



Talbot Mackenzie & Associates

Consulting Arborists

945 Pembroke St, Victoria

Arborist Report:

Tree Preservation Plan

PREPARED FOR:

Todd Doherty
961 Pembroke St.
Victoria, BC
V8T 1J1

PREPARED BY:

Talbot, Mackenzie & Associates

Noah Borges – Consulting Arborist
ISA Certified # PN-8409A

DATE OF ISSUANCE: January 8, 2019

Box 48153 RPO - Uptown Victoria, BC V8Z 7H6
Ph: (250) 479-8733
Fax: (250) 479-7050
Email: tmtreehelp@gmail.com



Talbot Mackenzie & Associates

Consulting Arborists

Jobsite Property: 945 Pembroke St, Victoria

Date of Site Visit: May 24, 2018

Site Conditions: Residential lot. No construction activity present.

Summary: No trees will require removal as a result of this development. Based on discussions with the contractor, it is our understanding that the proposed patio near the west property boundary for House B will be redesigned to avoid severing large, critical roots from Purple Leaf Plum NT7. Based on an exploratory excavation we conducted, the driveway and walkway can be constructed in the locations shown on the attached plans without impacting the health or stability of Sweetgum NT2. The patio north of house A may have to be raised depending on whether critical roots from NT2 are encountered during excavation. An arborist should supervise any excavation within the tree's critical root zone, including during excavation for underground storm, sewer, and water connections. Roots from Hawthorn NT5 and Laurel NT6 are also likely to be encountered during excavation for construction of the parking area, but we anticipate they will incur only minor health impacts.

Scope of Assignment:

- To inventory the existing bylaw protected trees and any trees on neighbouring properties that could potentially be impacted by construction or that are within three metres of the property line
- Review the proposal to demolish the existing building and garage, subdivide the property into two lots, and construct two new houses, a common driveway, and a parking area at the rear of the property
- Comment on how construction activity may impact existing trees
- Prepare a tree retention and construction damage mitigation plan for those trees deemed suitable to retain given the proposed impacts

Methodology: We visually examined the trees on the property and prepared an inventory in the attached Tree Resource Spreadsheet. Each by-law protected tree was identified using a numeric metal tag attached to its lower trunk. Municipal trees and neighbours' trees were not tagged. Information such as tree species, DBH (1.4m), crown spread, critical root zone (CRZ), health, structure, and relative tolerance to construction impacts were included in the inventory. The by-law protected trees with their identification numbers were labelled on the attached Site Plan. The conclusions reached were based on the information provided within the attached plans from Christine Lintott Architects (dated January 8, 2019).

Limitations: An exploratory excavation was performed only for the construction of the driveway and walkway to house A. The remaining conclusions reached in this report are based solely on critical root zone calculations and our best judgement using our experience and expertise. The location, size and density of roots are often difficult to predict without exploratory excavations and therefore the impacts to the trees may be more or less severe than we anticipate.

Summary of Tree Resource: Seven trees were inventoried, none of which are on the subject property. There are two trees on the municipal frontage and five on neighbouring properties. Only Garry Oak NT1 is by-law protected.

Potential Impacts on Trees to be Retained and Mitigation Measures

- **Purple Leaf Plum NT7** (46cm DBH): The attached plans indicate the patio on the west side of house B will be constructed approximately 50cm below the existing grade, with a retaining wall along the west property boundary. Unless plans are altered, large critical roots from this tree will be encountered during excavation, resulting in significant health impacts, in which case we recommend it be removed prior to construction.

However, based on discussions with the contractor, it is our understanding that an effort will be made to retain this tree, either by building the patio at grade within the critical root zone of the tree or leaving an area of undisturbed soil around its base. If the patio is to be constructed at grade, it should be cantilevered to avoid excavation near the base of the tree. We recommend an arborist review any future plans for patio construction and direct and supervise any excavation to occur within the tree's CRZ. As the tree is on an adjacent property, the neighbour should be notified of the proposed impacts to their tree.

- **Sweetgum NT2** (66cm DBH): An exploratory excavation was conducted to determine the impacts of constructing the common driveway and walkway to house A. Trenches were excavated using shovels to depths of 30-45cm. We dug in the following locations:
 - 1.5m east of the tree, in the approximate location of the proposed walkway to house A
 - south of the existing municipal sidewalk on the municipal frontage, 3.5m west from the base of the tree (in the location of the proposed driveway)
 - 4.5-5m northwest of the tree (in the approximate location of the driveway apron)

No roots were encountered in any of the trenches (see photos below). Therefore, in our opinion, the driveway and walkway can be constructed without impacting the health or stability of the tree. We recommend the project arborist be on site during excavations if it is to occur beyond 30cm in depth.

A patio will also be located 2.5m south of the existing fence, or approximately 3-3.5m south of the tree. If the new patio requires excavation down to bearing soil within its footprint and roots are encountered in this area, this could impact the health and/or stability of the tree significantly. We recommend an arborist be on site during excavation to determine whether the patio should be constructed at an elevated grade and be made of a permeable material, depending on the number and size of roots encountered within its footprint. Based on

discussions with the contractor, it is our understanding that construction will consider the preservation of the tree's critical roots. The "floating patio" specifications are attached.

The objective of a raised, permeable surface is to avoid root loss and to instead raise the patio and its base layer above the roots. This may result in the grade of the "floating patio" being up to 30cm above the existing grade (depending on how close roots are to the surface and the depth of the driveway base layers). Final grading plans should take this potential change into account. This may also mean that some of the A horizon soil layer (rich in organic material and roots) will be left intact below the driveway.

To allow water to drain into the root systems below, we would also recommend that the surface of the driveway, walkway, and patio 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.





- **Sweetgum NT3** (39, 28cm DBH): The footprints of the patio for unit B6 and the parking area overlap with the critical root zone of this tree. If excavation to bearing soil is required, the health of this tree could be significantly impacted. We recommend an arborist be on site to determine whether the patio and parking area be “floated” atop the roots of the tree, depending on the number and size of roots encountered. It is our understanding that the patio will be constructed using permeable pavers. The project arborist should also be on site for any other excavation that occurs within the tree’s critical root zone (see attached specifications for “floating” features). As the tree is on an adjacent property, the neighbour should be notified of potential impacts to their tree.
- **Hawthorn NT5 and Laurel NT6** are located south of the property boundary. Roots from these trees are likely to be encountered during excavation, but we do not anticipate either will be significantly impacted by construction. Both species are typically tolerant of root disturbance. We recommend an arborist be on site to supervise any excavation within the critical root zones of the trees and prune any damaged roots back to sound tissue.
- **Garry Oak NT1** (5cm DBH): We do not anticipate this tree will be impacted by construction, but it should be isolated from construction by erecting protective barrier fencing at the perimeter of its critical root zone.
- **Service Connections:**

Based on discussions with the contractor, it is our understanding that underground storm, sewer, and water services to house A will be located along the east property line. Estimating a

trench width of approximately 1.5m, excavation will occur 6-7m from Sweetgum NT2. Any roots encountered should be pruned back to sound tissue.

Storm and sewer laterals to house B will be located underneath the west side of the driveway, requiring a trench to be excavated approximately 6.5m from the base of NT2 and 1.5m from NT1 (assuming a trench width of 60-80cm). There is an existing water service connection on the west side of the property that will be used to service House B. We do not anticipate large, structural roots from NT2 to be encountered during excavation, but recommend an arborist be on site to supervise any excavation within the critical root zones of the two municipal oaks. We also recommend an excavator with a small, flat-edged bucket be used. If large roots are encountered, alternative excavation methods may be required (e.g. hydro-vac or a combination of hand-digging and small machine excavation).

An underground hydro service connection will be installed within the proposed SRW at the northwest corner of the property (approximately 1m south of the fence line). If any roots from Garry Oak NT1 are encountered, they should be pruned back to sound tissue at the edge of excavation. No by-law protected, municipal, or neighbour's trees will be significantly impacted.

- **Arborist Supervision:** All excavation occurring within the critical root zones of protected trees should be completed under supervision by the project arborist. Any roots encountered must be pruned back to sound tissue to reduce wound surface area and encourage rapid compartmentalization of the wound.
- **Barrier fencing:** The areas surrounding the trees to be retained should be isolated from the construction activity by erecting protective barrier fencing. Where possible, the fencing should be erected at the perimeter of the critical root zones. The barrier fencing 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 plywood, or 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.
- **Minimizing 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 20cm 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 15cm over top.
 - Placing two layers of 19mm plywood.
 - Placing steel plates.

- **Demolition of the existing buildings:** The demolition of the existing house, garage, 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.

Based on discussions with the contractor, it is our understanding that the existing driveway will be retained beyond the demolition of the existing building and used as an access point during the construction phase, which will limit additional soil compaction to the trees to be retained.

- **Mulching:** Mulching is an important proactive step to maintaining the health of the trees to be retained 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. As much of the area within two times the dripline of the tree should be mulched, both inside and outside of the critical root zone. 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:** If required, 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.
- **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.

Talbot Mackenzie & Associates

Please do not hesitate to call us at (250) 479-8733 should you have any further questions. Thank you.

Yours truly,



Noah Borges
ISA Certified: #PN-8409A

Talbot Mackenzie & Associates
ISA Certified Consulting Arborists

Encl. 1-page Tree Resource Spreadsheet, 16-page site and building plans, 1-page floating driveway specifications, 1-page barrier fencing specifications, 2-page Tree Resource Spreadsheet Methodology and Definitions

Disclosure Statement

Arborists are professionals who examine trees and use their training, knowledge and experience to recommend techniques and procedures that will improve their 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. It is not possible for an Arborist to identify every flaw or condition that could result in failure or can he/she guarantee that the tree will remain healthy and free of risk.

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.

May 24, 2018

945 Pembroke St
Tree Resource Spreadsheet

Page 1 of 1

Tree ID	Common Name	Latin Name	DBH (cm) ~ approximate	Crown Spread (m)	CRZ (m)	Relative Tolerance	Health	Structure	Remarks and Recommendations	Retention Status
NT1	Garry Oak	<i>Quercus garryana</i>	5	1	0.5	Good	Fair	Fair	Municipal.	Retain
NT2	Sweetgum	<i>Liquidambar styraciflua</i>	66	8	8.0	Moderate	Good	Fair/poor	Municipal. Codominant union at 2m.	Retain
NT3	Sweetgum	<i>Liquidambar styraciflua</i>	39, 28	12	6.5	Moderate	Good	Fair	Neighbour's. 1m from fence. Codominant union at base	Retain
NT4	Shore pine	<i>Pinus contorta</i>	~20	6	2.0	Good	Good	Good	Neighbour's.	Retain
NT5	Hawthorn	<i>Crataegus spp.</i>	10	4	1.0	Good	Good	Fair	Neighbour's. Adjacent to fence	Retain
NT6	Laurel	<i>Prunus laurocerasus</i>	~20	8	2.0	Good	Fair	Fair	Neighbour's. Adjacent to fence. Some dieback	Retain
NT7	Purple Leaf Plum	<i>Prunus cerasifera</i>	46	5	5.5	Moderate	Fair	Fair	Neighbour's. Adjacent to fence. Some dieback	Retain

Prepared by:
Talbot Mackenzie & Associates
ISA Certified and Consulting Arborists
Phone: (250) 479-8733
Fax: (250) 479-7050
email: tmtreehelp@gmail.com

LEGAL DESCRIPTION: LOT A, SUBURBAN LOT 6, VICTORIA CITY, PLAN VIP83993



CONTACTS

APPLICANT

JOURNAL PROJECTS LTD
 1157 WILSON ROAD, SUITE 100
 WILLOW PARK, ONTARIO M2H 1B7
 CANADA
 TEL: 416-491-1111
 FAX: 416-491-1112
 WWW.JOURNALPROJECTS.COM

BUILDING CODE DATA

APPLICABLE SUPPLEMENT CODE:

WE BUILDING LEAD, 2018 EDITION
ALL RIGHTS TO COMPARTMENTS RESERVED
PART 1: GROUP 1: WE BUILDING LEAD, 2018 EDITION

EXPANSION:

BUILDING CODES IN THE CASE OF STORIES
THAT PORTION ON A BUILDING THAT IS PLACED BETWEEN
FLOOR ABOVE IT, AND A FLOOR AND FLOOR ABOVE IT, THE

ARCHITECT

QUESTIONS? CONTACT US AT
1-800-451-7829
WWW.QUESTIONS.COM

SURVEYOR

R. ANDERSON & ASSOCIATES
4712 CLINTONS AVENUE
VICTORIA, BC V8N 4R1
PH 727 2214
ORDERS: 800 421 462
Randy@randa.com

DISCUSSION

1) A BUILDING CLASSIFIED AS GROUP 1 IS PERMITTED TO DEVIATE 1) PROVIDED
 1) IT IS NOT MORE THAN 3 STOREYS IN BUILDING HEIGHT, AND
 1) IT HAS A BUILDING AREA NOT MORE THAN THE VALUE IN TABLE 5.2.1.12.

NO. OF STOREYS - 3
 RATING - STREET

IS THE BUILDING REFERRED TO BY SENTENCE (1) PERMITTED TO BE OF COMPOSITE CONSTRUCTION OF NONCOMBUSTIBLE CONSTRUCTION AND STEEL OR ALUMINUM FRAMING?
IF YES, IS THE BUILDING REFERRED TO BY SENTENCE (2) AND (3) PUBLIC ASSEMBLY BUILDING, AS PER THE DEFINITION OF A PUBLIC ASSEMBLY BUILDING IN THE CODE?
IF YES, IS THE BUILDING REFERRED TO BY SENTENCE (2) AND (3) A NON-RESIDENTIAL BUILDING, AS PER THE DEFINITION OF A NON-RESIDENTIAL BUILDING IN THE CODE?
IF YES, IS THE BUILDING REFERRED TO BY SENTENCE (2) AND (3) A BUILDING REFERRED TO BY SECTION 10.1.1.1.1 AND 10.1.1.1.2 OF THE CODE?
IF YES, IS THE BUILDING REFERRED TO BY SENTENCE (2) AND (3) A BUILDING REFERRED TO BY SECTION 10.1.1.1.1 AND 10.1.1.1.2 OF THE CODE?
IF YES, IS THE BUILDING THAT CONTAINS OCCUPANCY UNITS THAT HAVE MORE THAN FIVE STORIES, SUBJECT TO THE REQUIREMENTS OF SENTENCE 3.1.1.1.1 OF THE CODE, RECOGNIZED AS A BUILDING REFERRED TO BY SENTENCE (2) AND (3) OF THE CODE?
IF YES, IS THE BUILDING REFERRED TO BY SENTENCE (2) AND (3) A BUILDING REFERRED TO BY SECTION 10.1.1.1.1 AND 10.1.1.1.2 OF THE CODE?
IF YES, IS THE BUILDING REFERRED TO BY SENTENCE (2) AND (3) A BUILDING REFERRED TO BY SECTION 10.1.1.1.1 AND 10.1.1.1.2 OF THE CODE?
IF YES, IS THE BUILDING REFERRED TO BY SENTENCE (2) AND (3) A BUILDING REFERRED TO BY SECTION 10.1.1.1.1 AND 10.1.1.1.2 OF THE CODE?

REFERENCES

THE FIVE ALIAS SYSTEMS ARE PROVIDED IN A RESIDENTIAL OCCUPANCY AND ARE NOT IN PUBLIC
COMMON SERVICE ARE MORE THAN A FIFTY (50) YEARS (SUCH AS, IT HAS A DIRECT ACCESS TO AN ELEVATOR
AND ELEVATOR LANDING TO CONDUITS)

CONSTRUCTION

© 2006 Blackwell Publishing Ltd, *Journal of Internal Medicine* 260: 395–403

RESUBMISSION NOTES

- [illegible]



**Christmas & party
accessories**

Issue	Date
CALLC Meeting	March 26-18
Reopening Application	March 28-18
Reopening Resubmission	June 22-18
Reopening Resubmission 2	July 30, 2018
Reopening Resubmission 3	Jan. 8, 2019

Revision		
No.	Description	Date

Consultant	
------------	--

945 Pembroke
Street
House A & B

Cover Sheet

Date	2017-01-07 11:46:40 AM
Drawn by	EA
Checked by	CL
A0.00	
Scale	

Revenue		
No.	Description	Date
1	Revised Grade	Jan 3-19
2	Building Size Increased	Jan 3-19
5	Bike Parking	Jan 3-19

945 Pembroke
Street
House A & B

Date	2019-01-07 11:46:58 AM
Drawn by	JA
Checked by	CL
A0.01	

[illegible][illegible]

A. $\text{CONC}(\text{Carnegie}) \leq \text{CONC}(\text{UP})$ AND $\text{N}(\text{Carnegie}) \leq \text{N}(\text{UP})$ IS CALLED THE FIRST STRONG PRIORITY ACT.
 C201 APP.
 B. NOT SPACES FOR FOLLOWING UNIT THAT IS NOT AN ORIGINAL BUT IS CALLED TO BE A NEW UNIT. IF
 1. NO SPACES WITH UNIT THAT UNIT IS BEING MADE FROM IS
 UNIT.
 C. SPACES FOR FOLLOWING UNIT
 CALCULATED $\text{TIME}(\text{Carnegie}) + (\text{N}(\text{Carnegie}) - \text{N}(\text{UP})) \times \text{P}(\text{UP}) + \text{P}(\text{Carnegie})$
 PRE-ADD-5

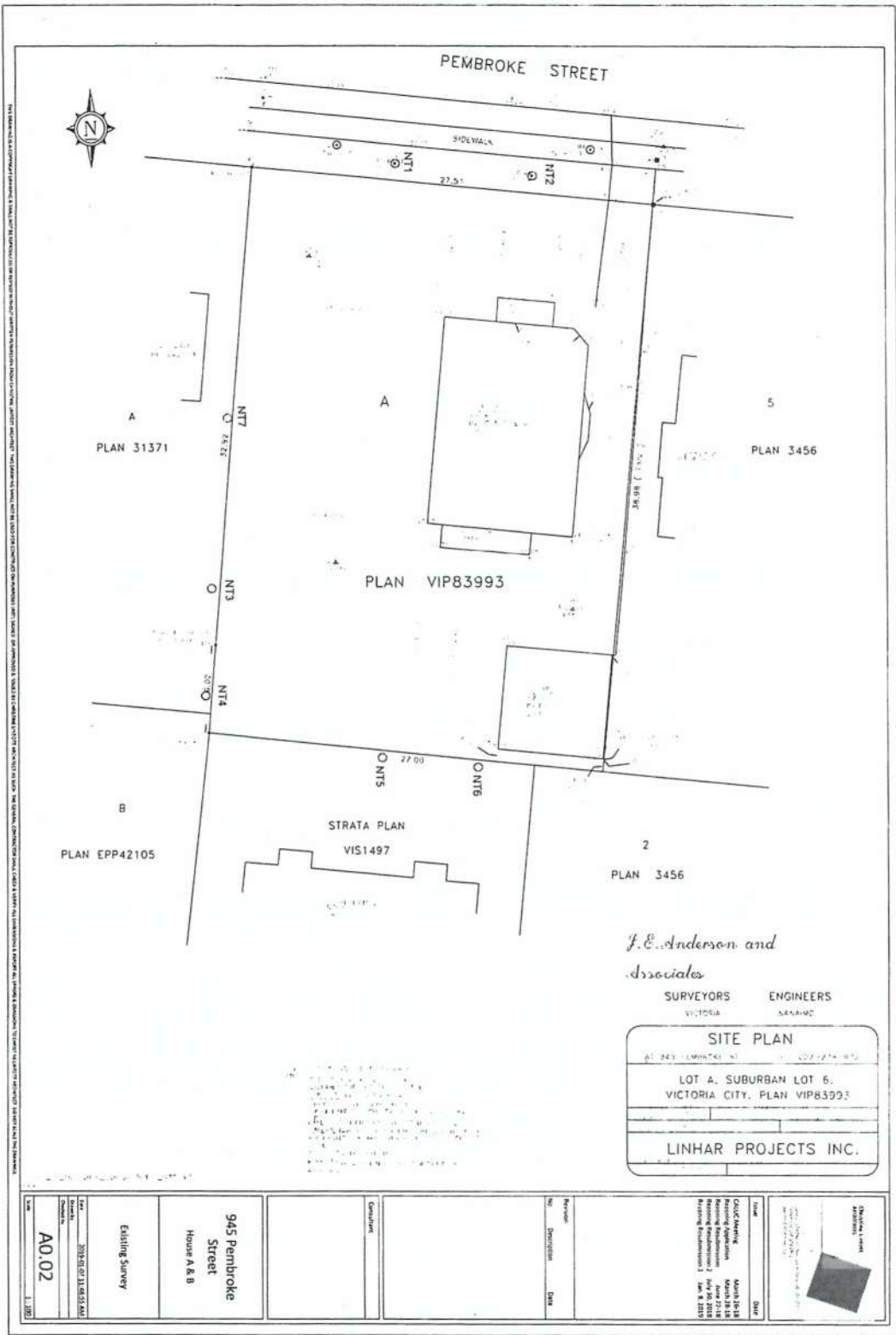
	PROPOSED	EXISTING ZONING
ZONING	R3-1A: LOW DENSITY MULTIPLE DWELLING	R2, TWO FAMILY DWELLING
SITE AREA	513.29 sq.m (VARIANCE: 920 sq.m REQUIRED)	106.7 sq.m ²
TOTAL FLOOR AREA	120.50 sq.m ²	212 sq.m ²
CONVENTIONAL FLOOR AREA	93.61 sq.m ²	N/A
FLOOR SPACE RATIO	0.18 (1 DOES NOT INC. ATTIC) (0.19% ATTIC)	0.5-5
SITE COVERAGE	35-4% (VARIANCE: 33-35% ALLOWABLE)	18.8%
OPEN SPACE	12.33%	42.33%
HEIGHT OF BUILDING	9.32 m	8.35 m
NUMBER OF STOREYS	3	2
PARKING SPACES ON SITE	5 (VARIANCE: 11 G + 7 REQUIRED)	0
BIKE/PARKING PARKING (STORAGE & RACKS)	LONG TERM & SHORT TERM B.	0
BUILDING SETBACKS		
FRONT YARD (NORTH)	5.45 m (VARIANCE: 7.5 m REQUIRED)	7.5 m
FRONT YARD (EAST)	3.20 m (VARIANCE: 4.5 m REQUIRED)	3.5 m
FRONT YARD (SOUTH)	12.38 m	13.64 m
SIDE YARD (EAST)	2.23 m (VARIANCE: 4.88 m REQUIRED)	2.75 m
SIDE YARD (WEST)	1.54 m (VARIANCE: 4.88 m REQUIRED)	2.75 m
COMBINED SIDE YARDS	4.12 m	5.5 m

	PROPOSED	EXISTING (JOHN)
ZONING	R3 AL LOW PROFILE MULTIPLE DWELLING	R3 TWO FAMILY DWELLING
SITE AREA	528.41 sq ft (VARIANCE: 920 sq ft REQUIRED)	1061.7 sq ft
TOTAL FLOOR AREA	126.01 sq ft	212 sq ft
COMMERCIAL FLOOR AREA	N/A	N/A
FLOOR SPACE RATIO	0.83 (DOES NOT EXCEED, ATTC.)	0.51
	1.5 (ENCL. 1.5 REQUIRED)	0.51
SITE COVERAGE	35.0% (VARIANCE: 21.33% ALLOWABLE)	18.8%
OPEN SITE SPACE	31.6%	61.1%
HEIGHT OF BUILDING	9.48 m	8.35 m
NUMBER OF STOREYS	3	2
PARKING SPACES ON SITE	5 (VARIANCE: 13 "6 + 7" REQUIRED)	0
BICYCLE PARKING (NUMBER OF STORAGE & LOCKS)	LONG TERM & SHORT TERM 6	0
BUILDING TOLERANCES		
FRONT YARD (METERS)	1.52 m (VARIANCE: 7.5 m REQUIRED)	7.5 m
FRONT YARD (FOOTING)	3.23 m (VARIANCE: 4.5 m REQUIRED)	3.5 m
REAR YARD (FOOTING)	12.79 m	15.6 m
SIDE YARD (EAST)	3.56 m (VARIANCE: 4.71 m REQUIRED)	2.75 m
SIDE YARD (WEST)	2.17 m (VARIANCE: 4.71 m REQUIRED)	2.75 m
COMBINED SIDE YARDS	4.27 m	5.5 m

RESIDENTIAL USE DETAILS	PROPOSED
TOTAL NUMBER OF UNITS	6
UNIT TYPE	2 BDRM
GROUND ORIENTED UNITS	4
MINIMUM UNIT FLOOR AREA	65.53 m ²
TOTAL RESIDENTIAL FLOOR AREA	485.44 m ²

RESIDENTIAL USE DETAILS	PROPOSED
TOTAL NUMBER OF UNITS	6
UNIT TYPE	2 BDRM
GROUND ORIENTED UNITS	4
MINIMUM UNIT FLOOR AREA	66.51 SQ.M
TOTAL RESIDENTIAL FLOOR AREA	488.57 SQ.M

THIS DRAWING IS A COPYRIGHT DRAWING AND SHALL NOT BE REPRODUCED OR REVISED IN ANY MANNER WITHOUT PERMISSION FROM CHRISTIAN UNITS ARCHITECT. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL SIGNED OR APPROVED & SHALL BE CHRISTIAN UNITS ARCHITECT AS SHOWN. THE GENERAL CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & REPORT ALL ERRORS & OMISSIONS TO CHRISTIAN UNITS ARCHITECT. AGGREGATE SHALL BE THE OWNERS.



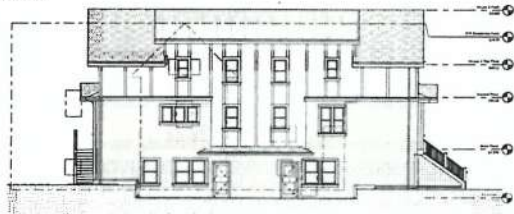
F.E. Anderson and Associates
 SURVEYORS ENGINEERS
 VICTORIA SEASIDE

SITE PLAN	
ST. 243	1/10/2013
LOT A, SUBURBAN LOT 6, VICTORIA CITY, PLAN VIP83993	
LINHAR PROJECTS INC.	

945 Pembroke Street House A & B Existing Survey A0.02 1. 2013	Date: 2013.03.07 11:46:55 AM Drawn by: [blank] Checked by: [blank]	Title: [blank] Author: [blank] Revision: [blank] Revision Description: [blank] Revision Date: [blank]	Date: [blank] Description: [blank] Date: [blank]	Date: [blank] Description: [blank] Date: [blank]	Date: [blank] Description: [blank] Date: [blank]
---	--	---	--	--	--



945 Pembroke Street House A & B	Grade Calculations	Date: 2019.01.07 11:52:12 AM User: A Created by: SL A0.04 1.30
------------------------------------	--------------------	--



Christine L. Oakes
Architect

Issue	Date
CALLUC Meeting	March 29-30
Reasoning Application	March 29-30
Reasoning Reconsideration	June 27-28
Reasoning Reconsideration 2	July 30, 2018
Reasoning Reconsideration 3	Jan. 8, 2019

Revision		
No.	Description	Date
3	Window Revisions	Jan 3-19
4	Door Revisions	Jan 3-19

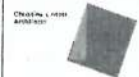
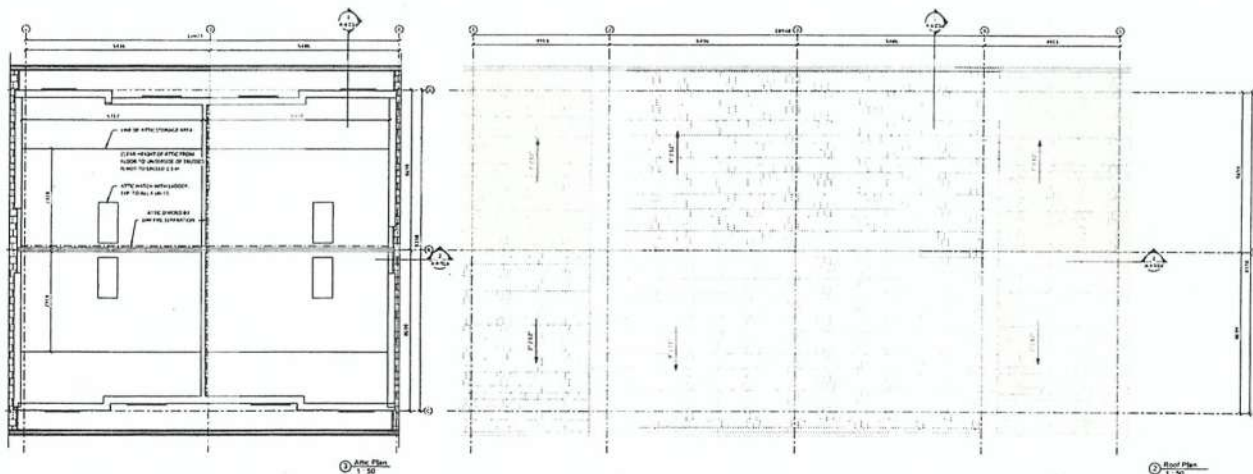
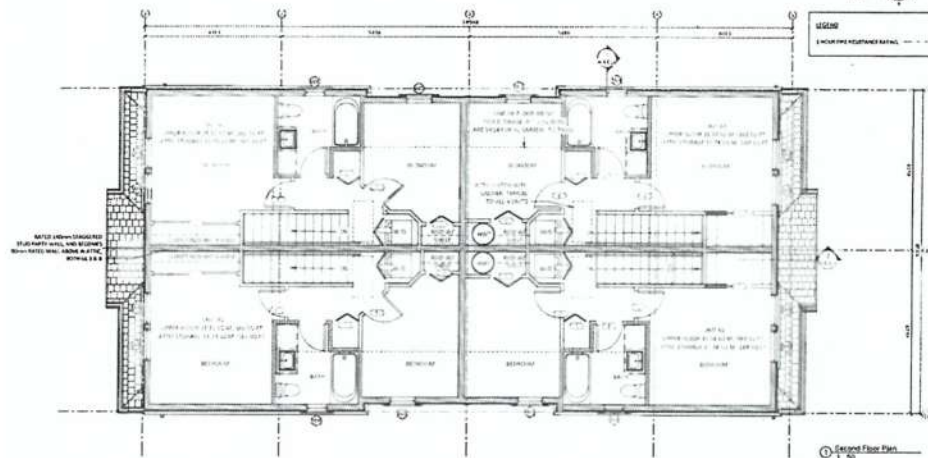
Consultant

945 Pembroke Street
House A & B

Context Elevations & Outlook Comparison

Date: 2019-01-07 11:53:11 AM
Drawn by: J.A.
Checked by: C.L.
A0.05
Scale: As Indicated

THIS DRAWING IS A COPYRIGHTED WORK AND SHALL NOT BE REPRODUCED OR REVISED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM CHRISTINE L. OAKES ARCHITECT. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS IT IS SIGNED, SEALED, OR APPROVED BY CHRISTINE L. OAKES ARCHITECT AS SUCH. THE GENERAL CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & REPORT ALL ERRORS & OMISSIONS TO CHRISTINE L. OAKES ARCHITECT. DO NOT SCALE THE DRAWING.



Issue	Date
Calculation	March 28-18
Reasoning Application	March 28-18
Reasoning Submission	June 27-18
Reasoning Resubmission 1	July 30, 2018
Reasoning Resubmission 2	Jan. 8, 2019

Rev	Description	Date
1	Building Size Increased	Dec 21-18
2	Window Revisions	Dec 21-18
3	Door Revisions	Dec 21-18

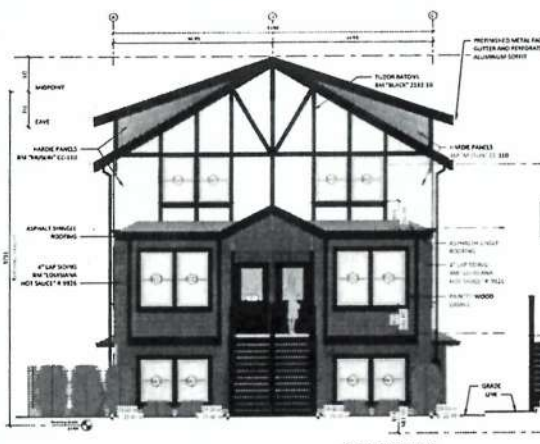
Consultant

945 Pembroke Street
House A

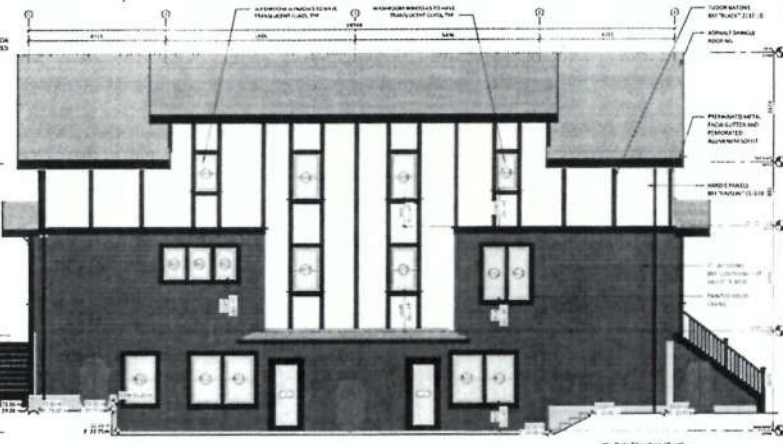
Upper Floor & Roof Plan

Rev	2018-01-07 11:39:17 AM
Drawn	J.A.
Checked	S.L.
Scale	As indicated

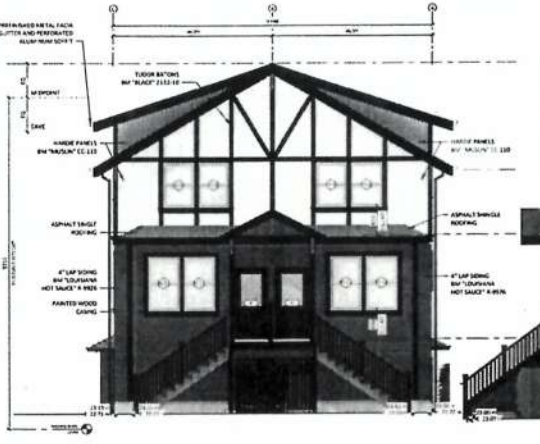
THIS DRAWING IS A COPYRIGHTED WORK AND SHALL NOT BE REPRODUCED OR REPOSTED WITHOUT WRITTEN PERMISSION FROM CHARTER LIFESTYLE ARCHITECT. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS, IN WHOLE OR IN PART, IT IS APPROVED AND SEALED BY CHARTER LIFESTYLE ARCHITECT AS SUCH. THE GENERAL CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & REPORT ALL ERRORS & OMISSIONS TO CHARTER LIFESTYLE ARCHITECT. DO NOT SCALE THIS DRAWING.



① Front Elevation (Scale) 1/8"



② Side Elevation (Scale) 1/8"



③ Rear Elevation (Scale) 1/8"



④ Rear Side Elevation (Scale) 1/8"



Item	Date
Callic Meeting	March 25-18
Revising Permits	March 25-18
Revising Permits	June 22-18
Revising Permits	July 20-18
Revising Permits	Jan. 6, 2019

Revision	Description	Date
1	Revised Grade	Dec 21-18
2	Window Revisions	Dec 21-18
3	Door Revisions	Dec 21-18

Consultant

945 Pembroke Street
House A

Exterior Elevations

Date	2019-01-07 11:29:53 AM
Drawn by	J.A.
Checked by	J.A.
Scale	A 3.01a
Sheet	1/50

THIS DRAWING IS A COPYRIGHTED DOCUMENT AND SHALL NOT BE REPRODUCED OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT. THE ARCHITECT SHALL NOT BE USED FOR CONTRACTS OR PURCHASES. ANY REVISIONS TO THIS DRAWING SHALL BE MADE BY THE ARCHITECT. THE GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECT. THE ARCHITECT SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED BY THE CLIENT.

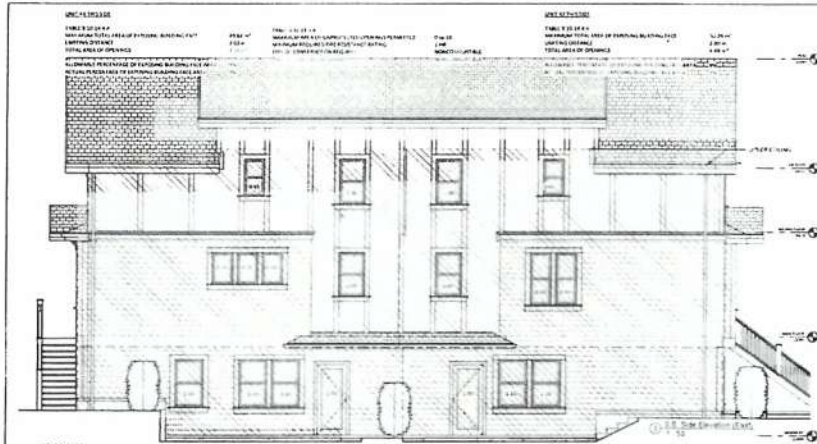


TABLE 1 TO 10.4.1 MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft	TABLE 1 TO 10.4.1 MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft	TABLE 1 TO 10.4.1 MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft	TABLE 1 TO 10.4.1 MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft
--	--	--	--

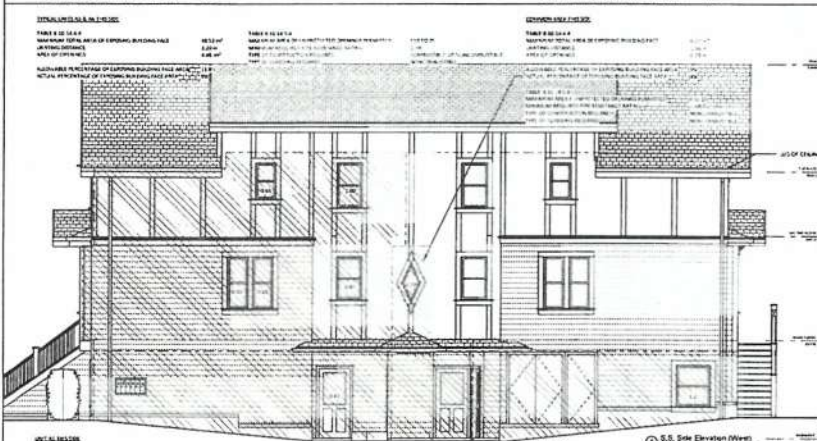


TABLE 1 TO 10.4.1 MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft	TABLE 1 TO 10.4.1 MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft	TABLE 1 TO 10.4.1 MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft	TABLE 1 TO 10.4.1 MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft
--	--	--	--



TABLE 1 TO 10.4.1 MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft	TABLE 1 TO 10.4.1 MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft	TABLE 1 TO 10.4.1 MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft	TABLE 1 TO 10.4.1 MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft
--	--	--	--

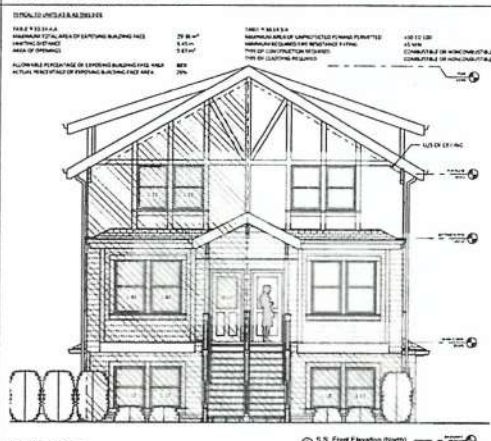


TABLE 1 TO 10.4.1 MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft	TABLE 1 TO 10.4.1 MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft	TABLE 1 TO 10.4.1 MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft	TABLE 1 TO 10.4.1 MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft MAXIMUM TOTAL AREA OF EXISTING BUILDING FACE 22,000 sq ft
--	--	--	--



Issue	Date
1. Initial Submission	March 28, 2018
2. Building Size Increased	June 22, 2018
3. Window Revisions	July 30, 2018
4. Door Revisions	Dec 21, 2018

Revision	Description	Date
1	Building Size Increased	Dec 21, 2018
2	Window Revisions	Dec 21, 2018
3	Door Revisions	Dec 21, 2018

Consultant

945 Pembroke Street
House A

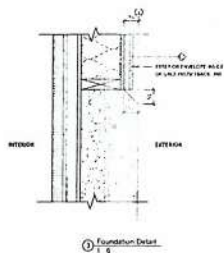
Spatial Separation
Calculations

Date	2019-05-07 11:45:00 AM
Drawn by	JA
Checked by	CL
Scale	A 4.02a
Sheet	1 of 1

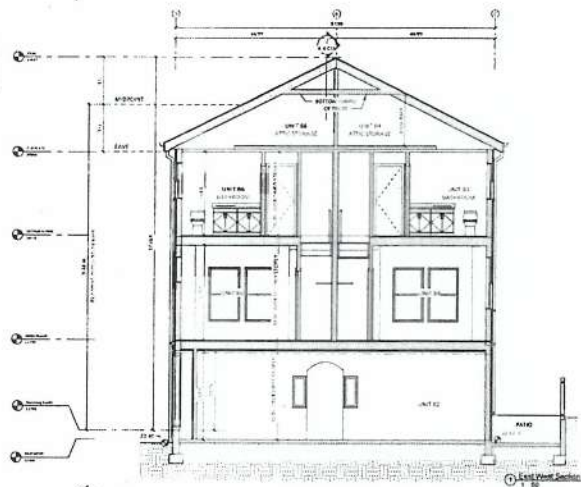
THIS DRAWING IS A COPYRIGHTED WORK AND SHALL NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT. THE ARCHITECT SHALL NOT BE RESPONSIBLE FOR ANY CONSTRUCTION VIOLATIONS, UNLESS SUCH VIOLATIONS ARE CAUSED BY THE ARCHITECT'S NEGLIGENCE OR WILLFUL MISFEASANCE. THE ARCHITECT'S LIABILITY IS LIMITED TO THE DESIGN AND CONSTRUCTION OF THE BUILDING AND SHALL NOT BE EXTENDED TO ANY OTHER MATTER. THE ARCHITECT'S LIABILITY SHALL NOT BE EXTENDED TO ANY OTHER MATTER. THE ARCHITECT'S LIABILITY SHALL NOT BE EXTENDED TO ANY OTHER MATTER.



This drawing is a conceptual rendering and shall not be reproduced or relied upon without written permission from the Christian Unity Archetype. This drawing shall not be used for construction purposes until signed, approved & issued by Christian Unity Architects as such. The General Contractor shall check & verify all dimensions & report all errors & omissions to Christ Unity Architects. DO NOT SCALE THIS DRAWING.



USMLE
A-1000 (P) 10/10/10 (P) 10/10/10 (P) 10/10/10 (P)

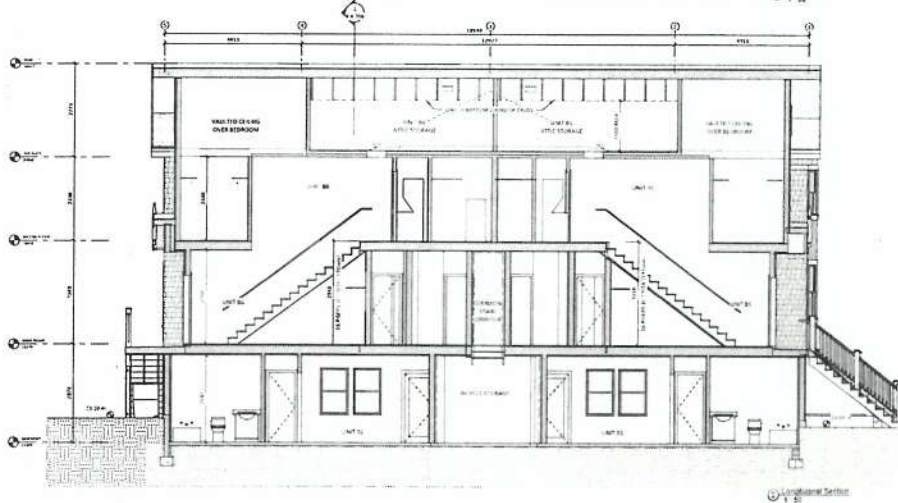


Door Schedule

Door	Model	Material	Finish	Comments	Count
D1	100	100	100	100	1
D2	100	100	100	100	1
D3	100	100	100	100	1
D4	100	100	100	100	1
D5	100	100	100	100	1
D6	100	100	100	100	1
D7	100	100	100	100	1
D8	100	100	100	100	1
D9	100	100	100	100	1
D10	100	100	100	100	1
D11	100	100	100	100	1
D12	100	100	100	100	1
D13	100	100	100	100	1
D14	100	100	100	100	1
D15	100	100	100	100	1
D16	100	100	100	100	1
D17	100	100	100	100	1
D18	100	100	100	100	1
D19	100	100	100	100	1
D20	100	100	100	100	1
D21	100	100	100	100	1
D22	100	100	100	100	1
D23	100	100	100	100	1
D24	100	100	100	100	1
D25	100	100	100	100	1
D26	100	100	100	100	1
D27	100	100	100	100	1
D28	100	100	100	100	1
D29	100	100	100	100	1
D30	100	100	100	100	1
D31	100	100	100	100	1
D32	100	100	100	100	1
D33	100	100	100	100	1
D34	100	100	100	100	1
D35	100	100	100	100	1
D36	100	100	100	100	1
D37	100	100	100	100	1
D38	100	100	100	100	1
D39	100	100	100	100	1
D40	100	100	100	100	1
D41	100	100	100	100	1
D42	100	100	100	100	1
D43	100	100	100	100	1
D44	100	100	100	100	1
D45	100	100	100	100	1
D46	100	100	100	100	1
D47	100	100	100	100	1
D48	100	100	100	100	1
D49	100	100	100	100	1
D50	100	100	100	100	1
D51	100	100	100	100	1
D52	100	100	100	100	1
D53	100	100	100	100	1
D54	100	100	100	100	1
D55	100	100	100	100	1
D56	100	100	100	100	1
D57	100	100	100	100	1
D58	100	100	100	100	1
D59	100	100	100	100	1
D60	100	100	100	100	1
D61	100	100	100	100	1
D62	100	100	100	100	1
D63	100	100	100	100	1
D64	100	100	100	100	1
D65	100	100	100	100	1
D66	100	100	100	100	1
D67	100	100	100	100	1
D68	100	100	100	100	1
D69	100	100	100	100	1
D70	100	100	100	100	1
D71	100	100	100	100	1
D72	100	100	100	100	1
D73	100	100	100	100	1
D74	100	100	100	100	1
D75	100	100	100	100	1
D76	100	100	100	100	1
D77	100	100	100	100	1
D78	100	100	100	100	1
D79	100	100	100	100	1
D80	100	100	100	100	1
D81	100	100	100	100	1
D82	100	100	100	100	1
D83	100	100	100	100	1
D84	100	100	100	100	1
D85	100	100	100	100	1
D86	100	100	100	100	1
D87	100	100	100	100	1
D88	100	100	100	100	1
D89	100	100	100	100	1
D90	100	100	100	100	1
D91	100	100	100	100	1
D92	100	100	100	100	1
D93	100	100	100	100	1
D94	100	100	100	100	1
D95	100	100	100	100	1
D96	100	100	100	100	1
D97	100	100	100	100	1
D98	100	100	100	100	1
D99	100	100	100	100	1
D100	100	100	100	100	1

Window Schedule

Window	Model	Material	Finish	Comments	Count
W1	100	100	100	100	1
W2	100	100	100	100	1
W3	100	100	100	100	1
W4	100	100	100	100	1
W5	100	100	100	100	1
W6	100	100	100	100	1
W7	100	100	100	100	1
W8	100	100	100	100	1
W9	100	100	100	100	1
W10	100	100	100	100	1
W11	100	100	100	100	1
W12	100	100	100	100	1
W13	100	100	100	100	1
W14	100	100	100	100	1
W15	100	100	100	100	1
W16	100	100	100	100	1
W17	100	100	100	100	1
W18	100	100	100	100	1
W19	100	100	100	100	1
W20	100	100	100	100	1
W21	100	100	100	100	1
W22	100	100	100	100	1
W23	100	100	100	100	1
W24	100	100	100	100	1
W25	100	100	100	100	1
W26	100	100	100	100	1
W27	100	100	100	100	1
W28	100	100	100	100	1
W29	100	100	100	100	1
W30	100	100	100	100	1
W31	100	100	100	100	1
W32	100	100	100	100	1
W33	100	100	100	100	1
W34	100	100	100	100	1
W35	100	100	100	100	1
W36	100	100	100	100	1
W37	100	100	100	100	1
W38	100	100	100	100	1
W39	100	100	100	100	1
W40	100	100	100	100	1
W41	100	100	100	100	1
W42	100	100	100	100	1
W43	100	100	100	100	1
W44	100	100	100	100	1
W45	100	100	100	100	1
W46	100	100	100	100	1
W47	100	100	100	100	1
W48	100	100	100	100	1
W49	100	100	100	100	1
W50	100	100	100	100	1
W51	100	100	100	100	1
W52	100	100	100	100	1
W53	100	100	100	100	1
W54	100	100	100	100	1
W55	100	100	100	100	1
W56	100	100	100	100	1
W57	100	100	100	100	1
W58	100	100	100	100	1
W59	100	100	100	100	1
W60	100	100	100	100	1
W61	100	100	100	100	1
W62	100	100	100	100	1
W63	100	100	100	100	1
W64	100	100	100	100	1
W65	100	100	100	100	1
W66	100	100	100	100	1
W67	100	100	100	100	1
W68	100	100	100	100	1
W69	100	100	100	100	1
W70	100	100	100	100	1
W71	100	100	100	100	1
W72	100	100	100	100	1
W73	100	100	100	100	1
W74	100	100	100	100	1
W75	100	100	100	100	1
W76	100	100	100	100	1
W77	100	100	100	100	1
W78	100	100	100	100	1
W79	100	100	100	100	1
W80	100	100	100	100	1
W81	100	100	100	100	1
W82	100	100	100	100	1
W83	100	100	100	100	1
W84	100	100	100	100	1
W85	100	100	100	100	1
W86	100	100	100	100	1
W87	100	100	100	100	1
W88	100	100	100	100	1
W89	100	100	100	100	1
W90	100	100	100	100	1
W91	100	100	100	100	1
W92	100	100	100	100	1
W93	100	100	100	100	1
W94	100	100	100	100	1
W95	100	100	100	100	1
W96	100	100	100	100	1
W97	100	100	100	100	1
W98	100	100	100	100	1
W99	100	100	100	100	1
W100	100	100	100	100	1



Checklist
Architects

Issue Date
CALCULATING March 26-18
Revising Revising March 26-18
Revising Revising March 26-18
Revising Revising March 26-18

Revision
No Description Date
1 Door Revisions Dec 21-18

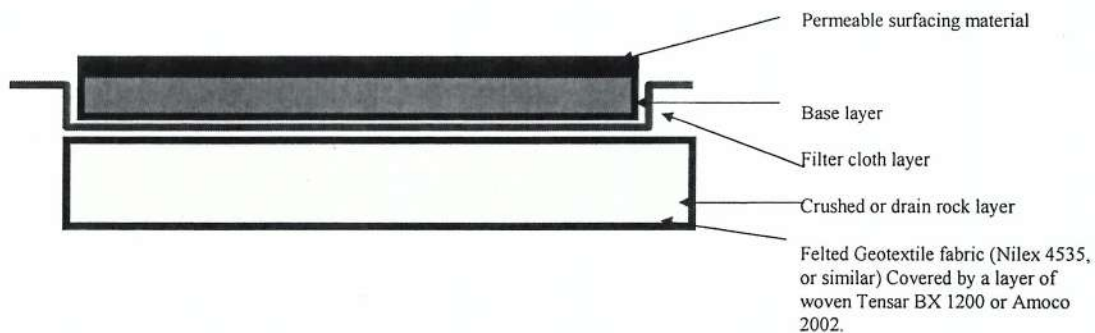
Consultant

945 Pembroke
Street
House B

Building Sections &
Schedules

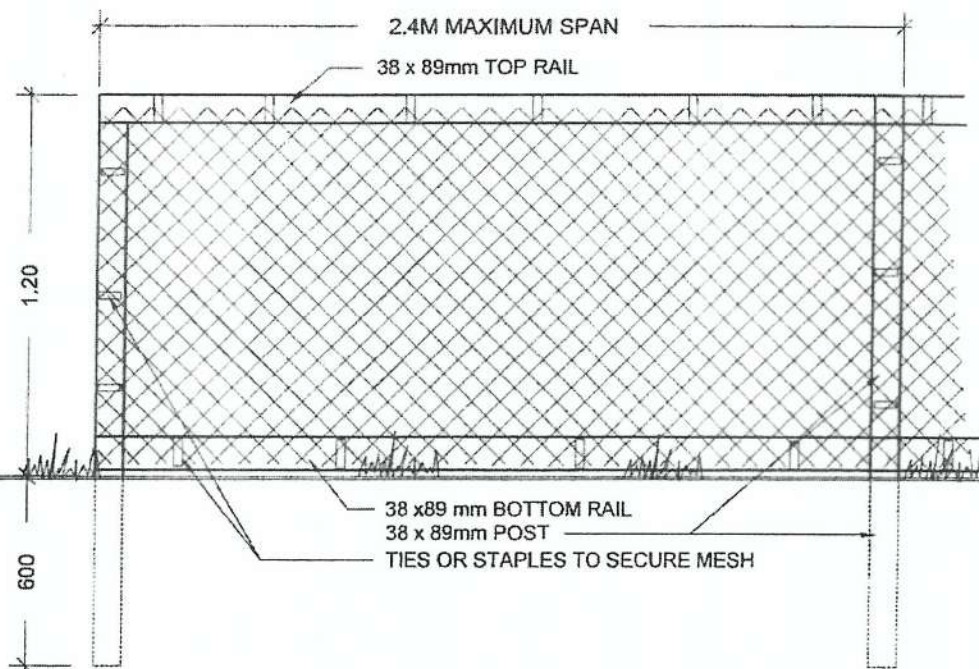
Date 2018-01-07 11:44:15 AM
Project 1A
Sheet 1A
A 4.01b
As indicated

Diagram – Site Specific Floating Driveway, Parking and Sidewalk Areas



Specifications for Floating Driveway and Parking Areas

1. Excavation for driveway or parking area construction must remove the sod layer only, where they encroach on the root zones of the protected trees
2. A layer of medium weight felted Geotextile fabric (Nilex 4535, or similar) is to be installed over the entire area of the critical root zone that is to be covered by the paving. Cover this Geotextile fabric with a layer of woven Amoco 2002 or Tensar BX 1200. Each piece of fabric must overlap the adjoining piece by approximately 30-cm.
3. A 10cm layer of torpedo rock, or 20-mm clean crushed drain rock, is to be used to cover the Geotextile fabric.
4. A layer of felted filter fabric is to be installed over the crushed rock layer to prevent fine particles of sand and soil from infiltrating this layer.
5. The bedding or base layer and permeable surfacing can be installed directly on top of the Geotextile fabric.



TREE PROTECTION FENCING
 FENCE WILL BE CONTRUCTED USING
 38 X 89 mm (2"X4") WOOD FRAME:
 TOP, BOTTOM AND POSTS. *
 USE ORANGE SNOW-FENCING MESH AND
 SECURE TO THE WOOD FRAME WITH
 "ZIP" TIES OR GALVANZIED STAPLES

* IN ROCKY AREAS, METAL POSTS (T-BAR
 OR REBAR) DRILLED INTO ROCK WILL BE
 ACCEPTED

DETAIL NAME:

TREE PROTECTION FENCING

DATE: Oct 30/07
 DRAWN: DM
 APP'D: RR
 SCALE: N.T.S.

E105
 DRAWING



Talbot Mackenzie & Associates

Consulting Arborists

Box 48153 RPO - Uptown Victoria, BC V8Z 7H6

Ph: (250) 479-8733

Fax: (250) 479-7050

Email: tmtreehelp@gmail.com

Tree Resource Spreadsheet Methodology and 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.

NT: No tag due to inaccessibility or ownership by municipality or neighbour.

DBH: Diameter at breast height – diameter of trunk, measured in centimetres 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

Crown Spread: Indicates the diameter of the crown spread measured in metres to the dripline of the longest limbs.

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 take into account individual tree characteristics, such as health and vigour. Three ratings are assigned based on our knowledge and experience with the tree species: Poor, Moderate or Good.

Critical Root Zone: A calculated radial measurement in metres 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 soil volume restrictions, age, crown spread, health, or structure (such as a 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

Retention Status:

- X - 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
- TBD (To Be Determined) - The impacts on the tree could be significant. However, in the absence of exploratory excavations and in an effort to retain as many trees as possible, we recommend that the final determination be made by the supervising project arborist at the time of excavation. The tree might be possible to retain depending on the location of roots and the resulting impacts, but concerned parties should be aware that the tree may require removal.
- NS - Not suitable to retain due to health or structural concerns