C. V4P2E8 |7788062470|
info@goodearboriculture.com |

2. Observations

Goode Arboriculture Consulting (GAC) visited the sites on October 20, 2020. The topography of this site is relatively flat, the site has no waterways or riparian areas. The property has a building on it presently as shown below in the pictures and maps. All services, site grade elevations, and any conflicting changes with regards to the trees are marked on the Tree & Site Survey attached to this report.

Shared trees (via trunk, canopy, or root protection zones) on adjacent properties were also assessed, and are represented on the Tree Management Plan and Tree Inventory Table. It is important to assess all neighbouring trees that reside along the perimeter of this lot. These "edge trees" are now at an increased risk of partial to complete failure when the surrounding trees are removed due to the increased exposure to wind and development activities.

The Tree Inventory Table found below is an inventory of all of the assessed trees that are greater than 20cms in diameter on-site and neighboring the lot perimeters. Each marked with a numbered tag as recommended by UBC Land Use Plan. For each assessed tree the following data was collected and calculated:

All tree specimens on-site and neighboring the property were located and assessed for health and structural condition. Trees were assessed according to the International Society of Arboriculture standards. Tree risk assessments are based on Level 1 observations. Observations were made from the ground using binoculars, sounding mallet, tape measure, probe, and camera.

This assessment includes a tree inventory table specifying:

- Tree species identification
- The diameter of the trunk at breast height (DBH), measured in centimeters & based on Topographical Survey.
- Tree height, measured in meters above ground level (AGL)
- Live crown ratio, used as a measure of tree canopy
- On-site observations
- Recommendations based on observations and tree impact.
- Location on-site (O-offsite tree, C-city tree, S-shared)
- Root Protection Zone (RPZ) and Tree Protection Barriers (TPB)

GOODE ARBORICULTURE CONSULTING

14186 25a Ave, Surrey B.C. V4P2E8 |7788062470|
info@goodearboriculture.com |

2.1. *Images:*

Image 2 – Trees #2523-2524 located along Iona Drive.

GOODE ARBORICULTURE CONSULTING

14186 25a Avenue, Surrey B.C. V4P2E8 |7788062470 | info@goodearboriculture.com |

Image 3 – Photograph of Cedar tree along Iona Drive.

GOODE ARBORICULTURE CONSULTING

14186 25a Avenue, Surrey B.C. V4P2E8 |7788062470 | info@goodearboriculture.com |

Image 4 – Photograph of Maple Trees 10002-10003 on-site.

GOODE ARBORICULTURE CONSULTING

14186 25a Avenue, Surrey B.C. V4P2E8 |7788062470 | info@goodearboriculture.com |

Image 5 – Photograph of decayed base of Dogwood trees #2237-2238.

GOODE ARBORICULTURE CONSULTING

14186 25a Avenue, Surrey B.C. V4P2E8 |7788062470 | info@goodearboriculture.com |

Image 6 – Photograph of Dogwood & Cedar trees #2237-2238.

GOODE ARBORICULTURE CONSULTING

14186 25a Avenue, Surrey B.C. V4P2E8 |7788062470 | info@goodearboriculture.com |

Image 7 – Photograph of Corner of Westbrook Mall and Iona Drive.

GOODE ARBORICULTURE CONSULTING

14186 25a Avenue, Surrey B.C. V4P2E8 |7788062470 | info@goodearboriculture.com |

Image 8 – Photograph of raised base of Cedar tree #2519.

GOODE ARBORICULTURE CONSULTING

14186 25a Avenue, Surrey B.C. V4P2E8 |7788062470 | info@goodearboriculture.com |

Image 9 – Photograph of Maple tree #2328.

GOODE
ARBORICULTURE CONSULTING

14186 25a Avenue, Surrey B.C. V4P2E8 |7788062470 | info@goodearboriculture.com |

Image 10 – Photograph of Off-site Magnolia & Katsura Trees along east property line.

GOODE ARBORICULTURE CONSULTING

14186 25a Avenue, Surrey B.C. V4P2E8 |7788062470 | info@goodearboriculture.com |

Image 11 – Photograph of Katsura trees #2528, 9933, 2527, 9935.

GOODE ARBORICULTURE CONSULTING

14186 25a Avenue, Surrey B.C. V4P2E8 |7788062470 | info@goodearboriculture.com |

Image 12 – Photograph of City Ash trees #5188,5187,5194.

GOODE
ARBORICULTURE CONSULTING

14186 25a Avenue, Surrey B.C. V4P2E8 |7788062470 | info@goodearboriculture.com |

Image 13 – Photograph of rear gravel parking lot with several Maple and Cedar Trees.

GOODE
ARBORICULTURE CONSULTING

14186 25a Avenue, Surrey B.C. V4P2E8 |7788062470 | info@goodearboriculture.com |

mage 14 – Photograph of rear gravel parking lot with several Maple and Cedar Trees.

GOODE ARBORICULTURE CONSULTING

14186 25a Avenue, Surrey B.C. V4P2E8 |7788062470 | info@goodearboriculture.com |

Image 15 – Off-site Pear trees #1006-1008 on left of roadside.

GOODE ARBORICULTURE CONSULTING

14186 25a Avenue, Surrey B.C. V4P2E8 |7788062470 | info@goodearboriculture.com |

Image 16 – Trees #1004-1005 in parking area.

2.2. Tree Inventory Table:

Table 1:

Tag #	Surveyed	Location	Common & *Botanical* Name	DBH (cm)	Ht (m)	LCR (%)	Observations	Recommendations	Retention Suitability	Retain/ Remove	Tree Protection zone (m)
2524	Yes	On-site	Maple Tree *Acer sp.*	60	14	60	Multi-stemming specimen that is visually in good health and condition. Exposed roots at base, shared canopy. Recently topped. Next to utilities.	Protect throughout development with tree protection barriers.	High	Retain	3.9
2523	Yes	On-site	Maple Tree *Acer sp.*	60	17	80	Multi-stemming specimen that is visually in good health and condition. Exposed roots at base, shared canopy.	Protect throughout development with tree protection barriers.	High	Retain	3.9
2240	Yes	On-site	Western Red Cedar *Thuja plicata*	95	24	90	Single stemming specimen that is visually in good health and condition. Exposed roots at base, shared canopy.	Remove due to development pressures and to accommodate proposed site plans.	High	Remove	6.2
2239	Yes	On-site	Western Red Cedar *Thuja plicata*	105	24	90	Single stemming specimen that is visually in good health and condition. Exposed roots at base, shared canopy.	Remove due to development pressures and to accommodate proposed site plans.	High	Remove	6.8
10003	Yes	On-site	Japanese Maple *Acer japonicum*	15+ 20	7	70	Specimen is visually in good health and condition, forks at base.	Remove to accommodate proposed site plans.	High	Remove	2.3
10002	Yes	On-site	Japanese Maple *Acer japonicum*	10+ 10+ 20	7	70	Specimen is visually in good health and condition, forks at base.	Remove to accommodate proposed site plans.	High	Remove	2.3
2238	Yes	On-site	Pacific Dogwood *Cornus nuttallii*	20+ 25+ 30	11	70	Specimen is a understory tree. Bark peeling off on east stem and basal cavity, visually in poor health.	Remove to accommodate proposed site plans.	Low	Remove	4.9
2237	Yes	On-site	Pacific Dogwood *Cornus nuttallii*	20+ 30+ 30	12	70	forks at base. all 3 stems have peeling bark slight deadwood in canopy. decay at base, visually in poor health.	Remove to accommodate proposed site plans.	Low	Retain	5.2
2236	Yes	On-site	Western Red Cedar *Thuja plicata*	65	21	80	Single stemming specimen that is visually in good health and condition. Exposed roots at base, shared canopy.	Remove to accommodate proposed site plans.	High	Retain	4.2
2235	Yes	On-site	Western Red Cedar *Thuja plicata*	45	20	80	Single stemming specimen that is visually in good health and condition. Exposed roots at base, shared canopy.	Remove to accommodate proposed site plans.	High	Retain	2.9
2234	Yes	On-site	Western Red Cedar *Thuja plicata*	65	23	80	Single stemming specimen that is visually in good health and condition. Exposed roots at base, shared canopy.	Remove to accommodate proposed site plans.	High	Retain	4.2

001	Yes	On-site	Pacific Dogwood *Cornus nuttallii*	20+ 25+ 25	10	60	Specimen has several dying branches throughout canopy, broken top and peeling bark. Visually in poor health	Remove to accommodate proposed site plans.	Low	Retain	4.6
2233	Yes	On-site	Pacific Dogwood *Cornus nuttallii*	30	11	70	Single stemming specimen.	Remove to accommodate proposed site plans.	High	Retain	2
2522	Yes	On-site	Western Red Cedar *Thuja plicata*	85	21	80	Single stemming specimen that is visually in good health and condition, shared canopy..	Remove to accommodate proposed site plans.	High	Retain	5.5
2532	Yes	On-site	Western Red Cedar *Thuja plicata*	100	23	80	Single stemming specimen that is visually in good health and condition with exposed roots and low branches.	Protect throughout development with tree protection barriers.	High	Retain	6.5
2229	Yes	On-site	Western Red Cedar *Thuja plicata*	105	23	85	Specimen that is visually in good health and condition. Co-dominate leader 55 AGL.	Protect throughout development with tree protection barriers.	High	Retain	6.8
2230	Yes	On-site	Western Red Cedar *Thuja plicata*	95	21	85	Single stemming specimen that is visually in good health and condition. Large cavity found at base, low branches.	Protect throughout development with tree protection barriers.	High	Retain	6.2
2518	Yes	On-site	Western Red Cedar *Thuja plicata*	45	15	90	Single stemming specimen that is visually in good health and condition, low branches & exposed roots.	Protect throughout development with tree protection barriers.	High	Retain	2.9
2519	Yes	On-site	Western Red Cedar *Thuja plicata*	95	23	90	Specimen that is visually in good health and condition forks 25 AGL wit included union. Base is above ground level with low branches.	Protect throughout development with tree protection barriers.	High	Retain	6.2
10001	Yes	On-site	Japanese Maple *Acer japonicum*	10+ 15	6	70	Specimen is visually in good health and condition, forks AGL.	Remove to accommodate proposed site plans.	High	Remove	1.6
2328	Yes	On-site	Japanese Maple *Acer japonicum*	10+ 35+ 35	6	70	Specimen is visually in good health and condition, forks AGL.	Remove to accommodate proposed site plans.	High	Retain	5.2
9982	Yes	Off-site	Katsura *Cercidiphyllum japonicum*	8+8 +8	9	70	Specimen is visually in good health and condition, forks AGL.	Protect throughout development with tree protection barriers.	High	Retain	1.6
2516	Yes	Off-site	Katsura *Cercidiphyllum japonicum*	35	12	80	Specimen is visually in good health and condition.	Protect throughout development with tree protection barriers.	High	Retain	2.3
9978	Yes	On-site	Japanese Maple *Acer japonicum*	8+8 +8	6	70	Specimen is visually in good health and condition, forks AGL.	Retain and relocate under arborist supervision.	High	Retain	1.6
9977	Yes	On-site	Japanese Maple Acer japonicum	8+8 +8	6	70	Specimen is visually in good health and condition, forks AGL.	Retain and relocate under arborist supervision.	High	Retain	1.6
2528	Yes	On-site	Katsura *Cercidiphyllum japonicum*	25	11	70	Specimen is visually in good health and condition.	Remove to accommodate proposed site plans.	High	Retain	1.6

GOODE ARBORICULTURE CONSULTING

14186 25a Avenue, Surrey B.C. V4P2E8 |7788062470 | info@goodearboriculture.com |

9933	Yes	On-site	Katsura *Cercidiphyllum japonicum*	20	9	70	Specimen is visually in good health and condition.	Protect throughout development with tree protection barriers.	High	Retain	1.3
2527	Yes	On-site	Katsura *Cercidiphyllum japonicum*	25	11	70	Specimen is visually in good health and condition.	Protect throughout development with tree protection barriers.	High	Retain	1.6
9935	Yes	On-site	Katsura *Cercidiphyllum japonicum*	25	11	70	Specimen is visually in good health and condition.	Protect throughout development with tree protection barriers.	High	Retain	1.6
9931	Yes	Off-site	Magnolia *Magnolia sp.*	8+8 +8	8	75	Specimen is visually in good health and condition, forks AGL.	Protect throughout development with tree protection barriers.	High	Retain	1.6
9929	Yes	Off-site	Magnolia *Magnolia sp.*	8+8 +8	4	70	Specimen is visually in good health and condition, forks AGL.	Protect throughout development with tree protection barriers.	High	Retain	0
9927	Yes	Off-site	Magnolia *Magnolia sp.*	8+8 +8	4	70	Specimen is visually in good health and condition, forks AGL.	Protect throughout development with tree protection barriers.	High	Retain	0
9923	Yes	Shared	Katsura *Cercidiphyllum japonicum*	10+ 10	11	70	Specimen is visually in good health and condition, forks AGL.	Protect throughout development with tree protection barriers.	High	Retain	1.3
9922	Yes	Shared	Katsura *Cercidiphyllum japonicum*	10+ 10	9	70	Specimen is visually in good health and condition, forks AGL.	Protect throughout development with tree protection barriers.	High	Retain	1.3
9921	Yes	Shared	Katsura *Cercidiphyllum japonicum*	20	11	70	Specimen is visually in good health and condition.	Protect throughout development with tree protection barriers.	High	Retain	1.3
5188	Yes	City	Ash *Fraxinus sp.*	25	12	70	Specimen is visually in good health and condition. Bark damage, peeling on east side.	Protect throughout development with tree protection barriers.	High	Retain	1.6
5187	Yes	City	Ash *Fraxinus sp.*	30	12	70	Specimen is visually in good health and condition, lean over Walter Rd.	Protect throughout development with tree protection barriers.	High	Retain	2
5194	Yes	City	Ash *Fraxinus sp.*	30	12	70	Specimen is visually in good health and condition, damage to bark at base	Protect throughout development with tree protection barriers.	High	Retain	2
9826	Yes	City	Magnolia *Magnolia sp.*	10	5	70	Specimen is visually in good health and condition.	Protect throughout development with tree protection barriers.	High	Retain	0.7
9829	Yes	City	Magnolia *Magnolia sp.*	10	5	70	Specimen is visually in good health and condition.	Protect throughout development with tree protection barriers.	High	Retain	0.7
9830	Yes	City	Ash *Fraxinus sp.*	20	11	70	Specimen is visually in good health and condition, corrected lean.	Protect throughout development with tree protection barriers.	High	Retain	1.3
9952	Yes	On-site	Maple Tree *Acer sp.*	60	20	70	Specimen is visually in good health and condition, shared canopy.	Remove to accommodate proposed site plans.	High	Remove	3.9

9956	Yes	On-site	Maple Tree *Acer sp.*	30	17	75	Specimen is visually in good health and condition, shared canopy.	Protect throughout development with tree protection barriers.	High	Retain	2
2531	Yes	On-site	Maple Tree *Acer sp.*	30+ 40	18	70	Specimen is visually in good health and condition, shared canopy, forks 1ft AGL with included union.	Remove to accommodate proposed site plans.	Medium	Retain	4.6
9957	Yes	On-site	Maple Tree *Acer sp.*	20	14	70	Specimen is visually in good health and condition, shared canopy, lean towards Walter.	Protect throughout development with tree protection barriers.	High	Retain	1.3
9958	Yes	On-site	Maple Tree *Acer sp.*	20	14	70	Specimen is visually in good health and condition, shared canopy.	Protect throughout development with tree protection barriers.	High	Retain	1.3
9959	Yes	On-site	Maple Tree *Acer sp.*	20+ 35	17	70	Specimen is visually in good health and condition, shared canopy, low branches. along a bank of 3ft. Forks AGL with included union.	Protect throughout development with tree protection barriers.	Medium	Retain	3.6
9953	Yes	On-site	Western Red Cedar *Thuja plicata*	60	21	95	Specimen is visually in good health and condition, shared canopy.	Remove to accommodate proposed site plans.	High	Remove	3.9
9954	Yes	On-site	Maple Tree *Acer sp.*	50	20	70	Specimen is visually in good health and condition, shared canopy.	Remove to accommodate proposed site plans.	High	Remove	3.3
9951	Yes	On-site	Maple Tree *Acer sp.*	20+ 35+ 35	18	70	Specimen is visually in good health and condition, shared canopy. Gravel base, forks at base.	Remove to accommodate proposed site plans.	High	Remove	5.9
9947	Yes	On-site	Maple Tree *Acer sp.*	50	20	70	Specimen is visually in good health and condition, shared canopy. Gravel base, forks at base.	Remove to accommodate proposed site plans.	High	Remove	3.3
9946	Yes	On-site	Maple Tree *Acer sp.*	30	18	70	Specimen is visually in good health and condition, shared canopy. Gravel base.	Remove to accommodate proposed site plans.	High	Remove	2
9945	Yes	On-site	Maple Tree *Acer sp.*	25+ 25	20	70	Specimen is visually in good health and condition, shared canopy. Gravel base, forks 1ft AGL with included union.	Remove to accommodate proposed site plans.	Medium	Remove	3.3
2529	Yes	On-site	Western Red Cedar *Thuja plicata*	55	21	80	Specimen is visually in good health and condition, shared canopy.	Remove to accommodate proposed site plans.	High	Retain	3.6
9943	Yes	On-site	Maple Tree *Acer sp.*	20+ 25	17	70	Specimen is visually in good health and condition, shared canopy. Gravel base, forks 1ft AGL. with included union.	Remove to accommodate proposed site plans.	Medium	Retain	2.9
9942	Yes	On-site	Maple Tree *Acer sp.*	45	17	70	Specimen is visually in good health and condition, shared canopy.	Remove to accommodate proposed site plans.	High	Remove	2.9
9941	Yes	On-site	Maple Tree *Acer sp.*	30	12	70	Specimen is visually in good health and condition, shared canopy, lean towards parking	Remove to accommodate proposed site plans.	High	Remove	2
2525	Yes	On-site	Maple Tree *Acer sp.*	60	18	70	Specimen is visually in good health and condition, shared canopy, large dead branches in canopy.	Remove to accommodate proposed site plans.	High	Remove	3.9

GOODE ARBORICULTURE CONSULTING

14186 25a Avenue, Surrey B.C. V4P2E8 |7788062470 | info@goodearboriculture.com |

9940	Yes	On-site	Maple Tree *Acer sp.*	20	12	70	Specimen is visually in good health and condition, shared canopy. forks AGL with included union. leaning. understory. beside 2525.	Remove to accommodate proposed site plans.	Medium	Remove	1.3
1009939	Yes	On-site	Maple Tree *Acer sp.*	40	17	70	Specimen is visually in good health and condition, shared canopy.	Remove to accommodate proposed site plans.	High	Remove	2.6
9938	Yes	On-site	Maple Tree *Acer sp.*	20	15	70	Specimen is visually in good health and condition, shared canopy.	Remove to accommodate proposed site plans.	High	Remove	1.3
10006	Yes	Off-site	Pear *Pyrus sp.*	20	6	70	Specimen is visually in good health and condition.	Protect throughout development with tree protection barriers.	High	Retain	1.3
1007	Yes	Off-site	Pear *Pyrus sp.*	20	7	70	Specimen is visually in good health and condition, shared canopy.	Protect throughout development with tree protection barriers.	High	Retain	1.3
10008	Yes	Off-site	Pear *Pyrus sp.*	25	8	70	Specimen is visually in good health and condition, shared canopy.	Protect throughout development with tree protection barriers.	High	Retain	1.6
10009	Yes	Off-site	Pear *Pyrus sp.*	20	7	70	Specimen is visually in good health and condition, shared canopy.	Protect throughout development with tree protection barriers.	High	Retain	1.3
10005	Yes	On-site	Liquid Amber *Liquidamber styraciflua*	20	9	60	Specimen is visually in good health and condition, shared canopy, recently topped. next to utilities. touching building	Protect throughout development with tree protection barriers.	High	Retain	1.3
10004	Yes	On-site	Liquid Amber *Liquidamber styraciflua*	25	8	80	Specimen is visually in good health and condition, shared canopy, surface roots damaged in both trees.	Protect throughout development with tree protection barriers.	High	Retain	1.6

3. Tree Preservation Summary

Project Number: 322
Project Location: 5920 Iona Drive, Vancouver
Registered Arborist: Stuart Goode, BSc, ISA Certified (PN-6463)
Date of Assessment: October 20, 2020

General Tree Assessment:

This site and neighboring properties consist of a variety of tree species throughout the properties. These trees vary in size, and the condition is represented in the Tree Inventory Table and Tree Management Plan. This site inventory identified a total of 58 protected trees. Six city trees, 3 shared trees, and 9 off-site neighboring trees are marked on the "Tree Management Plan" attached to this report. The location of the protected trees and root protection zones are provided on the Tree Management Plan" and Tree Inventory Table.

Discussion and Recommendations:

- The soil surrounding the roots of trees is one of the most important parts of the land to preserve. The soil is the life force of trees and provides for water, nutrition, oxygen, biological hosts, and a structural base. Preserving the soil includes protecting it from changes in bulk density compression of soil from machinery and personnel. Excavating soil changes the soil chemistry and potentially damages several roots. Protecting larger areas of land than otherwise set forth by the city surrounding each tree will help increase health and longevity.
- Arborist supervision is highly recommended when any work is to be done near or within the TPB's and RPZ's of any retained trees. Please advise an arborist before any work commences to ensure the appropriate tree protection plan can be put into place to help preserve any retained trees.
- To protect and prevent any further stress and damage after the demolition phase GAC recommends the use of wood chip/bark mulch by 10 - 15cm covering the site and soil. Mulch will also increase drought resistance, increase soil microorganism's count and help create healthy soil structure.
- All retained tree specimens on-site and neighboring the property are to be protected during all stages of the development with constructed barriers as specified by UBC.

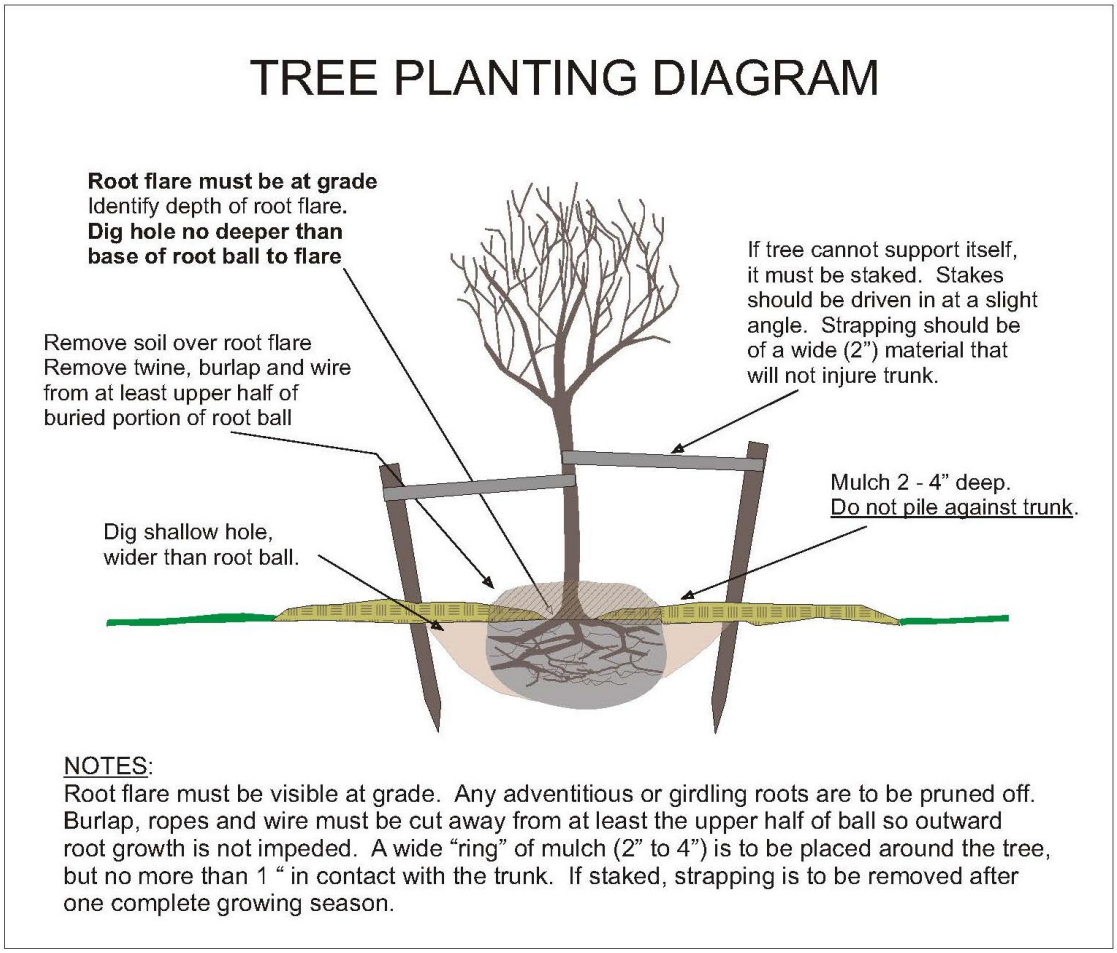
Tree Replacement:

Replacement trees will meet the UBC Land Use Plan, their proposed locations throughout the property are shown on the attached "Tree Management Plan." GAC recommends small to medium-sized deciduous and coniferous trees for the property such as; Maple, Oak, or Beech trees, False cypress and Serbian spruce, Dogwood, Stewartia, and Gingko. All replacement trees must conform to the BCSLA/BCLNA landscaping and International Society of Arboriculture standards. The proper selection and installation of plant material are crucial for plant growth, health and success.

GOODE ARBORICULTURE CONSULTING
14186 25a Ave, Surrey B.C. V4P2E8 |7788062470|
info@goodearboriculture.com |

Small growing trees should not be planted within 3m of foundations, fences, or outbuildings. Large growing species should be planted 4m away from building foundations. Replacement trees should also be planted 1m away from property lines and 3m away from another tree and not planted in a hedge like manner. Trees with mature heights greater than 5m should not be planted under overhead utility lines and within 3m of the power lines. Additional arborist recommendations and notes with regard to replacement trees and their locations can be found on the attached "Tree Management Plan".

See the tree planting schematic below.



Conclusions:

This summary is based on the Arborists best judgment, trees expected to be unsafe, conflicting with the proposed development plans, of poor health, or minimal long-term retaining value are recommended for removal shown in the Tree Inventory and Tree Preservation Summary. Goode Arboriculture Consulting recommends arborist consultation when any changes are made to the proposed site plans due to the effects on any retained trees on-site.

GOODE ARBORICULTURE CONSULTING
14186 25a Ave, Surrey B.C. V4P2E8 |7788062470|
info@goodearboriculture.com |

Table 2 *- Tree Retention and Removal by Species Summary*
(Excluding Off-site, Park dedicated areas, Open space, and riparian areas)

Tree Species	Existing	Remove	Retain
Deciduous Species			
Maple Tree Acer sp.	26	15	11
Liquid Amber Liquidamber styraciflua	2	0	2
Pacific Dogwood Cornus nuttallii	4	1	3
Magnolia *Magnolia sp.*	2	0	2
Katsura Cercidiphyllum japonicum	7	0	7
Ash Fraxinus sp.	4	0	4
Coniferous Species			
Western Red Cedar Thuja plicata	13	3	10
Total *(including Alder & Cottonwood Trees)*	**58**	**19**	**39**
Additional Trees in the proposed open space/riparian/park area			
Replacement Trees Proposed *(excluding Boulevard Street Trees)*	**68**		
Total Retained and Replacement Trees	**107**		

Table 3 *- On-site Tree Protection and Replacement Summary*

On-Site Trees	Number of Trees
Protected Trees Identified - *on-site and shared trees, including trees within boulevards and proposed streets and lanes, but excluding trees in proposed open space or riparian areas. Including Alder and Cottonwood trees*	58
Protected Trees to be Removed	19
Protected Trees to be Retained - *excluding trees within proposed open space or riparian areas.*	39
Total Replacement Trees Required: • UBC Land use plan 1:1 replacement ratio.	39
Replacement Trees Proposed	68
Additional Replacement Trees	36

Table 4 *- Off-site Tree Protection and Replacement Summary*

Off-Site Trees	Number of Trees
Protected Off-site Trees to be removed	0
Total Replacement Trees Required: • UBC Land use plan 1:1 replacement ratio.	0
Replacement Trees Proposed	0

Summary and Plan Prepared by Goode Arboriculture Consulting

November 15, 2022

GOODE ARBORICULTURE CONSULTING

14186 25a Ave, Surrey B.C. V4P2E8 |7788062470|
info@goodearboriculture.com |

4. Construction Guidelines

The trees identified for preservation, as shown in the Tree Inventory table and Summary, have been given this recommendation on a preliminary basis. Final recommendations shall be based on grading and construction details. It is also advised to use a **Project Arborist** to supervise and review any changes that may occur during the demolition and construction phases of the site development within the recommended no disturbance zones (RPZ).

All 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 by all parties to ensure the preservation of the retained trees; the following guidelines are provided for the root protection zones (RPZ). To maintain the good health and vigor of the retained trees, the following tree preservation guidelines should be followed during the construction period.

- No grade changes, the natural grade must be maintained.
- No soil disturbances or stripping.
- No alterations to surface drainage as to direct the flow of water.
- No storage, dumping of materials, parking, fires, or underground utilities.
- Site drainage should be designed to maintain the natural water table.
- Any plans that will affect the trees including; Excavation, demolition, erosion control, improvement, utility, drainage, grading, landscape, and irrigation should be reviewed and supervised by a **Project Arborist**.

Ongoing monitoring and the implementation of a Tree Health Care works, such as watering, mulching, pruning, fertilization, pest, and disease, etc., is essential for success. Site visits should be more frequent during activities of higher risk. These visits will help ensure the above guidelines are being respected and will allow for any tree concerns that may arise. Every site visit will be documented and summarized in a report which will include any concerns along with recommended mitigation procedures.

Tree protection fences shall be constructed before any activity takes place on-site, these fences must be constructed at a specified distance from the tree trunks. The tree protection fence must be constructed of 2 by four lumber at a height of 1.2 meters with orange plastic meshing.

GOODE ARBORICULTURE CONSULTING

14186 25a Ave, Surrey B.C. V4P2E8 |7788062470|
info@goodearboriculture.com |

5. *Limitations & Certifications*

This Arboricultural field report is solely based on site observations on the dates noted in this report. The findings and recommendations expressed in this report are representative of the conditions found on the day of the assessment; this report is a reasonable and accurate representation of the condition of the trees reviewed. There are no guarantees offered or implied by Goode Arboriculture that the trees are healthy and safe given all conditions, all trees have the potential to fail. The inspection is limited to a visual examination of accessible items without dissection, excavation, probing, coring, or climbing.

This report does not provide the cost estimates to the recommendations put forth in this report. This report is valid for six months from the date of submission. To ensure the accuracy of this report, additional site visits and reports are required after this point for the City's development permit application process.

Any trees retained should be reviewed regularly, to ensure optimal growth and health of the trees. Any trees retained must be reviewed immediately following land clearing, grade disturbances, significant weather events, and before site usage changes.

Nothing in this report is intended to form a legal opinion, and Goode Arboriculture disclaims any legal responsibility in this matter. Goode Arboriculture shall not be required to attend court in any nature because of this report unless it has been made clear in a contract. Any change made to this report invalidates the whole report.

CERTIFICATION:

This report and the opinions expressed within it have been prepared in good faith and accepted Arboricultural standards within the scope afforded by its terms of reference and the resources made available to the consultant.

Stuart G Goode, BSc
Goode Arboriculture Consulting
ISA Certified Arborist PN-6463A
ISA Certified Tree Risk Assessor

November 15, 2022

GOODE ARBORICULTURE CONSULTING

14186 25a Ave, Surrey B.C. V4P2E8 |7788062470|
info@goodearboriculture.com |