



COUNCIL REPORT

Executive Committee

Report No. PDS 023-2023

Date: January 23, 2023

File No: 3100-05 PRJ22-103

To: Mayor and Council
From: Daniel Graham, Planner
Subject: Rezoning Application (2741 McCallum Road)

RECOMMENDATION

1. THAT Bylaw No. 3333-2023, "Abbotsford Zoning Bylaw, 2014, Amendment Bylaw No. 486", be given first and second readings at the next Council Meeting, and be advanced to an upcoming Public Hearing;
2. THAT prior to adoption of Bylaw No. 3333-2023, "Abbotsford Zoning Bylaw, 2014, Amendment Bylaw No. 486", the following conditions be satisfied:
 - (a) entering into a development agreement or paying cash-in-lieu to secure the required road dedication and utility upgrades and extensions, in accordance with Development Bylaw, 2022, as detailed in the Works and Services Report;
 - (b) providing a road widening dedication of approximately 1.25m along the full frontage of McCallum Road, in accordance with Development Bylaw;
 - (c) providing \$6,500 cash-in-lieu for future intersection upgrades at McCallum Road and George Ferguson Way; providing a Community Benefit Contribution of \$1,250 for future transit and cycle infrastructure, park improvements, and affordable housing; and
 - (d) resolving all issues of funding for items not budgeted by the City.

REPORT CONCURRENCE	
General Manager	City Manager
The General Manager concurs with the recommendation of this report.	The City Manager concurs with the recommendation of this report.

PURPOSE

To consider rezoning the subject property from Urban Residential Zone (RS3) to Rowhouse Residential Zone (RMR) to facilitate the construction a three unit fee simple rowhouse development within one building.

SUMMARY OF THE ISSUE

The applicant proposes to rezone the subject property from Urban Residential Zone (RS3) to Rowhouse Residential Zone (RMR) to facilitate the development of a three unit rowhouse development within one building. Concurrent form and character development permit and subdivision applications have also been submitted. The proposed rowhouse development is consistent with the Urban 2 – Ground Oriented land use designation of the 2016 OCP and staff are therefore supportive of the proposed rezoning.

BACKGROUND

Applicant:	D & D Design Ltd. (Contact: Darren Hall)
Owners:	Jagjot and Ramandeep Sidhu
Legal Descriptions:	Lot 9 Block 1 Section 21 Township 16 NWD Plan 1584
OCP Designation:	Urban 2 – Ground Oriented
Historic Downtown Neighbourhood Plan:	Urban 2 – Ground Oriented
Existing Zoning:	Urban Residential Zone (RS3)
Proposed Zoning:	Rowhouse Residential Zone (RMR)
Site Area:	0.07 ha (719m ²)
Site Description:	The site flat, partially treed and accommodates a single family dwelling accessed via a rear lane.
Surrounding Uses:	N: single family residential lots zoned Urban Residential Zone (RS3); S: single family residential lots zoned Urban Residential Zone (RS3); E: McCallum Road, beyond which is a multifamily building zoned Lowrise Apartment Zone (RML) and an older apartment building regulated by Land Use Contract No. 244; and W: single family residential lots zoned Urban Residential Zone (RS3).

DISCUSSION

Context

1. The proposed development is located mid-block north of the intersection of McCallum Road and George Ferguson Way. The area is a mix of single family and multi-family uses with close proximity to commercial uses in Historic Downtown to the southeast. The surrounding area offers numerous services and amenities, schools (Abbotsford Virtual School, Terry Fox Elementary School and Abbotsford Senior Secondary School), and a Primary Transit Corridor (South Fraser Way), refer to Figure 2.

Official Community Plan (OCP) and Historic Downtown Neighbourhood Plan

2. The Historic Downtown Neighbourhood Plan designates the site Urban 2 – Ground Oriented in alignment with the Official Community Plan (OCP) (see Figure 3), which

enables multifamily housing to support Mixed Use Centres, and/or serve as transition areas near single detached neighbourhoods. This land use designation allows for townhouses and rowhouses at heights up to three storeys, with densities between 0.5 and 1.5 Floor Space Ratio (FSR). The proposed three unit rowhouse development complies with the Urban 2 – Ground Oriented land use designation as the proposed development has a FSR of 0.96.

3. The proposed development is in keeping with the broad objectives of the Urban Structure of the OCP by:
 - i. *Urban Core* – Accommodating additional redevelopment and intensification of uses in an area in proximity to the Transit Priority Corridor which connects to Mixed Use Centres; and
 - ii. *Focused Residential Growth* - Focusing an overall 75% of new residential growth in centres and existing neighbourhoods, with the most intensification in the Urban Core.

Affordable Housing Strategy

4. On May 25, 2020 the City adopted an updated Affordable Housing Strategy (AHS). This strategy contains two overarching policy topics; Housing Supply and Partnerships and Coordination. Under the category of Housing Supply, similar to the OCP objectives and policies, the AHS encourages the development of diverse housing options for all stages of life across the housing continuum. The applicant's proposal is consistent with this policy objective.

Strategic Zoning Bylaw Update

5. On June 27, 2022, Council adopted the Strategic Zoning Bylaw Update, Bylaw No. 3249-2022 (Bylaw) consisting of items that implement broad policy and planning objectives under Council's 2019-2022 Strategic Plan Zoning Bylaw objective.
6. As the subject application was received after adoption of the Bylaw, it is not eligible to be evaluated under the previous regulation through the transition strategy.

Zoning

7. The subject property is currently zoned Urban Residential Zone (RS3). The applicant proposes to rezone the subject property to Residential Rowhouse Zone (RMR) to permit the development of a three unit rowhouse building (see Figures 4-11).
8. The RMR Zone permits rowhouse use with a maximum height of up to three storeys (11m) at a density of 0.5 – 1.5 Floors Space Ratio (FSR), 65% lot coverage and permits accessory detached garages. The proposal complies with the proposed RMR Zone, which fully aligns with the Urban 2 – Ground Oriented land use designation in the OCP and Neighbourhood Plan and staff therefore, support the proposed rezoning.

Development Permit

9. The proposed development is subject to the Historic Influence Development Permit Guidelines contained in the Historic Downtown Neighbourhood Plan as well as the Multifamily Residential Form and Character Development Permit guidelines contained

within the OCP (see Figure 3a). The objectives of these guidelines are to encourage the construction of well designed, attractive and livable residential developments and to retain the authentic historic character of the neighbourhood. As no variances are proposed, the Development Permit for Form and Character will be reviewed for issuance by the Director, Development Planning in accordance with the delegation of powers contained within the Development Application Procedures Bylaw.

Access and Parking

10. Access is proposed via driveways on the rear lane spanning between George Ferguson Way and Huggins Avenue (Figure 6). The proposed rowhouses accommodate double car garages on the two end units and a single car garage on the interior unit, each with exterior parking pads on the driveways. No visitor parking is required as each unit is proposed on its own fee simple lot, in accordance with the Zoning Bylaw. Registration of a restrictive covenant preventing the garages from being converted into habitable space will be noted as a condition of Development Permit issuance.

Landscaping/Tree Removal and Replacement

11. An Arborist report was submitted in conjunction with this application, which was prepared by Koome Urban Forestry Ltd., dated July 25, 2022 (see Attachment C and Figure 11). A total of seven mature trees exist on the subject site, of which all are proposed for removal in conjunction with this development as the trees conflict with the proposed buildings or road dedication. The Tree Management Plan indicates an additional two off-site trees, of which one is recommended for retention and one for removal. Authorization from the adjacent land owner will be required in order to remove the other tree (staff note the adjacent property is currently under application for development of rowhouses and the accompanying arborist report also identifies the same tree 'ST1-289' for removal).
12. Accordingly, the removal of eight trees will require the provision of 20 replacement trees on site, or a cash contribution in lieu of replacement consistent with the Tree Protection Bylaw. The exact details of tree replacement/contribution will be verified and secured through the associated Development Permit.

Subdivision

13. The applicant has submitted a concurrent subdivision application in order to subdivide the subject site into three fee simple lots (see Figure 6). The proposed Rowhouse Residential Zone (RMR) accommodates a zero interior lot line setback for the principle residence and accessory buildings, however, a party wall agreement will be required at time of subdivision in order to facilitate the proposed rowhouses in a fee simple configuration.
14. The site plan indicates that the proposed lots comply with the minimum width, depth and lot area requirements of the Zoning Bylaw. Should Council approve the subject rezoning proposal, additional details of the subdivision will be reviewed by the Approving Officer in conjunction with the concurrent subdivision application.

Community Benefit Contribution

15. Upon adoption of the 2016 Official Community Plan a greater and more purposeful emphasis was placed on making alternative forms of transportation such as walking, biking and public transportation delightful. Additionally, the 2016 OCP emphasized accommodating 75% of new growth in existing neighbourhoods, thereby increasing the demand for the City's existing social infrastructure including park and recreational spaces. In response, the City began negotiating the collection of Community Benefit Contributions (CBC) for residential and commercial developments at the time of rezoning. With respect to residential developments, staff has been recommending the collection of \$625 per additional dwelling unit (\$225 per unit for transit and bicycling infrastructure improvements, \$200 for park enhancements, and \$200 for affordable housing). For the subject application, the recommended CBC based on this formula is \$1,250.

House Demolition

16. Given that there are concurrent Subdivision and Development Permit applications to redevelop the subject properties as a rowhouse development, the demolition of the existing house will be addressed with future approvals. Should the rezoning application be adopted the existing home will become legal non-conforming in accordance with the Local Government Act.

Site Development Considerations

17. A staff review of the Works and Services Requirements necessary to support this application has been completed and is outlined within Attachment B (dated October 4, 2022), the details of which will be incorporated into the Development Agreement, a prerequisite for adoption of the rezoning bylaw.
18. The developer is responsible to adhere to all other legislation, which may apply to the land, including:
- a) complying with all applicable City bylaws, such as Official Community Plan Bylaw, 2016, Development Bylaw, 2022, Tree Protection Bylaw, 2010, Building Bylaw, 2016, Sign Bylaw, 2001, Erosion and Sediment Control Bylaw, 2010, and Development Cost Charges Imposition Bylaw, 2021 administered by the City; and
 - b) obtaining all other necessary approvals and permits on such terms as they may be issued, including but not limited to a development permit, tree removal permit, subdivision approval, building permit, soil removal/deposit permit, Ministry of Health permit, Ministry of Transportation and Infrastructure approval and Ministry of Environment approval.

Communication Plan

If supported by Council, Bylaw No. 3333-2023, "Abbotsford Zoning Bylaw, 2014, Amendment Bylaw No. 486" will proceed to a Regular Meeting of Council, where it will be considered for first and second readings. If the development is supported by Council the Bylaw will then proceed to an upcoming Public Hearing. The City will notify, in writing, the owners and occupiers of land within a 100 meter radius of the property and copies of all correspondence received will be

provided to Council. Two advertisements for the Public Hearing will be published in the City Page of the local newspaper.

The City received confirmation on November 19, 2022 that the applicant installed the required Development Notification Sign in accordance with the Development Application Procedures Bylaw, which requires the sign to be installed a minimum of 3 weeks in advance of Council's consideration of the application.

FINANCIAL PLAN IMPLICATION

No financial plan implications are anticipated. Any capital works implications arising from this application have been addressed through the rezoning process.

Komal Basatia

Komal Basatia
General Manager, Finance and Procurement Services
Signed 1/20/2023 9:30 AM

IMPACTS ON COUNCIL POLICIES, STRATEGIC PLAN AND/OR COUNCIL DIRECTION

The proposal meets the goals and objectives identified in the 2016 Official Community Plan, the Affordable Housing Strategy, and Council's 2019-2022 Strategic Plan which identifies four cornerstones: vibrant economy, complete community, fiscal discipline and organizational alignment. The proposal is consistent with the four cornerstones of Council's Strategic Plan

SUBSTANTIATION OF RECOMMENDATION

Staff support the proposed rezoning to the Rowhouse Residential Zone (RMR) to facilitate the development of a three unit rowhouse development given the proposal is consistent with the Urban 2 – Ground Oriented land use designation and the broad objectives of the OCP that support multifamily housing near Mixed Use Centres (in this case Historic Downtown Centre).

Daniel Graham

Daniel Graham
Planner
Signed 11/30/2022 2:14 PM

Blake Collins

Blake Collins
Director, Development Planning
Signed 1/19/2023 10:03 PM

Mark Neill

Mark Neill
General Manager, Planning and Development Services
Signed 1/20/2023 10:29 AM

ATTACHMENTS:

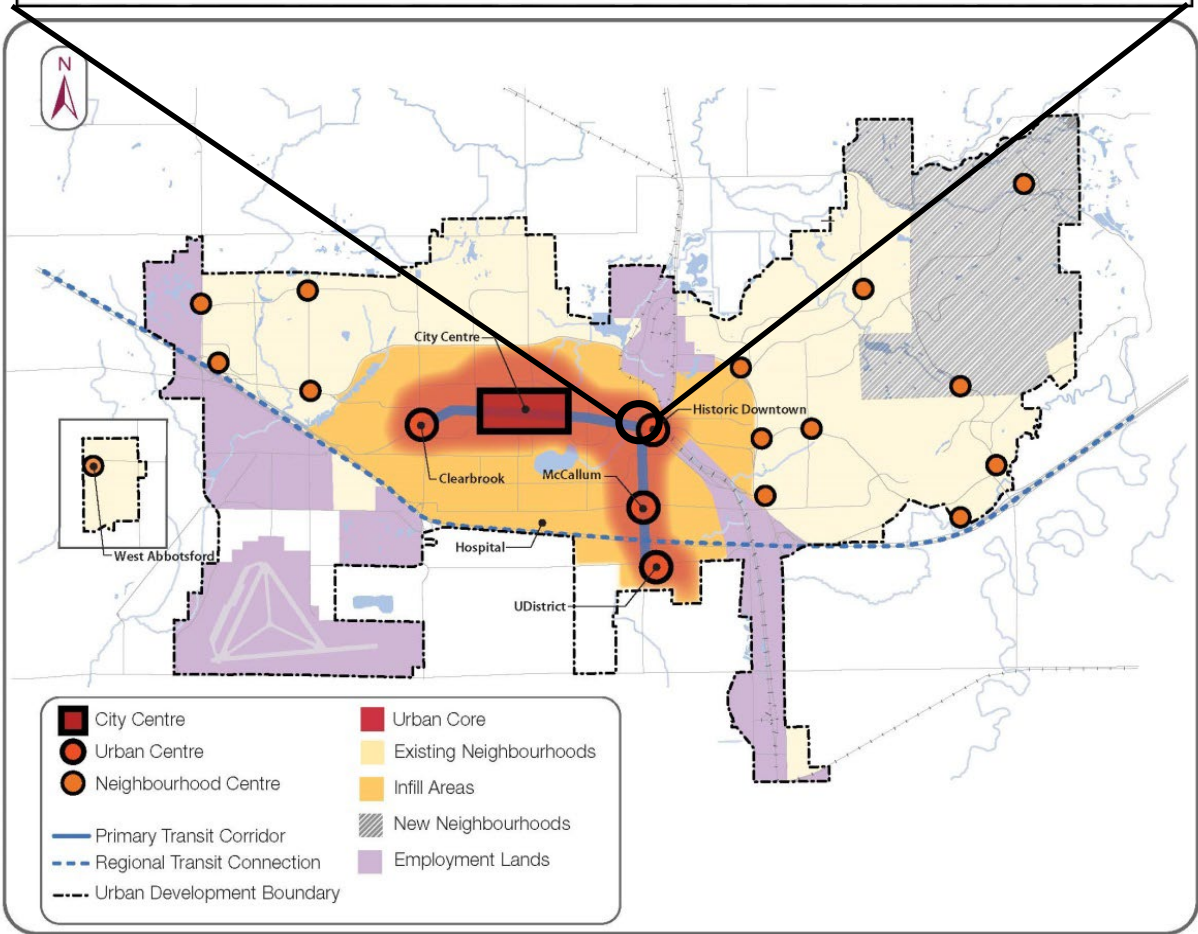
Council Figures 0-11

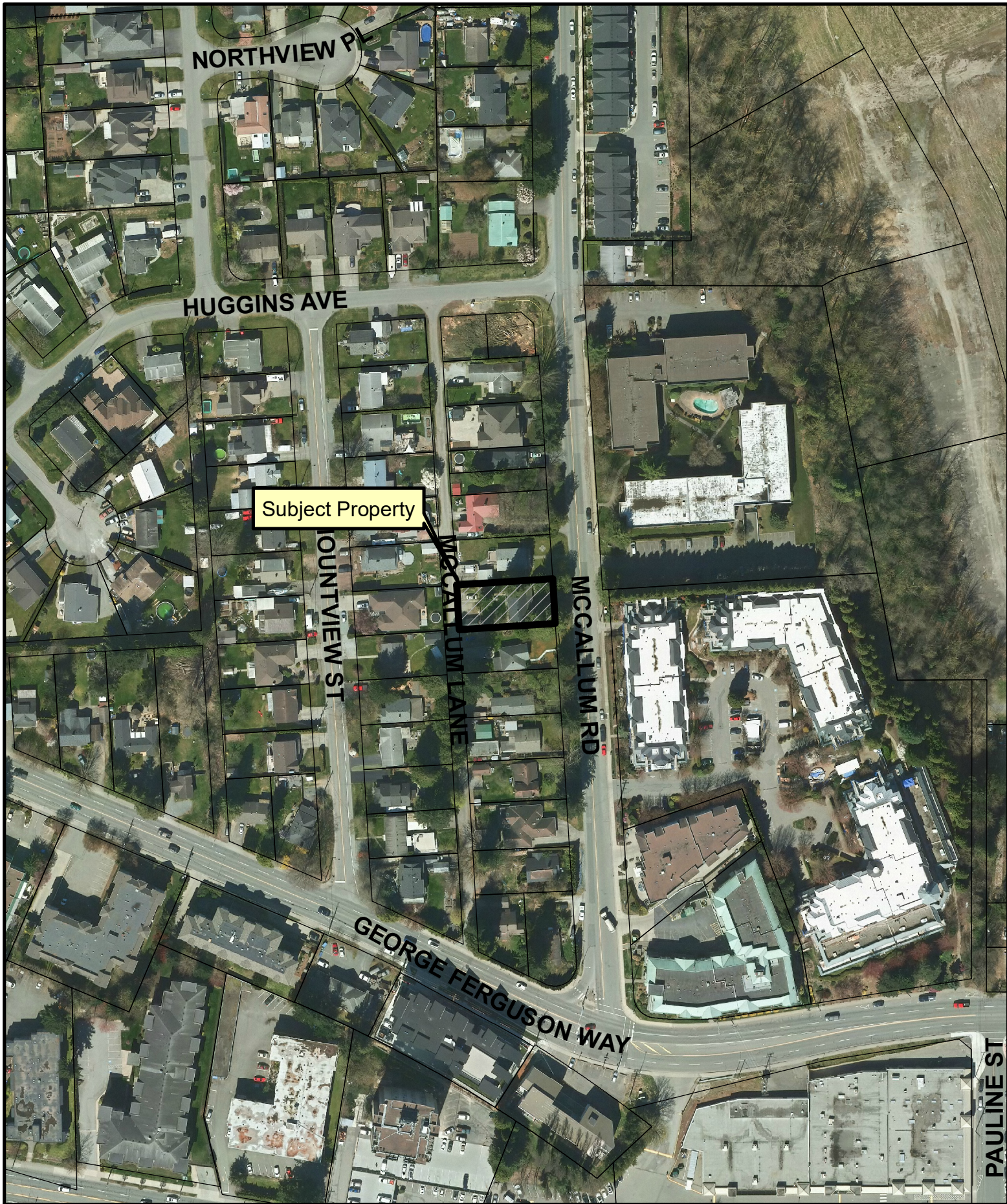
Attachment A - Draft Bylaw No. 3333-2023 Abbotsford Zoning Bylaw 2014 Amendment Bylaw No. 486

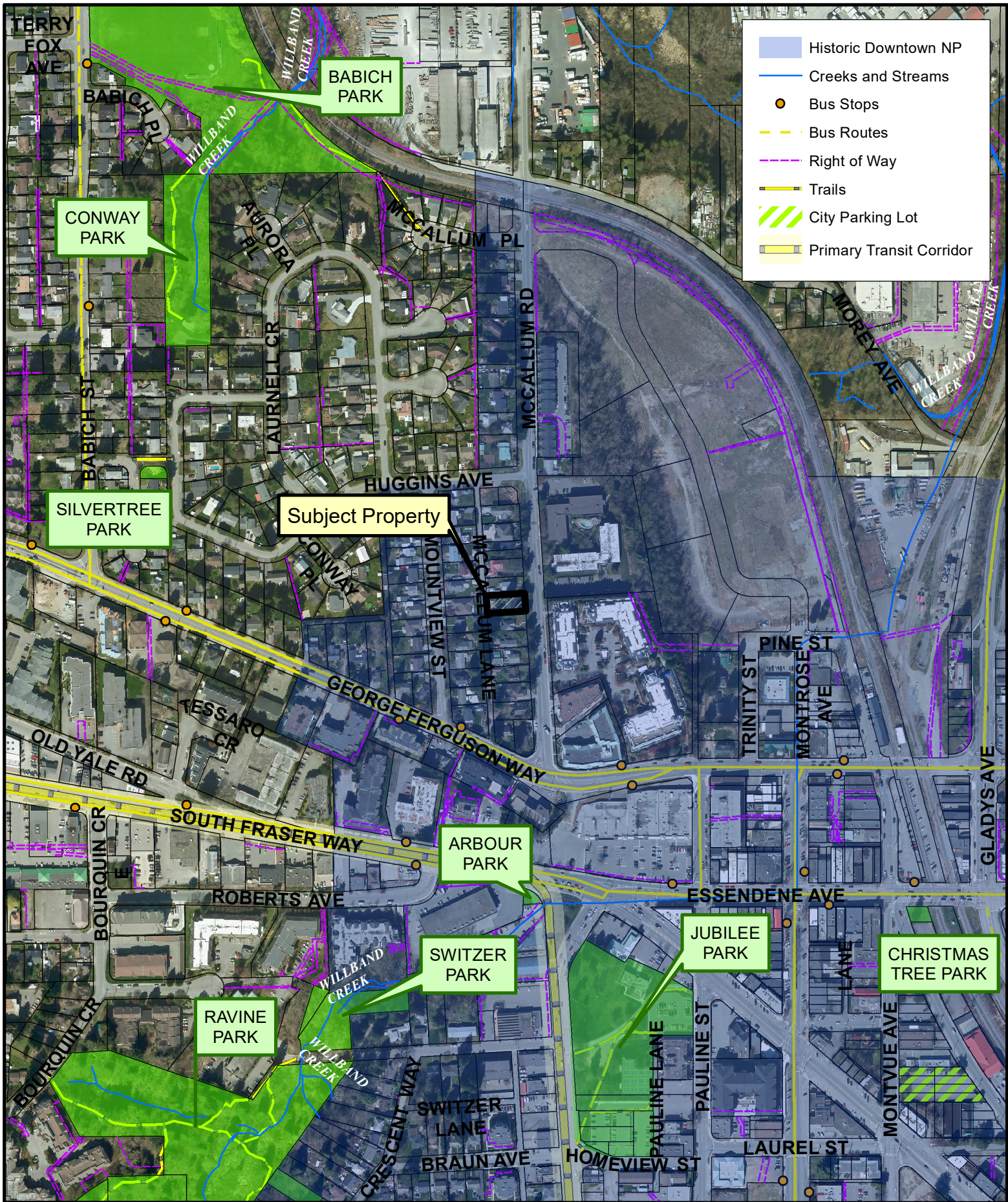
Attachment B - Works and Services Report

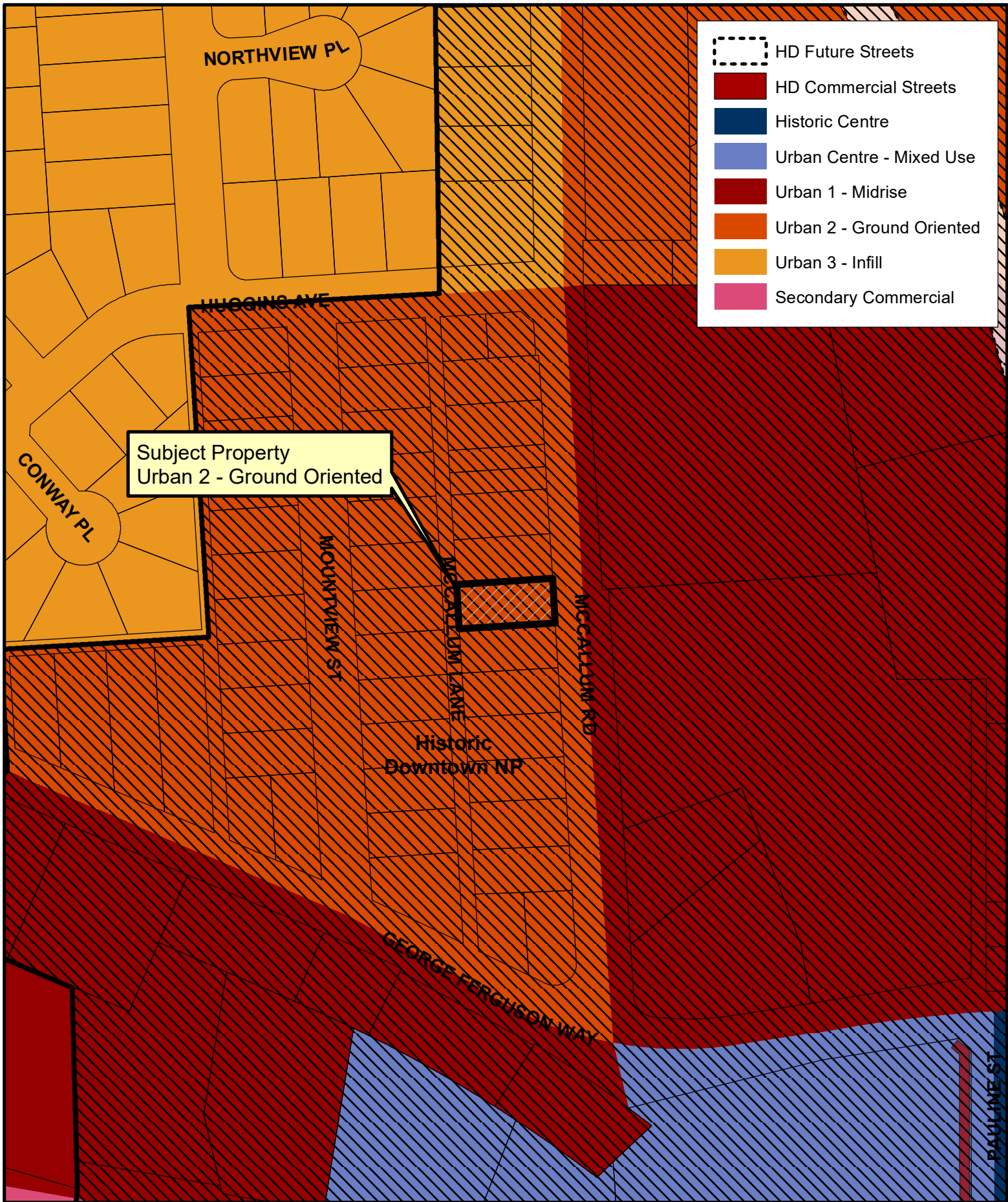
Attachment C - Arborist Report

City Context Plan
File: PRJ21-103 Location: 2741 McCallum Road









- Historic Downtown Neighbourhood Plan Boundary
- Facade Retention
- Historic Core
- Historic Influence
- Parkland
- Commercial Zone
- MultiFamily Zone

Subject Property

McCRIMMON DR

GEORGE FERGUSON WAY

McCALLUM RD

GLADYS AVE

GEORGE FERGUSON WAY

ESSENDENE AVE

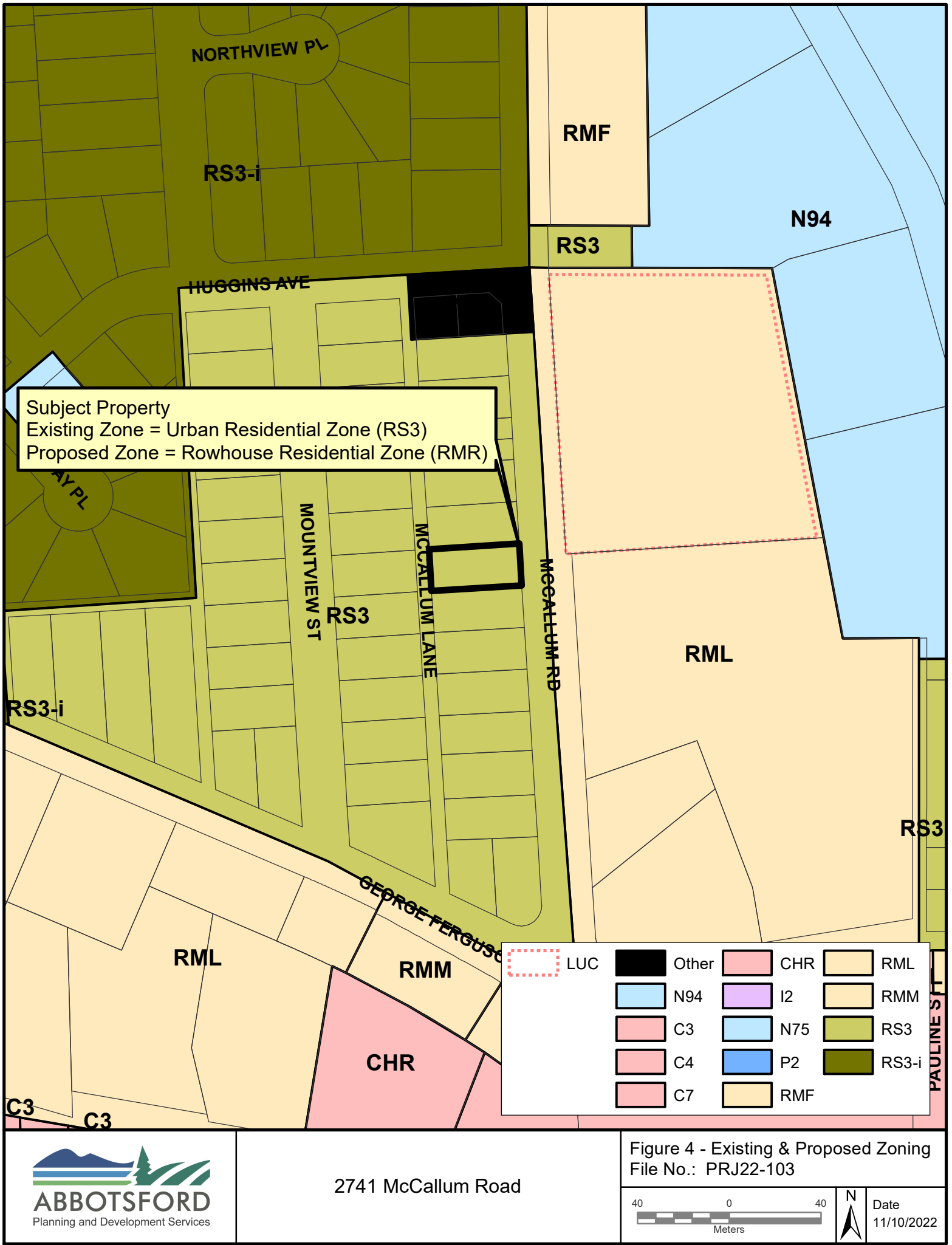
SOUTH FRASER WAY

OLD YALE RD

McCALLUM RD

McDOUGALL AVE

WEST RAILWAY ST





PROPOSED 3 PLEX

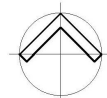
2741 McCALLUM ROAD, ABBOTSFORD B.C.

Site Statistics

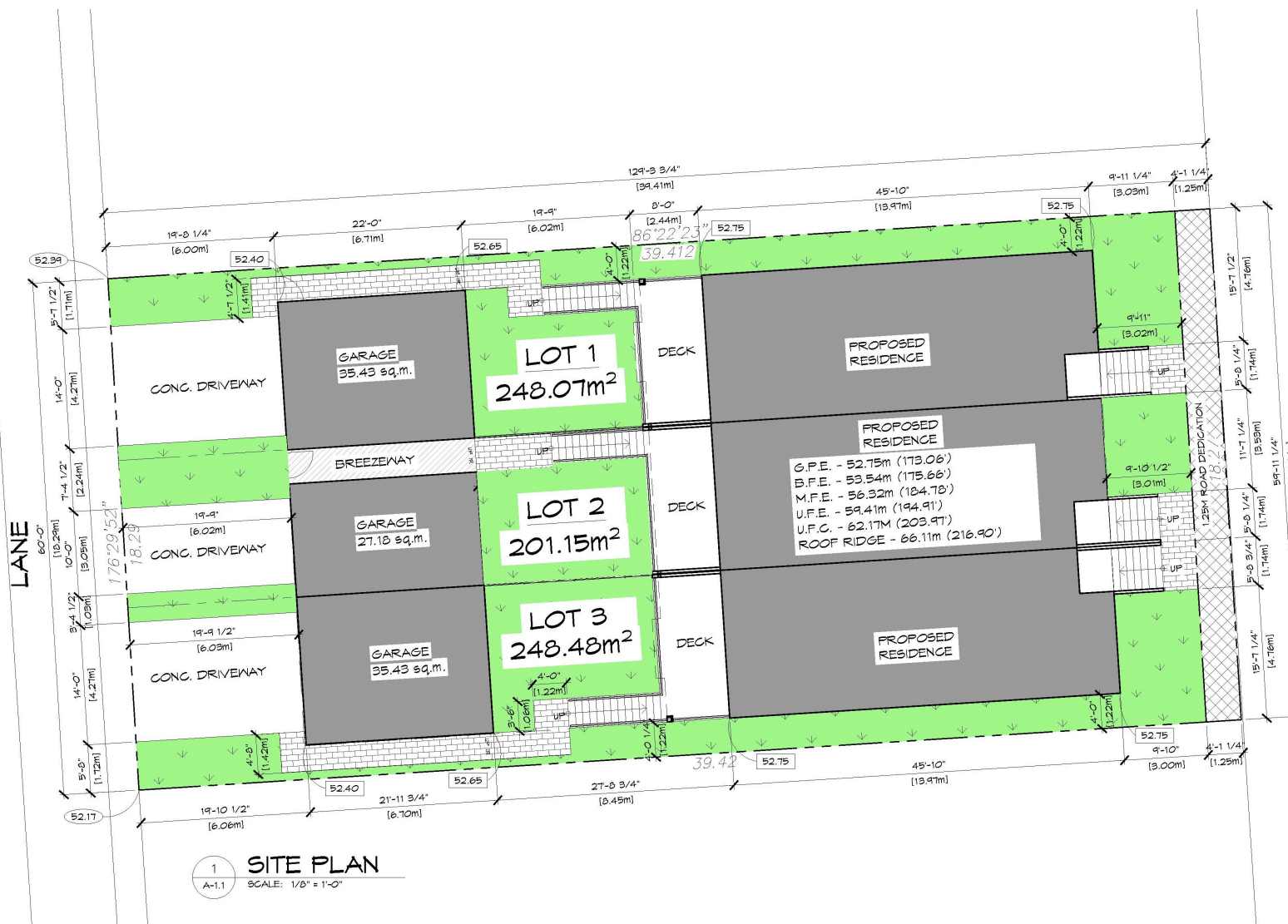
No. of Units = 3

Floor Space Ratio (FSR) = 0.96

Total Parking Spaces = 6



McCALLUM ROAD







Architectural elevation drawing of a two-story house. The house features a dark asphalt shingle roof with a gabled section on the left. The exterior walls are clad in light blue vertical siding. On the left side, there is a small porch with a white railing and a set of stairs leading up to it. The front facade has several windows: a double window on the second floor, and three single windows on the first floor. A small square window is located on the ground floor to the right. A label 'ASPHALT SHINGLE ROOF' with arrows points to the roofline. A small section of another building is visible on the far left.

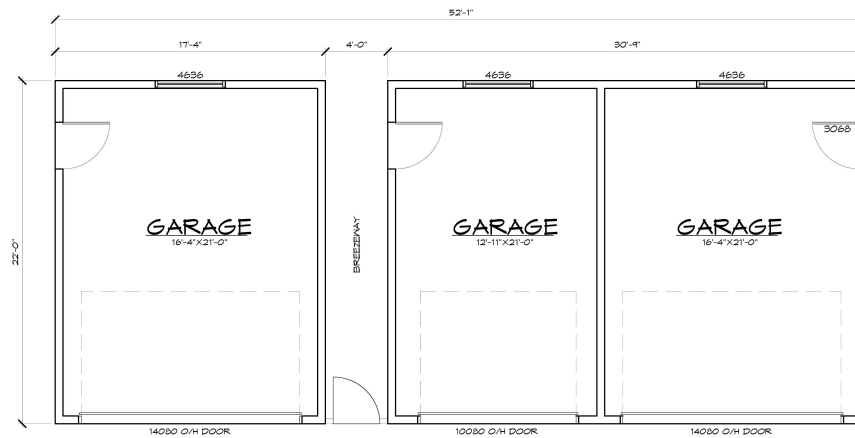


ABBOTSFORD
Planning and Development Services

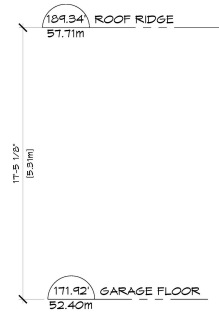
Figure 8 - Rear and Left Elevation Plan
File No.: PRJ22-103



Date
11/10/2022



1 MAIN FLOOR PLAN
SCALE: 1/4" = 1'-0"



1 FRONT (W) ELEVATION
SCALE: 1/4" = 1'-0"



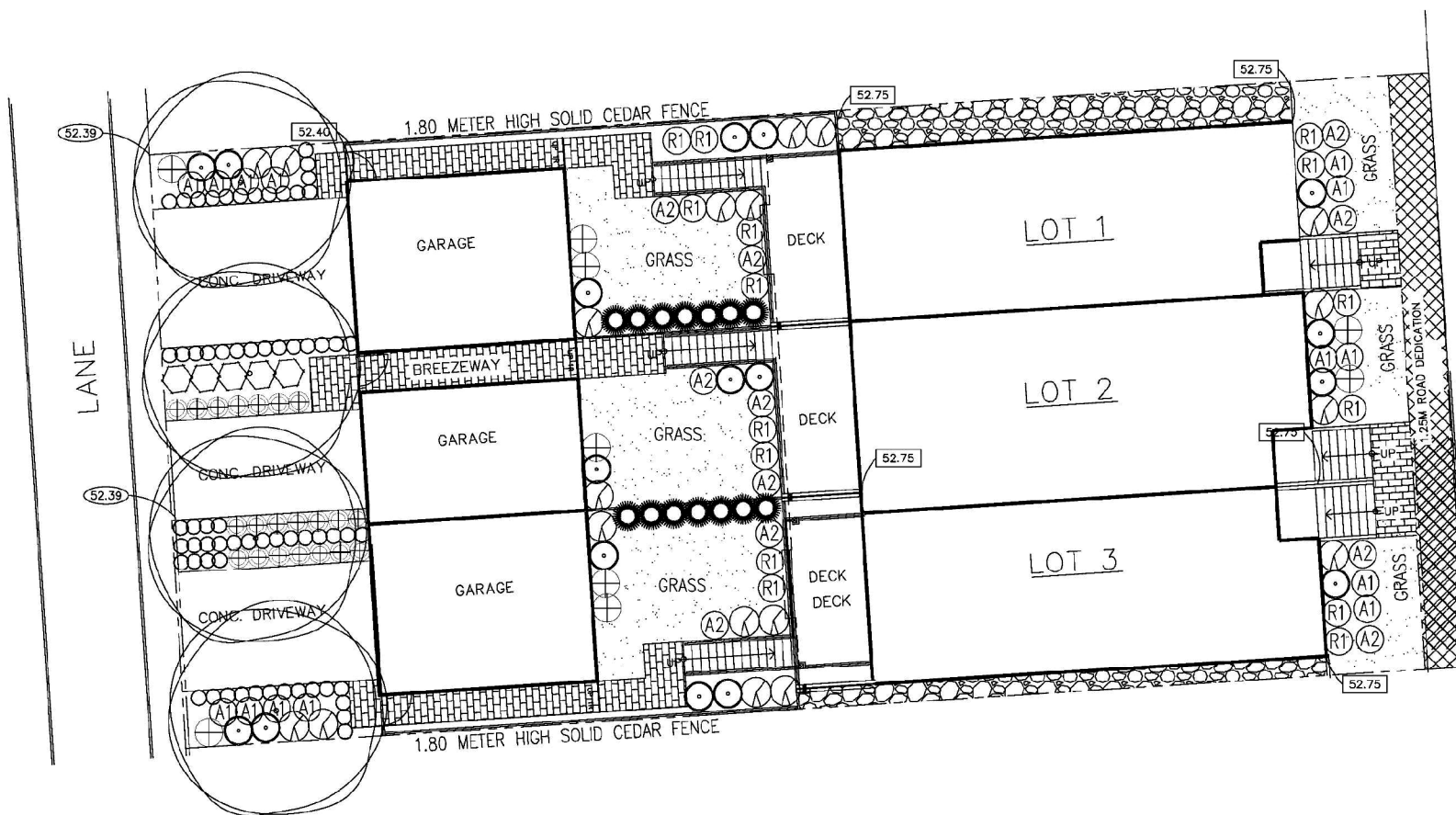
2 RIGHT (S) ELEVATION
SCALE: 1/4" = 1'-0"



3 REAR (E) ELEVATION
SCALE: 1/4" = 1'-0"



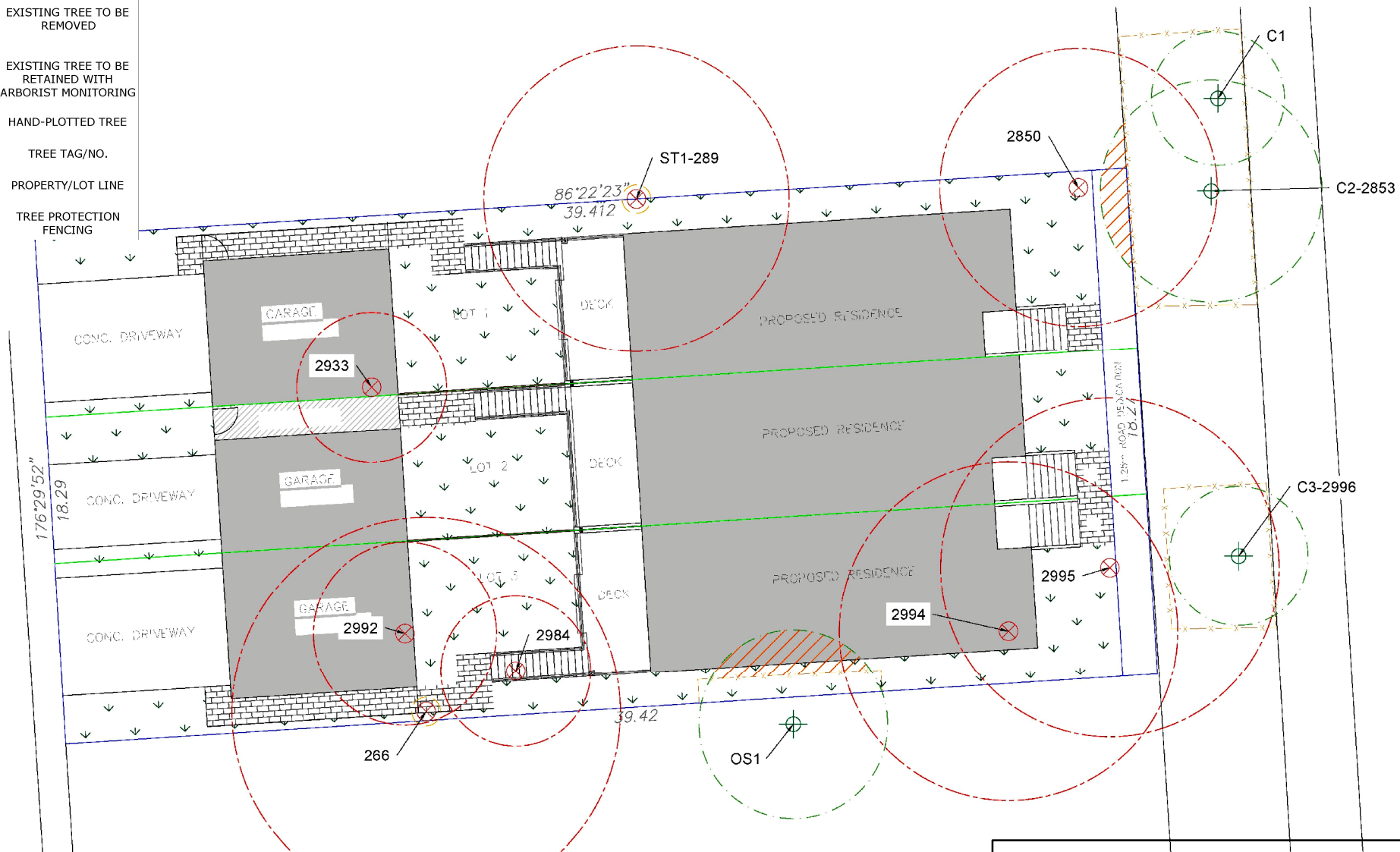
4 LEFT (N) ELEVATION
SCALE: 1/4" = 1'-0"



McCALLUM ROAD

LEGEND

- EXISTING TREE TO BE REMOVED
- EXISTING TREE TO BE RETAINED WITH ARBORIST MONITORING
- HAND-PLOTTED TREE
- 19 TREE TAG/NO.
- PROPERTY/LOT LINE
- TREE PROTECTION FENCING



ARBORIST (KELLY KOOME, 778.885.6777, k@koomeurbanforestry.ca) 72 HOURS PRIOR 3. IF STUMP GRINDING IS TO OCCUR IN CLOSE PROXIMITY TO TREES WHICH ARE TO BE RETAINED

Tree Management Summary

No. of trees assessed: 12

No. of trees to be removed: 8

No. of trees to be retained: 4

CITY OF ABBOTSFORD

ABBOTSFORD ZONING BYLAW, 2014, AMENDMENT BYLAW NO. 486

Bylaw No. 3333-2023

PRJ22-103

The Council of the City of Abbotsford, in open meeting assembled, enacts as follows:

1. CITATION

Bylaw No. 3333-2023 may be cited as “Abbotsford Zoning Bylaw, 2014, Amendment Bylaw No. 486”.

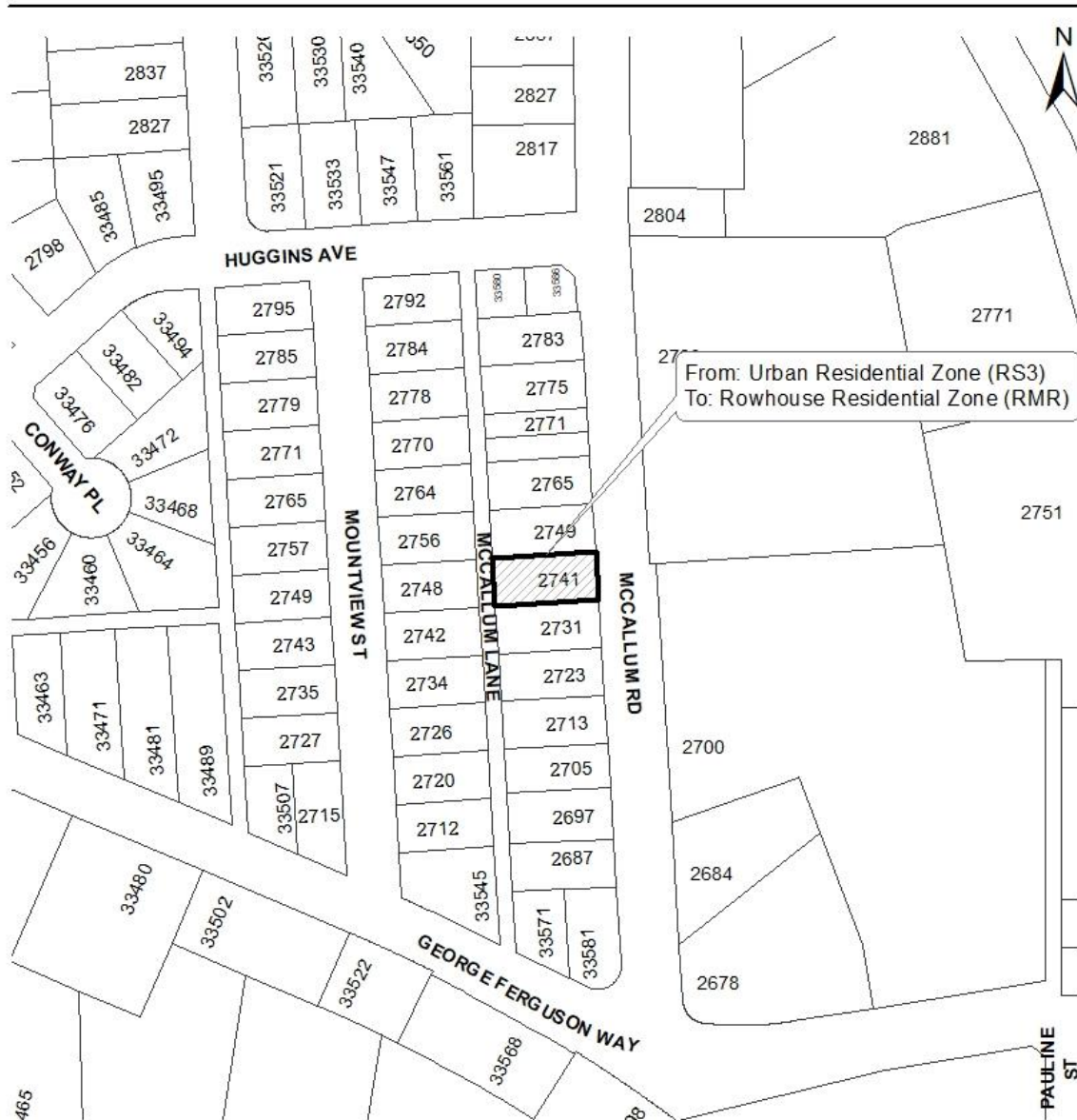
2. AMENDS ZONING MAPS

Abbotsford Zoning Bylaw, 2014, Schedule “D”, Urban Area Zoning, as amended, is further amended by changing the zoning of the lands as set out in the attached Appendix “A” and located at 2741 McCallum Road:

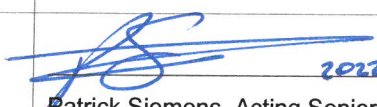
From: Urban Residential Zone (RS3)

To: Rowhouse Residential Zone (RMR)

READ A FIRST TIME this	day of	, 2023
READ A SECOND TIME this	day of	, 2023
PUBLIC HEARING HELD this	day of	, 2023
READ A THIRD TIME this	day of	, 2023
ADOPTED this	day of	, 2023



REZONING WORKS AND SERVICES REQUIREMENTS

File No:	PRJ22-103
Planner:	Daniel Graham, Planner
Prepared By:	Stanley de Haan, Development Technologist II
Approved By:	 2022/10/06 Patrick Siemens, Acting Senior Manager, Development Engineering
Date:	October 4, 2022
Applicant:	Darren Hall, D & D Design
Development Property:	2741 McCallum Road

The Local Government Act authorizes local governments to require development to meet current works and services standards as set out in the City's Development Bylaw and Policies.

This report includes the Works & Services **Requirements** to meet the applicable bylaws and policies and **Future Considerations** that may apply to the next phase of development.

Please have your consulting engineer call Stanley de Haan, Development Technologist II at 604-851-4175 in regard to this report and any other servicing matters relating to this application.

REQUIREMENTS

Additional dedications, SRWs, works, features or limits of construction may be needed as identified through the design and construction phases.

Drainage Collection and Disposal

This development is to follow requirements of the Development Bylaw #3260-2022. An updated IDF curve with climate change factor as shown in the bylaw is to be used for sizing storm sewer and infiltration/detention facilities. Details refer to the Sec. 4 & 5 of the development bylaw.

A drainage plan will be required to show how runoff is controlled on site without discharging offsite. Design and install a 300 mm diameter storm sewer system on McCallum Road along the full frontage. Coordinated design and construction with adjacent developments on 2793, 2765 and 2749 McCallum Road to construct a storm sewer system on McCallum Road from the south property line of this property to an existing manhole at the intersection of McCallum Road and Huggins Ave.

Provision of enough space is need for onsite infiltration trenches.

Conduct a percolation/ infiltration test to explore options to infiltrate runoff from the entire site for 1 in 100-year events without a service connection. Pre-treat road runoff prior to infiltration.

Per the updated Development Bylaw, provide source controls such as 300 mm absorbent soil, swales and rain gardens, roof leaders to infiltration facilities, and pervious surface for pedestrian areas, etc. to achieve Basic Oil Controls as outline on Table 5.2 Water Quality Performance Targets by Development Type of the Development Bylaw.

Sewage Collection and Disposal

The sewer main fronting the property is a 150 mm diameter main (Asset ID: 157481) and is required to be upgraded to a 200 mm diameter main. There are two options to pay for the upgrade:

1. Pay a cash-in-lieu of \$12,682 (18.3 m x \$693/m at approximately 3 m depth) to the City. The cash-in-lieu shall be collected under the title "McCallum Rd Sewer Main Upgrades (Asset ID: 157481), North of George Ferguson Way"; or
2. Pay latecomer to the applicant of PRJ21-069 and PRJ21-091 (2765 and 2749 McCallum, respectively) for upgrading the main (Asset IDs 157481 and 157907) to 200 mm diameter.

Under Option 1, there is no dependency on other neighbouring applications to proceed while Option 2 depends on other neighbouring applications to proceed first before the subject application.

Efficiencies may be achieved if the sewer main upgrade required for this application is completed in coordination with the upgrades required by the developments proposed for the neighbouring properties 2749 McCallum Rd (PRJ21-091) and 2765 McCallum Rd (PRJ21-069).

Water Distribution Domestic and Fire Fighting

Existing single water service will require abandonment at watermain and replaced with 3 new service lines and associated appurtenances (meters, meter box ect). These services should be connected to the 300mm watermain along McCallum Rd.

Highways – Dedications and Rights-of-Ways

On McCallum Road a dedication of approximately 1.25 m is required along the full frontage of the Lands from the north property line to the south property line.

Urban Roadways - Construction

On the rear lane, along the full length of the Lands from the north property line to the south property line, construct a full Urban Residential Access Lane as per ES-R-5 standard road.

Provide cash-in-lieu of \$10,705.50 (\$585 per metre x 18.3m) for required upgrades along McCallum Road site frontage to meet City's Urban Arterial Undivided road-way standard.

Provide cash-in-lieu of \$6,500 for required upgrades at the intersection of McCallum Road and George Ferguson Way.

Power/Telecommunications

Service Connection:

Provide underground power and telecommunications services from the distribution system to the property line.

Required Covenants, Easements and Rights-of-way

- Infiltration and/or Detention rights-of-way (PL-201)

FUTURE CONSIDERATIONS

Upon further development an additional works and services review will apply related to that application. Listed below are some items to consider.

Bylaws

- the applicant is to be familiar with the Development Bylaw to ensure an understanding of possible future Works and services that may impact the development
- the applicant is to review the Works and Services identified in the Development Agreement and how they may impact the building.

Traffic Management

- the increase in vehicle traffic will be reviewed for its impact on the access and nearest intersections. Access may be restricted.
- road dedications, statutory rights-of-way and easements to accommodate the works and lot grading may require adjustments to the placement or size of the building.

Service Connections

- water, sanitary and storm connections may have specific tie in locations. Review and confirm locations prior to design.
- calculations related to the required domestic and fire water demand will be reviewed. There may be a service, meter or flow restrictions.
- Fire Department review may result in geometric changes to onsite roadways, additional fire hydrants, emergency access and building placement.
- Provide underground power and telecommunications services from the distribution system to the proposed building(s).

Development Cost Charges.

- Development Cost Charges are applicable at Building Permit

Lot Grading

- A Lot Grading Plan is required. Final lot grading shall conform to City's Development Bylaw Schedule "I" Lot Grading Standards. Any retaining walls that the Developer or Consulting Engineer consider are necessary to effectively grade the Lands to prevent negative impacts on finished neighbouring Lands, either existing or proposed, shall be constructed by the Developer. The standard "Lot Grading Covenant shall be registered against title to all proposed lots.
- Lot grading shall also provide for the collection of surface runoff and other drainage that will discharge to the City Drainage system. Lot grading may be designed to allow for surface sheet flows or collected in swales and directed to lawn basins as necessary to the satisfaction of the General Manager, Engineering & Regional Utilities. Any collection of surface flows to a concentrated point discharge location shall include provision for easements or rights-of-way across impacted Lands as necessary. All lot grading shall be designed to take care of surface flows emanating from onsite grading.



ABBOTSFORD DEVELOPMENT ENGINEERING DIVISION

Building Permit Submissions

- In order to avoid delays in receipt of building permits, the builder shall be responsible for ensuring that building permit applications on the Lands conform to the intent of the accepted Lot Grading Plan(s) prior to submission to the City.
- The developer or their designate shall review and approve building permit applications prior to submission to the City. When submitted, the building permit plans shall provide lot grading information that shall, at time of final inspection for building occupancy or approval, comply with the accepted Lot Grading Plan or the intent of the lot grading design accepted by the General Manager, Engineering & Regional Utilities prior to construction.

Erosion and Sediment Control

All works shall be performed in substantial conformance with the City's Development Bylaw, the Provincial 'Land Development Guidelines' and the City's Erosion and Sediment Control Bylaw, in the control and prevention of erosion and sediment during all phases of construction. No release of silt, sediment laden waters or deleterious substances is permitted into any existing City storm or drainage system during any phase of development of the Lands.

The ESC Plan requires 4 drawings, each indicating the ESC methods for that stage of construction;

- site preparation
- site servicing
- building construction
- warranty period



Koome Urban Forestry Ltd. Arborist Report

Submitted to:

**iEngineer Solutions
Inc.**

14756 69 Ave, Surrey, BC,
V3S 2C6

Submitted by:

koome
urban forestry 

305 –1163 The High Street
Coquitlam, BC
V3B 7W2
604 900-8262

**2741 McCallum Road
Abbotsford, BC**

Internal Project Code: KUF-iENGINEER_McCallum Rd

Original Report: June 14, 2017 – KK
Revision 1: January 21, 2021 – MT/KK
Revision 2: February 9, 2021 – MT
Revision 3: July 25, 2022 – KK, DW
Reviewed by KK

This report's content was performed and managed by:



Kelly Koome, Consulting Arborist
ISA Certified Arborist, PN-5962A
ISA Tree Risk Assessment Qualified
Wildlife Danger Tree Assessor, #P2546



Dionne Wong, Consulting Arborist
ISA Certified Arborist, PN-9499A
Bachelor of Urban Forestry

Any questions or concerns as to the contents of this report please direct them to the following:

Phone: 778.885.6777 (Kelly), 604.999.8269 (Dionne)
Email: kelly.koome@koomeurbanforestry.ca, dionne.wong@koomeurbanforestry.ca
Website: www.koomeurbanforestry.ca



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1.0 Introduction

1.1 Background

Koome Urban Forestry Ltd. (KUF) was contracted by iEngineer Solutions Inc. to prepare an ISA Certified Arborist Tree Report for the proposed development at 2741 McCallum Road, Abbotsford, BC.

1.2 Assignment

KUF has been retained by the client to assess the health and condition of the tree(s) in accordance with The City of Abbotsford Tree Protection Bylaw, 2010 No. 1831-2009.

As part of this assessment, the KUF Ltd. has performed a site review entailing identification and visual assessment of the tree(s) on site. The report also includes off site trees which may be impacted by development based on the tree survey provided by the client or representative(s). The Project Arborist will provide recommendations for the retention or removal of tree(s) on this site based on the existing site conditions and the proposed use of the site.

The mitigation of development impact on the tree(s) has been considered as part of the tree assessment process.

1.3 Limits of the Assignment

KUF's observations were limited to site visits on June 13, 2017, October 15, 2020, and July 20, 2022. No tissue or soil samples were sent to a lab for identification or analysis. KUF located the trees using the survey provided by the client.

During winter, deciduous trees are in winter dormancy and this is a limitation for assessing tree health at that time.

1.4 Testing & Analysis

KUF used visual tree assessment and mallet sounding to test the trees' health, condition, and risk level.

The International Society of Arboriculture Best Management Practices (for Managing Trees During Construction, Second Edition) and ANSI A300 Standards (Part 5: Tree, Shrub and Other Woody Plant Maintenance—Standard Practices [Management of Trees and Shrubs During Site Planning, Site Development, and Construction]) were used to prepare this report.

1.5 Purpose & Use of Report

The purpose of this report is to assist the property owner in compliance with The City of Abbotsford Tree Protection Bylaw, 2010 No. 1831-2009.



2.0 Site Description

2.1 Site Review



Fig. 1 – Abbotsford Map Viewer aerial of property

2.2 Proposed Site Development

Division into three lots with houses, driveways, and decks.

2.3 Environmental Description

The property is bordered by McCallum Road to the East, McCallum Lane to the West and residential properties on the North and south sides. There is an existing house on the property with a shed in the back yard. The lot is on an even grade.

There is no evidence of raptors nests, osprey nests or heron colonies on the site. **Removal of trees between March 15 – August 15 (date subject to change depending on seasonal nesting behavior and therefore must be confirmed with the City) will require a bird nesting survey.** This is as prescribed by the federal Migratory Birds Convention Act (MBCA), 1994 and Section 34 of the BC Wildlife Act. It is the responsibility of the owner/developer to ensure they follow the city's regulations governing nesting birds on sites where development is occurring.

2.4 Tree Preservation Summary

All the trees identified on the Tree Management Plan and within the Tree Assessment Data Table have been given their Retention/Removal recommendation on a preliminary basis. Final recommendations will be based upon design/construction and grading details.

Long-term tree preservation success is dependent on minimizing the impact caused during pre-construction clearing operations, construction, and post construction activities. Best efforts must be made to ensure the Tree Protection Zone remains undisturbed.

Ongoing monitoring of retained trees through the development process and implementation of mitigating works (watering, mulching, etc.) is essential for success.



3.0 Findings

3.1 Summary of Findings

- Off-site tree (OS1) to be protected with tree protection fencing and arborist monitoring during excavation of adjacent area. This area is indicated with orange hatching on the Tree Management Plan.
- 7 on-site trees (266, 2933, 2992, 2984, 2994, 2995, 2850) to be removed due to the excavation and installation associated with proposed development.
- The removal of ST1- 289 will require written permission from property owner.
- The removal of 8 trees requires 20 tree replacements.
- The locations of ST1- 289 and 266 were hand-plotted by arborist and the location on the TMP is approximate.
- City trees C1, C2-2853, and C3-2996 will require tree protection fencing built at the outer drip-line encompassing tree.
 - C2-2853 requires arborist monitoring during excavation in the critical root zone.



3.2 Tree Inventory Assessment

Table 1 Tree Inventory Table

Tree #	Tag #	Common Name <i>Botanical Name</i>	DBH (m.)	C-RAD (m.)	LCR (%)	Comments	Retain / Remove	REPLACE MENT TREES
The following trees are located on-site								
1	2850	Norway Spruce <i>Picea abies</i>	0.40	5.0	80	GOOD CONDITION TRUNK - subdominant fork at 3 meters.	REMOVE Proposed road dedication significantly encroaches the critical root zone	0
2	2933	Douglas-fir <i>Pseudotsuga menziesii</i>	0.25	2.7	80	GOOD CONDITION TRUNK - subdominant forked stem at 3 meters.	REMOVE Located within proposed garage	2
3	2984	Fruiting cherry <i>Prunus spp.</i>	0.23, 0.25, 0.23	2.7	60	POOR CONDITION CROWN- Dieback	REMOVE Located within proposed staircase	3
4	2992	Apple Tree <i>Malus spp.</i>	0.35	3.3	60	FAIR CONDITION CROWN - Previous pruning cuts have left some stub cuts with decay TRUNK - Leans southeast before self-correcting in crown	REMOVE Located within proposed garage	3
5	2994	Eastern Redcedar <i>Juniperus virginiana</i>	0.40, 0.64, 0.72	6.1	50	GOOD CONDITION TRUNK - Two codominant stems joined at base. One stem divides into two smaller trunks near base. CROWN - Utility lines currently running through lower crown.	REMOVE Located within proposed residence.	3
6	2995	Eastern Redcedar <i>Juniperus virginiana</i>	0.39, 0.67, 0.60	6.1	70	GOOD CONDITION TRUNK - Two codominant stems joined at base. One stem divide into two smaller trunks near base.	REMOVE >60% of the critical root zone is encroached by proposed residence, stairs, and road dedication.	3

Tree #	Tag #	Common Name <i>Botanical Name</i>	DBH (m.)	C-RAD (m.)	LCR (%)	Comments	Retain / Remove	REPLACE MENT TREES
7	266	English Walnut <i>Juglans Regia</i>	32	7	80	GOOD CONDITION LOCATION IS APPROXIMATE AND HAND-PLOTTED ON MAP	REMOVE Located within proposed walkway.	3
The following are City of Abbotsford Trees								
C1	N/A	Fruiting Cherry <i>Prunus spp.</i>	0.25	2.4	60	FAIR CONDITION SUITABLE FOR RETENTION – The critical root zone does not likely extend to Development Property. However, if during construction encroachment toward Crown or within 1-meter of Critical root zone occurs, Project Arborist must directly supervise.	RETAIN	0
C2	2853	Cypress <i>Cupressus spp.</i>	0.13 0.20 0.20 0.24 0.25 0.27 0.38 0.42	4.0	90	FAIR CONDITION TRUNK - Multiple stems radiating from base. CROWN - Removal of lateral limbs near base has left stub cuts. SUITABLE FOR RETENTION - Tree Protection Barrier required. All work within 1-meter of Drip Line must be completed under direct supervision of Project Arborist and in coordination with City of Abbotsford Urban Forestry Dept.	RETAIN	0



Tree #	Tag #	Common Name <i>Botanical Name</i>	DBH (m.)	C-RAD (m.)	LCR (%)	Comments	Retain / Remove	REPLACE MENT TREES
C3	2996	White Spruce <i>Picea glauca</i>	0.18	2.5	40	FAIR CONDITION This tree is sub-dominant to adjacent T2995 CROWN - Limbs asymmetrically weighted to north east (road) side of trunk. SUITABLE FOR RETENTION - Tree Protection Barrier required. All work within 1-meter of Drip Line must be completed under direct supervision of Project Arborist and in coordination with City of Abbotsford Urban Forestry Dept.	RETAIN	0
The following trees are straddling the property line								
ST1	289	Western Red Cedar <i>Thuja plicata</i>	0.80	5.5	70	GOOD CONDITION Tree appears to partially share property line with neighbour to north (2749 McCallum Rd). DRIP LINE = 5.50 METERS LIVE CROWN RATIO = 70 - 80% TRUNK - Codominant stems beginning at 15 meters with English Ivy throughout bole. LOCATION IS APPROXIMATE AND HAND-PLOTTED ON MAP	REMOVE >40% of the critical root zone is encroached by proposed residence and deck. <i>Written permission is required from neighbour prior to removal.</i>	3
The following trees are located offsite								



Tree #	Tag #	Common Name <i>Botanical Name</i>	DBH (m.)	C-RAD (m.)	LCR (%)	Comments	Retain / Remove	REPLACE MENT TREES
OS1	N/A	Northern White-cedar <i>Thuja occidentalis</i>	0.45	3.4	90	<p>GOOD CONDITION</p> <p>TRUNK - multiple stems beginning at 1.30 METERS. Edge of trunk is at 0.60 meters from property line</p> <p>CROWN - Upper crown limbs reach to within 20 cm of existing house on development property.</p> <p>SUITABLE FOR RETENTION - Tree Protection Barrier required. Critical Root Zone likely extends towards existing house on development property. This zone must be respected during demolition of house and throughout Construction Phase.</p> <p>Arborist presence required during the excavation within the critical root zone area.</p>	RETAIN	0



3.3 Replacement Tree Requirements

Table 1 Tree Inventory Table

DBH (m)	Number of Trees to be Cut	Number of Replacement Trees per the bylaw	Number of Replacement Trees Needed
< 0.20	0	0	0
0.20-0.30	1	2	2
>0.30	7	3	18
Total			20



Appendix A – Glossary of Key Terms

Abutment: A structure built to support the lateral pressure of an arch or span, e.g., at the ends of a bridge.

Adapted Trunk Diameter Method: This method uses the trees age and tolerance to construction damage to determine the factor that will be multiplied by the diameter to provide a sufficient tree protection zone given these factors.

Age: The relative age (young, intermediate, mature) within the stand of trees or forest.

Algae: Is a simple, nonflowering plant (includes seaweeds and many single-celled forms). They do contain chlorophyll (but lack true stems, roots, and vascular tissue)

ALR: The Agricultural Land Reserve in which agriculture is recognized as the priority.

Bole: The stem or trunk of a tree.

Chlorotic: Yellowing of plant tissues caused by nutrient deficiency &/or pathogen.

Co-dominant Leaders: Forked dominant stems nearly the same size in diameter, arising from a common junction.

Co-dominant Within Stand: Individual tree whose height is generally equal to trees (regardless of species) within the same stand.

Compaction: Compression of the soil that breaks down soil aggregates and reduces soil volume and total pore space, especially macropore space.

Conk: A fungal fruiting structure typically found on trunks and indicating internal decay.

C-rad: Crown radius, is the dripline measured from the edge of the trunk to the outermost branches of the crown.

CRZ: Critical Root Zone - The area between the trunk and to the end of the Drip Line.

Dead Standing: A tree that has died but is still standing erect.

DBH: The Diameter of the tree at 1.40 meters above the ground.

Dominant Within Stand: Individual tree whose height is significantly greater than adjacent trees (regardless of species) within the same stand.

Fair: Healthy but has some defects such as co-dominant trunk, dead branches.

Feeder Roots: The smaller roots responsible for water and nutrient absorption and gas exchange. These roots can extend far beyond the Drip Line (or outer canopy) of the tree.

Fungus (singular) / Fungi (plural): Unicellular, multicellular, or syncytial spore-producing organisms that feed on organic matter (including molds, yeast, mushrooms and toadstools)

Girdling Root: Root that encircles all or part of the trunk of a tree or other roots and constricts the vascular tissue and inhibits secondary growth and the movement of water.

Good: Good form and structure, healthy with no defects.

Hazardous: Significant hazard exists with a high risk of immediate failure, which could result in serious damage to property or person(s).

Height: Height of tree is approximate.

LCR: Live Crown Ratio – The ratio of crown length to total tree length.

Level 1 Limited Visual Assessment: Limited visual assessment looking for obvious defects such as, but not limited to dead trees, large cavity openings, large dead or broken branches, fungal fruiting structures, large cracks, and severe leans.

Level 2 Basic Visual Assessment: Detailed visual inspection (aboveground roots, trunk, canopy) of tree(s) may include the use of simple tools to perform assessment (i.e. sounding mallet, trowel, measuring tape, binoculars). The assessment does not include advanced resistance drilling of trunk.

Level 3 Advanced Assessment: To provide detailed information about specific tree parts, defects, targets, or side conditions. May include aerial inspection, resistance drilling of tree parts, laboratory diagnosis of fungal or plant tissue.

Mildew: Is a minute powdery or web-like fungi (of different colours) that is found on diseased or decaying substances.

Moss: A small, green, seedless plant that grows on stones, trees or ground.

No Disturbance Zone: The area adjacent to the tree that is restricted from all construction activity.

Poor: multiple defects, disease, poor structure and or form, root and or canopy damage.

Phloem: Plant vascular tissue that transports sugar and growth regulators. Situated on the inside of the bark, just outside the cambium. Is bidirectional (transports up and down). Contrast with xylem.

Phototropic: Growth toward light source or stimulant.

RAR: Riparian Areas Regulation.

Retain & Monitor: Monitor health and condition of tree every 12 months for signs of deterioration.

Root Crown: Also, called the root collar, it includes the flare at the base of the trunk and the initial roots that develop below the trunk. These roots generally taper and subdivide rapidly to form the root system of the tree.

SPEA: Streamside Protection and Enhancement Area

Spiral Decline: The health and condition of the tree is deteriorating.

Sub-dominant Within Stand: Individual tree whose height is significantly less than adjacent trees (regardless of species) within the same stand.

Suppressed: Individual tree whose growth, health and condition is negatively impacted by adjacent tree(s).

TPB: Tree Protection Barrier

TPZ: Tree Protection Zone - The area between the trunk and the Tree Protection Barrier.

Wildlife Tree: A tree or a group of trees that are identified to be retained to provide future wildlife habitat. Wildlife habitat can exist in tree risks (cavities, dead snags, broken tops). Often times the tree risk to potential targets (people & property) is reduced by removing that part of the tree posing the risk of failure, but the tree (or portion of) is retained to provide future habitat.

Witches Broom: A dense mass of shoots growing from a single point, with the resulting structure resembling a broom or a bird's nest.

Xylem: Thin overlapping cells that helps provide support and that conducts water and nutrients upward from the roots all the way to the leaves.

Appendix B– Photos



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6

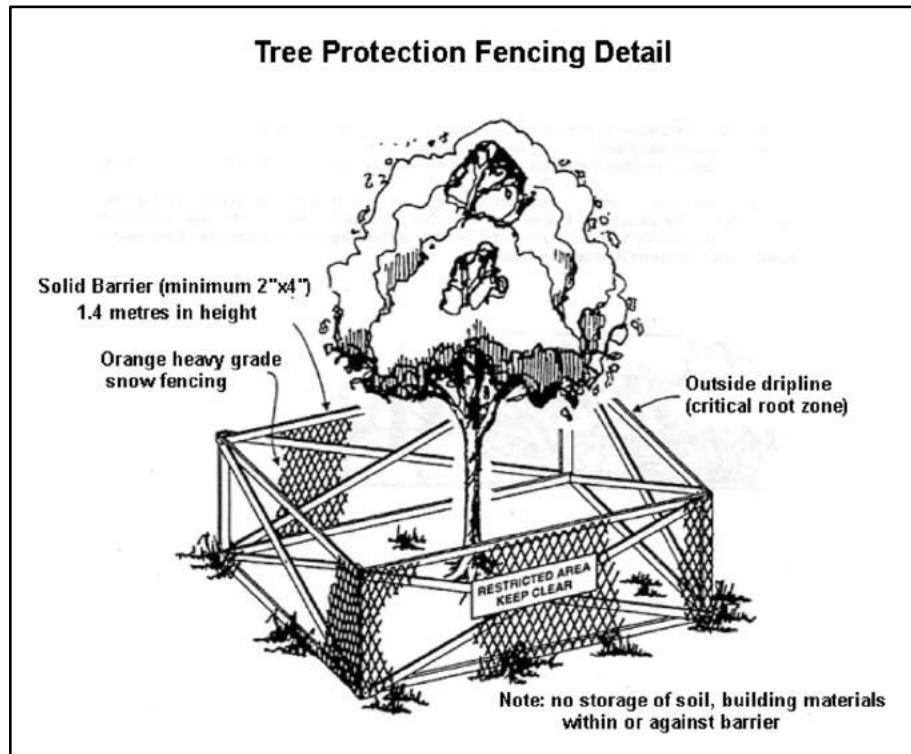


Fig. 7

Appendix C – Construction Activity Around Tree Protection Zone

TREES THAT REQUIRE TREE PROTECTION BARRIERS:

- All Bylaw Protected Trees that are being retained on your property.
- All Bylaw Protected Trees on adjacent property within 4m of the property line.
- All trees located on the City Boulevard, Parkland, or City land within 4m of the property line



Tree Protection Barrier imagery taken from City of Surrey tree bylaws

Materials:

- 2x4's for framing (vertical posts, top and bottom rails, and cross-bracing)
- Plastic mesh screening (also known as snow fencing).

Dimensions:

- Panels must be 1.2m in height
- Maximum 3.7 m spacing between vertical posts (see Tree Management Plan for spacing recommended for each retained tree – based on the crown radius/dripline measurement).

Maintaining your tree protection barriers:

Tree protection barriers must be installed and maintained throughout the entire construction process. Barriers that are in disrepair must be fixed immediately to prevent possible fines, "Stop Work" orders, and/or permit delays.

General Requirements and Limitations for Operations Within the Tree Protection Zone

- The Contractor shall not engage in any construction activity within the Tree Protection Zone (TPZ) without the approval of the Project Arborist including operating, moving or storing equipment; storing supplies or materials; locating temporary facilities including trailers or portable toilets and shall not permit employees to traverse the area to access adjacent areas of the project or use the area for lunch or any other work breaks. Permitted activity, if any, within the Tree Protection Zone maybe indicated on the drawings along with any required remedial activity as listed below.
- If construction activity is unavoidable within the Tree Protection Zone, notify the Project Arborist and submit a detailed written plan of action for approval. The plan shall include: a statement detailing the reason for the activity including why other areas are not suited; a description of the proposed activity; the time for the activity, and a list of remedial actions that will reduce the impact on the Tree Protection Zone from the activity. Remedial actions shall include but shall not be limited to the following:
 - In general, demolition and excavation within the drip line of trees and shrubs shall proceed with extreme care either using hand tools, directional boring and/or Air Spade. If any excavation work is required within the Tree Protection Zone (TPZ), the Project Arborist must be present during excavation, and a trench should be 'hand dug' to a depth of 60 cm outside the Drip Line, to uncover any potential roots. The Project Arborist should cleanly prune roots and recommend the appropriate treatment for any structural roots encountered.
 - Knife excavation where indicated or with other low impact equipment that will not cause damage to the tree, roots soil.
 - When encountered, exposed roots, 1 inch and larger in diameter shall be worked around in a manner that does not break the outer layer of the root surface (bark). These roots shall be covered in Wood Chips and shall be always maintained above permanent wilt point. Roots one inch and larger in diameter shall not be cut without the approval of the Project Arborist. Excavation shall be tunnelled under these roots without cutting them. In the areas where roots are encountered, work shall be performed and scheduled to close excavations as quickly as possible over exposed roots.
 - Tree branches that interfere with the construction may be tied back or pruned to clear only to the point necessary to complete the work. Other branches shall only be RETAINED when specifically indicated by the Project Arborist. Tying back or trimming of all branches and the cutting of roots shall be in accordance with accepted arboriculture practices (ANSI A300, part 8) and be performed under supervision of the Project Arborist.
- Do not permit foot traffic, scaffolding or the storage of materials within the Tree Protection Zone.
- Always protect the Tree Protection Zone from compaction of the soil; damage of any kind to trunks, bark, branches, leaves and roots of all plants; and contamination of the soil, bark or leaves with construction materials, debris, silt, fuels, oils, and any chemicals substance. Notify the Project Arborist of any spills, compaction or damage and take corrective action immediately using methods approved by the Project Arborist.

Appendix D – Assumptions and Limiting Conditions

It is the policy of Koome Urban Forestry Ltd. (KUF) to attach the following clauses regarding limitations. We do this to ensure that developers, owners, and approving officers are clearly aware of what is technically and professionally realistic in retaining trees.

This Assessment is based on the circumstances and observations as they existed at the time of the site inspection of the Client's Property and the tree(s) situated thereon by Koome Urban Forestry Ltd. and upon information provided by the Client to KUF. The opinions in this Assessment are given based on observations made and using generally accepted professional judgment, however, because trees and plants are living organisms and subject to change, damage and disease, the results, observations, recommendations, and analysis as set out in this Assessment are valid only as at the date any such testing, observations and analysis took place and no guarantee, warranty, representation or opinion is offered or made by KUF as to the length of the validity of the results, observations, recommendations and analysis contained within this Assessment.

As a result, the Client shall not rely upon this Assessment, save and except for representing the circumstances and observations, analysis and recommendations that were made as at the date of such inspections. It is recommended that the trees discussed in this Assessment should be re-assessed periodically. Only the subject tree(s) was inspected and no others.

Restriction of Assessment

Notwithstanding the recommendations and conclusions made in this Assessment, it must be realized 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. The tendency of trees or parts of trees to fall due to environmental conditions and internal problems are unpredictable. Defects are often hidden within the tree or underground.

The Assessment carried out was restricted to the Property. No Assessment of any other trees or plants has been undertaken by KUF. Koome Urban Forestry Ltd. is not legally liable for any other trees or plants on the Property except those expressly discussed herein. The conclusions of this Assessment do not apply to any areas, trees, plants or any other property not covered or referenced in this Report. The conclusions of this Assessment does not imply or in any way infer that other trees on this site or near this site are sound and healthy.

While reasonable efforts have been made to ensure that the tree(s) recommended for retention are healthy, no guarantees are offered, or implied, that these trees, or all parts of them, will remain standing. It is both professionally and practically impossible to predict with absolute certainty the behaviour of any single tree -- or group of trees --, or all their component parts, in all given circumstances. Inevitably, a standing tree will always pose some risk. Most trees have the potential for failure in the event of adverse weather conditions, and this risk can only be eliminated if the tree is removed.

Although every effort has been made to ensure that this assessment is reasonably accurate, the tree(s) should be re-assessed periodically. In accordance with standard practice, the Assessment presented in this Report is valid at the time it was undertaken. It is not a guarantee of safety. It is the owner's responsibility to maintain the tree(s) and inspect the tree(s) to reasonable standards and to carry out recommendations for mitigation suggested in this Report.

Professional Responsibility

In carrying out this Assessment, Koome Urban Forestry Ltd. and any Assessor appointed for and on behalf of KUF to perform and carry out the Assessment has exercised a reasonable standard of care, skill and diligence as would be customarily and normally provided in carrying out this Assessment.

The Assessment of the tree(s) 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) and the surrounding site, and the current or planned 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.

Without limiting the foregoing, no liability is assumed by Koome Urban Forestry Ltd. or its directors, officers, employees, contractors, agents or Assessors for:

- a) any legal description provided with respect to the Property;
- b) issues of title and or ownership respect to the Property;
- c) the accuracy of the Property line locations or boundaries with respect to the Property; and
- d) the accuracy of any other information provided to KUF by the Client or third parties;
- e) any consequential loss, injury or damages suffered by the Client or any third parties, including but not limited to replacement costs, loss of use, earnings and business interruption; and
- f) the unauthorized distribution of the Report.

The total monetary amount of all claims or causes of action the Client may have as against KUF, including but not limited to claims for negligence, negligent misrepresentation and breach of contract, shall be strictly limited solely to the total amount of fees paid by the Client to KUF.

Further, under no circumstance may any claims be initiated or commenced by the Client against Koome Urban Forestry Ltd. or any of its directors, officers, employees, contractors, agents or Assessors, in contract or in tort, more than 12 months after the date of this Assessment.

Assumptions

The Client is hereby notified and does hereby acknowledge and agree that where any of the facts and information set out and referenced in this Assessment are based on assumptions, facts or information provided to KUF by the Client and/or third parties and unless otherwise set out within this Assessment, KUF will in no way be responsible for the veracity or accuracy of any such information.

Further, the Client acknowledges and agrees that KUF has, for the purposes of preparing their Report, assumed that the Property, which is the subject of this Assessment is in full compliance with all applicable federal, provincial, municipal and local statutes, regulations, by-laws, guidelines and other related laws. KUF explicitly denies any legal liability for any and all issues with respect to non-compliance with any of the above-referenced statutes, regulations, bylaws, guidelines and laws as it may pertain to or affect the Property to which this Assessment applies.

Third Party Liability

This Report was prepared by Koome Urban Forestry Ltd. exclusively for the Client. The contents reflect KUF's best Assessment of the tree(s) and plant(s) situated on the Property in light of the information available to it at the time of preparation of this Assessment. Any use which a third party makes of this Assessment, or any reliance on or decisions made based upon this Assessment, are made at the sole risk of any such third parties. KUF accepts no responsibility for any damages or loss suffered by any third party or by the Client as a result of decisions made or actions based upon the use or reliance of this Assessment by any such party.

Further Services

Notwithstanding the recommendations made in this Assessment, Koome Urban Forestry Ltd. accept no responsibility for the implementation of all or any part of this plan, unless we have specifically been requested to examine said implementation activities. Approval and implementation of this plan in no way implies any inspection or supervisory role on the part of Koome Urban Forestry Ltd. In the event that inspection or supervision of all or part of the implementation of the plan is requested, said request shall be in writing and the details agreed to in writing by both parties. Any on site inspection or supervisory work undertaken by Koome Urban Forestry Ltd. shall be recorded in written form and submitted to the client as a matter of record.

Koome Urban Forestry Ltd. nor any of its representatives shall be required to give testimony, or to act as an expert witness or to attend court by reason of this Report unless the Client has first made specific arrangements with respect to such further services, including, without limitation, providing the payment of Koome Urban Forestry Ltd.'s regular hourly billing fees.

Koome Urban Forestry Ltd. nor any of its representatives shall be required to provide any further consultation or services to the Client, save and except as already carried out in the preparation of this Report unless the Client has first made specific arrangements with respect to such further services, including, without limitation, providing the payment of Koome Urban Forestry Ltd.'s regular hourly billing fees.

General

Any plans and/or illustrations in this Assessment are included only to help the Client visualize the issues in this Assessment and shall not be relied upon for any other purpose.

KUF shall not be held responsible for the manner of use of the interpretations that other parties may attach to the report. This report is not to be re-printed, copied, published or distributed without prior approval by Koome Urban Forestry Ltd.

The Report shall be considered a whole, no sections are severable, and the Report shall be considered incomplete if any pages are missing.

This Report is best viewed in colour. Any copies printed in black and white may make some details difficult to properly understand. Koome Urban Forestry Ltd. accepts no liability for misunderstandings due to a black and white copy of the Report.

Sketches, drawings and photographs in this Report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural Report of surveys unless expressed otherwise. The reproduction of any information generated by architects, engineers, or other consultants on any sketches, drawings, or photographs is for the express purpose of co-ordination and ease of reference only. Inclusion of said information on any drawings or other documents does not constitute a representation by Koome Urban Forestry Ltd. as to the sufficiency or accuracy of said information.

Publication

The Client acknowledges and agrees that all intellectual property rights and title, including without limitation, all copyright in this Report shall remain solely with Koome Urban Forestry Ltd. Possession of this Report, or a copy thereof, does not entitle the Client or any third party to the right of publication or reproduction of the Report for any purpose save and except where KUF has given its prior written consent. This Report may not be used for any other project or any other purpose without the prior written consent of Koome Urban Forestry Ltd.

Unless required by law otherwise, possession of this Report or a copy thereof does not imply right of publication or use for any purpose by any other than the person, parties or agencies to whom it is addressed, without the prior expressed written consent of Koome Urban Forestry Ltd. Neither all nor any part of the contents of this Report shall be disseminated to the public through advertising, public relations, news, sales, the Internet or other media (including, without limitation, television, radio, print or electronic media) without the prior written consent of Koome Urban Forestry Ltd.

Appendix E – References

- Bond, Jerry & Buchanan, Beth (2006) Best Management Practices: Tree Inventories, International Society of Arboriculture, Champaign, IL.
- Dunster, Dr. Julian (2003) *Preliminary Species Profiles for Tree Failure Assessment*. ISA Pacific Northwest Chapter, Silverton, OR, USA
- Dunster, Dr. Julian & Edmonds, Dr. R. (2014) Common Fungi Affecting Pacific Northwest Trees, ISA Pacific Northwest Chapter, Silverton, OR, USA
- Fite, Kelby & Smiley, E. Thomas (2016) Best Management Practices: Managing Trees During Construction, International Society of Arboriculture, Champaign, IL.
- Sibley, David Allen (2009) *The Sibley Guide to Trees*. Alfred A. Knopf, New York, NY
- Smiley, E.T., Matheny, N., Lilly, S. (2011) Best Management Practises: Tree Risk Assessment. International Society of Arboriculture, Champaign, IL.

Appendix F – Certificate of Performance

I certify that:

1. I have personally inspected the trees and property referred to in this report and have stated my findings accurately.
2. I have no current or prospective interest in the trees or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved.
3. The analysis, opinions and conclusions stated herein are my own and are based on current scientific procedures and facts.
4. My analysis, opinions and conclusions were developed, and this report has been prepared according to commonly accepted arboriculture practices.
5. No one provided significant professional assistance to me, except as indicated within the report.
6. My compensation is not contingent upon the reporting of a predetermined conclusion that favours the cause of the client or any other party nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.

I further certify that I am a member in good standing with the International Society of Arboriculture, and the Pacific Northwest Chapter of the ISA.

Koome Urban Forestry Ltd.,



Kelly Koome, Project Arborist
ISA Certified Arborist PN 5962A
ISA Tree Risk Assessment Qualified
Certified Wildlife Dangerous Tree Assessor, P2546


Appendix G – Tree Management Plan

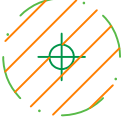
See attached


Original size: 24x36
Print as 11x17 for foldout


305 - 1163 The High Street
Coquitlam, BC V3B 7W2


LEGEND


 EXISTING TREE TO BE REMOVED

 EXISTING TREE TO BE RETAINED WITH ARBORIST MONITORING

 HAND-PLOTTED TREE

 TREE TAG/NO.

 PROPERTY/LOT LINE

 TREE PROTECTION FENCING

1.	25/07/22	D.W.
(DD/MM/YY) NAME		
REVISIONS		

PROJECT CODE
KUF-iENGINEER_McCallum Rd

PROJECT ADDRESS
2741 McCallum
Abbotsford, BC

DRAWING TITLE
TREE MANAGEMENT PLAN

- NOTE:
1.

CONTACT ARBORIST (KELLY KOOME, 778.885.6777, kelly.koome@koomeurbanforestry.ca) 72 HOURS PRIOR TO ANY GRADING OR EXCAVATION WITHIN THE TREE PROTECTION ZONE. IF DURING EXCAVATION IT IS FOUND THAT IT CANNOT BE COMPLETED WITHOUT SEVERING ROOTS THAT ARE CRITICAL TO THE TREE HEALTH OR STABILITY, IT MAY BE NECESSARY TO REMOVE ADDITIONAL TREE.

2.

READ THIS PLAN TOGETHER WITH THE ARBORIST REPORT PREPARED BY KOOME URBAN FORESTRY LTD (KUF).

3.

IF STUMP GRINDING IS TO OCCUR IN CLOSE PROXIMITY TO TREES WHICH ARE TO BE RETAINED THEN IT IS REQUESTED STUMPS TO BE REMOVED UNDER ARBORIST SUPERVISION.

4.

IT IS THE RESPONSIBILITY OF THE CLIENT OR HIS/HER REPRESENTATIVE TO CONTACT THE PROJECT ARBORIST FOR THE PURPOSE OF:
*LOCATING TPZ FENCING
*LOCATING WORK ZONE AND MACHINE ACCESS CORRIDORS WHERE REQUIRED
*REVIEWING THE REPORT WITH THE PROJECT FOREMAN OR SITE SUPERVISOR

