A REGULAR MEETING OF THE TOWN OF LADYSMITH COUNCIL AGENDA 6:00 P.M.

Tuesday, March 16, 2021

This meeting will be held electronically as per Ministerial Order No. M192

Pages

1. CALL TO ORDER

Call to Order 6:00 p.m. in Open Session, in order to retire immediately into Closed Session.

Members of the public are welcome to attend all Open Meetings of Council, but may not attend Closed Meetings.

2. CLOSED SESSION

Recommendation

That, in accordance with section 90(1) of the *Community Charter*, Council retire into closed session in order to consider items related to the following:

- the acquisition, disposition or expropriation of land or improvements, if the council considers that disclosure could reasonably be expected to harm the interests of the municipality - section 90(1)(e);
- the receipt of advice that is subject to solicitor-client privilege section 90(1)(i).

3. OPEN MEETING AND ACKNOWLEDGEMENT (7:00 P.M.)

The Town of Ladysmith acknowledges with gratitude that this meeting takes place on the traditional, unceded territory of the Stz'uminus First Nation.

Residents are encouraged to "virtually" attend the meeting by registering here: https://zoom.us/webinar/register/WN_0seoUmx7TdGF0DxomWLXSA

Instructions on how to join the meeting will be sent immediately after you register.

View the livestream on YouTube:

https://www.youtube.com/channel/UCH3qHAExLiW8YrSuJk5R3uA/featured.

AGENDA APPROVAL

Recommendation

That Council approve the agenda for this Regular Meeting of Council for March 16, 2021.

5. RISE AND REPORT- Items from Closed Session

Items from the Closed Meeting of Council held February 23, 2021:

CE 2021-055

That Council:

- Accept the entire change of scope for the Arts & Heritage Hub outlined in Appendix A to the February 16, 2021 report from the Director of Development Services;
- 2. Direct staff to include funding options for consideration during upcoming Financial Plan discussions; and
- 3. Rise and report once the contract for the change in scope is signed by the Town and the architect.

Items from the Closed Meeting of Council held March 2, 2021

CE 2021-060

That Council:

- Approve the exclusive use of the main floor of Aggie Hall by Island Health from March to September 2021, for use as a COVID-19 mass immunization site;
- Authorize the Director of Parks, Recreation and Culture to: negotiate a
 cost recovery fee for the rental usage; and permit the use of the
 Province's COVID-19 Restart funding to offset any rental revenue lost
 by entering into this agreement; and
- 3. Rise and Report after Island Health has the opportunity to publicly announce the COVID-19 mass immunization site in Ladysmith.

6. MINUTES

6.1. Minutes of the Regular Meeting of Council held March 2, 2021

Recommendation

That Council approve the minutes of the Regular Meeting of Council held March 2, 2021.

7. PROCLAMATIONS

7.1. World Down Syndrome Day

19

Mayor Stone has proclaimed Sunday, March 21, 2021 as World Down Syndrome Day in the Town of Ladysmith.

8. DEVELOPMENT APPLICATIONS

8.1. Referral for Non-Medical Cannabis Retail Store - 411B 1st Avenue ("Local Cannabis Co.")

20

Recommendation

That Council, having considered the general impact on the community and the views of the residents, pursuant to section 33 of the *Cannabis Control and Licensing Act*, consider whether or not to:

- Recommend that the Province issue a licence for a non-medical cannabis retail store at 411B 1St Avenue ("Local Cannabis Co."); and
- 2. Pursuant to section 13.5 of the *Cannabis Licensing Regulation*, provide reasons for the recommendation, based on:
 - The views of Council on the impact of the proposed store and/or of non-medical cannabis retail stores in general;
 - Submissions from the public; and
 - The context of the proposed location; local land use regulations; and/or other considerations.

BYLAWS- OFFICIAL COMMUNITY PLANNING AND ZONING

9.1. Application to Rezone 336 Belaire Street from 3 to 4 Storeys

68

Recommendation

That Council:

- Proceed with first and second reading of "Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 36) 2021, No. 2066"; and
- 2. Direct staff to proceed with scheduling and notification for a Public Hearing for "Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 36) 2021, No. 2066".

9.2. Official Community Plan Amendment - Development Permit Exemption for Single Family Development in the Multi-family Development Permit Area

Recommendation

That Council:

- 1. Give first and second reading of "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 66) 2021, No. 2070";
- Consider "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 66) 2021, No. 2070" in conjunction with the Town's Financial Plan, the Town's Liquid Waste Management Plan, and the Cowichan Valley Regional District Solid Waste Management Plan, pursuant to section 477(3) of the Local Government Act;
- 3. Direct staff to refer Bylaw No. 2070 to:
 - the Stz'uminus First Nation pursuant to the Naut'sa mawt Community Accord and Memorandum of Understanding; and
 - b. School District 68 pursuant to section 476 of the *Local Government Act*, and,
- 4. Pursuant to section 475 of the Local Government Act.
 - consider whether opportunities for consultation with one or more persons, organizations and authorities should be early and ongoing;
 - b. specifically consider whether consultation is required with:
 - i. the board of the Cowichan Valley Regional District and board of the Regional District of Nanaimo;
 - ii. the Council of the District of North Cowichan;
 - iii. the Stz'uminus First Nation;
 - iv. the Board of Education for School District 68; and
 - v. the Provincial and Federal Governments and their agencies; and
 - c. determine that further consultation is not required under section 475(a) or 475(b) of the *Local Government Act*, and
- 5. Direct staff to proceed with scheduling and notification of a Public Hearing for "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 66) 2021, No. 2070".

9.3. OCP & Zoning Bylaw Amendment – Lot 20 Trans-Canada Highway, 674 & 670 Farrell Road

Recommendation

That Council:

- 1. Having considered section 475 (consultation during development of an official community plan) of the *Local Government Act*, direct that no additional consultation is required pursuant to section 475, as the application has been referred to the Community Planning Advisory Committee, the Stz'uminus First Nation, School District 68 (Nanaimo-Ladysmith), the Ministry of Transportation and Infrastructure, the Ministry of Forests, Lands, Natural Resource Operations and Rural Development, BC Transit, and the Cowichan Valley Regional District;
- Consider first and second reading of "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 63) 2021, No. 2060";
- 3. Consider "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 63) 2021, No. 2060" in conjunction with the Town's Financial Plan and the Town's Liquid Waste Management Plan, pursuant to section 477(3) of the *Local Government Act*;
- Consider first and second reading of "Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 33) 2021, No. 2061";
- Direct staff to proceed with scheduling and notification of a public hearing for "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 63) 2021, No. 2060" and "Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 33) 2021, No. 2061"; and
- 6. Require, prior to adoption of "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 63) 2021, No. 2060" and "Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 33) 2021, No. 2061", that the developer:
 - a. be required to consolidate Lot 20, District Lot 41, Oyster District, Plan 2519, Except Parts in Plans 8993, 43985 and EPP28332, Lot 2 District Lot 41 Oyster District, Plan VIP65993 and Lot 1, District Lot 41, Oyster District, Plan 20461:
 - b. On the title of the consolidated parcel, register in favour of the Town and at the cost of the developer, the following:
 - i. A covenant pursuant to section 219 of the *Land Title*Act, requiring a deciduous planting and protection area, shown as 'Tree Buffer Area' in Attachment C, of the report to Council dated March 16, 2021, at time of

subdivision;

- ii. A covenant pursuant to section 219 of the Land Title Act requiring all development on site to be consistent with the recommendations of Wildfire Assessment Management Plan attached as Attachment I to the report to Council dated March 16, 2021.
- iii. A covenant pursuant to section 219 of the *Land Title Act* requiring the dedication of parkland, shown as 'Park' in Attachment C to the report to Council dated March 16, 2021, at time of subdivision approval;
- iv. A covenant pursuant to section 44 of the *Community Charter* and 219 of the *Land Title Act* requiring road dedication generally in accordance with the road layout shown in Attachment C to the report to Council dated March 16, 2021 at time of subdivision approval;
- v. A covenant pursuant to section 44 of the *Community Charter* and 219 of the *Land Title* Act requiring road dedication, without compensation to the property owner, for the extension of Farrell Road fronting the site generally in accordance with the road layout shown in Attachment E, to be taken at time of subdivision or when the Town elects to extend Farrell Road past the site, whichever occurs first; and
- vi. A covenant pursuant to section 219 of the *Land Title Act* requiring a community amenity contribution of \$1,000 per multi-family residential unit, payable at time of building permit, and \$1,000 per single-family or duplex residential parcel, payable at time of subdivision, to the Town's Amenity Fund.

10. COMMITTEE MINUTES

10.1. March 9, 2021 Committee of the Whole Recommendations

Recommendation

That Council approve the allocated amounts of 2021 Grant in Aid requests as follows:

Ladysmith Community Gardens Society \$1600

Old English Car Club Central Island Branch \$600

Ladysmith Downtown Business Association \$4000

Ladysmith Family and Friends Society \$2,500

Ladysmith Celebrations Society \$10,000

314

Ladysmith & District Historical Society \$7,500

Ladysmith and District Marine Rescue Society \$2,500

Cowichan Family Caregivers Support Society \$1,000

Ladysmith Festival Of Lights \$15,000

Ladysmith Show and Shine \$2,000

Ladysmith Maritime Society \$1,500

Ladysmith Little Theatre \$2,500

Cowichan Trail Stewardship Society - Ladysmith Chapter \$2,000

Ladysmith Secondary School Parent Advisory Council \$500

LSS - Frank Jameson Bursary \$1,500

Waiving Fees \$4,000

Late Applications/Council Discretion \$3,850

Recommendation

That Council direct staff to:

- 1. Implement a yard waste pilot project, starting with two spring pickup dates targeted for the end of April and May 2021;
- Bring a summary report of costs and participation levels after the first two spring pickups, in order that Council can provide direction on a fall pickup schedule; and
- 3. Include \$20,000 in the Solid Waste budget for 2021 with the funds to come from the Solid Waste Reserve.

Recommendation

That Council direct staff to:

- Prepare a Park Dedication Bylaw which includes Town-owned properties identified in the staff report dated March 9, 2021; and
- Identify portions of road right of way that are currently being used as park space and bring forward the necessary bylaws to:
 - close and remove the road dedication pursuant to section
 40 of the Community Charter; and
 - dedicate the resulting legal parcels as park.

Recommendation

That Council direct staff to bring forward amendments to the Zoning Bylaw related to two-storey coach houses as identified by the Committee of the Whole.

10.2. February 4, 2021 Public Art Task Group Minutes

323

Recommendation

That Council receive for information the minutes of the February 4, 2021 meeting of the Public Art Task Group.

11. REPORTS

11.1. 2021 Financial Plan Update

325

Recommendation

That Council approve the changes to the 2021-2025 Financial Plan as presented by the Director of Financial Services on March 16, 2021, including:

- Single Axle Dump Truck for \$230,000 with funds from prior year surplus;
- Yard Waste Clean-up Pilot for \$20,000 with funds from solid waste reserve;
- Water main breaks for \$200,000 with funds from the water reserve;
- Parks, Recreation & Culture additional loss in revenues for \$29,863 with the funds to come from the COVID-19 Provincial funds;
- Arts & Heritage Hub design changes for \$1,352,340 with funds from Real Property Reserve for \$234,812, Amenity Fund for \$96,588, General Government Reserves for \$336,940 and the relocation of the Artist's Studio using \$400,000 from Prior Year Surplus and \$284,000 from Government - Development Reserves;
- Engineering coverage for \$62,044 with funds to come from General Government – staff vacation sick leave reserve; and
- Fire Department used SCBA for \$11,300 with funds from the fire equipment reserve.

12. BYLAWS

12.1. Town of Ladysmith Fees and Charges Bylaw 2008, No. 1644, Amendment Bylaw No. 9, 2021, No. 2059

329

The purpose of Bylaw 2059 is to amend the Fees and Charges Bylaw to update recycling bag and park bench charges and to remove references to trolley charges.

Recommendation

That Council adopt "Town of Ladysmith Fees and Charges Bylaw 2008, No. 1644, Amendment Bylaw No. 9, 2021, No. 2059".

12.2. Bylaw Status Sheet

333

13. CORRESPONDENCE

13.1. Request for Support for CVRD Grant Application to the UBCM Community Emergency Preparedness Fund EOC

334

The CVRD, on behalf of Ladysmith and participating member municipalities is applying for a grant to enable the purchase of equipment and supplies required to maintain or improve Emergency Operations Centres (EOCs) and enhance EOC capacity through training and exercises.

Recommendation

That Council authorize the Cowichan Valley Regional District to apply for, receive and manage the UBCM Community Emergency Preparedness Fund Emergency Operations Centre grant funding up to \$25,000 on behalf of the Town of Ladysmith.

13.2. Request from Councillor Will Cole-Hamilton, City of Courtenay, to Endorse the Help Cities Lead Campaign and the Property Assessed Clean Energy Coalition

Recommendation

That Council consider passing the following resolution:

That the Mayor on behalf of Council send a letter of support endorsing the "Help Cities Lead Campaign" and expressing support for BC legislation enabling Property Assessed Clean Energy (PACE) by third-party administration to the following: the Hon. Josie Osbourne, Minister of Municipal Affairs; the Hon. George Heyman, Minister of Environment and Climate Change Strategy; the Hon. Selina Robinson, Minister of Finance; the Hon. Bruce Ralston, Minister of Energy Mines and Low Carbon Innovation; and the Hon. David Eby, Attorney-General and Minister responsible for Housing.

13.3. Request for Support from Paul Manly, MP regarding Housing Affordability and Homelessness

Recommendation

That Council consider passing the following resolution:

That the Mayor, on behalf of Council write to the Federal Government requesting that it increase efforts to protect and reinvest in existing rental stock and direct more funding toward non-profit and cooperative housing rather than funding programs that amount to a transfer of tax dollars to the private sector in exchange for housing that is only temporarily affordable as with the rental construction financing initiative.

14. NEW BUSINESS

346

15. UNFINISHED BUSINESS

15.1. Motion to Provide a Letter of Support for a Fully Funded Tertiary Hospital at the NRGH

As a result of a presentation by Dr. Coupland at the March 2, 2021 Council Meeting, Council requested staff to provide suggested wording for a motion of support for the initiative. The following wording was provided by Dr. Coupland and has been used by other municipalities.

Recommendation

That the Mayor, on behalf of Council provide a letter of support for a fully funded tertiary hospital at the Nanaimo Regional General Hospital in a timeline approved by the Nanaimo medical staff and the patients of Central and North Vancouver Island.

16. QUESTION PERIOD

Residents are encouraged to "virtually" attend the meeting and ask their questions live by registering here:

https://zoom.us/webinar/register/WN 0seoUmx7TdGF0DxomWLXSA.

Instructions on how to join the meeting will be sent immediately after you register.

Alternately, questions can be submitted via email at info@ladysmith.ca during the meeting.

- Persons wishing to address Council must be Town of Ladysmith residents, non-resident property owners, or operators of a business.
- Individuals must include their name and address for identification purposes.
- Questions put forth must be on topics which are not normally dealt with by Town staff as a matter of routine.
- Questions must be brief and to the point.
- No commitments shall be made by the Chair in replying to a question.
 Matters which may require action of the Council shall be referred to a future meeting of the Council

17. ADJOURNMENT



MINUTES OF A REGULAR MEETING OF COUNCIL

Tuesday, March 2, 2021 7:00 P.M.

This meeting was held electronically as per Ministerial Order No. M192

Council Members Present:

Mayor Aaron Stone

Councillor Amanda Jacobson

Councillor Rob Johnson

Councillor Tricia McKay

Councillor Duck Paterson

Councillor Marsh Stevens

Councillor Jeff Virtanen

Staff Present:

Geoff Goodall

Allison McCarrick Donna Smith
Erin Anderson Julie Thompson
Chris Barfoot Mike Gregory
Jake Belobaba Sue Bouma

1. CALL TO ORDER

Mayor Stone called this Regular Meeting of Council to order at 6:01 p.m., in order to retire immediately into Closed Session.

2. CLOSED SESSION

CS 2021-057

That, in accordance with section 90 of the *Community Charter*, Council retire into closed session in order to consider items related to the following:

- personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the municipality section 90(1)(a);
- the consideration of information received and held in confidence relating to negotiations between the municipality and a provincial government or the federal government or both, or between a provincial government or the federal government or both and a third party section 90(2)(b).

Motion Carried

3. OPEN MEETING AND ACKNOWLEDGEMENT (7:00 P.M.)

Mayor Stone called this Regular Meeting of Council to order at 7:00 p.m., recognizing with gratitude that it was taking place on the traditional unceded territory of the Stz'uminus People.

4. AGENDA APPROVAL

CS 2021-058

That Council allow the late delegation request from the applicants of the Zoning and OCP Amendment Application for 201/203 Dogwood Drive.

Motion carried unanimously

CS 2021-059

That Council approve the agenda for this Regular Meeting of Council for March 2, 2021 as amended to include:

 Item 7.2., "Delegation from Mr. Frank Crucil, FMC Holdings Ltd. and Mr. Toby Seward, Seward Developments Inc.: Zoning and OCP Amendment Application for 201/203 Dogwood Drive."

Motion Carried

5. RISE AND REPORT- Items from Closed Session held February 16, 2021

The following Items from the Closed Meeting of Council held February 16, 2021 were reported:

Appointments to the Official Community Plan Steering Committee for terms commencing February 16, 2021, to the date of adoption of a new Official Community Plan (Resolution Nos. CE 2021-047, -048, -049):

- Isabel Anderson to represent the youth sector; and
- Cyndi Beaulieu and Mark Drysdale to represent the business sector.

Council rose from the Closed Session held March 2, 2021 at 6:35 p.m. without report.

6. MINUTES

6.1 Minutes of the Special Meeting of Council held February 16, 2021

CS 2021-060

That Council approve the minutes of the Special Meeting of Council held February 16, 2021.

Motion Carried

6.2 Minutes of the Regular Meeting of Council held February 16, 2021

CS 2021-061

That Council approve the minutes of the Regular Meeting of Council held February 16, 2021.

Motion Carried

6.3 Minutes of the Special Meeting of Council held February 23, 2021

CS 2021-062

That Council approve the minutes of the Special Meeting of Council held February 23, 2021.

Motion Carried

7. DELEGATIONS

7.1 Dr. David Coupland, President of the Nanaimo Medical Staff Association/Nanaimo Medical Staff Engagement Society

Dr. Coupland presented Council with an overview of the Nanaimo Regional General Hospital's five-year plan to upgrade the facility to a tertiary hospital in order to meet growing demands for cardiac, cancer and critical care services throughout Central and North Vancouver Island. He responded to Council's questions. Council thanked him for his presentation.

CS 2021-063

That Council request that staff bring back to a future Council meeting a potential motion of support regarding Nanaimo Regional General Hospital's five-year plan to upgrade the facility to a tertiary hospital. *Motion Carried*

7.2 Mr. Frank Crucil, FMC Holdings Ltd., and Mr. Toby Seward, Seward Developments Inc.

Mr. Crucil, of FMC Holdings Ltd., addressed changes to their application for a proposed five storey, 25 unit multi-family residential development at 201 and 203 Dogwood Drive.

Council thanked Mr. Crucil for his presentation.

8. PROCLAMATIONS

8.1 World Lymphedema Day

Mayor Stone proclaimed March 6, 2021 as World Lymphedema Day in the Town of Ladysmith.

9. BYLAWS- OFFICIAL COMMUNITY PLANNING AND ZONING

9.1 Zoning & OCP Amendment – 201/203 Dogwood Drive

CS 2021-064

That Council proceed with first and second reading of "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 64) 2021, No. 2062". *Motion Carried*

CS 2021-065

That Council consider "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 64) 2021, No. 2062" in conjunction with the Town's Financial Plan and the Town's Liquid Waste Management Plan, pursuant to section 477(3) of the *Local Government Act.*Motion Carried

CS 2021-066

That Council proceed with first and second reading of "Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 34) 2021, No. 2063".

Motion Carried

CS 2021-067

That Council direct staff to proceed with scheduling and notification of a public hearing for "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 64) 2021, No. 2062" and "Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 34) 2021, No. 2063".

Motion Carried

CS 2021-068

That Council require that the property owner, prior to adoption of "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 64) 2021, No. 2062" and "Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 34) 2021, No. 2063":

- a. Consolidate Amended Lot 10 (DD 21674N) District Lot 56 Oyster District Plan 1684 (201 Dogwood Drive) and Amended Lot 11 (DD 27179N) District Lot 56 Oyster District Plan 1684 (203 Dogwood Drive); and
- b. Either:
 - Install a pedestrian signal at the existing crosswalk at Dogwood Drive and Bayview Avenue, or provide cash in the amount of 125% of the estimated construction cost and an undertaking to complete the work within one year of final approval; or
 - ii. Provide cash in the amount of 125% of the estimated construction cost to be deposited to the Town's Amenity Reserve Fund should the pedestrian signal not be considered viable through consultation with the developer's traffic engineer.

Motion Carried

OPPOSED: Councillor Johnson

10. REPORTS

10.1 Request for Support - Ladysmith Family and Friends Association Grant Application to Construct a Picnic Shelter at the Aggie Hall Playground

CS 2021-069

That Council:

- Permit the Ladysmith Family and Friends Society to proceed with a grant application for funding to construct a picnic shelter at the Aggie Hall Playground, subject to obtaining the appropriate permits and approval from the Town of Ladysmith; and
- Provide a letter of support to the Ladysmith Family and Friends Society for their grant application to construct a picnic shelter located at the Aggie Hall Playground through the Canada Healthy Communities Initiative.

Motion Carried

11. BYLAWS

11.1 Housekeeping Amendments to "Town of Ladysmith Fees and Charges Bylaw 2008, No. 1644"

CS 2021-070

That Council give first three readings to "Town of Ladysmith Fees and Charges Bylaw 2008, No. 1644, Amendment Bylaw No. 9, 2021, No. 2059" to amend Schedule "1" and remove Schedule "4" as outlined in the staff report dated March 2, 2021.

Motion Carried

12. CORRESPONDENCE

12.1 Request from Victoria and VI Greek Community Society to Illuminate
City Hall to Celebrate the 200th Anniversary of Greek Independence

CS 2021-071

That Council approve the request from the Victoria and VI Greek Community Society to illuminate City Hall with blue and white lights on March 25, 2021 to celebrate the 200th anniversary of Greek Independence.

Motion Carried

12.2 Request from BC Lyme Society to Illuminate City Hall to Increase Lyme Disease Awareness

CS 2021-072

That Council approve the request from the BC Lyme Society to illuminate City Hall with green lights on May 3, 2021 as part of Lyme Disease Awareness Day.

Motion Carried

13. QUESTION PERIOD

There were no questions submitted by the public.

14. ADJOURNMENT

CS 2021-073

That this Regular Meeting of Council adjourn at 8:18 p.m. *Motion Carried*

		CERTIFIED CORRECT.
	XO.	
Mayor (A. Stone)		Corporate Officer (D. Smith)



TOWN OF LADYSMITH

PROCLAMATION

WORLD DOWN SYNDROME DAY

WHEREAS: World Down Syndrome Day is an international observance

resolved by the General Assembly of the United Nations to raise public awareness of Down syndrome and promote equitable treatment of individuals with Down syndrome in accordance with the Convention on the Rights of Persons with Disability; and

WHEREAS: At this time we take an opportunity to highlight the unique abilities,

strengths and needs of our community members with Down

syndrome; and

WHEREAS: Individuals with Down syndrome have tremendous potential to live

full and fulfilling lives as contributing members of our community;

and

WHEREAS: As Canadians, we celebrate our similarities, as well as our

differences, knowing we are richer as a result; and

WHEREAS: The Town of Ladysmith values our citizens with Down syndrome

and their families, and supports the well-being of all individuals

with Down syndrome so that they may achieve their fullest

potential.

THEREFORE, I, Aaron Stone, Mayor of the Town of Ladysmith, do hereby

proclaim March 21, 2021 as World Down Syndrome Day in the

Town of Ladysmith, British Columbia.

Mayor A. Stone

March 1, 2021

STAFF REPORT TO COUNCIL

Report Prepared By: Christina Hovey, Senior Planner

Meeting Date: March 16, 2021

File No: 4320-90-21-01 (LCRB File No. 011023)

Referral for Non-Medical Cannabis Retail Store - 411B 1st Avenue Re:

("Local Cannabis Co.")

RECOMMENDATION:

That Council, having considered the general impact on the community and the views of the residents, pursuant to section 33 of the Cannabis Control and Licensing Act, consider whether or not to:

- 1. Recommend that the Province issue a licence for a non-medical cannabis retail store at 411B 1st Avenue ("Local Cannabis Co."); and
- 2. Pursuant to section 13.5 of the Cannabis Licensing Regulation, provide reasons for the recommendation, based on:
 - The views of Council on the impact of the proposed store and/or of non-medical cannabis retail stores in general;
 - Submissions from the public; and
 - The context of the proposed location; local land use regulations; and/or other considerations.



Figure 1: Subject Property

EXECUTIVE SUMMARY:

A non-medical cannabis retail store is proposed at 411B 1st Avenue ("Local Cannabis Co."). Under the Cannabis Control and Licensing Act (CCLA), a non-medical cannabis retail store licence cannot be issued without a positive recommendation from the local government. Accordingly, the Province referred this licence application to the Town of Ladysmith, and Council is requested to provide a response and explain their reasons.







PREVIOUS COUNCIL DIRECTION:

Resolution #/ Date	Resolution
CS 2020-004,	That Council:
Jan. 7, 2020	 Adopt Town of Ladysmith Zoning Bylaw 2014, 1860, Amendment Bylaw 2021;
	2. Adopt Ladysmith Fees and Charges Bylaw 2008, No. 1644, Amendment Bylaw No. 7, 2019, No. 2022; and
	3. Approve Cannabis Retail Stores Public Notification Procedures Policy 13-6410-B.

INTRODUCTION/BACKGROUND:

The applicant has requested a licence for a non-medical cannabis retail store at 411B 1st Avenue. The store is proposed to be approximately 105m² and will be called "Local Cannabis Co.". The proposed store is located in a two-storey building located at the corner of Roberts Street and 1st Avenue. There are three commercial units on the main floor and the proposed store is the middle unit. The other two units in the building are retail clothing stores. There are residential units

located in the second storey of the building. The information that the applicant provided about the proposed store is provided as Attachment A.

Proposed Use is Permitted Under the Zoning Bylaw:

As of January 7, 2020, licensed, non-medical cannabis retail sales are a permitted use on some parcels within the Downtown Commercial (C-2) zone in Zoning Bylaw No. 1860 (as amended, see Attachment D). 411 1st Avenue is zoned C-2 and is within the area of the downtown where licensed non-medical cannabis retail sales



Figure 2: 411 1st Avenue

are a permitted use. Two other licensed non-medical cannabis retail stores are located in the downtown.

Role of the Local Government is to Provide Comments and Recommendations:

Under the *Cannabis Control and Licensing Act* (CCLA) the Province refers non-medical cannabis retail store licence applications to the local government for comments and recommendations. If the local government decides to provide a response to the Province's referral, the CCLA requires the local government to gather the views of residents in respect of the application. The CCLA also requires the local government to provide their comments and recommendations in accordance

with the *Cannabis Licensing Regulation*. Section 13(5) of the regulation stipulates the following requirements for providing comments and recommendations:

- "(a) the comments and recommendations must be in writing;
- (b) the comments must include the views of the local government or Indigenous nation on the general impact on the community;
- (c) if the local government or Indigenous nation has gathered the views of residents under section 33 (3) of the Act, the comments must include
 - (i) the views of the residents, and
 - (ii) a description of the method used to gather those views;
- (d) the recommendations must include a recommendation
 - (i) that the licence be issued or amended, or
 - (ii) that the licence not be issued or amended;
- (e) the recommendations must include the reasons on which they are based."

Without a favourable recommendation from local government, the Province cannot issue a non-medical cannabis retail store licence. In this way, the Province has provided local government with a powerful, discretionary veto over whether a licence will be issued.

In some cases, local governments' reasons are based on policies they have adopted to guide consideration of specific non-medical cannabis retail store licence referrals (e.g. proximity to other land uses or cannabis stores, security requirements etc.). However, Council adopted only geographic regulations in January 2020 when it amended the Zoning Bylaw to allow cannabis retail. Subsequently, not only does the decision whether or not to endorse the application fall to Council but much of the analysis as well.

Accordingly, Council must consider the application and public feedback and make a resolution either endorsing or not endorsing the application with reasons for Council's decision. The reasons must include the views of the local government as well as the views of residents. In addition to public submissions, the views of local government may be informed by:

- the context of the proposed location (e.g. proximity to other land uses, density of land uses);
- the views of Council on the impact of the proposed store and/or of non-medical cannabis retail stores in general (e.g. on the community, on the local economy);
- local land use regulations (e.g. zoning); and
- any number of other considerations (e.g. applicant's approach to managing the business).

The Liquor and Cannabis Regulation Branch's brochure "Local Governments' Role in Licensing Non-Medical Cannabis Retail Stores" is provided for reference as Attachment B. Attachment C is a Council Resolution relating to a previous application referral. The resolution is provided as a sample of how a recommendation can be phrased.

ALTERNATIVES:

Council can choose to:

- 1. Provide a positive recommendation with reasons as required under the CCLA.
- 2. Provide a negative recommendation with reasons as required under the CCLA (which will require the Province to deny the licence application).
- Provide a positive recommendation with reasons as required under the CCLA and direct staff to bring forward a zoning amendment to prohibit further cannabis retail stores and/or additional policies for non-medical cannabis retail store licence referrals for Council consideration.
- 4. Provide a negative recommendation with reasons as required under the CCLA (which will require the Province to deny the licence application) and direct staff to bring forward a zoning amendment to prohibit further cannabis retail stores and/or additional policies for non-medical cannabis retail store licence referrals for Council consideration.
- 5. Defer consideration of the referral to a future meeting of Council.
- 6. Refer the referral back to staff for further review, as specified by Council.

FINANCIAL IMPLICATIONS:

N/A

LEGAL IMPLICATIONS:

Under Section 33 of the *Cannabis Control and Licensing Act* (CCLA), certain licences cannot be issued unless the local government gives a positive recommendation. If the local government decides to provide a response to the Province's referral, the local government must follow the requirements of the CCLA and the *Cannabis Licensing Regulation* (see above "the Role of Local Government" for details) and provide reasons for the recommendation based on the views of the local government on the general impact on the community. If the comments and recommendations do not meet the regulatory requirements, the Province may ask the Town to provide new or amended comments.

Council's decision must be reasonable, to avoid risk of the recommendation being challenged, Council should consider all relevant facts and base their decision on the merits of the application. (e.g. proximity to other land uses, density of businesses...)

By gathering public opinion in accordance with the the Town of Ladysmith's Cannabis Retail Stores Public Notification Procedures Policy, the Town has committed to providing comments and recommendations on this application.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

In accordance with the Town of Ladysmith's Cannabis Retail Stores Public Notification Procedures Policy, notice was issued advising the public that Council has been asked to consider this application and inviting the public's written submissions. Notice was:

- Published in the Ladysmith Chemainus Chronicle newspaper on March 4 and March 11, 2021;
- Delivered by hand and mailed to the owners and residents of properties within 60 m of the subject property;
- Posted on the subject property;
- Posted on the Town of Ladysmith website; and
- Posted on bulletin boards at City Hall, the Development Services and Public Works offices, the Frank Jameson Community Centre, the library, and the Ladysmith & District Credit Union.

At time of writing, 24 submissions (Attachment E) were received. 22 submissions oppose the application, and 2 are in favour of the application. Concerns include: there are not enough residents in Ladysmith to support three cannabis retail stores; the proposed store is not owned by a Ladysmith resident; and having three cannabis stores in the downtown makes for a lack of variety for visitors to the downtown. The submissions in favour suggest: there is an economic benefit to allowing the store; and the Parksville location of "Local Cannabis Co." is well run.

If any additional submissions are received prior to Council's consideration of the referral, the submissions will be provided to Council separately as late items. Staff will include the public submissions and a description of the Town's public notification procedures in a written response to the Province's referral.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

N/A

ALIGNMENT WITH SUSTAINABILITY VISIONING	G REPORT:
☐Complete Community Land Use	☐ Low Impact Transportation
□Green Buildings	☐ Multi-Use Landscapes
□Innovative Infrastructure	☐ Local Food Systems
☐Healthy Community	☐ Local, Diverse Economy
☑ Not Applicable	
ALIGNMENT WITH STRATEGIC PRIORITIES:	
□Infrastructure	⊠ Economy
□ Community	☐ Not Applicable
□Waterfront	
I approve the report and recommendation(s).	
Allison McCarrick, Chief Administrative Office	r

ATTACHMENT(S):

- Attachment A Application Information, Local Cannabis Co., February 1, 2021
- Attachment B Local Governments' Role in Licensing Non-Medical Cannabis Retail Stores, Liquor and Cannabis Regulation Branch, December 20, 2018
- Attachment C Sample Resolutions From February 18, 2021, Council Minutes
- Attachment D Town of Ladysmith Zoning Bylaw 2014, 1860, Amendment Bylaw 2021 and Cannabis Retail Stores Public Notification Procedures Policy 13-6410-B
- Attachment E Submissions from the Public





February 1st, 2021

Re: Cannabis Retail Store Application Unit B - 411 1st Ave Ladysmith, BC

I would like to start by thanking the Town of Ladysmith for the opportunity to apply for a Cannabis Retail Store and provide a bit of background on our current operations.

Local Cannabis Co. currently operates a Provincially and Municipally licensed Cannabis Retail Store in Parksville, BC that opened its doors on February 1st, 2020.

As a currently licensed Cannabis Retail Store, the Company and myself have successfully gone through the Financial Integrity and Security Screening processes from the Province of British Columbia and the Liquor and Cannabis Regulation Branch ("LCRB").

This experience will allow us to operate in a safe and responsible manner right from the beginning while providing a positive Cannabis experience for the residents of Ladysmith. We take pride in providing a customer service experience that is centred around education and safe access to Cannabis.

Again, thank you for the opportunity to lay out our proposed Business Operations. We would be happy to expand as needed on any sections.









Proposed Store

The proposed Cannabis Retail Store would be located at Unit B - 411 1st Avenue in a retail space that is approximately 1125 SQFT.

We take pride in creating a store environment that has a very West Coast and Vancouver Island look. We consistently receive feedback from customers that they are surprised upon entering the store that a Cannabis store can look so professional, modern yet feel comfortable at the same time. This is one of the key components of our design. A store that is comfortable and accessible for everyone including seniors. We have a dedicated seating area for any customers who may have difficulty standing for long periods of time so they don't feel rushed through their decision making.

Our proposed Ladysmith store design features a very open and spacious interior which is becoming more and more important in a time of Social Distancing. This will allow us to operate in a very safe and responsible manner during these times.

We have images of our Parksville store interior on our website and Google Profile as well to provide a reference point for what our potential Ladysmith store would look like.

Parking

We anticipate parking for customers to be along 1st Avenue. In our experience Customer visits typically range from 5-15mins on the high end and gradually go down in length over time as consumers become more familiar with the product offerings and their personal preferences. We do not anticipate any extra demand for parking being placed on the neighbourhood versus a typical retail store.









Proposed Hours of Operation

We intend to operate from **10am to 8pm Sunday to Wednesday and 10am to 9pm Thursday to Saturday**. Our hours of operation may be adjusted based on customer flow or as required/requested from the Town of Ladysmith. We are open to discussion and feedback from residents and Council for any changes they would like to see to these proposed hours.

Expected Number of Employees

We anticipate hiring 4 to 6 local employees and hiring additional employees as the business grows or hours are expanded. At our Parksville location, we offer a lucrative pay package that is competitive with the BC Government Cannabis Store and do offer full medical benefits after 3 months and anticipate doing the same at our proposed store here as well. The employees will all be required to pass security screening via the Worker Security Verification program processed by the LCRB. We anticipate using all local trades and contractors to assist with renovations as well.

Community Impacts

We believe that Local Cannabis Co. will have many positive impacts on the community and neighbouring businesses.

Signage

We understand the importance the Town of Ladysmith has placed on maintaining its retaining and revitalizing its heritage properties especially in the heritage downtown. We look forward to working with the Town of Ladysmith and presenting options and proposals to discuss with Town Staff that not only comply with all the basic Local Bylaws and Requirements but to really go above and beyond to help the Town maintain the charm that contributes to the growing community of Ladysmith.











Neighbouring Businesses

We strongly believe in supporting local businesses and becoming a positive member of the community. From smaller items such as office supplies, coffee, groceries all the way up to the larger items such as hiring trades and building supplies, we will support local businesses. We are confident that if a survey was taken of the current neighbours in Parksville, none would report any negative effects and most would even report positive impacts including additional business. We have taken the time to introduce ourselves to all the neighbours and make sure to recommend them to any visitors to our Store. At our Parksville location, we regularly have customers that drive from neighbouring communities such as Nanaimo and even Ladysmith because they appreciate the approach we have taken to providing great customer service. This can be seen in our Google Reviews. We feel this same branding and approach will be a benefit for the neighbourhood.

We are required by LCRB Regulations to maintain an Incident Log that must record any disturbances in the store or adjacent to the retail store. We are proud to say that there have been no incidents.

We take care and time to ensure our Store and neighbourhood is kept in a clean state even going so far as to pick up garbage from the parking lot and up and down the sidewalk near our store.

We would encourage anyone with concerns or questions to reach out to us and we would be happy to discuss directly or even provide a tour of our Parksville location so residents and business can see first hand the steps that we take to deliver a safe and positive experience.









Safety

Our store will comply with all Provincial and LCRB Safety requirements for a Cannabis Retail Store including:

- 24/7 Video Surveillance of key areas including Entrances/Exits, Sales Area and Staff areas. We maintain all recordings for 30 days and they are available to be turned over as required to the LCRB or any law enforcement authorities that require lawful access to it.
- There is signage advising customers at the entrance and inside the store that there is video surveillance.
- Requiring ID from all Customers or Visitors to the store.
- 3rd party Intruder and Fire Alarm Monitoring
- No self service options. All Cannabis and Cannabis Accessories are locked or inaccessible to customers.
- Displaying Social Responsibility posters in store

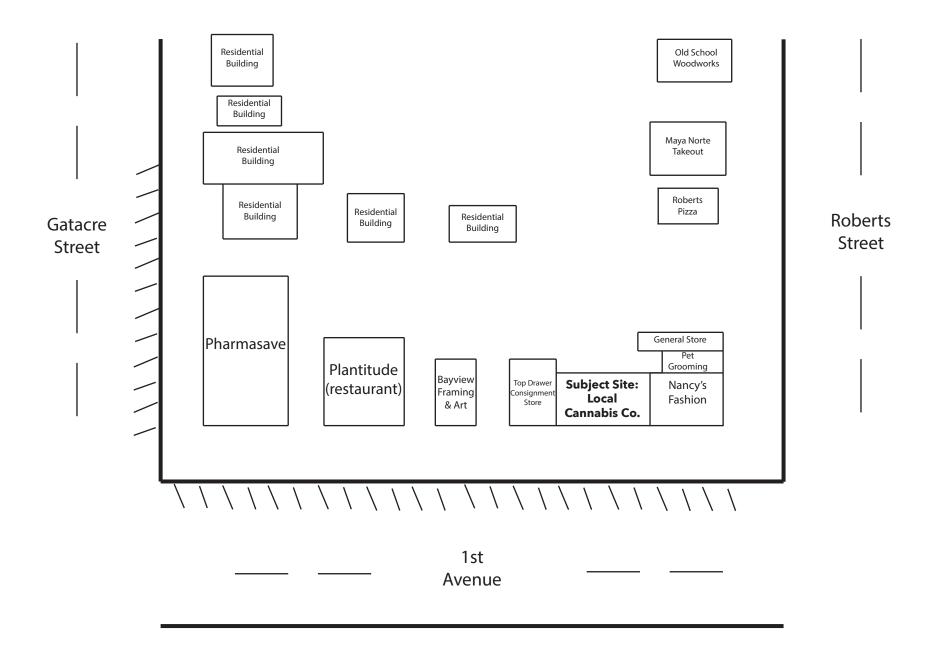
Summary

We have been closely following the development of the bylaws in the Town of Ladysmith going back to the Community Survey on Retail Sale of Cannabis conducted in May of 2019. We understand that the residents do prefer to limit the overall number of retail stores in the community. As a currently Licensed Cannabis Retail Store that has already passed the Financial Integrity and Security Screening steps of the Province of BC and LCRB for the Parksville store, we go beyond a potential store, we offer a proven solution for a business that over 85% of local residents supported in the survey. We understand the importance of 1st Ave to the history and character of the Downtown Core in the Town of Ladysmith and we can revitalize the space and help keep it as an important part of the future.









CLIENT	ADDRESS	PLAN TYPE
Local Main Holdings Ltd. (Local Cannabis Co.)	Unit B - 411 1st Ave. Ladysmith Page 31 of 348	SITE PLAN JOB # 011023



Local Governments' Role in Licensing Non-Medical Cannabis Retail Stores

If you have any questions about this document, please contact the Liquor and Cannabis Regulation Branch toll-free at 1-866 209-2111, or email cannabisregs@gov.bc.ca. NOTE: This document will be updated from time to time as additional information surrounding the regulatory framework for cannabis retail sales becomes available. (Last updated 20 December, 2018)

Non-medical cannabis retail licence

The province will be issuing licences for non-medical cannabis retail stores. A cannabis retail store must be a standalone business. This licence requires input and a positive recommendation from a local government in whose area the proposed store is located.

The province recognizes the importance of ensuring carefully regulated access to non-medical cannabis in all areas of the province, including rural areas.

As a first step, the province will open opportunities to apply for regular retail licences. Once the regional distribution of retail non-medical cannabis stores is known, the province will consider issuing licences to service rural or remote areas that are not sufficiently served by existing retail cannabis stores.

The role of local governments in the cannabis retail store licensing process

Applicants for a non-medical cannabis retail store licence must submit a licence application to the LCRB. When an application is received, the LCRB will notify the local government of the area where the proposed store will be located.

Upon receipt of notice, local governments can:

- choose not to make any recommendation in respect of the application for a cannabis retail store licence (Note: this would end a licence application in progress because the LCRB cannot issue a licence unless the local government gives the LCRB a positive recommendation that the licence be issue)
- choose to make comments and recommendations in respect of an application for a cannabis retail store licence. Note that:
 - o if the local government chooses to make a comments and recommendation on the licensee's application to the LCRB, it must gather the views of residents
 - if it makes a recommendation to deny the application then the LCRB may not issue the licence
 - if it makes a recommendation in favour of the application, then the LCRB has discretion whether or not to issue the licence, but must consider the local government's recommendation.

Local Governments (municipalities, regional districts or Islands Trust local trust committees) have some or all of the following regulatory powers in respect of cannabis retail store licences:

Revised December 2018

- Impose restrictions in its zoning bylaws regarding the location of cannabis retail stores. Temporary
 zoning for cannabis retail stores will be accepted provided local governments monitor and enforce
 the temporary zoning requirements. LCRB must be notified if temporary or permanent zoning for a
 cannabis retail store is cancelled.
- Regulation of business (municipalities only): by terms and conditions in its business licensing bylaw, a municipality may limit the hours that cannabis retail stores can operate or impose other conditions such specifications regarding signage
- Charge the applicant fees if choosing to assess an application.

The above process applies to all relocations of existing cannabis retail stores.

Gathering residents' views

If the local government decides to consider the notice of application and to provide comments and recommendations as to the location of the proposed retail store, it must gather the views of residents of the area if the location of the proposed store may affect nearby residents. It may gather resident's views by using one or more of the following methods:

- Receiving written comment in response to a public notice of the application
- Conducting a public hearing in respect of the application
- Holding a referendum, or
- Using another method the local government considers appropriate.

It is up to the local government to determine the area, relative to the licensee's application, where resident's views must be gathered.

Please note: Gathering the views of residents of the area/providing a recommendation to the LCRB must be unique to each provincial licence application. In other words, past recommendations cannot be used in a new licensing process. Each individual application must be considered separately by the local government.

What must the local government's recommendation include?

The recommendations and comments the local government provides to the LCRB must:

- be in writing (this may or may not be in the form of a resolution)
- show that the local government has considered the location of the proposed store
- include the views of the local government on the general impact on the community if the application is approved
- include the views of residents if the local government has gathered residents' views, and a description of how they were gathered
- include the local government's recommendation as to whether the application should be approved or rejected and provide the reasons upon which the recommendation is based.

The local government should also provide any supporting documents referenced in their comments.

What if the local government does not want to provide a recommendation?

If a local government does not want to accept the notice of application and provide a recommendation for the proposed retail location, they should notify the LCRB. A licence for a cannabis retail store will not

be issued without a positive recommendation from a local government. If a response is not received, LCRB will not consider the application any further.

What if the recommendation does not meet the regulatory requirements?

If the recommendation does not meet the regulatory requirements, the LCRB will ask the local government to provide new or amended comments that address outstanding issues.

How long does the local government have to provide comments?

Unlike in the process for liquor licensing, local governments are not required to provide a recommendation on a cannabis retail store application within a specific time period. Please note that delays in the application process can have a significant impact on the applicant. If the applicant is the reason for the delay, please notify the LCRB. If the applicant is not trying to move an application forward, the application can be cancelled.

Can the local government recommend approval subject to certain conditions?

In some circumstances, the local government can recommend that the LCRB approve the application as long as certain restrictions (e.g. hours of operation) are placed on the licence. In these situations, the recommendation should clearly explain the rationale for placing restrictions.

If the local government intends to request that the LCRB impose terms and conditions on a licence, prior to sending such a recommendation the local government should consult with the LCRB so that the LCRB can determine whether it has the authority to impose the requested terms and conditions before finalizing their conditional recommendation.

The local government may also have the ability to impose other operating rules on the proposed store through the terms and conditions of the applicant's business licence, zoning or bylaw. The local government is responsible for enforcing these rules.

Floor Plans

Applicants must submit a floor plan with their licence application for approval so the LCRB can identify store features such as sales, storage and delivery areas. Unlike for some kinds of liquor licence applications, local governments are not required to provide occupant load stamps or approve the applicant's floor plans as part of the provincial licensing process for cannabis retail stores.

A municipal council or regional district board can delegate authority to their staff to provide comments and a recommendation to the LCRB

A municipal council or regional district board may delegate its powers and duties to provide comments and a recommendation to the LCRB regarding a cannabis retail store licence application. If a council or board has delegated this authority, a cannabis retail store applicant may ask for comments and recommendations made by delegated staff to be reconsidered by the local government.

Council as defined in the Vancouver Charter:

A Council, as defined in the *Vancouver Charter*, choosing to delegate to its staff must establish procedures for a reconsideration of comments and recommendations made by delegated staff, including how a cannabis retail store applicant may apply for reconsideration. In undertaking a reconsideration, the Council will have the same authority as it delegated to staff.

Right of reconsideration:

Delegated local government staff must advise the cannabis retail store licence applicant that the applicant has the right of reconsideration of the staff's recommendation by the council or board.

How local governments inform the LCRB of delegation:

Revised September 2018

A local government that has delegated authority to staff should send a copy of the delegation to the LCRB at Cannabis.Licensing@gov.bc.ca.

From MINUTES OF A REGULAR MEETING OF COUNCIL

Tuesday, February 18, 2020 7:00 P.M. Council Chambers, City Hall

9. DEVELOPMENT APPLICATIONS

9.1 Non-Medical Cannabis Retail Store Licence Referral -- 510C Esplanade Avenue ("Jerry's Cannabis")

CS 2020-061

That Council, pursuant to the *Cannabis Control and Licensing Act* and the *Cannabis Licensing Regulation*, recommend that the Province of British Columbia issue a licence for a non-medical cannabis retail store at 510C Esplanade Avenue ("Jerry's Cannabis"). *Motion Carried*

CS 2020-062

That Council advise the Province of British Columbia that the proposed location for Jerry's Cannabis (510C Esplanade Avenue) falls within the specified area approved by Council for the retail sale of cannabis. *Motion Carried*

CS 2020-063

That Council advise the Province of British Columbia that Council has no concerns about the impact of the proposed non-medical cannabis retail store at 510 C Esplanade Avenue.

Motion Carried

CS 2020-064

That Council advise the Province of British Columbia that all submissions from the public regarding the proposed retail sale of non-medical cannabis at 510C Esplanade Avenue have been in favour of the licence application. *Motion Carried*

Attachment D - Bylaw No. 2021 and Cannabis Notification Policy

TOWN OF LADYSMITH

BYLAW NO. 2021

A Bylaw to amend "Town of Ladysmith Zoning Bylaw 2014, No. 1860"

WHEREAS pursuant to the *Local Government Act*, the Council of the Town of Ladysmith is empowered to amend "Town of Ladysmith Zoning Bylaw 2014, No. 1860" (the "Zoning Bylaw");

AND WHEREAS Council considers it advisable to amend the Zoning Bylaw to permit the retail sale of cannabis in certain zones;

NOW THEREFORE the Council of the Town of Ladysmith in open meeting assembled enacts as follows:

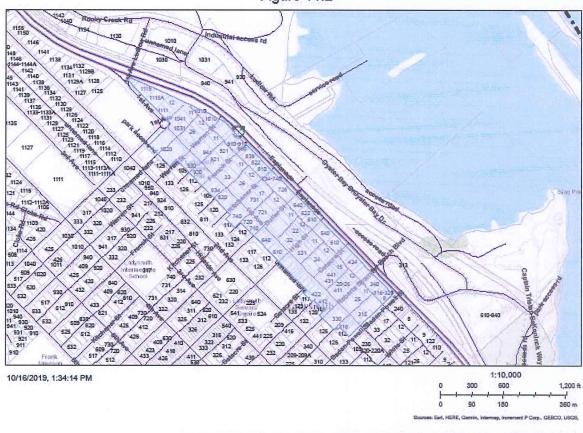
- 1. Schedule A of the Zoning Bylaw is amended as follows:
 - (a) Part 4: Definitions is amended by:
 - i. deleting the defined term "Sales, Marihuana Retail";
 - ii. adding the following definitions in alphabetical order:

"Cannabis Control and Licensing Act" means the Cannabis Control and Licensing Act [S.B.C. 2018] c.29, as amended or replaced from time to time;

"Sales, Cannabis Retail means the sale of Cannabis or products containing Cannabis from a retail store licensed under the Cannabis Control and Licensing Act, to persons who attend at the premises but do not consume Cannabis at the premises;

- iii. in the definition of "Sales, Retail", replacing the phrase "Marihuana Retail Sales" with "Cannabis Retail Sales";
- (b) Part 6, section 6.3 is amended by deleting section 6.3(a)(vii);
- (c) Part 8: Parking and Loading is amended by adding to the Commercial section of Table 8.1 "Cannabis Retail Sales" in Column 1 and "1 per 30 square metres of Gross Floor Area" in Column 2;
- (d) Part 11: Commercial Zones is amended by:
 - i. adding "Cannabis Retail Sales but only in the Parcels that are zoned C-2 and contained within the shaded area identified in Figure 11.2" to the list of Principal Uses in section 11.2.1 of the Downtown Commercial (C-2) zone;
 - ii. adding the following as Figure 11.2 following section 11.2.10:

Figure 11.2



- iii. adding "Cannabis Retail Sales but in the Parcels contained within the shaded area identified on Figure 11.5" to the list of Principal Uses in section 11.5.1 of the Shopping Centre Commercial (C-5) zone;
- iv. adding the following as Figure 11.5 following section 11.5:

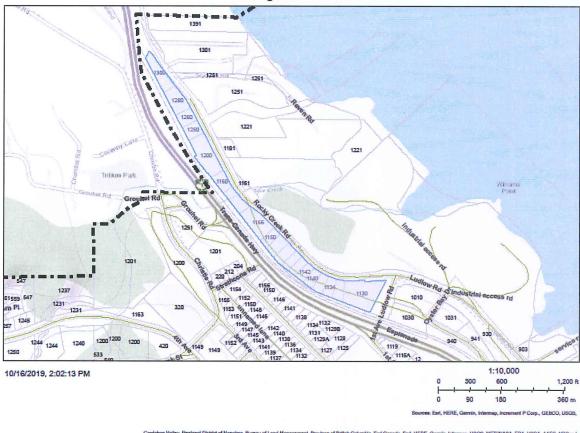




Coelchan Velley, Bureau of Land Management, Province of British Columbia, Earl Cenada, Earl, HERE, Garmin, USGS, EPA, USDA, AAFC, NRCan (

- (e) Part 12: Industrial Zones is amended by:
 - i. adding "Cannabis Retail Sales but only in the Parcels that are zoned I-1 and contained within the shaded area identified in Figure 12.2.1" to the list of Principle Uses in section 12.2.1 of the Light Industrial (I-1) zone; and
 - ii. Adding the following as Figure 12.2.1 following section 12.2.9"

Figure 12.2.1



(f) And by making such consequential changes as are required to reflect the foregoing amendments, including without limitation changes in the number, ordering of alphabetical lists, and Table of Contents of the Zoning Bylaw.

CITATION

2. This Bylaw may be cited for all purposes as "Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw 2021.

READ a first time this	4 th	day of November,	2019.	
READ a second time this	4 th	day of November,	2019.	
PUBLIC HEARING held pursuant to the provisions of the Local Government Act				
On the	2 nd	day of December,	2019.	
READ a third time this	$2^{\rm nd}$	day of December,	2019.	
APPROVED pursuant to s	s.52(3) of the <i>Trai</i>	nsportation Act		
On the	7th	_day of <u>December</u>	_2019.	
ADOPTED this	-7th	_day of January	2019, 2020	
			inter.	
Aaron Stone, Mayor		Joanna Winter, Cor	porate Officer	
Approved pursuant to sectithe Transportation Act this day of Ministry of Transportation an	embero, 19			

JAMIE LEIGH HOPKINS
A Commissioner for taking affidavits
within the Province of British Columbia
2100 Labieux Road, Nanaimo BC V9T 6E9

TOWN OF LADYSMITH



TOPIC:	CANNABIS RETA	AIL STORES PUBLIC NOTIFICATION PROCEDURES
POLICY No:	13-6410-B	
APPROVED BY	: COUNCIL	RESOLUTION CS 2020-004
AMENDED BY:		
DATE:	January 7, 2020	

Purpose

The purpose of this policy is to establish the procedure that the Town of Ladysmith will use to gather the views of residents when Council is determining whether to recommend that a cannabis retail store licence be issued or amended under the *Cannabis Control and Licensing Act*, RSBC 2018 c. 29 ("CCLA").

Background

Under the CCLA, a cannabis retail store licence cannot be issued by the Province unless the relevant local government provides a recommendation that the licence be issued. Similarly, an amendment to a cannabis retail store licence that permanently changes the location of the store cannot be issued unless the local government provides a recommendation that the licence be amended.

If a local government decides to give comments and recommendations on the issuance or amendment of a licence, it must first gather the views of residents of an area determined by the local government using one or more methods described in the CCLA. One of the methods of gathering views contained in the CCLA is to receive written comments in response to a public notice of the application.

Interpretation

In this Policy, the following words have the following meanings:

"Applicant" means a person who has made an application under the CCLA for a cannabis retail store licence or an application to amend an existing cannabis retail store licence to permanently change the location of a store;

"General Manager" means the general manager of the LCRB; and

"LCRB" means the Liquor and Cannabis Regulation Branch;

Policy

The Town will use the following notification procedure when it receives notice of an application from the General Manager for a cannabis retail store licence or an amendment to a cannabis retail store licence from an Applicant:

- 1. Public notification and processing of the application will not occur until: the Applicant has:
 - a. the Applicant has paid the processing fee established under Ladysmith Fee and Charges Bylaw 2008, No. 1644; and
 - b. the Applicant has provided:
 - i. a copy of their completed LCRB application;
 - ii. a title search for the subject property (dated within 30 days of submission), including copies of any charges on title, and a corporate registry search (if applicable);
 - iii. if the Applicant is not the registered owner of the subject property, a letter of consent from the registered owner; and
 - iv. a description of the proposed store, including size, proposed hours of operation, and proposed target market.
- 2. Public notification of the application shall be required as follows:
 - a. Upon the receipt of a complete application, the Town will direct the Applicant to post a notice on the subject property in the form and size prescribed by the Director of Planning that contains the information listed in section 2(d) of this Policy. The sign will be placed on the property, in a conspicuous location, for a minimum of 14 days prior to the Council meeting at which Council is to consider whether to provide a recommendation to the LCRB. In the case where the property is double fronting or a corner lot, additional signs may be required, at the Applicant's cost.
 - b. The Town will send notification of the application to all owners and tenants of land within 60m of the boundary of the subject property.
 - c. The Town will place two consecutive advertisements in a local newspaper, advising the public of the application and the opportunity to provide written submissions to Council. The advertisements must appear not less than 3 and not more than 10 days before the date that Council will determine whether or provide a recommendation
 - d. The public notice sign, written notification, and newspaper advertisements shall state:
 - i. In general terms, the purpose of the application;
 - ii. The land that is subject to the application;
 - iii. The place and times where information on the application are available for viewing by the public;
 - iv. That Council is inviting written comments on the application; and
 - v. The deadline for submission of written comments.
 - e. Comments from the public will be directed to the Planning Department.
- 3. Applications will processed as they are received.

Attachment E - Public Submissions

Received March 1, 2021

From: Beverly D

Sent: March 1, 2021 10:14 AM

To: Town of Ladysmith < info@ladysmith.ca>

Subject: RE: opening new cannabis store on first avenue in Ladysmith

Importance: High

To whom it may concern:

We already have three cannabis stores within a 7 km radius, I don't believe another is warranted. Our town does not have the population to support another cannabis store, without being detrimental to the stores that are already here.

Beverly Dawe

From: Doug Wainman

Sent: March 1, 2021 10:16 AM

To: Town of Ladysmith < info@ladysmith.ca>

Subject: Opening another cannabis store in Ladysmith on 1st Ave.

The Town of Ladysmith has two cannabis stores at this time as well as one more close by at Oyster Bay. I cannot imagine that it is beneficial to add one more store to downtown Ladysmith and am therefore opposed to the licensing of any more stores.

Doug Wainman

From: Haley Regulant

Sent: February 28, 2021 3:55 PM

To: Town of Ladysmith

Subject: New cannabis store

Hello,

I'm writing to the council in regards to the new cannabis store that is planning on opening in the 411B space on First Ave. It concerns me that this store will be the 3rd store in the Ladysmith core, as well as it being owned by people who aren't local to Ladysmith. This will have a negative effect on the 2 locally owned stores we already have, while both are adequately supplying Ladysmith and the surrounding area. We do not need out of town businesses taking up prime retail space and leaving our own people without possible business opportunity space, nor do we need to put the livelihood of our current cannabis owners and staff at risk

I believe a cap needs to be put in place to prevent any new stores opening up and oversaturating the area. I can't see any more than what we have benefitting our community. It would be a shame to see any of the local shops sink just cause someone from out of town thought Ladysmith needs another store.

Thank you for your time,

Haley Regualnt

From: ian calder

Sent: February 26, 2021 9:00 PM

To: Town of Ladysmith **Subject:** Concerned citizen

Hello my name is ian calder and i live at 110 esplanade road, ladysmith. I am emailing you to voice my concerns of another cannibis store at 411 b first ave. I feel there is enough options for this buisness and would like to see more restaurants. Thank you

From: William Tilland

Sent: March 3, 2021 10:46 AM

To: Town of Ladysmith < <u>info@ladysmith.ca</u>>

Subject: Comments regarding the application for a third cannabis store

It has come to our attention that the town council is considering an application for a third cannabis store in Ladysmith. I understand the town's desire to eliminate vacant storefronts in the downtown retail area, and to increase tax revenues. Vacant storefronts are not a "good look."

But a third retail cannabis store in Ladysmith is clearly not needed, and the only thing it will accomplish is to increase competition among the cannabis retailers, with the likely possibility of one or more of the stores eventually closing. Thus, nothing will really be gained.

We do not patronize either of the existing cannabis stores in Ladysmith on a regular basis, although we have visited both. We have other sources for cannabis, including online ordering. But both of the existing establishments have worked hard to create attractive storefronts and positive shopping experiences, and they have obviously invested personal savings as well as considerable "sweat equity." It seems to me that opening up the local market with a third store would represent a slap in the face for these people, among other things.

The town should have an obligation not only to enhance local retail opportunities for town residents, but also to protect existing businesses which are attempting to establish themselves. Nothing positive will be achieved by allowing a third cannabis store to open in Ladysmith.

Thank you,

Bill and Lynn Tilland

From: BARB GILFOY

Sent: March 3, 2021 3:17 PM

To: Town of Ladysmith < <u>info@ladysmith.ca</u>> **Subject:** NO to a Cannabis Store, 1st Ave.

Hello Mayor Stone and council,

I would like to voice my opposition on a cannibis store possibly opening in the former April's Tack Shop in the heart of downtown Ladysmith.

I have nothing against either the product or the users of marijuana, but don't feel it will do anything to promote the vibrancy of making Ladysmith a memorable destination. This downtown area already has a couple of outlets for cannabis and I feel the area is better suited for retail or eating establishments.

My opinion is a solid NO on this possibility.

Barbara Gilfoy

Ladysmith

From: Jaysen Paddle

Sent: March 3, 2021 7:50 AM

To: Town of Ladysmith < <u>info@ladysmith.ca</u>>

Subject: New cannabis store

To whom it may concern.

It has recently been brought to my attention that there is a new retail cannabis store opening in Ladysmith. As a small town I don't think it is necessary to open another cannabis store in Ladysmith. We have 2 locally owned and operated cannabis stores in Ladysmith and I don't see how this town is going to be able to sustain 3 stores, not to mention during a pandemic where small businesses are already going under. Do we need another store owned by a non local owner where they are selling the same product for the same price, just does not seem necessary. As a supporter of local businesses I think we would all rather see our locally owned cannabis stores be able to operate successfully without competition from an outside run business

From: Ryan Fowler

Sent: March 3, 2021 7:57 AM

To: Town of Ladysmith < info@ladysmith.ca>

Subject: New retail cannabis store

Ladysmith

I've been a resident of ladysmith for over 15 years now, and I've always been drawn to the small local businesses that are the backbone and culture of our town. Overexposure of medical marijuana dispensaries in my opinion will flood the market for our small town and make it a struggle for the companies already operating to reach quota as sales will be dispersed. Making it hard for the few stores to excel. We pride our town and always have supported small business owners. As a collective let's all try and preserve what we have going for us especially during this pandemic.

Sincerely, a dedicated small town resident.

From: Hannah rogerson

Sent: March 4, 2021 2:53 PM

To: Town of Ladysmith < <u>info@ladysmith.ca</u>>

Subject: Cannabis retail

Hello i would just like to write a short email saying that me and my partner think and feel that we have enough cannabis stores in town. We definitely forsure have enough marijuana for the whole town (that are legal age) . I believe its a bad idea to have another as this store isnt even island local . Please deny any new cannabis stores Thank you for your time .

Hannah Rogerson and Haley Napier

From: Jessica Lapp

Sent: March 3, 2021 5:10 PM

To: Town of Ladysmith < <u>info@ladysmith.ca</u>>

Subject: RE: 411b first avenue Cannabis License support

Jessica Lapp 720 5th ave bottom unit

I support the Cannabis retail opening at 411B first ave in Ladysmith B.C. Cannabis business supports our community through well paying jobs, medical relief for the town, as well bringing more local shopping. I believe three cannabis related stores is a perfect amount for Ladysmith. Being a veterinary staff member this company is the only one I trust to send my clientele too, as I have personally used this group's Parksville location. I find them meticulous, supportive, and very educated in the use of cannabinoid medication and I do not find them overstepping their bounds. I would love to be able to keep my clientele in the ladysmith area and fully support the move to 411B first ave. Thank you so much for your consideration.

Jessica Lapp R.V.T

From: Pamela Hoy

Sent: March 4, 2021 3:53 PM

To: Town of Ladysmith < info@ladysmith.ca>

Subject: Proposed Cannabis Retail Store @ 411B 1st Avenue.

Good afternoon,

RE: Proposed Cannabis Retail Store @ 411B 1st Avenue.

Myself and my husband are homeowners at 15 Gatacre Street and have lived in our home since the 1980's. As the owners of an older home in the commercial/residential zoning we have felt the negative impacts of some of the council's decisions over the years....i.e. the tons of garbage scattered all up and down the streets every year from 7-Eleven that is an eye-sore on the sidewalks and in the surrounding alleyways.

Today in the mail we received correspondence advising us of yet ANOTHER application to operate a non-medical Cannabis store. Is two stores not enough for our little town given our population and data that indicates a population of 10,000 can support one store...and now consideration is going to be given to having 3. The 2 existing stores need to be able to survive and creating more competition for the 2 already in operation would not be a very considerate move for these 2 small business if council recommends that a license be issued. Would you issue a permit for another liquor store here in town based on the needs of the town's population...I think not! Ladysmith is already adequately supplied and there would be no benefit to the community or the downtown core, and it could possibly put an existing small business out of business after considerable investment to get up and running. The only benefit is more tax dollars in the town coffers.

Supporting the addictions of cannabis smokers with another retail outlet to support their habit does not get our vote. Please do not issue another permit for this purpose, it is not necessary, it is not fair to the two small businesses trying to survive and we do not need it.

Thank you for your consideration.

Pamela Hoy / Gary Redding

From: Shaun Kuyten

Sent: March 4, 2021 1:21 PM

To: Town of Ladysmith < info@ladysmith.ca>

Subject: Marijuana dispensary 1st ave.

I think two dispensary's is enough for this town I don't think there is enough people who live in ladysmith to sustain 3 dispensary's! I don't want to see them popping up on every street and corner.

From: Tristan Griffiths

Sent: March 4, 2021 12:45 PM

To: Town of Ladysmith < info@ladysmith.ca>

Subject:

In regards to another medical marijuana dispensary. Each dispensary is capable of handling about ten thousand people with our current population and two already wouldn't a third over crowd the market for our hometown business owners

Sent from my iPhone

From: BONNY MACDONALD Sent: March 5, 2021 3:33 PM

To: Town of Ladysmith < info@ladysmith.ca>

Subject: Store at 411B 1rst Ave.

I absolutely do not believe another cannabis store is needed nor wanted in Ladysmith. This is a prominent location on our main street and should be used for a business that would promote visitors and tourists and help to keep down town vibrant. We have other cannabis outlets in town as well as as in Nanaimo and Duncan. Really people can even grow their own now

From: Lori Currie

Sent: March 5, 2021 10:51 AM

To: Town of Ladysmith < <u>info@ladysmith.ca</u>>

Subject: New Cannabis Location

Hi there,

I'm writing in as I've noticed that a request for another cannabis location has been proposed in Ladysmith.

I feel that it would be wasteful to see another location open up when we already have two great suppliers in our town. Myself, my husband and several friends have been chatting about how unappealing it would be to see a third location open in Ladysmith, especially with two other locations also less than 10 minute drive from here. I felt the need to write in, in hopes that our voices can be heard.

We love ladysmith so much, this is an amazing town but we notice when it comes to stores it's edging on lacking the diversity that people crave. Especially with some recent store closings.

Please don't add a third cannabis location to the mix. We need more variety and we really hope that you agree.

Thank you for your time,

Lori

From: Michaela Binda

Sent: March 5, 2021 1:37 PM

To: Town of Ladysmith < info@ladysmith.ca>

Subject: 411B 1st Ave Cannabis Liscense Support

I wanted to voice my support for the Cannabis Retail application at 411B 1st Avenue. The business would help stimulate the local economy, provide many job opportunities, and positively contribute to the neighbourhood. Similar businesses have been well received and widely support around the island and across the country.

RECEIVED MARCH 5 2021

From: Pat Edwards

Sent: March 5, 2021 8:33 PM

To: Town of Ladysmith < info@ladysmith.ca>

Subject: 411B 1st Ave

We already have two cannabis shops in town, are they so busy that we can support 3? Not in favor!

RECEIVED MARCH 7 2021

From: Carol Tysdal

Sent: March 7, 2021 3:01 PM

To: Town of Ladysmith < info@ladysmith.ca>

Cc: info@1904cannabis.ca

Subject: Application for an additional cannabis store in Ladysmith

To the City of Ladysmith,

This email is written in opposition to allowing an additional retail cannabis location at 411B First Avenue which I am very much against.

Ladysmith is currently served by two excellent, discreet storefronts who I believe have local owners. They provide good service and product at reasonable prices. They are clean, attractive and discreet.

My understanding is that the applicant for the new store is not only NOT a Ladysmith resident but has another store in Parksville. Do we really need a "chain" to come in to supply the town's needs - already well supplied by our two stores.

I believe the current stores have invested heavily in their shops and deserve to be given a chance to success. They have already been battling COVID and many other business impediments unique to cannabis sales. As a life long business women, I urge the town to set the current stores up for success and enable them to become part of the fabric of the community. We do not need a non-resident "chain" coming in, possibly with deep pockets and predator pricing, to drive out our present excellent suppliers.

Many thanks for your consideration of this letter.

Carol Tysdal Ladysmith Resident

RECEIVED MAR 7 2021

From: Pauline

Sent: March 7, 2021 4:51 PM

To: Town of Ladysmith < <u>info@ladysmith.ca</u>> **Subject:** No To Another Cannabis Store

Dear Sir,

No! We do not need another cannabis store in Ladysmith. A town this size does not need more than the three we already have.

Sincerely,

Pauline Campone

RECEIVED MAR 8 2021

March 8,2021

Town of Ladysmith 410 Esplanade Ave. Ladysmith, B.C.

To whom it may concern

Our little town is unique and has so many interesting shops for visitors to wander and enjoy. The fact that you want to allow another Pot Shop to open on Main Street with windows that have to be covered just doesn't seem to be the right fit! Something open bright and cheerful not papered windows and non-inviting. I am not against the pot shops at all but two in the size of our town would seem plenty. Let's try to encourage business that draws more people and help to support what wonderful local businesses that we have.

Sincerely,

Carrol Townsend

Ladysmith, B.C.

From: Ian Bunton

Sent: March 8, 2021 10:17 PM

To: Town of Ladysmith < <u>info@ladysmith.ca</u>>

Subject: Proposed cannabis location

I'm just writing in as I'm curious as to why there would be a need for a third cannabis store here in Ladysmith? In a town as small as this I truly believe that adding yet another cannabis store could be detrimental to our two existing stores due to over supply in the area.

With Covid already having done so much damage to small businesses as it is this past year it would be awful to have another business have to go through closing its doors. To my understanding it's not even anyone living locally here Ladysmith that wants to open the dispensary which would make it even more upsetting if they were to cause the closing of either of the two already existing stores, not to mention the proposed location is merely a block and a half away from one of those stores. We have two liquor stores in this town and with how established the liquor industry is that is more than enough to suffice, I can't see the demand for marijuana already being so much higher that we would require a third store within such close proximity.

Thank you for your time,

Ian Bunton

From: Jordan Yano

Sent: March 8, 2021 4:14 PM

To: Town of Ladysmith < <u>info@ladysmith.ca</u>>

Subject: Cannabis Retail Application

Good afternoon,

Today I went into a local legal cannabis store (1904) and found out there is an application for yet another store in town. I am a working forestry professional with a minor in commerce so this is not an ungrounded take or opinion. Here is my argument against said application:

Lack of local demand.

While visiting the two stores already in place I have never had to wait in a line or had any issues with prompt and friendly service. It is my belief that the current demand having to be shared by yet another firm is unsustainable and will be detrimental to the current economic ecosystem.

While my opinion is just that, my opinion, I do not think that it is one that is unfounded and needs serious consideration.

Thank you for your time and consideration, Sincerely Jordan Yano BScF, RPF

From: KEITH DANKS

Sent: March 9, 2021 4:22 PM

To: Town of Ladysmith <info@ladysmith.ca>

Subject: Yet ANOTHER Cannabis Licence - First Avenue

Dear Sirs/Madam,

This email has a two fold question & concerns, but they ARE linked I believe.[Cannabis & Litter].

Let me start by asking WHY you are even considering yet another application for a Cannabis Store to be open in Ladysmith.?

Our lovely & ONCE pristine town is now becoming the center of grit & grime. It's a disgrace right now.

I realize you might like to have more finances by filling our town with businesses, no matter what their products, but his superb store once occupied with a fantastic range Equine products is now being considered for our THIRD cannabis licence. <u>I TOTALLY OBJECT, AND I WILL TELL YOU WHY.</u>

Since the opening of the first, let alone the second, our town has become a dumping ground for litter, discarded cups, discarded masks etc... I walk around the town every single day and try to clear up some of the litter.myself as I go.

But it's now so bad even I have given up. The Esplanade is sickening, the side streets are filthy, the front & back of the Shell garage is embarrassing & it's no coincidence that this has happened at a time you have agreed these licences.

The litter on the Esplanade right outside Jerry's is a complete disgrace, I am embarrassed to walk with friends along that route.

The use of the building on First Ave. for the Homeless is generous, but that will only add to the mess I see every day., & with two Cannabis stores on the First Avenue plus homeless shelter I cringe at what I can expect to see in the future.

I was so proud to see the Dalby building area being developed, the two Brew pubs being added, The Old Travellers Hotel gutted, but these great additions have stalled and nothing seems be happening unless it involves Cannabis.

Enough is Enough, please stop this madness, and please clean up the town.

I say again, I am totally against another Cannabis store in the town, I didn't want the first, argued against the second, but still lost, please do not let me lose for the third time.

Finally, IF you are stuck for staff to clear the mess, I would still consider helping clean up on the odd day or so.....if you can supply the bags and tongs to pick it up without using my gloves, which I have done recently.

I was so proud of this town when I moved here in 2007, but it has gradually gotten worse, to point now where I really don't want to walk around, It's embarrassing, which is why I am prepared to help even a little bit.

Regards,

Keith Danks

From:

Sent: March 9, 2021 6:30 PM

To: Town of Ladysmith <info@ladysmith.ca>

Subject: Application for cannabis store 411B 1st street

Hello

I've just seen that another Cannabis store is being considered for Ladysmith? Is this really necessary to have two such facilities within blocks of each other, in a town of this size?

Personal opinion aside, I can't imagine that the current outlet is not enough to meet the needs of a town with less then 10,000, the majority of whom will never use this service.

Ladysmith is struggling with so many issues as it is, and I don't think we also need to be known as the town with a Cannabis store on every street corner.

In conclusion... I am opposed.

Thank you for your consideration Marion Stewart

STAFF REPORT TO COUNCIL

Report Prepared By: Christina Hovey, Senior Planner

Meeting Date: March 16, 2021 File No: 3360-20-09

Re: Application to Rezone 336 Belaire Street from 3 to 4 Storeys

RECOMMENDATION:

That Council:

- 1. Proceed with first and second reading of "Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 36) 2021, No. 2066"; and
- 2. Direct staff to proceed with scheduling and notification for a Public Hearing for "Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 36) 2021, No. 2066".

EXECUTIVE SUMMARY:

The current application is to amend the zoning for 336 Belaire to allow for an additional (fourth) storey. The proposed development now has one floor of commercial space and three floors of residential. The current zoning, adopted by Council in January 2020, allows for three storeys, with commercial on the main floor and residential units above the main floor.

PREVIOUS COUNCIL DIRECTION:

Resolution #/Date	Resolution		
CS 2020-005,	That Council adopt Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment		
Jan. 7, 2020	Bylaw, No. 2020.		
CS 2019-397,	That Council:		
Dec 2, 2019	1. Proceed with third reading and final adoption of Bylaw 2018, cited as		
	Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw 2018.		
	2. Proceed with third reading of Bylaw 2020, cited as Town of Ladysmith		
	Zoning Bylaw 2014, No. 1860, Amendment Bylaw, 2019, No. 2020		
	3. Direct staff to refer Town of Ladysmith Zoning Bylaw 2014, No. 1860,		
	Amendment Bylaw, No. 2020 to the Ministry of Transportation and		
	Infrastructure, pursuant to the Transportation Act.		

INTRODUCTION/BACKGROUND:

In January 2020, 336 Belaire Street (the subject property) was rezoned from C-1 (Local Commercial) to the CD-6 Zone (Comprehensive Development 6 – Belaire Mixed Use Zone). The property is 1,530 m² in size and was the site of the former RCMP Detachment. The police station building has been demolished and the property is now vacant. The applicant is now proposing to amend the zoning to allow for a fourth storey (one floor commercial, three floors



of residential) and up to four additional residential units (to a total of 12 units). The current zoning on the property allows for three storeys, commercial on the main-floor and up to eight residential units in the two storeys above.

Site Context:

The subject property is located at the corner of Belaire Street and Rigby Place, near the intersection between Belaire Street and Dogwood Drive. The subject property is across the street from Wickham Park, which is landscaped with trees and shrubs and a large grassed area. Most of the surrounding neighbourhood is comprised of single-family residential properties. However, there is a multi-family (townhouse) development adjacent to the property's eastern boundary at 332 Belaire Street and a mix of single-family and multi-family residential properties to the east of the site, on the opposite side of Dogwood Drive.

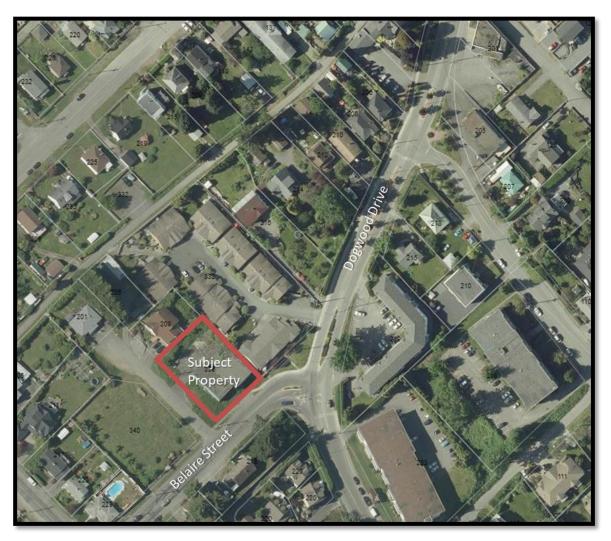


Figure 1: Subject Property

DISCUSSION/ANALYSIS:

Official Community Plan:

The subject property is designated as Local Commercial in the Official Community Plan (OCP) and is within both Development Permit Area 3 'Commercial' (DPA 3) and Development Permit Area 4 'Multi-Unit Residential' (DPA 4). The Local Commercial Designation is intended to accommodate small scale commercial uses located within neighbourhoods. It provides for a limited range of retail, office, and service uses, which do not compete with the commercial uses in the downtown core. The OCP states that residential uses may be included within the Local Commercial Designation provided that they are consistent with the scale, form, and character of the surrounding neighbourhood.

336 Belaire is within a newly adopted Comprehensive Development Zone. The OCP states that Comprehensive Development Zones may be located within any designation, provided that the mix of uses conform or are compatible with the permitted uses of the designation.

It is the opinion of staff that the proposed zoning amendment is consistent with the OCP and an OCP amendment is not required.

The OCP includes several policies that relate to infill development. The OCP suggests encouraging residential infill development as beneficial for the transportation network and as a way to minimize detrimental impacts of new development on the environment (OCP Sections 1.8.2, 3.1.3, 3.1.4, 3.3). The OCP specifies that approval of infill should take into consideration potential impacts on the existing neighbours as well as new residents and users of a proposed development (Section 3.1.4.(17)).

A Development Permit (DP) will be required prior to construction. Through the DP application, the proposed development will be evaluated against the DPA 3 and DPA 4 guidelines. The applicant is currently proposing to submit the DP application following Council's consideration of first and second reading. This may allow for the DP to be approved concurrently with the zoning amendment, should the amendment bylaw proceed.

Proposed Zoning Bylaw Amendment:

The property is currently zoned Comprehensive Development 6—Belaire Mixed-Use (CD-6). A density bonus provision of the CD-6 zone requires the owner to construct parking improvements on the other side of Rigby Place along the edge of Wickham Park. The proposed rezoning would add an additional density bonus provision to allow for up to four additional residential units if the owner provides underground parking, provides a gathering space at Wickham Park, and builds to meet the BC Energy Step Code (Level 1). The proposed zoning amendment is described below in Table 1: Summary of Zoning Amendments.

Table 1: Summary of Zoning Amendments

Provision	Current Zoning	Proposed Zoning Amendment
Floor Space Ratio	0.9 maximum	1.3 maximum
Residential Density	8 units maximum with a	12 units maximum with the following

Provision	Current Zoning	Proposed Zoning Amendment
Bonuses	requirement to provide street parking and drainage improvements on Rigby Place adjacent to Wickham Park	 additional requirements: To provide a public gathering space in Wickham Park (see Attachment E) To provide at least 60%¹ of parking spaces for the residential units underground Compliance with BC Energy Step Code Level 1 or better
Height of Principal Building(s)	11.0m maximum	14.5m maximum
Step Back of Upper Storey(s)	Not specified	That the fourth storey must be no more than 80% of the floor area of the largest storey
Setbacks for Accessory Structures	Structures under 10m² are exempt	Structures under 15m² are exempt

The additional density bonus rules allowing the four additional dwelling units reflect the applicant's current proposal. The applicant is planning to provide up to 21 parking spaces underground, for the use of residential occupants. The four additional units proposed would require a maximum of nine parking spaces. This means that the surface parking on the property can be used primarily for the commercial occupants and visitor parking. In addition, eleven new parking stalls are proposed adjacent to Wickham Park, these stalls will add to the supply of street parking in the area.

Visualizations of the project, prepared by the applicant, are provided in Attachment B and C.

Proposed Community Amenity Contributions:

The applicant is proposing to provide 11 parking spaces adjacent to Wickham Park and to update the storm water infrastructure along Rigby Place. The applicant is also proposing to construct a pavilion/gathering space in Wickham Park. This proposal is consistent with the vision for the park as a place for people to congregate and relax and as a potential location for a community garden.

If this application proceeds, the applicant and the Parks Department will work together to design a public gathering space for Wickham Park that is compatible with similar Town structures and operational needs, but that is unique to this project.

A conceptual plan of the proposed facilities for Wickham Park is provided as Attachment E.

.

¹ Parking for multi-family units is determined by the number of bedrooms in each unit so the final percentage depends on the unit configuration. Based on the current proposal, 27 parking spaces would be required for 12 two-bedroom units. 21 underground parking spaces is 77% of the required spaces.



Figure 2: proposed 4-storey building

Impact Analysis:

As outlined in the OCP, encouraging infill development can allow for efficient use of existing infrastructure and have a lower environmental impact than developments on forested or agricultural lands. The subject property is well suited for residential infill, located near the downtown and at a significant intersection. The massing of the building, as shown in Attachment C, stands out without overpowering the surrounding built form.

The potential impacts of overlook and shading on neighbouring properties have been mitigated with step back provisions for the building, and the requirement for a large rear yard setback (see Attachment B and D). The proposed underground, on-site, and street parking mean that the proposed development should not increase the demand for the existing street parking in the neighbourhood. The upgrades to Wickham Park will address an existing drainage problem and enhance the park with a gathering space.

Based on this analysis of the proposed development, staff are recommending that the proposed zoning amendment bylaw be given first and second reading.

ALTERNATIVES:

Council can choose to:

- 1. Deny Zoning Amendment Application No. 3360-20-09 (336 Belaire) and Bylaw No. 2066.
- 2. Amend proposed "Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 36) 2021, No. 2066" prior to first and second reading.

- 3. Defer consideration of Zoning Amendment Application No. 3360-20-09 (336 Belaire) and Bylaw No. 2066 to a future meeting of Council.
- 4. Refer the application back to staff or the applicant for further review as specified by Council.

FINANCIAL IMPLICATIONS:

N/A

LEGAL IMPLICATIONS:

A public hearing is required pursuant to section 464 of the *Local Government Act* (LGA). This application is consistent with the OCP, so the requirement for a public hearing could be waived in accordance with section 464.2 of the LGA. However, staff are recommending that a public hearing be held.

The subject property is within 800m of an intersection with a controlled access highway, therefore the zoning amendment bylaw must be approved by the BC Ministry of Transportation and Infrastructure after third reading but prior to adoption by Council (*Transportation Act*, section 52).

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

Neighbourhood Information Meeting(s):

The applicant hosted a neighbourhood information meeting (NIM) via video conferencing (Zoom) on January 12, 2021. The applicant also held small/one-on-one meetings with community members on January 11 and 13, 2021. The applicant's report on the NIM and one-on-one meetings, as well as the information the applicant provided to the community, is in Attachment F.

Community Planning Advisory Committee (CPAC):

CPAC reviewed the application for 336 Belaire on March 3, 2021. CPAC passed the following recommendation related to the application (draft recommendation, subject to adoption):

"That CPAC recommend to Council that the rezoning proceed and recommend that Council ensure that all public safety concerns be considered."

The reference to safety concerns was linked to a discussion on street lighting and sidewalks. Standard requirements for frontage improvements including street lighting and sidewalks are established through the "Town of Ladysmith Subdivision and Development Servicing Bylaw 2013, No. 1834". The developer will be required to install frontage improvements at time of building permit.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

This application has been referred to the Engineering Department, the Parks Department, the Building Inspector, and the Fire Chief. Should the project move forward, the Engineering and

Parks Departments will work with the applicant regarding the design of proposed amenities in Wickham Park.

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:		
⊠Complete Community Land Use	☐ Low Impact Transportation	
⊠Green Buildings	☐ Multi-Use Landscapes	
□Innovative Infrastructure	☐ Local Food Systems	
☐Healthy Community	\square Local, Diverse Economy	
☐ Not Applicable		
ALIGNMENT WITH STRATEGIC PRIORITIES:		
□Infrastructure	☐ Economy	
□Community □		
□Waterfront		
I approve the report and recommendation(s).		
Allison McCarrick, Chief Administrative Officer		

ATTACHMENT(S):

- Attachment A "Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 36) 2021, No. 2066"
- Attachment B Application Information
- Attachment C Viewshed Images
- Attachment D Shadow Study
- Attachment E Proposed Community Amenity Contributions and Conceptual Plan for Wickham Park
- Attachment F –NIM Report

TOWN OF LADYSMITH

BYLAW NO. 2066

A Bylaw to amend "Town of Ladysmith Zoning Bylaw 2014, No. 1860"

WHEREAS pursuant to the *Local Government Act*, the Municipal Council is empowered to amend the Zoning Bylaw;

AND WHEREAS pursuant to section 482 of the *Local Government Act* a zoning bylaw may establish different density rules for a zone, one generally applicable for the zone and the other or others to apply if the applicable conditions are met;

AND WHEREAS the Municipal Council considers it advisable to amend "Town of Ladysmith Zoning Bylaw 2014, No. 1860";

NOW THEREFORE the Council of the Town of Ladysmith in open meeting assembled enacts as follows:

- 1. "Town of Ladysmith Zoning Bylaw 2014, No. 1860" is amended by:
 - (a) Deleting "17.6 Comprehensive Development 6 Belaire Mixed-Use (CD-6)"; and
 - (b) Replacing it with amended "17.6 Comprehensive Development 6 Belaire Mixed-Use (CD-6)" as shown in Schedule 1, which is attached to and forms part of this Bylaw.

Citation

READ A FIRST TIME on the

2. This Bylaw may be cited for all purposes as "Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 36) 2021, No. 2066".

day of

READ A SECOND TIME on the	day of	,
PUBLIC HEARING held pursuant to the	e provisions of the <i>Local G</i>	overnment Act
on the	day of	,
READ A THIRD TIME on the	day of	,
APPROVED by the Ministry of Transpo	ortation & Infrastructure	
on the	day of	,
ADOPTED on the	day of	,
		Mayor (A. Stone)
		Corporate Officer (D. Smith)

Schedule 1

"Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 36) 2021, No. 2066"

17.6 COMPREHENSIVE DEVELOPMENT 6 – BELAIRE MIXED-USE (CD-6)

The purpose of the CD-6 Belaire Mixed-Use is to accommodate a four-storey mixed-use development containing ground floor commercial and second, third, and fourth floor multi-family residential development.

1. Principal Uses

- a) Coffee shop
- b) Community care facility
- c) Media production studio
- d) Multiple-Unit Dwellings
- e) Neighbourhood pub
- f) *Office*
- g) Personal service establishment
- h) Restaurant
- i) Retail sales
- j) Veterinary clinic

2. Accessory Uses

a) Home Based Business, subject to Part 6, Section 6.8.

3. Sizing and Dimension of Parcels

- a) No *Parcel* shall be created which has a *Parcel Area* less than 1,500 square metres.
- b) No *Parcel* shall be created which has a *Frontage* less than 30 metres.

4. Size and Density of the Use of Land, Buildings and Structures

- a) The Floor Space Ratio shall not exceed 1.3.
- b) The maximum number of Dwelling Units permitted in this Zone is one.
- c) Notwithstanding Section 17.6(4)(b), the owner shall be entitled to a maximum residential density of 53.5 units per hectare, to a maximum of 8 units, provided that:

- the owner constructs, at their cost, street parking and drainage improvements, in accordance with the standards established by the Town, on that portion of Rigby Place immediately adjacent to Wickham Park; and
- ii) prior to obtaining a building permit for the dwelling units under this section, the owner provides a bond or other surety satisfactory to the Town from which the Town may draw upon if the owner fails to complete the works under (i).
- d) Notwithstanding Section 17.6(4)(b) and (c), the owner shall be entitled to a maximum residential density of 78.5 units per hectare, to a maximum of 12 units, provided that:
 - the owner constructs, at their cost, street parking and drainage improvements, in accordance with the standards established by the Town, on that portion of Rigby Place immediately adjacent to Wickham Park;
 - ii) the owner constructs, at their cost, a public gathering space, in accordance with the standards established by the Town, in Wickham Park;
 - iii) prior to obtaining a building permit for the dwelling units under this section, the owner provides a bond or other surety satisfactory to the Town from which the Town may draw upon if the owner fails to complete the works under (i) and (ii);
 - iv) a minimum of 60 percent of the off-street parking spaces for the dwelling units, as required in Part 8: Parking and Loading Regulations, are provided as *Underbuilding Parking*; and
 - v) all *Principal Buildings* meet or exceed Step 1 of the British Columbia Energy Step Code.
- e) No commercial use on the parcel shall have a *Gross Floor Area* greater than 250 square metres.
- f) The combined *Floor Space Ratio* for all commercial uses on the property shall not exceed 0.5.
- g) No Building or Structures shall exceed a Parcel Coverage of 40.0 percent.
- h) A Parcel may contain more than one Principal Building.

5. Siting, Sizing and Dimension of Uses, Buildings and Structures

a) No Principal Building or Structure shall exceed a Height of 14.5 metres.

No Accessory Building or Structure shall exceed a Height of 7.5 metres; except where the roof pitch is less than 4:12, in which case the maximum Height shall be 5.0 metres.

b) No *Principal Buildings* or *Structures* shall be located closer to the *Parcel Line* than the minimum *Setback* shown in the Table below:

PARCEL LINE	MINIMUM SETBACK
Front Parcel Line (Belaire Street)	2.0 metres
Interior Side Parcel Line	4.5 metres
Exterior Side Parcel Line	2.0 metres
Rear Parcel Line	17.0 metres

- c) The maximum *Finished Floor Area* of the fourth *Storey* of a *Principal Building* shall not exceed 80.0 percent of the *Finished Floor Area* of the *Storey* with the largest *Finished Floor Area*.
- d) No Accessory Building or Structure, with a Finished Floor Area greater than 15 m², shall be located closer to the Parcel Line than the minimum Setback shown in the Table below:

PARCEL LINE	MINIMUM SETBACK
Front Parcel Line	6.0 metres
Interior Side Parcel Line	4.5 metres
Exterior Side Parcel Line	3.0 metres
Rear Parcel Line	13.0 metres

6. Landscaping and Screening

a) Landscaping and screening shall be provided in accordance with Part 7: Landscaping and Screening Regulations.

7. Parking and Loading

- a) Off-street parking shall be provided in accordance with Part 8: Parking and Loading Regulations.
- b) Notwithstanding (a);
 - the total number of on-site loading spaces required on a parcel shall be one; and
 - ii) a maximum of 50 percent of the total off-street parking requirement may be designated as small car spaces.

www.aypqarchitecture.com

the Jailhouse

336 Belaire Street, Ladysmith BC Owner: the Jailhouse Brewing Co. Ltd.

A Rezoning to increase height from three to four storeys November 06, 2020

DRAFT 2020.11.12

www.aypqarchitecture.com

BACKGROUND

Height Consideration given to the immediate neighbours

Ladysmith's Visioning Public Preference Handbook recommends four storey commercial-residential buildings as the preferred model for mixed-use projects.

"A four storey (12.7m) commercial and residential building type forming part of a street wall is the preferred model when integrating mix use."

~ Visioning Public Preference Handboo

In 2018, the Jailhouse project was presented to the Town of Ladysmith for rezoning the Ol' RCMP Building Site from a three storey commercial to a four storey mixed-use building.

At that time, feedback from the community at two Neighbourhood Information meeting favored the mixed-use model with over 75 attendees expressing general acceptance for **four storeys**.

There were some concerns remaining from immediate neighbours and with much consideration, the Owner subsequently met with selected neighbours in person.

Two main concerns were discussed,

- adequate parking along Rigby Place;
- · building height and overlook.

At the time, the project did not include underground parking and the Owner felt that it was economically possible to forgo the fourth floor.

The approved CD-6 zone limited the Jailhouse Project to three storeys.

RZ PROPOSAL 2020

Increase height from three to four storeys

The Project proceeded with three storeys and as the design progressed, underground parking was once again on the table and with the Town of Ladysmith's reconsideration for access off Belaire Street, this amenity became possible.

Residential parking would be provided underground, on-site visitor and commercial surface parking. Street parking would be provided on Belaire as well as along the park-side of Rigby Place. In addition, there would be a stormwater system installed along Rigby Place.

An evaluation of the economics for the additional underground parking as well as the Rigby street stormwater upgrade made it clear that a fourth floor was needed for the overall project viability.

Hence, this rezoning proposes to increase the overall building height from three to four storeys.

- This was presented to the community in 2018 and favorably accepted.
- Four storeys is a "preferred model when integrating mix use."

"Love the idea of bringing life back into the neighborhood" ~ PIM01 Survey comment

Would love a community area near my house (Bayview Ave) to socialize and enjoy.

~ PIM01 Survey comment

"Developing an area for people to enjoy, accessible, and affordable." ~ Ladysmith's Visioning Public Preference Handbook

Town Vision
Value & Themes
People

Public Spaces – Creating great spaces to be; Sidewalks into places of animation, conservation and colour; Parks for all ages; Great Streets that offer pedestrian experiences; Housing diversity that support residents at all stages of their lives to preserve friendships and relationships over the years.



"Roads form part of the transportation network. As part of a walkable community, vehicles share the road with other pedestrian activities, and form part of a vibrant community. Street calming techniques should be explored through the use of traffic islands, landscaped medians, curb extensions, raised street sections and textured pavement visual signals and messages."

~ Ladysmith's Vision Public Preference Handbook

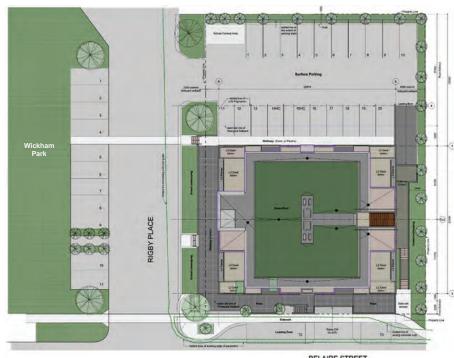




PUBLIC PARKING

Town Vision Value & Themes **Environment**

Parks and trails - Preserving and extending the parks and trail systems in the community so everyone lives within a short distance of a park or greenway;



BELAIRE STREET

RZ.2018: Rigby Place parking

In 2018, the community was presented with a parking layout with five (5) parallel parking spaces along Rigby Place.

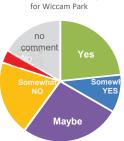
They were asked if the public parking was enough for Wickham Park.

Their response was mixed with a significant level of concern that public parking may not be adequate.

Sustainability Strategy #2 Low Impact Transportation

Pursing innovative parking design strategies and exploring new street standards to make streets more environmentally & socially more friendly.

Public Parking Enough Street Parking



Recent discussions with the Town of Ladysmith has resulted in a design layout showing Rigby Place with parking only on the Park-side. It was felt that this would be a safe configuration for a community amenity.

Eleven (1) 90d parking spaces and a stormwater management system will service both park and commercial visitors. In addition, all residential parking will be accommodated underground, leaving on-site parking for commercial activities.

RZ.2020: Rigby Place Parking

"Cluster parking encouraged: 6-8 spaces with landscape buffering. If more than 10, provide landscape bays for division. Auto to pedestrian paths should include transitional elements, such as plantings, land forms, screens, and structures."

~ Ladysmith's Visioning Public Preference

DRAFT 2020.11.12

PRIVACY AND OVERLOOK

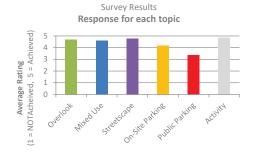
RZ.2018: Privacy and overlook comments

The community felt that the overall design does minimize overlook as well as maximize privacy for the Project's only two immediate neighbours.

NIM #2 Survey Topic: BUILDING LOCATION ON SITE

How do you feel these fall within the scale of 1 to 5 ?

1 Overlook	lem:configuration & location of the building on the site seeks to minimize overlook & maximize privacy for the neighbours.
2 Mixed Use	$Optimization \ of \ the \ configuration \ and \ economics \ of \ the \ building.$
3 Streetscape	Social places such as outdoor patios creates a community oriented street character.
4 On-Site Parking	On-site parking location gives greater spatial separation to neighbours.
5 Public Parking	Street parking for Wickham Park is enough.
6 Activity	Public activity is focused towards Rigby & Belaire corner to respect neighbours.
•	



RZ.2020: Privacy and overlook

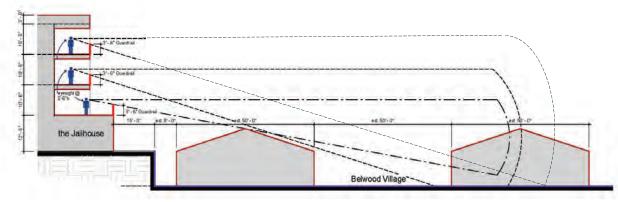
The proposed fourth floor would have similar if not less overlook and privacy concerns.

- A wide rear setback ensures privacy and minimal overlook towards the northern neighbour.
- Large outdoor residential decks with horizontal views towards the ocean, buffers overlook downward to Belwood Villiage.

Overlook

Concerns were primarily raised by immediate neighbour in regards to overlook of Belwood Village.

With a 15ft wide setback and an additional upper floor setback, overlook has been minimized and impact limited to primarily front yards.



DRAFT 2020.11.12

ZONING Proposed revisions related to adding the fourth floor

The additional residential fourth floor proposes to add four units for a total of 12 units. Other CD-6 zoning requirements un-related to density remains unchanged, such as

- Site coverage remains @ 40%.
- · Setbacks remain as is, and
- · Parking and landscape requirements
- Commercial space on the main level

The commercial component on the main level remains unchanged. The additional level provides for an additional four residential units or a total of 12 units.

17.6 COMPREHENSIVE DEVELOPMENT 6 - BELAIRE MIXED-USE (CD-6)

The purpose of the CD-6 Belaire Mixed-Use is to accommodate a three-storey mixed-use development containing ground floor commercial and second and third floor multi-family residential development.

1. Principal Uses

- a) Coffee shop
- b) Community care facility
- c) Media production studio
- d) Multiple-Unit Dwellings.
- e) Neighbourhood pub
- f) Office
- g) Personal service establishment
- h) Restaurant
- i) Retail sales
- j) Veterinary clinic
- 2. Accessory Uses
- a) Home Based Business, subject to Part 6, Section 6.8.

3. Sizing and Dimension of Parcels

- a) No Parcel shall be created which has a Parcel Area less than 1,500 square
- b) No Parcel shall be created which has a Frontage less than 30 metres.
- 4. Size and Density of the Use of Land, Buildings and Structures

a) The Floor Space Ratio shall not exceed 0.9 Proposed

- b) The maximum number of Dwelling Units permitted in this Zone is one.
- c) Notwithstanding Section 17.6(4)(b), the owner shall be entitled to a maximum residential density of 53.5 units per hectare, to a maximum of 8 units, provided that:

Proposed max. 12 units

Proposed Increase FSR

- the owner constructs, at their cost, street parking and drainage improvements, in accordance with the standards established by the Town, on that portion of Rigby Place immediately adjacent to Wickham Park; and
- prior to obtaining a building permit for the dwelling units under this section, the owner provides a bond or other surety satisfactory to the Town from which the Town may draw upon if the owner fails to complete the works under (i).

- d) No commercial use on the parcel shall have a Gross Floor Area greater than 250 square meters
- The combined Floor Space Ratio for all commercial uses on the property shall not exceed 0.5.
- f) No Building or Structures shall exceed a Parcel Coverage of 40.0 percent.
- g) A Parcel may contain more than one Principal Building.

5. Siting, Sizing and Dimension of Uses, Buildings and Structures

- No Principal Building or Structure shall excs
 No Accessory Building or Structure shall exceed a Height of 7.5 metres; except where the roof pitch is less than 4:12, in which case the maximum Height shall be 5.0 metres.
- No Principal Buildings or Structures shall be located closer to the Parcel Line than the minimum Setback shown in the Table below:

PARCEL LINE	MINIMUM SETBACK
Front Parcel Line (Belaire Street)	2.0 metres
Interior Side Parcel Line	4.5 metres
Exterior Side Parcel Line	2.0 metres
Rear Parcel Line	17.0 metres

c) No Accessory Building or Structure, with a Finished Floor Area (10 m²) as shown in the Table below, shall be located closer to the Parcel Line than the minimum Sethack shown in the Table below:

PARCEL LINE	MINIMUM SETBACK
Front Parcel Line	6.0 metres
Interior Side Parcel Line	4.5 metres
Exterior Side Parcel Line	3.0 metres
Rear Parcel Line	13.0 metres

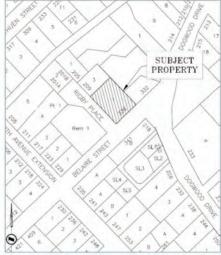
6. Landscaping and Screening

 a) Landscaping and screening shall be provided in accordance with Part 7: Landscaping and Screening Regulations.

7. Parking and Loading

- a) Off-street parking shall be provided in accordance with Part 8: Parking and Loading Regulations.
- Notwithstanding Part 8: Parking and Loading Regulations, the total number of on-site loading spaces required on a parcel shall be one.

Proposed Height: 4 Storeys Schedule II – Bylaw 2020



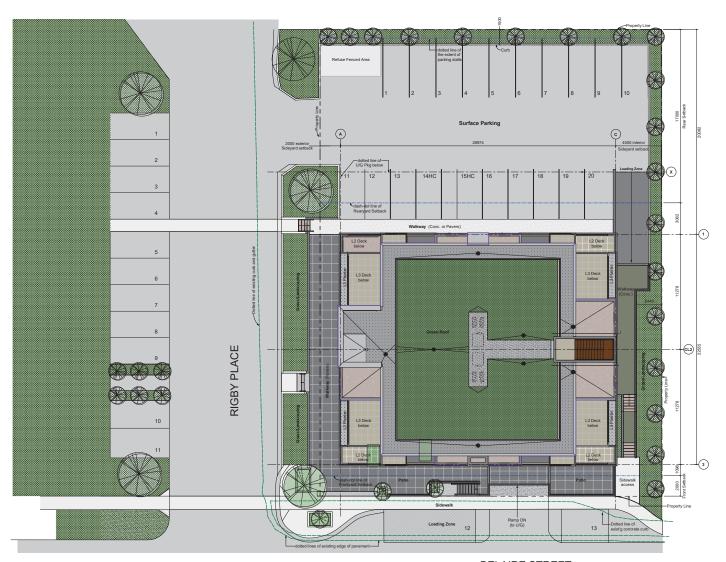
Present zoning was approved December 02, 2019

www.aypqarchitecture.com

SCHEMATIC DESIGN

Four Storey Mixed-use Building Architectural drawings

DRAFT 2020.11.12



BELAIRE STREET



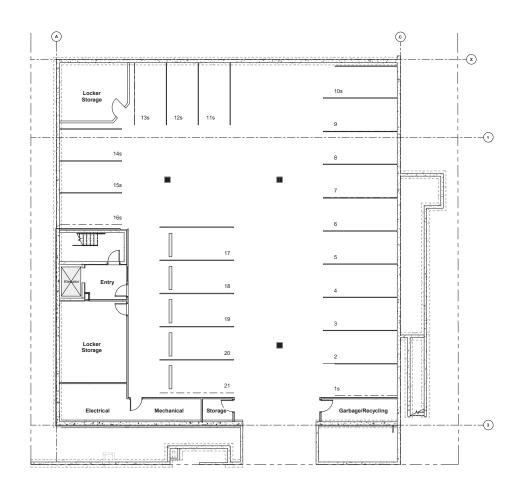
DRAFT 2020.11.12

AQ2011

The Jailhouse Mixed-use
336 Belaire Street,
Ladysmith BC

RZ.201106 (1)

Scale: 1" = 10'-0" 2020-11-12 2:55:27 PM

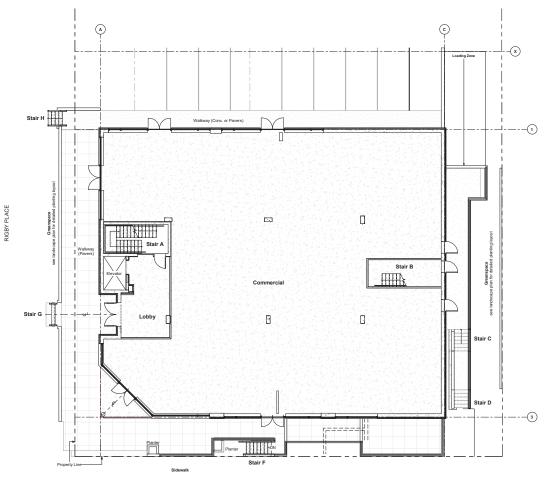




DRAFT 2020.11.12

The Jailhouse Mixed-use
336 Belaire Street,
Ladysmith BC

RZ.201106 (2) Floor Plan - UG Parking Scale: 1/8" = 1'-0" 2020-11-12 1:12-19 PM



BELAIRE STREET

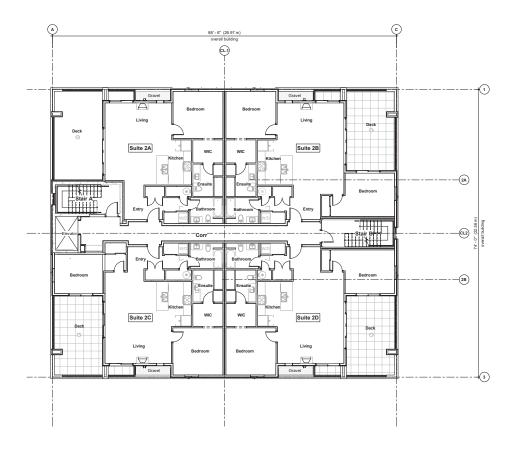


DRAFT 2020.11.12

The Jailhouse Mixed-use
336 Belaire Street,
Ladysmith BC

RZ.201106 (3)

Floor Plan - Commercial Scale: 1/8" = 1'-0" 2020-11-12 1:12:20 PM



DRAFT 2020.11.12

The Jailhouse Mixed-use
336 Belaire Street,
Ladysmith BC

RZ.201106 (4)

Floor Plan - Residential Scale: 1/8" = 1'-0" 2020-11-12 1:12:24 PM



Constant Philade Page

DRAFT 2020.11.12

AQ2011
The Jailhouse Mixed-use
336 Belaire Street,
Ladysmith BC

RZ.201106 (5) Elevations

Scale: 1/8" = 1'-0" 2020-11-12 1:12:47 PM



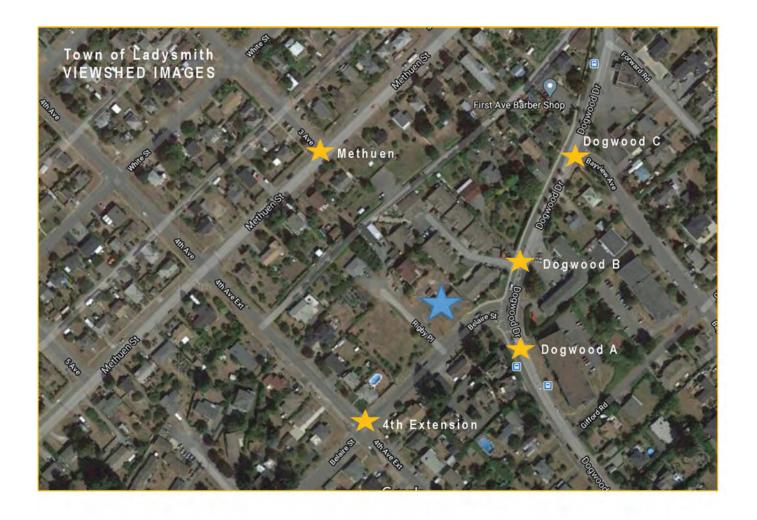
DRAFT 2020.11.12

The Jailhouse Mixed-use
336 Belaire Street,
Ladysmith BC

RZ.201106 (6)

3D Model

Scale: 2020-11-12 1:12:51 PM











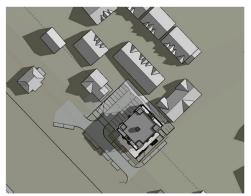


www.aypqarchitecture.com

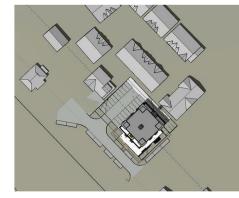
Shadowing

There is minimal shadow impact on the immediate neighbours.

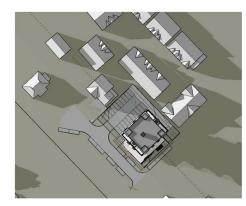
The neighbouring unit facing Dogwood Drive will solely experience over-shadowing during the later hours of the day. However, its SE outdoor area remains un-shaded for the entire morning both in the summer and winter.



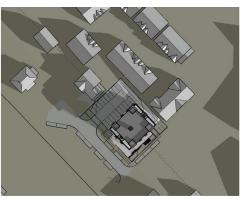
SUMMER @ 6:00 am Shadow overcast over Rigby Place



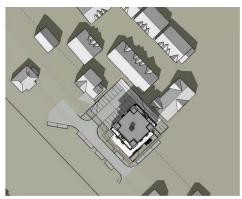
SUMMER @ Noon Minimal to no shadow overcast



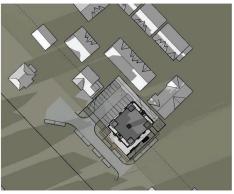
SUMMER @ 5:00 pm Shadow overcast over the SE corner



WINTER @ 7:00 am Shadow overcast over NW corner



WINTER @ Noon Short shadow overcast



WINTER @ 5:00 pm Shadow overcast over the SE corner



R. W. (Bob) Wall Ltd.

Project: THE JAILHOUSE

336 Belaire Street, Ladysmith

Date: January 15, 2021

Project Report: Neighbourhood Information Meeting on January 11, 2021

Notice of the Neighbourhood meeting was posted in the Ladysmith Chronicle on December 31, 2020 and then again on January 7, 2021 – copy of the ad is attached. Prior to Christmas, a notice to all neighbours within the 60m radius was mailed out.

On January 8, 2021, due the update by the Provincial Health Officer regarding protocols and restrictions being enforced due to COVID 19, we were forced to cancel our public meeting. We placed notices on the exterior doors of Eagle Hall informing interested parties of the change and advising of ways to contact our office (email or phone). We also had the Chronicle place a notice regarding the meeting cancellation and our contact information in their digital platform.

On January 11, 2021, three of us attended Eagle Hall to address anyone who still might show up for the meeting. We stood outside on the sidewalk, adhering to Public Health guidelines and did not go into the building. We had four people who came to get project packages from us and ask project specific questions, their comments were as follows:

- There were two people in favour of the project, but they did have some specific comments that included possibly reconsidering the name of the project, addressing some fencing measures between the project and the neighbouring properties and if the condo units would be for sale or rent;
- We had one person who said they were opposed to the project specifically because they felt that Council was approving too many projects and supporting too much development in Ladysmith. They did not seem to have a specific issue with our project, just that it was another example of a project happening right now;
- We had a fourth person who was opposed to the project. She said she was a
 neighbour who had spent the last number of years renovating her home and she
 was opposed a project being developed on this site and felt that it was her
 obligation to be opposed to protect the neighbourhood.

We also left a number of packages with the Pub that is located within Eagle Hall in case anyone else showed up and wanted an information package.

G.S.T. #R104676267

6040 Hammond Bay Road Nanaimo, BC V9T 5M4 www.bobwallcontracting.com

Page 96 of 348

Phone: (250) 756-2707 Fax: (250) 756-2785 rwbobwallltd@shaw.ca On January 12, 2021, we hosted a Zoom meeting. Five groups participated in this session: Tricia McKay, Duck Paterson, Raelene Cormier, Linda McBride and Marky Herkel. Although we did not have the ability to share the plans on line during the meeting (everyone had a digital or paper set of plans available already), this was a very informative session. Discussion revolved around the following topics:

- The impact of stratification and what bylaws might be in effect and when does the strata corporation kick in: when it is habitable it can be stratified;
- Would the condos be for sale or for lease;
- Effects of development on the park and any trees or shrubs in the park;
- Consideration of fencing and vegetation to both neighbouring properties and the importance of this with respect to being a sound buffer from the surface parking;
- The importance of maintaining the noise by-law as it pertains to businesses "but creating a 'Yaletown' type project in this area is a benefit";
- "There is a lot of traffic on Belaire, so this building will buffer some of the traffic noise, but will also block some of the mountain view";
- Would there be a retaining wall between the project and Bellewood Village;
- Would we consider putting Hydro underground? To date, Hydro is a 'no' on going underground because of the three phase power here;
- Are we looking at changing the interchange at Belaire and Dogwood? Our response was no;
- The sewer right of way and how we would preserve it;
- Rain gardens and their impact on storm water management;
- Green roofs and what their purpose is: they are not for residents to access;
- Some HVAC equipment on the roof for the condo units as well;
- Underground parking and its impact do we meet the parking bylaws with the underground and on site parking – yes we do;
- The impact of the parking across the street at the park: no we are not taking away from the park, we will building parking on the road allowance. No parking on the project side to allow for safe access to those spaces;
- Stepping back the condo levels of the building this is the case with the decks;
- Is there a plan for the commercial level, do we know what the businesses will be?
 Yes the first level will continue to be commercial, but we do not know what or who the tenant will be;
- Is the commercial space multiple spaces: yes 3 spaces or 4 smaller units;
- Addition of green roof system as an element of sustainability;
- Project timelines: rezoning application in now, DP drawings ready to submit, BP drawings ready to submit, we would like to begin construction as soon as possible, construction time is approximately 10 12 months.
- Could the project be built in phases? That would be incredibly difficult with the current design – major infrastructure connections such as water and power would need to be installed for the entire project at one time;

- Some review of general design: where is the residential entrance, where is the
 commercial entrance, where are there decks, etc. Could we add electrical outlets to
 the trees? Yes this is our intent, along with power for electric cars in the
 underground parking;
- Are we designing in an energy efficient way? Yes we have done energy modelling for the project and are discussing options on the heating sources for the project and what the GHG impact will be;
- Will the condos all have windows coverings? Yes.

On January 13, 2021, Vince Hertel and his wife Henny asked me to meet with them on site so they could review the project with me directly. We walked both the site and the park area. Areas of concern that were reviewed in that meeting included:

- The importance of maintaining the sewer right of way;
- Changing the fencing between the properties to a 6' high wood fence, with the proposed hedge;
- Preserving the pampus grass at the park and dealing with the drainage issue along Rigby at the park;
- They were very happy about the revisions made to address their concerns regarding parking and cars turning around on Rigby. They supported the underground parking and they supported the 90 degree parking at the park;
- They asked about window coverings to provide a level of privacy between them and the condo occupants – I explained that condo windows would all have window coverings;
- They said they had no real concerns regarding the addition of a fourth storey to the building;
- They are concerned about the proposed location of the garbage enclosure and have requested that we consider moving it to the back corner of the property rather than right at the road, next to their driveway;
- They were concerned about the possibility of cell towers being on the building, but I
 do not believe that is an issue as our systems will all be hard wired.

We have had three requests via email for packages and we have sent those out to those who have asked.

The Project Owner, Fred Green, has also done a news article piece with the Bulletin in an attempt to get more information out regarding the project. As I understand it, there is also a lot of 'social chatter' regarding the project, for the most part, those comments have been positive.

Overall Feedback: we received very little opposition to the project specifically; however there was a minor amount of opposition to development as whole, no matter the size of the building. There was overwhelming positive feedback about the parking being located under the building and the proposed 90 degree parking at the park. The neighbours directly affected by the parking at the park felt that what is now proposed would be less of an infringement on their properties than the original proposed parallel parking. Lots of great comments on the form and character of the building, which seemed to generally be liked by those we spoke to. There were very few comments about adding another floor to the project, but the reason for this was discussed openly with everyone we met with.

Respectfully Submitted,

Donna Hais

General Manager

R.W. (Bob) Wall Ltd.



A Rezoning to increase height from three to four storeys

01 -

BACKGROUND

Height Consideration given to the immediate neighbours

Ladysmith's Visioning Public Preference Handbook recommends four storey commercial-residential buildings as the preferred model for mixed-use projects.

A four storey (12.7m) commercial and residentail building type forming part of a street wall is the preferred model when integrating mix use

~ Visioning Public Preference Handbook

In 2018, the Jailhouse project was presented to the Town of Ladysmith for re-zoning the Ol' RCMP Building Site from a three storey commercial to a four storey mixed-use building.

At that time, feedback from the community at two Neighbourhood Information meeting favored the mixed-use model with over 75 attendees expressing general acceptance for four storeys.

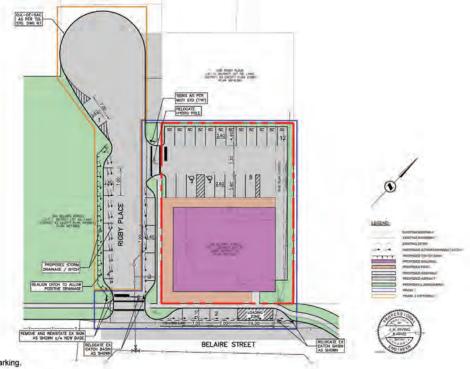
There were some concerns remaining from immediate neighbours, With much consideration, the Owner then met separately with selected neighbours in person.

Two main concerns were expressed and discussed,

- · adequate parking along Rigby Place;
- · building height and overlook.

At the time, the project did not include underground parking and the Owner felt that it was economically possible to forgo the fourth floor. Hence, the resulting approved CD-6 zone limited the Project to three storeys.

Civil engineering design was submitted to confirm Rigby Place stormwater design and on-site parking. Underground parking not included



AYPQ ARCHITECTURE

www.aypqarchitecture.com

77 .

RZ PROPOSAL 2020

Increase height from three to four storeys

As the design progressed, it became clear that underground parking would be an important element in freeing up surface parking for the community.

A sizable investment was made to develop underground parking.

Residential parking would be provided underground with on-site visitor and commercial surface parking. Street parking would be provided on Belaire as well as along the park-side of Rigby Place. In addition, there would be a stormwater system installed along Rigby Place.

Economic evaluation of the additional underground parking, the impact of COVID on commercial activities as well as the street upgrades, it became clear that a fourth floor was needed for overall project viability.

Hence, this rezoning proposes to increase the overall building height from three to four storeys with the understanding that

- A four-storey building was presented to the community in 2018 and favorably accepted, and
- 2. Four storeys is the "preferred model when integrating mix use."



Town Vision Value & Themes

People

Public Spaces – Creating great spaces to be. Sidewalks into places of animation, conservation and colour, Parks for all ages. Great Streets that offer pedestrian experiences; Housing diversity that support residents at all stages of their lives to preserve friendships and relationships over the years.

"Love the idea of bringing life back into the neighborhood" ~ PIM01-Survey comment

Would love a community area near my house (Bayview Ave) to socialize and enjoy.
~ PIM01 Survey comment

"Developing an area for people to enjoy, accessible, and affordable."

— Ladysmith's Visioning Public Preference Handbook



"Roads form part of the transportation network. As part of a walkable community, vehicles share the road with other pedestrian activities, and form part of a vibrant community. Street calming techniques should be explored through the use of traffic islands, landscaped medians, curb extensions, raised street sections and textured pavement visual signals and messages."

- Ladysmith's Vision Public Preference Handbook

AYPQ ARCHITECTURE

www.aypqarchitecture.com

03

SITE LAYOUT

Public Street & On-site Parking

RZ.2018: Rigby Place Parking

In 2018, the community was presented with a parking layout with only seven (7) parallel parking spaces along Rigby Place.

They were asked if the public parking was enough for Wickham Park. Their response was mixed with a significant level of concern that public parking may not be adequate.



Town Vision
Value & Themes
Environment, Parks and trails
Preserving and extending
the parks and trail systems in the
community so everyone lives within a
short distance of a park or greenway;

"Cluster parking encouraged: 6-8 spaces with landscape buffering. If more than 10, provide landscape buffering. If more than 10, provide landscape buffer division. Auto to pedestrian paths should include transitional elements, such as plantings, land forms, screens, and structures." — Ladysmith's Visioning Public Preference

RZ.2021: Rigby Place Parking

In recent discussions regarding underground and street parking, the Town of Ladysmith felt that 90d parking on the Wickham Park-side only would be a safe configuration that would provide community parking for park visitors as well reduce traffic using the cul-de-sac as a turnaround.

Eleven (11) 90d parking spaces and a stormwater management system will now service both park and commercial visitors.

Residential parking will be accommodated underground, leaving on-site parking for the commercial activities.

AYPQ ARCHITECTURE



www.aypgarchilecture.com

Page 103 of 348

ZONING

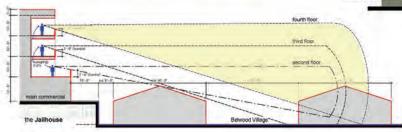
CD-6 Zoning remains the same with the exception of:

- Principal Building Height shall be four storeys
 Maximum residential units to be twelve units
 Floor space ratio increased to accommodate the additional storey.

BELAIRE STREET

OVERLOOK

The fourth floor view will be over the roofs of the lower development and out towards the ocean.



UNDERGROUNG PARKING

from Belaire

Two spaces for each residential unit (Surface on-site parking for commercial activities)

AYPQ ARCHITECTURE

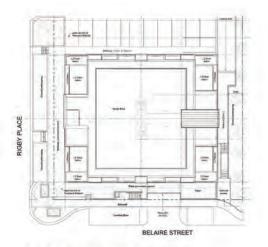
www.aypqarchitecture.com

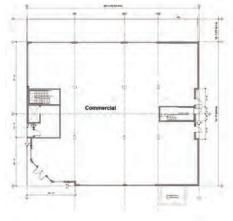
SUSTAINABILITY

Building efficiency & Livability

Permeable walkways, patios and a green roof Building efficiency reducing heating costs and water use Underground parking providing two spaces for each unit Large 200sf patios and balconies extending livability outdoors Independent air circulation maximizes health. Fireplaces in every unit providing alternate heating Indoor bike storage to support altermate travel options









AYPQ ARCHITECTURE

www.aypqarchitecture.com

06



the Jailhouse

www.aypqarchitecture.com

0/



the Jailhouse

www.aypqarchitecture.com

07

STAFF REPORT TO COUNCIL

Report Prepared By: Jake Belobaba, Dir. Of Development Services

Meeting Date: March 16, 2021 File No: 3360-21-01

Official Community Plan Amendment - Development Permit Re:

Exemption for Single Family Development in the Multi-family

Development Permit Area

RECOMMENDATION:

That Council:

- 1. Give first and second reading of "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 66) 2021, No. 2070";
- 2. Consider "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 66) 2021, No. 2070" in conjunction with the Town's Financial Plan, the Town's Liquid Waste Management Plan, and the Cowichan Valley Regional District Solid Waste Management Plan, pursuant to section 477(3) of the Local Government Act;
- 3. Direct staff to refer Bylaw No. 2070 to:
 - a. the Stz'uminus First Nation pursuant to the Naut'sa mawt Community Accord and Memorandum of Understanding; and
 - b. School District 68 pursuant to section 476 of the Local Government Act; and,
- 4. Pursuant to section 475 of the Local Government Act:
 - a. consider whether opportunities for consultation with one or more persons, organizations and authorities should be early and ongoing;
 - b. specifically consider whether consultation is required with:
 - i. the board of the Cowichan Valley Regional District and board of the Regional District of Nanaimo;
 - ii. the Council of the District of North Cowichan;
 - iii. the Stz'uminus First Nation;
 - iv. the Board of Education for School District 68; and
 - v. the Provincial and Federal Governments and their agencies; and
 - c. determine that further consultation is not required under section 475(a) or 475(b) of the Local Government Act; and
- 5. Direct staff to proceed with scheduling and notification of a Public Hearing for "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 66) 2021, No. 2070".



EXECUTIVE SUMMARY:

This report recommends adopting a minor amendment to the Development Permit Guidelines in the OCP to exempt single family and duplex developments in the Multi-family Development Permit Area from the requirement to obtain a development permit.

PREVIOUS COUNCIL DIRECTION:

N/A

INTRODUCTION/BACKGROUND:

The OCP contains eleven Development Permit Areas (DPAs) for various purposes under the *Local Government Act* (e.g. protection of the environment and riparian areas, form and character, protection from natural hazards, etc.). The DPA-4 Multi-Unit Residential, was enacted pursuant to sections 488(1)(f),(h),(i) and(j) of the *Local Government Act*, to regulate the form and character of multi-family residential development, promote energy and water conservation and reduce greenhouse gas emissions.

DPA 4 covers a small number of lots where the zoning permits single-family and duplex dwellings, many of which have already been built on. The development permit guidelines in DPA 4, have virtually no applicability to single family dwellings or duplexes, but because section 489 of the *Local Government Act* prohibits an owner from developing without a development permit, a development permit is still required. The Town is required to issue "empty" development permits for single family homes and duplexes in DPA 4—i.e., the development permit essentially authorizes the home to be built, but contains no conditions related to form and character, since the guidelines don't apply. The property owner must submit an application, pay the application fee (\$1,000) and wait while the permit application is processed and approved by Town Council.

The Town has received two building permits for single family dwellings in the DPA-4, requiring the owners to obtain empty development permits as noted above. However, a "housekeeping" amendment to the OCP is more practical in this case and will prevent similar situations in the future. Unlike most other types of housekeeping amendments, a development permit exemption added to the OCP for single family and duplex developments in DPA 4 can be added without risk of affecting other regulations throughout the bylaw, meaning the amount of analysis and review is relatively minor.

ANALYSIS/DISCUSSION:

The proposed amendment will remove an unnecessary permitting requirement for two proposed developments. Staff recommend approval of Bylaw No. 2070 as proposed.

ALTERNATIVES:

Council can choose to:

1. Not give readings to Bylaw No. 2070 and continue to require development permits for single family and duplex developments in DPA-4.

- 2. Defer consideration of proposed Bylaw No. 2070 to a future meeting of Council.
- 3. Refer Bylaw No. 2070 back to staff for further review as specified by Council.

FINANCIAL IMPLICATIONS:

N/A

LEGAL IMPLICATIONS:

Section 475 of the *Local Government Act* requires the Town, when amending its OCP, to consider whether opportunities for consultation with one or more persons, organizations and authorities should be early and ongoing. Council must also specifically consider whether or not to consult with the Cowichan Valley Regional District, Regional District of Nanaimo, District of North Cowichan, First Nations, School District 68 and the Provincial and Federal Governments and their agencies. Given the amendment is minor in nature, staff are only recommending referral to School Board 68, as described below, and referral to the Stz'uminus First Nation, as required under the Naut'sa mawt Community Accord and Memorandum of Understanding.

Section 476 of the *Local Government Act* requires local governments to consult with the board of the local school district when adopting or amending an OCP. A referral will be sent to the school board after first and second reading.

Section 477(3)(a) of the *Local Government Act* requires that Council consider OCP amendments in conjunction with the Town's Liquid Waste Management Plan following first and second reading of the amending bylaws. It is doubtful this housekeeping change will affect liquid waste management.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

A public hearing will be required pursuant to section 477(3)(c) of the *Local Government Act*. Further consultation is not recommended due to the minor nature of the amendment.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

Planning staff will work with the Building Inspector to allow the building permits noted above to be issued as soon as possible if Bylaw No. 2070 is approved.

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

☐Complete Community Land Use	☐ Low Impact Transportation
□Green Buildings	☐ Multi-Use Landscapes
□Innovative Infrastructure	☐ Local Food Systems
☐Healthy Community	☐ Local, Diverse Economy

ALIGNMENT WITH STRATEGIC PRIORITIES:	
□Infrastructure	⊠ Economy
□Community	☐ Not Applicable
□Waterfront	
I approve the report and recommendation(s)	
Alliana BACCamiala Chiaf Advantaina Office	
Allison McCarrick, Chief Administrative Office	er
ATTACHMENT:	

• Attachment A – Bylaw No. 2070

TOWN OF LADYSMITH

BYLAW NO. 2070

A Bylaw to amend "Official Community Plan Bylaw 2003, No. 1488"

WHEREAS pursuant to the *Local Government Act,* the Municipal Council is empowered to amend the Official Community Plan;

AND WHEREAS pursuant to section 488(1) of the *Local Government Act*, an official community plan may designate development permit areas;

AND WHEREAS pursuant to section 488(4) of the *Local Government Act*, an official community plan may, with respect to development permit areas, specify conditions under which a development permit would not be required;

AND WHEREAS the Municipal Council considers it advisable to amend "Official Community Plan Bylaw 2003, No. 1488";

NOW THEREFORE the Council of the Town of Ladysmith in open meeting assembled enacts as follows:

- 1. Schedule A.1 Official Community Plan Development Permit Area Guidelines of "Official Community Plan Bylaw 2003, No. 1488" is hereby amended by adding to section 4 'Exemptions', as subsection (m) the following text:
 - "(m) single family or two family dwelling development in the Multi-Unit Residential (DPA 4) Development Permit Area".

Citation

READ A FIRST TIME on the

This Bylaw may be cited for all purposes as "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 66) 2021, No. 2070".

dav of

READ A SECOND TIME on the	day of	,
PUBLIC HEARING held pursuant	to the provisions of the Local Govern	nment Act
on the	day of	,
READ A THIRD TIME on the	day of	,
ADOPTED on the	day of	,
		Mayor (A. Stone)
		Corporate Officer (D. Smith)

STAFF REPORT TO COUNCIL

Report Prepared By: Julie Thompson, Planner

Meeting Date: March 16, 2021 File No: ZBL 3360-19-02

Re: OCP & Zoning Bylaw Amendment - Lot 20 Trans-Canada

Highway, 674 & 670 Farrell Road

RECOMMENDATION:

That Council:

- 1. Having considered section 475 (consultation during development of an official community plan) of the Local Government Act, direct that no additional consultation is required pursuant to section 475, as the application has been referred to the Community Planning Advisory Committee, the Stz'uminus First Nation, School District 68 (Nanaimo-Ladysmith), the Ministry of Transportation and Infrastructure, the Ministry of Forests, Lands, Natural Resource Operations and Rural Development, BC Transit, and the Cowichan Valley Regional District;
- 2. Consider first and second reading of "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 63) 2021, No. 2060";
- 3. Consider "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 63) 2021, No. 2060" in conjunction with the Town's Financial Plan and the Town's Liquid Waste Management Plan, pursuant to section 477(3) of the Local Government Act;
- 4. Consider first and second reading of "Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 33) 2021, No. 2061";
- 5. Direct staff to proceed with scheduling and notification of a public hearing for "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 63) 2021, No. 2060" and "Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 33) 2021, No. 2061"; and
- 6. Require, prior to adoption of "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 63) 2021, No. 2060" and "Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 33) 2021, No. 2061", that the developer:
 - a. be required to consolidate Lot 20, District Lot 41, Oyster District, Plan 2519, Except Parts in Plans 8993, 43985 and EPP28332, Lot 2 District Lot 41 Oyster District, Plan VIP65993 and Lot 1, District Lot 41, Oyster District, Plan 20461;
 - b. On the title of the consolidated parcel, register in favour of the Town and at the cost of the developer, the following:
 - i. A covenant pursuant to section 219 of the Land Title Act, requiring a deciduous planting and protection area, shown as 'Tree Buffer Area' in Attachment C, of



- the report to Council dated March 16, 2021, at time of subdivision;
- ii. A covenant pursuant to section 219 of the *Land Title Act* requiring all development on site to be consistent with the recommendations of Wildfire Assessment Management Plan attached as Attachment I to the report to Council dated March 16, 2021.
- iii. A covenant pursuant to section 219 of the *Land Title Act* requiring the dedication of parkland, shown as 'Park' in Attachment C to the report to Council dated March 16, 2021, at time of subdivision approval;
- iv. A covenant pursuant to section 44 of the *Community Charter* and 219 of the *Land Title Act* requiring road dedication generally in accordance with the road layout shown in Attachment C to the report to Council dated March 16, 2021 at time of subdivision approval;
- v. A covenant pursuant to section 44 of the *Community Charter* and 219 of the *Land Title* Act requiring road dedication, without compensation to the property owner, for the extension of Farrell Road fronting the site generally in accordance with the road layout shown in Attachment E, to be taken at time of subdivision or when the Town elects to extend Farrell Road past the site, whichever occurs first; and
- vi. A covenant pursuant to section 219 of the *Land Title Act* requiring a community amenity contribution of \$1,000 per multi-family residential unit, payable at time of building permit, and \$1,000 per single-family or duplex residential parcel, payable at time of subdivision, to the Town's Amenity Fund.

EXECUTIVE SUMMARY:

The proposed development located at Lot 20, Trans-Canada Highway (TCH), 674 and 670 Farrell Road would allow a 60-unit multi-family residential development and a 24-parcel single-family/duplex residential subdivision. Council considered the application on December 1, 2020 and required a road connection through the site from Sanderson Road to Farrell Road, which has proven to be unfeasible. Subsequently, Council is being asked to consider first and second readings of the proposed bylaws with a different road layout.

PREVIOUS COUNCIL DIRECTION

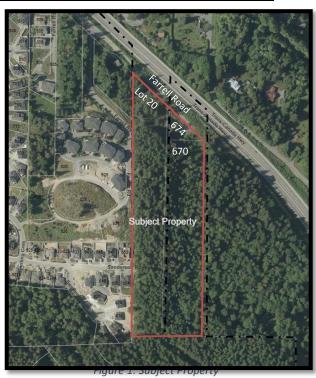
TREVIOUS COUNCIL DIRECTION		
Resolution #/Date	Resolution	
CS 2020-071	That Council:	
February 18, 2020	 Consider the application (3360-19-02) to amend the Official Community Plan (OCP) and Zoning Bylaw to allow for a mix of single-family and multi-family residential at Lot 20 Trans-Canada Highway and 670 Farrell Road. Direct staff to: 	
	 a. Refer application 3360-19-02 to the Community Planning Advisory Committee. b. Refer application 3360-19-02 to the Stz'uminus First Nation, pursuant to the Memorandum of Understanding between the Stz'uminus First Nation and the Town of Ladysmith. c. Work with the applicant regarding the proposed community amenity 	
	contribution and report back to Council. 3. Direct the applicant to: a. Provide a report from a geotechnical engineer assessing application 3360-19-02 in accordance with the Guidelines for Legislated Landslide	

Resolution #/Date	Resolution	
	Assessments for Proposed Residential Developments in BC.	
	b. Provide a transportation impact study, prepared by a professional	
	engineer, assessing anticipated traffic patterns, traffic volumes and	
	impacts of application 3360-19-02.	
	c. Provide a road layout and feasibility plan for the extension of Farrell	
	Road through the subject property.	
CS 2020-072	That resolution CS 2020-071 be amended and renumbered to include the following:	
February 18, 2020	That Council direct staff to:	
	2. a) Require that the applicant hold a second neighbourhood information meeting	
	prior to referring application 3360-19-02 to the Community Planning Advisory	
	Committee.	
	Main Motion, as Amended, Carried	
CA 2020-073	That Council direct staff to work with the applicant regarding neighbourhood layouts	
February 18, 2020	and park considerations that are more reflective of neighbouring residential areas.	
	Motion Carried	
CS 2020-351	That Council direct the applicant to continue working with staff on Zoning Bylaw and	
December 1, 2020	Official Community Plan Amendment Application No. 3360-19-02.	
	Motion Carried	
CS 2020-352	That Council impose the following conditions on Zoning Bylaw and Official	
December 1, 2020	Community Plan Amendment Application No. 3360-19-02 prior to further	
	consideration by Council:	
	Provide a tree protection plan, including a covenant versus park dedication	
	analysis; and	
	Provide a plan for a road connection between Farrell Road and Sanderson	
	Road.	
	Motion Carried	

INTRODUCTION/BACKGROUND:

The subject property consists of three separate parcels as shown in Figure 1. The subject property is located off Farrell Road on the west side of the TCH, approximately 1.75km south of the Coronation Mall. The subject property is approximately 4.8ha in size, 390m long and 120m wide. It has approximately 165m of road frontage along Farrell Road and slopes from an elevation of 67m at Farrell Road to the highest point at 103m where the northern property boundary meets Sanderson Road. The property is currently forested with mature trees.

The smallest parcel, 674 Farrell Road, is owned by the Town of Ladysmith. The Town has agreed to sell the property to the applicant. The sale of the Town's property must have no bearing on Council's decision to amend the OCP and zoning on the property (i.e Council's decision must not be influenced by the potential sale).



One of the parcels (Lot 20, Trans-Canada Highway) was added to the Town of Ladysmith boundaries in late 2018. This parcel still holds policies and regulations from the OCP and Zoning Bylaw applicable to Electoral Area G of the Cowichan Valley Regional District (CVRD). There is a covenant on Lot 20, TCH that was registered at the time of subdivision in 1997. The covenant identifies an area of the parcel to be used for a septic field. The applicant will need to seek to have this covenant removed prior to subdivision.

The proposal has been revised since it appeared at the February 18, 2020 and December 1, 2020 Council meetings. The revisions are shown in the lot layout plans attached to this report (see list of attachments below).

In response to Council resolutions and communication with staff, the applicant has provided the following information:

- a lot layout and engineering plan for a temporary emergency access connection between Sanderson Road and Farrell Road (Attachment C)
- a lot layout and engineering plan for a permanent road connection between Sanderson Road and Farrell Road (Attachment D)
- a feasibility plan for the extension of Farrell Road past the property (Attachment E)
- a geotechnical assessment (Attachment F)
- a traffic impact assessment and traffic memo (Attachment G)
- an arborist report for the proposed tree planting areas and park (Attachment H)
- a wildfire assessment and management plan (Attachment I)
- a Neighbourhood Information Meeting (NIM) summary and submissions for the July 15, 2020 NIM (Attachment J)
- A slope drawing showing slopes 30% or greater (Attachment K)

Council reviewed this application on February 18, 2020 and December 1, 2020. Table 1 summarizes Council's previous direction and how the revised proposal responds to Council's direction.

Table 1: Previous Council Direction Update

Council Direction	Staff Comments		
Work with the applicant regarding the community	The applicant has offered cash-in-lieu as a CAC of		
amenity contribution (CAC).	\$1,000 for each multi-family unit and single-		
	family/duplex parcel. See 'Community Amenity		
	Contribution Policy' for details.		
Provide a report from a geotechnical engineer in	The applicant has provided a geotechnical assessment		
accordance with the Guidelines for Legislated Landslide	de by a registered geotechnical engineer, with		
Assessments for Proposed Residential Development in	in consideration to the Guidelines for Legislated Landslide		
BC.	Assessments for Proposed Residential Development in		
	BC. The report identifies that the land is considered safe		
	for the use intended provided that the		
	recommendations in the report are followed (see		

Council Direction	Staff Comments
	Attachment F).
Provide a road layout and feasibility plan for the extension of Farrell Road through the subject property, have staff work with the applicant regarding neighbourhood layouts and park considerations, and provide a plan for the road connection between Farrell Road and Sanderson Road.	The applicant has provided a road feasibility plan for the extension of Farrell Road past the property. The Town's Engineering Department is satisfied that Farrell Road can be extended with some road dedication being required (see Attachment E). The applicant has proposed two lot layout and engineering plans showing two options: 1. an emergency access connection between Farrell and Sanderson Roads (Attachment C). 2. a permanent connection between Farrell and Sanderson Roads (Attachment D).
	The Town's Engineering Department and Approving Officer are not satisfied that the permanent Sanderson-Farrell connection would be safe or practical. Therefore, Council is being asked to consider waiving this requirement.
Hold a second Neighbourhood Information Meeting (NIM).	See 'Road and Lot Layout' for more detail. The applicant held a second NIM on July 15, 2020. The NIM summary report and submissions were received on July 23, 2020 and are attached as Attachment J. The site plan has been revised since the second NIM was held.
Provide a tree protection plan including covenant vs. park dedication analysis.	The applicant has provided a report from an arborist (Attachment H) with recommendations for removal and replanting of trees in select areas. The applicant has also provided a wildfire assessment (Attachment I) which also discusses the proposed treed areas. See 'Parks and Tree Retention' for more detail.

DISCUSSION:

Official Community Plan (OCP) & Development Permit Area:

Lot 20, TCH is designated Suburban Residential under the CVRD's Electoral Area G – Saltair Official Community Plan Bylaw No. 2500. Both 674 and 670 Farrell Road are designated Single Family Residential in the Town's Official Community Plan 2003, Bylaw No. 1488. The proposed OCP designations to accommodate the proposal are shown in Figure 2.

The subject property is not currently within a Development Permit Area (DPA). DPA 4 – Multi-Unit Residential and DPA 7 – Hazard Lands are proposed for the multi-family area shown on figure 2. DPA 4 is applied to areas intended for multi-family residential development. DPA 7 may be applied to areas subject to steep slope conditions, and is proposed since much of the multi-family area contains slopes 30% or greater. The OCP defines a "steep slope" as land in its natural state having a slope angle of 30% or greater for a minimum horizontal distance of 10m. The applicant has provided a plan (Figure 3, and Attachment K) showing steep slopes.

A Hazard Lands Development Permit (DP) would be required for the purpose of subdivision for the

Multi-family Residential Designation

Single Family Residential Designation

Parks and Open Spaces Designation

Figure 2: Proposed OCP Designations

multi-family area. A subsequent Hazard Lands and Multi-Unit Residential DP would also be required for the multi-family area for the purpose of construction. A DP would not be required



Figure 3: 30% slopes shown in red. Note: contour lines are at 1m intervals. Site plan has been revised since submission of this plan.

for the single-family/duplex area.

Zoning:

Lot 20, TCH highway is zoned Suburban Residential 2 under the CVRD's Electoral Area G – Saltair Zoning Bylaw No. 2524, while 674 and 670 Farrell Road are zoned Rural Residential (RU-1) under the Town's Zoning Bylaw 2014, No. 1860. Density regulations in the existing zones could yield, at most, approximately 10 parcels from the subject property. The applicant is proposing to amend the Zoning Bylaw to allow for a multi-family and single-family residential development with a park. The single-family area is proposed to be zoned Single Dwelling Residential (R-1), the multi-family area is proposed to be zoned Low Density Residential (R-3-A) and the park is proposed to be zoned Park and Recreation (P-2).

The R-1 zone has a minimum parcel size of 668m², meaning the proposed 2.36 ha single-family area could be subdivided into a maximum of 35 parcels. The applicant is proposing 24 parcels as the shape and topography of the subject property limits the lot layout options and the resultant number of lots. However, the R-1 zone is considered suitable for the site as it is consistent with the surrounding neighbourhood. The R-1 zone would allow single-unit dwellings with secondary suites.

The proposed multi-family area is approximately 1.64ha in size. The R-3-A zone has maximum density of 37 units per hectare, which would allow a maximum of 60 units on the multi-family area, either in the form of apartments, townhouses, or duplexes, which are permitted as principal uses in the R-3-A zone.

The applicant is also proposing duplexes in the proposed single-family area. Duplexes are not permitted in the R-1 zone, therefore a site specific amendment to the R-1 zone is also proposed to allow duplexes on parcels that are 780m² or larger within the single-family area. The proposed minimum parcel size for duplexes is consistent with that in the Old Town Residential (R-2) zone, where duplexes are currently permitted as a principal use. Duplexes are considered single-family residential development where they are located within a single-family zone, such as R-2 or R-1. Duplexes are supported within the proposed Single Family Residential designation under the OCP on parcels 780m² in size or larger. The proposed site specific amendment would also include finished floor area (FFA) regulations for duplexes, which mirror those provided in the R-2 zone (see 'Summary of Proposed Bylaws' below for detail).

Summary of Proposed Bylaws:

Bylaw No. 2060 amends the OCP by:

- placing the subject property into three land use designations: Parks and Open Spaces, Single Family Residential and Multi-Family Residential.
- placing two DPAs on the proposed multi-family area: DPA 7 Hazard Lands, and DPA 4 Multi-Unit Residential.

Bylaw No. 2061 amends the Zoning Bylaw by:

- placing the subject property into three zones: R-3-A, R-1 and P-2.
- allowing the R-1 zone to be amended on a site specific basis by allowing duplexes in the proposed single-family area with the following additional regulations:

- o minimum parcel area of 780.0m² for a duplex to be permitted.
- o minimum FFA of 137.0m² for duplexes.
- maximum FFA of 390.0m² or 50% of the parcel area, whichever is less, for duplexes.

Road and Lot Layout:

At Council's request, the applicant provided a lot layout and engineering plan for a permanent road connection between Farrell Road and Sanderson Road (see Attachment D). Engineering staff and the Subdivision Approving Officer have advised that the connection would not be safe or practical, and unlikely to be eligible for subdivision approval. Efforts to determine an alternate Sanderson-Farrell connection did not yield a practical or safe alternative. Subsequently, the applicant has also provided a lot layout and engineering plan for a temporary emergency connection (see Attachment C) that is similar to the site plan provided to Council on December 1, 2020. The Town's Engineering Department review and comparison on both plans is provided below:

"The emergency access proposal has much less grading required; approximately 2-3m maximum cuts and fills. The cul-de-sac is near existing grade and sees a maximum grade of 8% leading down the road. This is a much better outcome for traffic safety than the Farrell Connection proposal. The emergency access provides an active transportation access, albeit at a rather steep 20%. The access will be available in the event of an emergency, but will need to be used with care. "Steep Grade" and "Caution" signage may be required for pedestrians and cyclists who wish to use the route. Engineering will work with the developers to reduce the grade, but the proposed 20% grade is akin to Symonds. Cul-de-sacs are not conducive to snow removal; however, the emergency access provides an option for local snow storage.

The Farrell Connection proposal has cuts up to 11m, 12% north facing grades over a distance of about 200m, and a tee intersection with Farrell Road at 4%. The configuration is not suitable for icy conditions. The presence of surficial bedrock on the site indicates that rock blasting is very likely as rock breaking would not be feasible. This option does provide the two commuting options rather than the single Sanderson option for the Emergency Access proposal.

Engineering recommends the Emergency Access proposal for its traffic safety and the reduction in regrading. Engineering would work with the applicant's design team to reduce grades even further where possible. We ask that some flexibility in the lot layout be provided to the Approving Officer once zoning is created, to allow for tweaking of the road alignments, utility corridors, and emergency access routing."

Staff recommend that a covenant be registered to title to secure the road layout provided in the emergency connection plan (Attachment C). To address Engineering's concerns regarding flexibility of the road layout, the covenant will need to contain language to specify that road layout plan is approximate and minor alterations at the subdivision stage will be permitted to the satisfaction of the Approving Officer.

The applicant has submitted a road feasibility plan (Attachment E) which shows that road dedication will be necessary to facilitate the future extension of Farrell Road past the subject property. Road dedication for this purpose could be required at time of subdivision, but staff recommend that a road dedication covenant be registered on the properties as a condition of rezoning to secure this road dedication, without compensation, either at time of subdivision or when the Town elects to extend Farrell Road, whichever occurs first. This will ensure that if the developer does not subdivide right away, the Town can extend Farrell Road prior to subdivision, and avoid the need to expropriate the road dedication.

Parks and Tree Retention:

In accordance with section 510 (Requirement for provision of park land or payment for parks purposes) of the *Local Government Act*, the applicant is proposing to dedicate approximately 5% of the subject property as park land. The area proposed to be dedicated is located in the southwest corner of the subject property. The Parks Department is supportive of this location as it will build connectivity between the proposed development and future expansion of park land to the south and west. A section 219 covenant is recommended to secure the park area, to be dedicated at time of subdivision.

The applicant has proposed a series of treed buffer areas along the west, east and south property boundaries of the subject property (see Attachments C and D). Based on direction from Council and staff, the applicant has submitted an Arborist's Tree Risk Assessment report (Attachment H). The recommendations in the report suggest that the preferred treatment option for the trees in the proposed buffer areas is to remove and replant them due to windthrow concerns. The applicant has also submitted a Wildfire Assessment (Attachment I) which provides wildfire prevention recommendations, including a 10m setback from buildings to any retained conifers.

Based on information and recommendations submitted in the Arborist's report, the Wildfire Assessment, and through discussions with the Town's Parks Department, it is not recommended to retain the tree buffer areas as public park land. The narrow, replanted areas in the steep terrain will have little value for trail connections or other parks uses. As such, staff recommend that a section 219 covenant be registered to title to:

- allow the removal of trees from the subject property.
- require that native, drought-tolerant, deciduous trees be planted in the buffer areas and that a planting plan from a registered Landscape Architect be provided as a condition of subdivision.
- require that the newly planted buffer areas remain free from development in perpetuity.
- require wildfire protection regulations consistent with the recommendations provided in the Wildfire Assessment.

Community Planning Advisory Committee:

The application was considered by the Community Planning Advisory Committee (CPAC) on August 5, 2020. The CPAC did not make a recommendation regarding the application but the following was captured in the minutes:

"CPAC did not provide a recommendation on whether they support the OCP and Zoning Bylaw amendment; however, they identified the following issues that Council should take into consideration:

- Protection of the natural environment and preserving the mature trees that are currently on the property.
- Traffic and especially highway access at Davis Road, this is already an existing issue, but the proposed development will contribute additional traffic to the intersection.
- Parkland dedication/greenspace should be required rather than cash-in-lieu. It is important for the new residents to have access to greenspace.
- Connecting the community to the Town's trail network should be a priority."

The applicant has provided a Traffic Impact Assessment (TIA) and traffic memo (see Attachment G). The TIA and memo are based off a previous proposal for 28 townhomes and 45 single family homes; however, the road layout considered in the TIA is essentially the same as the emergency access road layout that is currently proposed, with only minor changes. The application and TIA were referred to the Ministry of Transportation and Infrastructure with no concerns noted regarding the proposal at this time.

Neighbourhood Information Meetings (NIM):

The applicant held a first NIM on June 26, 2019. After direction from Council at the February 18, 2020 Council meeting, the applicant held a second NIM on July 15, 2020. A summary of the July 15, 2020 NIM and submissions received are attached (Attachment J). The June 26, 2019 NIM summary and submissions were received by Council at the February 18, 2020 Council meeting. It is noted that since the second NIM, the proposal has been modified and no longer includes the previously proposed Single Dwelling Residential – Small Lot B (R-1-B) zone. A summary of public concerns and staff comments are provided in Table 2.

Table 2: Summary of Public and Staff Comments

Public Concern/Comments	Staff Comments	
Tree protection, including a	The applicant has submitted a Tree Hazard Assessment from an Arborist and a	
tree buffer on the south end	Wildfire Assessment from a Registered Professional Forrester. Following	
of the subject property and	recommendations from both reports for the proposed tree buffers on the south,	
between the subject property	east and west property boundaries, staff recommend that the trees in these areas	
and the Gales property.	be cleared and replanted. See 'Parks and Tree Retention' for detail.	
Frontage improvements to	Frontage improvements will be provided in accordance with the Town's	
Farrell Road.	Subdivision and Development Servicing Bylaw No. 1864.	
Too high density – density	The proposed R-3-A and R-1 zones are consistent with the surrounding area. A	
should be consistent with the	previous site plan presented at the NIM contained the R-1-B (small lot) zone,	

Public Concern/Comments	Staff Comments	
area.	which has since been removed from the proposal. However, the proposed R-3-A area is larger than previously proposed.	
Lot sizes too small.	The average parcel size in the proposed R-1 area is 983.8m². The proposed minimum parcel size is 668m², and 780m² for duplexes.	
Impacts to views.	The applicant has not provided a view study. The R-3-A zone allows a maximum building height of 10m and the R-1 zone allows a maximum building height of 9m with a pitched roof.	
Traffic at south Davis Road/Trans-Canada Highway intersection.	The applicant has submitted a traffic memo and a TIA (Bunt & Associates, 2020; see Attachment G). The TIA references an older Traffic Operation Review (Binnie Consulting, 2019) which was conducted for the Ministry of Transportation and Infrastructure (MOTI). The Binnie report reviews the TCH and south Davis intersection and recommends that a traffic signal at the TCH south Davis Road intersection is not warranted but that the intersection be restricted right-in/right-out and left-in movements only. The Bunt report states that the proposed development does not impact or alter the Binnie report recommendations for the s. Davis Road-TCH intersection.	
Noise.	Noise is regulated under the Town's Noise Suppression Bylaw No. 1478.	
Added shopping areas.	Commercial areas are not proposed for the development. The nearest commercial node is the Coronation Mall, approximately 1.75km north of the subject property.	

Community Amenity Contribution Policy:

Through the Town's Community Amenity Contribution (CAC) Policy, Council encourages rezoning applicants to consider proposing CACs towards needed infrastructure and amenities as a way of ensuring that the proposed development makes a positive contribution to the neighbourhood and community at large. Staff initially discussed with the applicant the dedication of additional park land around the periphery of the site, however, this was determined not to be viable as public park land. The applicant has offered to provide \$1,000 per unit for multi-family residential development and \$1,000 per single-family/duplex residential parcel as the CAC, which is consistent with the recommended amount of \$1,000 per residential unit in the CAC Policy. Staff recommend that the cash contribution be secured through a section 219 covenant, to be provided by the developer at time of building permit for multi-family residential development, and to be provided at time of subdivision for single-family/duplex residential development. Cash CACs are deposited into the Town's Amenity Reserve Fund, which can be applied to a variety of community amenity projects; for example, the cash-in-lieu contribution could be used to develop trails to improve connectivity to existing and future trails within the Town.

ALTERNATIVES:

Council can choose to:

- 1. Deny Amendment Bylaw Nos. 2060 and 2061.
- 2. Amend Bylaw Nos. 2060 and 2061 piror to first and second reading.
- 3. Refer the application back to staff or the applicant for further review, as specified by Council.

FINANCIAL IMPLICATIONS:

<u>Section 477(3)(a)</u> of the *Local Government Act* requires that Council consider OCP amendments in conjunction with the Town's Financial Plan following first and second reading of the amending bylaws. As such, the application was referred to the Financial Services Department for comment. Financial Services has no concerns regarding the proposed OCP amendment.

LEGAL IMPLICATIONS:

As the subject property consists of three separate parcels, consolidation is recommended as a condition of rezoning in order to secure the development as proposed, and to secure the proposed parkland, which is 5% of the total area of all three parcels¹. Consolidation would also ease the registration process of the recommended covenants. However, the smallest of the three parcels, 674 Farrell Road, is currently owned by the Town. The applicant intends to purchase the parcel from the Town and the purchase is contingent on the rezoning being approved. Consolidation cannot occur until the parcel is owned by the applicant, therefore the purchase agreement would have to be amended to allow purchase prior to rezoning.

Section 475 of the Local Government Act requires that a local government must consider opportunities for consultation with persons, organizations and authorities it considers will be affected by a proposed OCP amendment, and must consider whether consultation opportunities should be early and ongoing. In accordance with section 475, Council directed at the February 18, 2020 Council meeting that application 3360-19-02 be referred to the CPAC and the Stz'uminus First Nation. Staff also referred the application to MOTI, BC Transit, School District 68, the CVRD, and the Ministry of Forests, Lands, Natural Resource Operations, and Rural Development. No further consultation under section 475 of the Local Government Act is recommended at this time.

<u>Section 476</u> of the *Local Government Act* requires that local governments consult with the local school district board of education regarding OCP amendments. The application was forwarded to School District No. 68 for comment. The School District did not provide comments regarding this application.

<u>Section 477(3)(a)</u> of the *Local Government Act* requires that Council consider OCP amendments in conjunction with the Town's Liquid Waste Management Plan following first and second reading of the amending bylaws. The application was referred to the Infrastructure Services Department for comment and no concerns were noted.

Pursuant to <u>section 52</u> of the *Transportation Act*, the zoning amendment bylaw must be referred to the Ministry of Transportation and Infrastructure following third reading of the zoning amendment bylaw. This referral is required as the subject property is located within 800m of a controlled access highway.

¹ If consolidation were to not occur, 5% of each parcel could be dedicated, creating smaller, fragmented parks.

If the application proceeds, a public hearing will be required in accordance with <u>sections 464-470</u> of the *Local Government Act* and the Town's Development Procedures Bylaw No. 1667.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

The applicant held a NIM on June 26, 2019. After direction from Council at the February 18, 2020 Council meeting, the applicant held a second NIM on July 15, 2020. A summary of the July 15, 2020 NIM and submissions received are attached (Attachment J). The June 26, 2019 NIM summary and submissions were received by Council at the February 18, 2020 Council meeting. See 'Neighbourhood Information Meetings' for detail.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

The application has been forwarded to Engineering, Parks, Building Inspection, Financial Services, Infrastructure Services, for review and comment. Engineering's comments have been incorporated into the design of the proposed development. See 'Road and Lot Layout' for detail.

<u>ALIGNMENT WITH SUSTAINABILITY VISIONIN</u>	<u>IG REPORT:</u>
□Complete Community Land Use	☐ Low Impact Transportation
□Green Buildings	☐ Multi-Use Landscapes
□Innovative Infrastructure	☐ Local Food Systems
☐Healthy Community	☐ Local, Diverse Economy
⊠ Not Applicable	
ALIGNMENT WITH STRATEGIC PRIORITIES:	
□Infrastructure	☐ Economy
□Community	⋈ Not Applicable
□Waterfront	

I approve the report and recommendation(s).

Allison McCarrick, Chief Administrative Officer

ATTACHMENT(S):

- Attachment A Bylaw No. 2060
- Attachment B Bylaw No. 2061
- Attachment C Emergency Access Site Plan & Engineering Plans
- Attachment D Permanent Road Site Plan & Engineering Plans
- Attachment E Extension of Farrell Road Feasibility Plan
- Attachment F Geotechnical Assessment
- Attachment G Traffic Impact Assessment & Memo
- Attachment H Arborist Tree Risk Assessment
- Attachment I Wildfire Assessment

- Attachment J Second Neighbourhood Information Meeting Summary & Submissions
- Attachment K Slope Plan

TOWN OF LADYSMITH

BYLAW NO. 2060

A Bylaw to amend "Official Community Plan Bylaw 2003, No. 1488"

WHEREAS pursuant to the *Local Government Act,* the Municipal Council is empowered to amend the Official Community Plan;

AND WHEREAS pursuant to section 488 (1)(f) of the *Local Government Act*, an official community plan may designate development permit areas for the establishment of objectives for the form and character or commercial, industrial or multi-family residential development;

AND WHEREAS the Municipal Council considers it advisable to amend "Official Community Plan Bylaw 2003, No. 1488";

NOW THEREFORE the Council of the Town of Ladysmith in open meeting assembled enacts as follows:

- 1. Official Community Plan Map 1 Land Use is amended as follows:
 - a. By changing the land use designation for Lot 20, District Lot 41, Oyster District, Plan 2519, Except Parts in Plans 8993, 43985 and EPP28332 from Cowichan Valley Regional District Electoral Area G Saltair Official Community Plan Bylaw No. 2500 'Suburban Residential' to "Town of Ladysmith Official Community Plan Bylaw 2003, No. 1488" 'Single Family Residential', 'Multi-family Residential' and 'Parks and Open Space' as shown on Schedule 1;
 - b. By changing the land use designation for Lot 2 District Lot 41 Oyster District Plan VIP65993 from 'Single Family Residential' to 'Multi-family Residential' as shown on Schedule 1; and
 - c. By changing a portion of the land use designation for Lot 1, District Lot 41, Oyster District, Plan 20461 from 'Single Family Residential' to 'Multi-family Residential' and 'Parks and Open Space' as shown on Schedule 1.
- 2. Official Community Plan Map 2 Development Permit Areas is amended as follows:
 - a. By applying 'Development Permit Area 4 Multi-Unit Residential' and 'Development Permit Area 7 Hazard Lands' to Lot 1, District Lot 41, Oyster District, Plan 20461, a portion of Lot 2 District Lot 41 Oyster District Plan VIP65993 and Lot 20, District Lot 41, Oyster District, Plan 2519, Except Parts in Plans 8993, 43985 and EPP28332 as shown on Schedule 2.

Citation

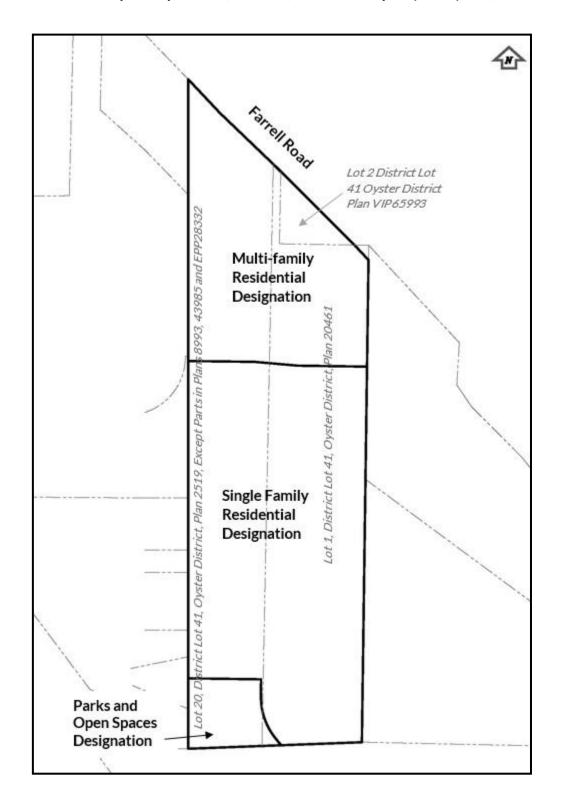
3. This Bylaw may be cited for all purposes as "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 63) 2021, No. 2060".

READ A FIRST TIME on the

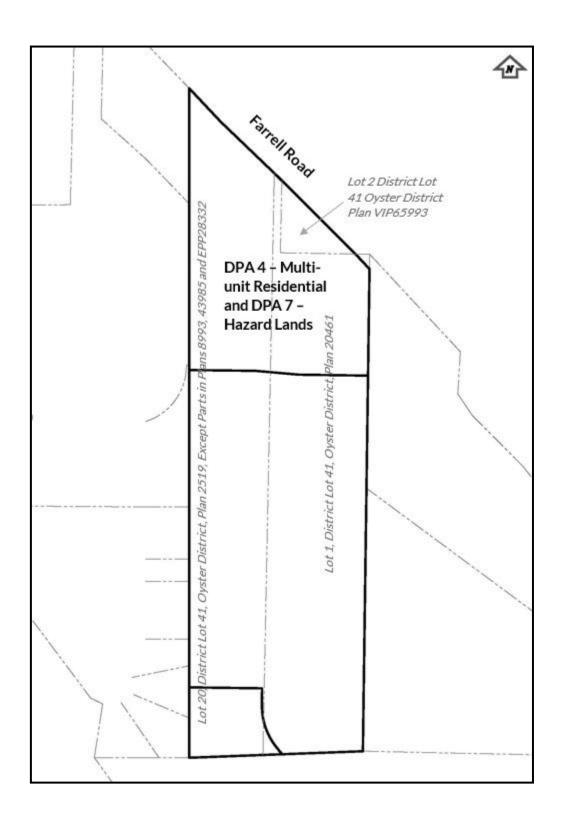
day of

READ A SECOND TIME	E on the	day of		,		
PUBLIC HEARING held	pursuant to the on the	provisions of the <i>Local</i> day of	Government	t Act ,		
READ A THIRD TIME	on the	day of	,			
ADOPTED on the		day of		,		
					Mayor (A. Stor	ne)
					, ,	
				Corporate	e Officer (D. Smit	th)

Schedule 1
"Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 63) 2021, No. 2060"



Schedule 2 "Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 63) 2021, No. 2060"



TOWN OF LADYSMITH

BYLAW NO. 2061

A bylaw to amend "Town of Ladysmith Zoning Bylaw 2014, No. 1860"

WHEREAS pursuant to the *Local Government Act*, the Municipal Council is empowered to amend the Zoning Bylaw;

AND WHEREAS the Municipal Council considers it advisable to amend "Town of Ladysmith Zoning Bylaw 2014, No. 1860";

NOW THEREFORE the Council of the Town of Ladysmith in open meeting assembled enacts as follows:

- 1. Schedule A Zoning Bylaw Text is amended as follows:
 - a. By adding a new subsection b) to Section 7 Site Specific Regulations under Section 10.2 Single Dwelling Residential (R-1) Zone:
 - "b) For the area shown in Figure 10.2.1, Two-Unit Dwelling is permitted as a Principal Use, subject to the following:
 - i) A *Two Unit Dwelling Use* is not permitted on parcels less than 780.0 square metres.
 - ii) No *Two Unit Dwelling* shall have a *Finished Floor Area* that is less than 137.0 square metres.
 - iii) No *Two Unit Dwelling* shall have a *Finished Floor Area* that exceeds 50 percent of the *Parcel Area* or 390.0 square metres, whichever is less."

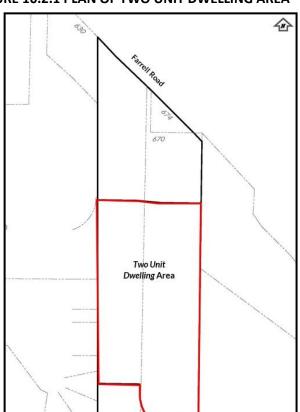


FIGURE 10.2.1 PLAN OF TWO UNIT DWELLING AREA

Page 131 of 348

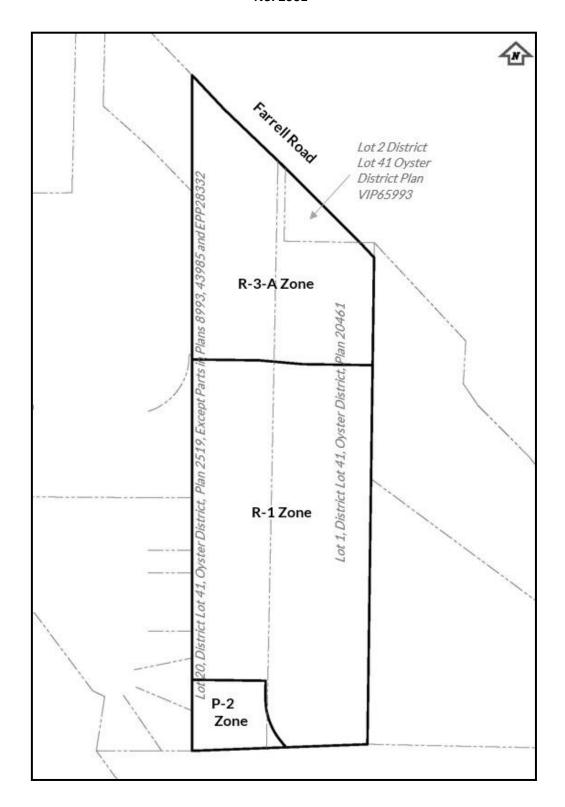
- 2. Schedule B Zoning Bylaw Map is amended as follows:
 - a. by changing the zone for Lot 20, District Lot 41, Oyster District, Plan 2519, Except Parts in Plans 8993, 43985 and EPP28332 from Cowichan Valley Regional District Electoral Area G Saltair Zoning Bylaw No. 2524 'Suburban Residential 2 Zone' to "Town of Ladysmith Zoning Bylaw 2014, No. 1860" 'Low Density Residential (R-3-A)', 'Single Dwelling Residential (R-1)', and 'Park and Recreation (P-2)' as shown on Schedule 1;
 - b. by changing the zone for Lot 2 District Lot 41 Oyster District Plan VIP65993 from 'Rural Residential (RU-1)' to 'Low Density Residential (R-3-A)' as shown on Schedule 1; and
 - c. by changing the zone for Lot 1, District Lot 41, Oyster District, Plan 20461 from 'Rural Residential (RU-1)' to Low Density Residential (R-3-A)', 'Single Dwelling Residential (R-1)' and 'Park and Recreation (P-2)' as shown on Schedule 1.

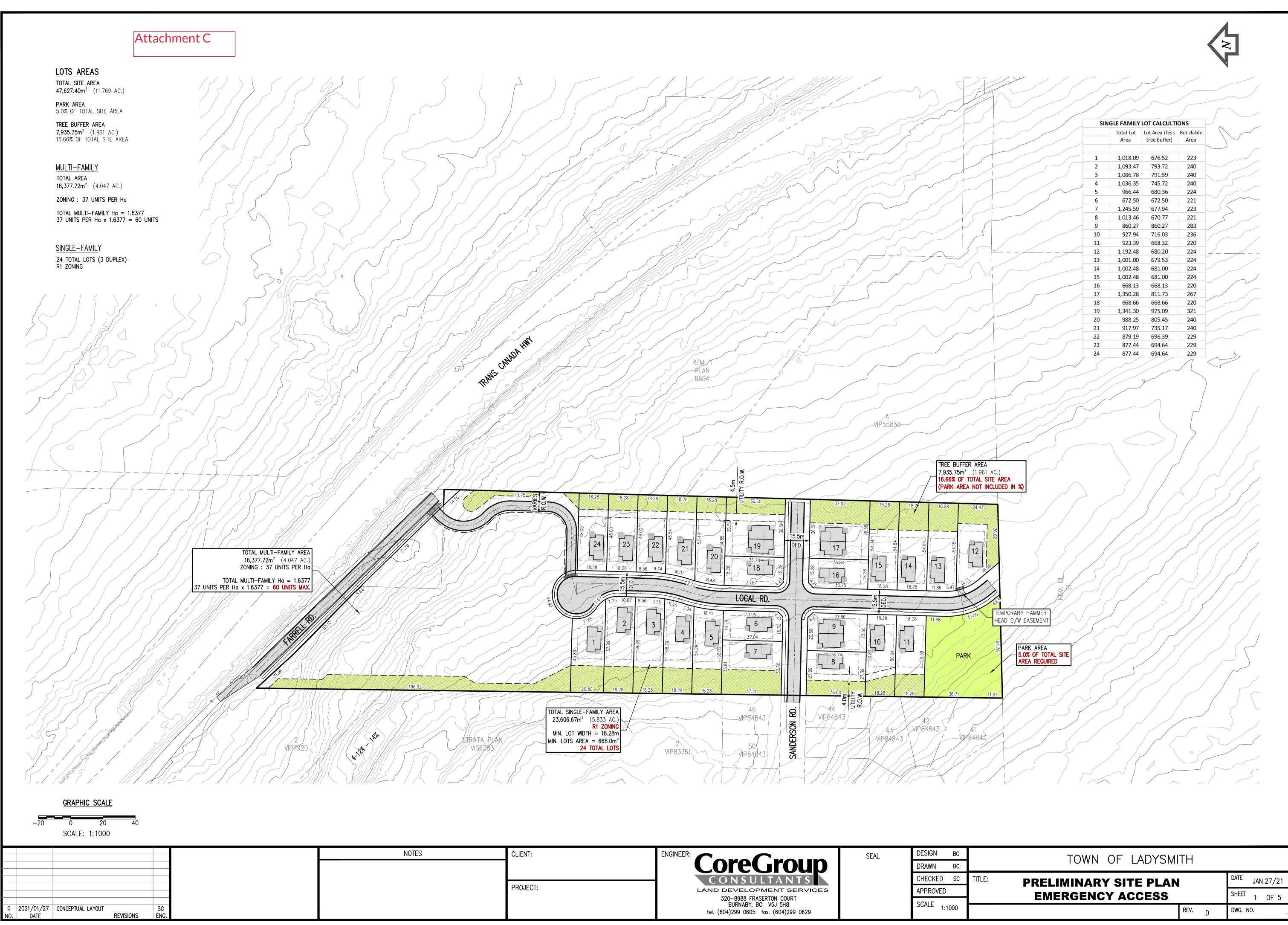
Citation

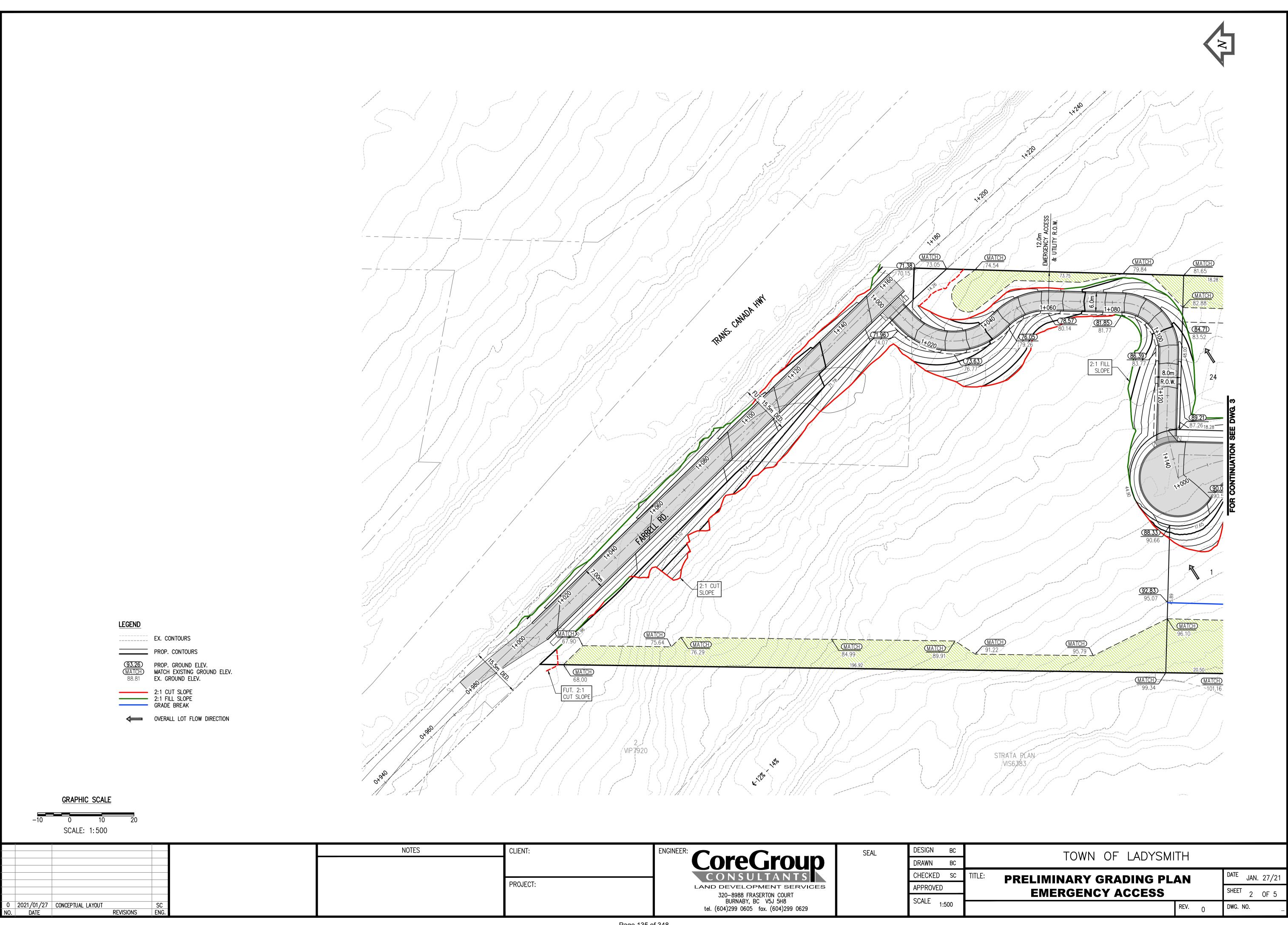
3. This Bylaw may be cited for all purposes as "Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 33) 2021, No. 2061".

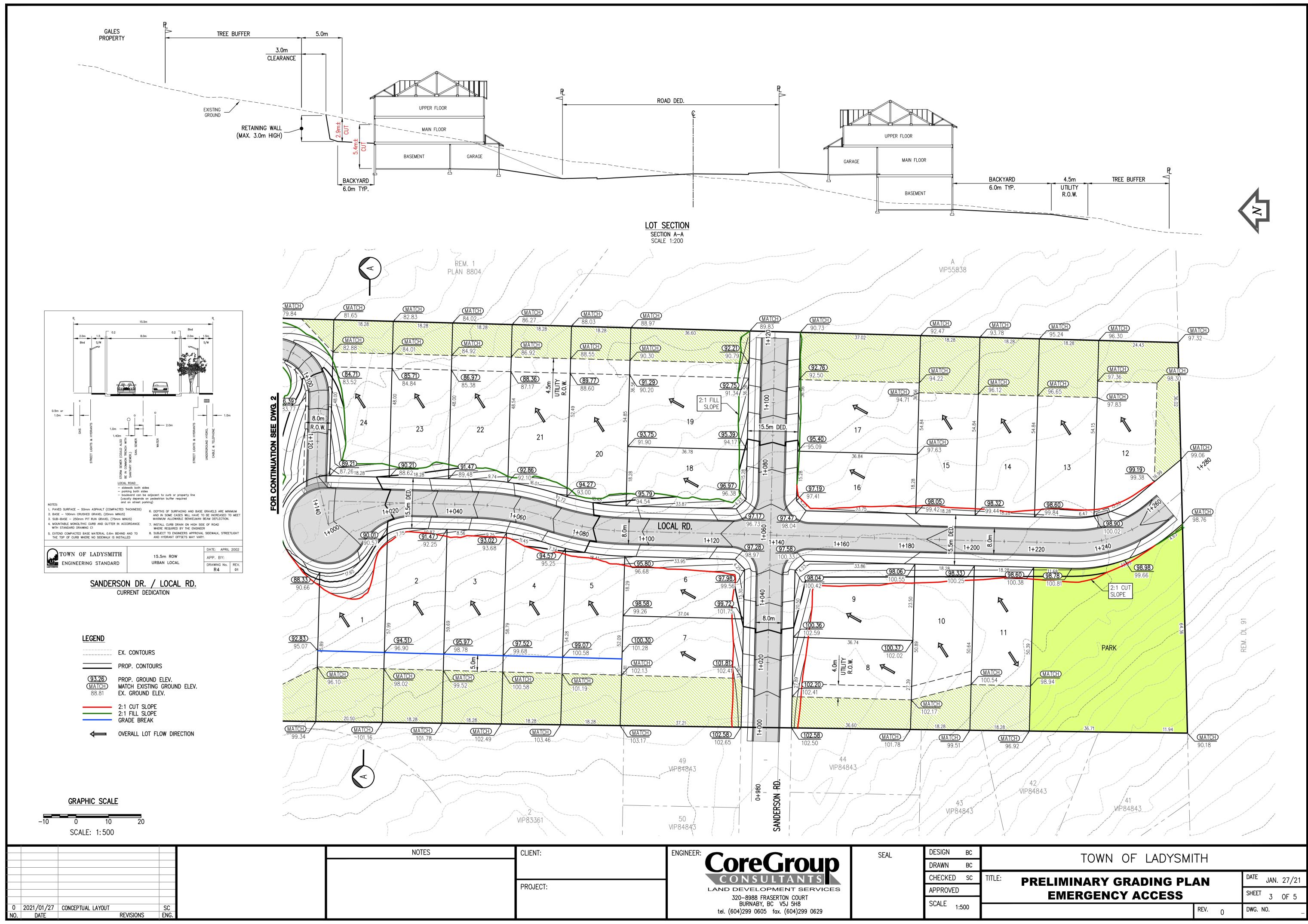
READ A FIRST TIME on the	day of	,
READ A SECOND TIME on the	e day of	,
PUBLIC HEARING held pursua on th	ant to the provisions of the <i>Local Gove</i> ne day of	ernment Act ,
READ A THIRD TIME on th	e day of ,	
APPROVED by the Ministry o	of Transportation & Infrastructure e day of	,
ADOPTED on the	day of	,
		Mayor (A. Stone)
		Corporate Officer (D. Smith)
		Corporate Unicer (D. Smith)

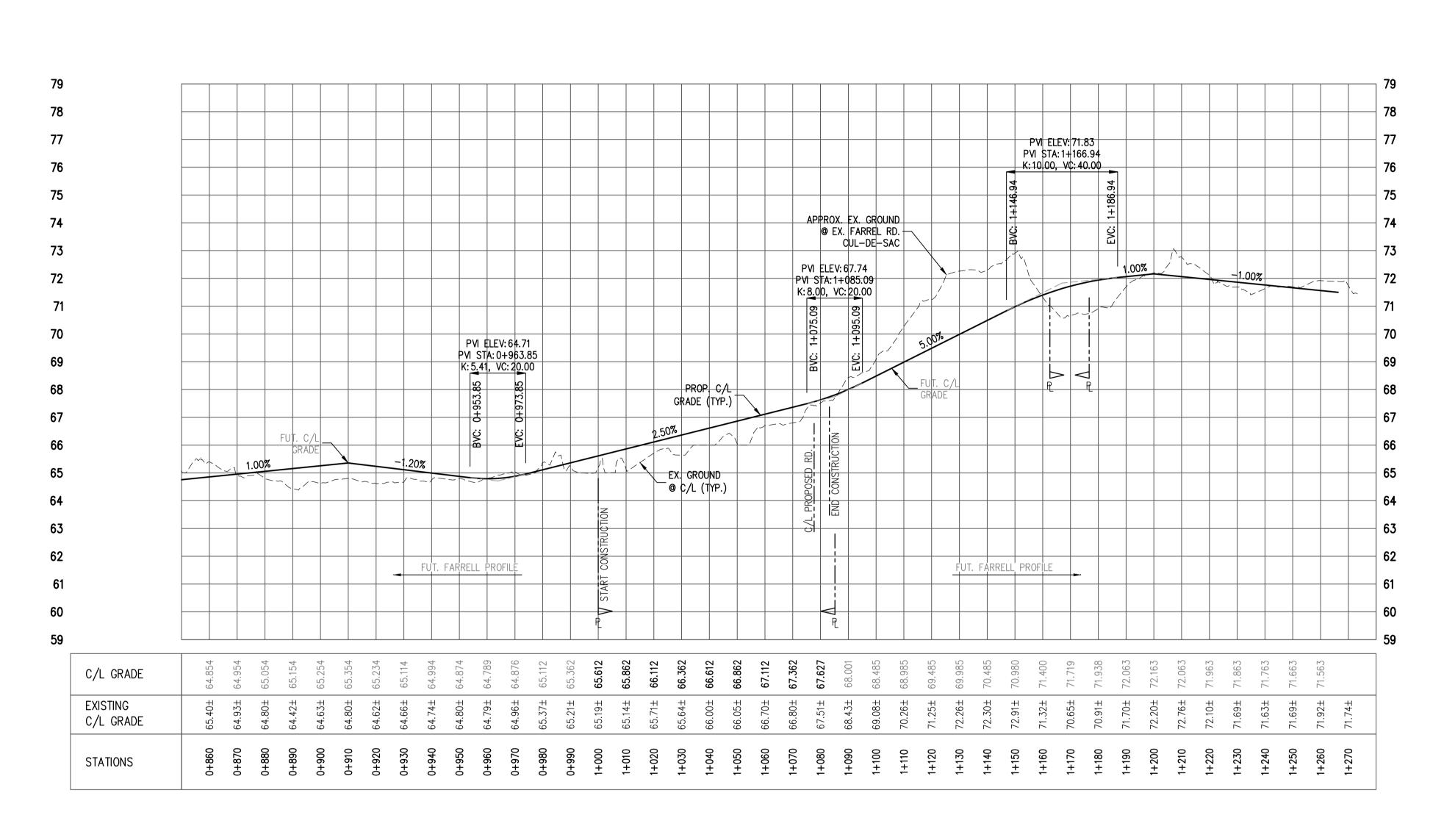
Schedule 1
"Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 33) 2021,
No. 2061"

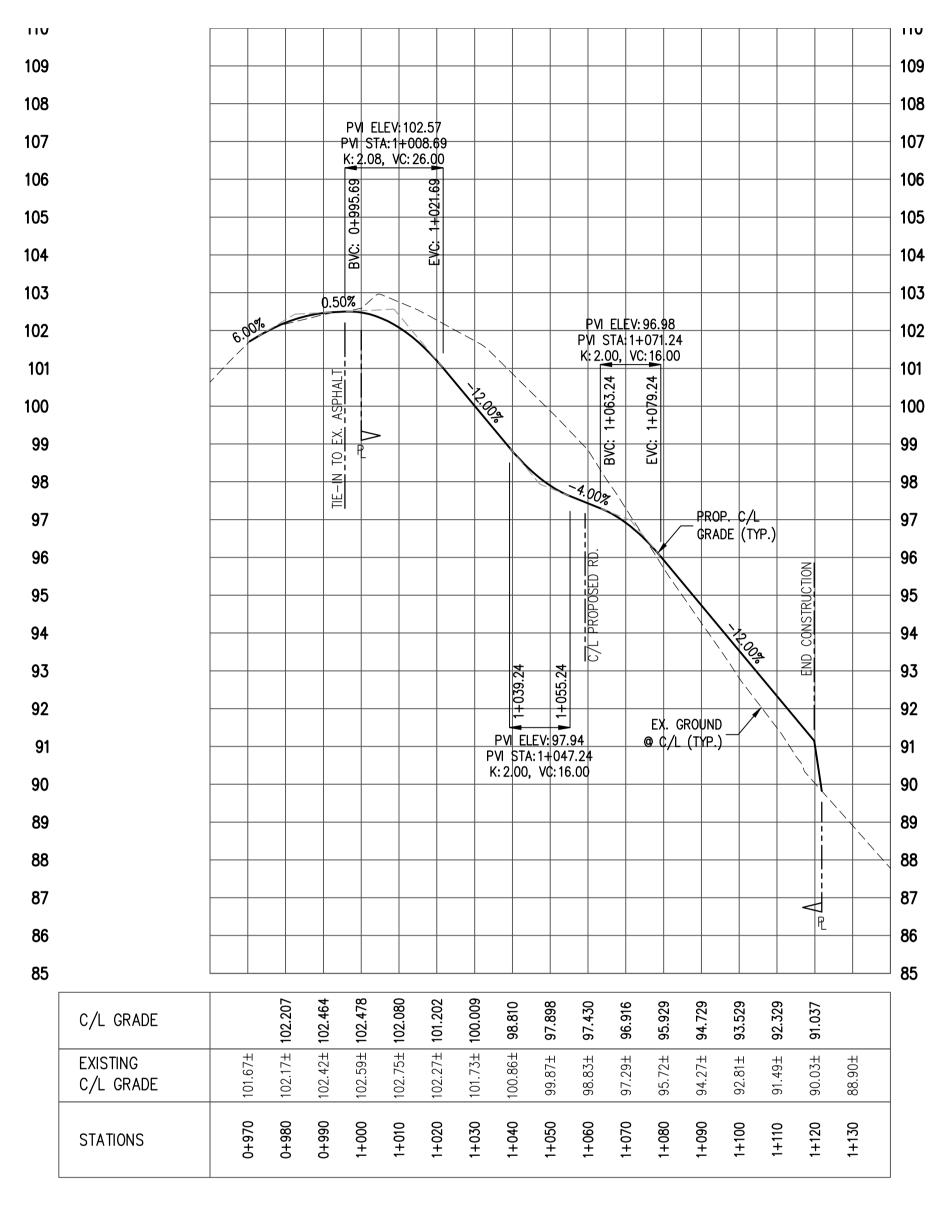






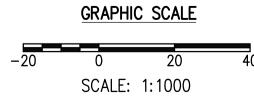




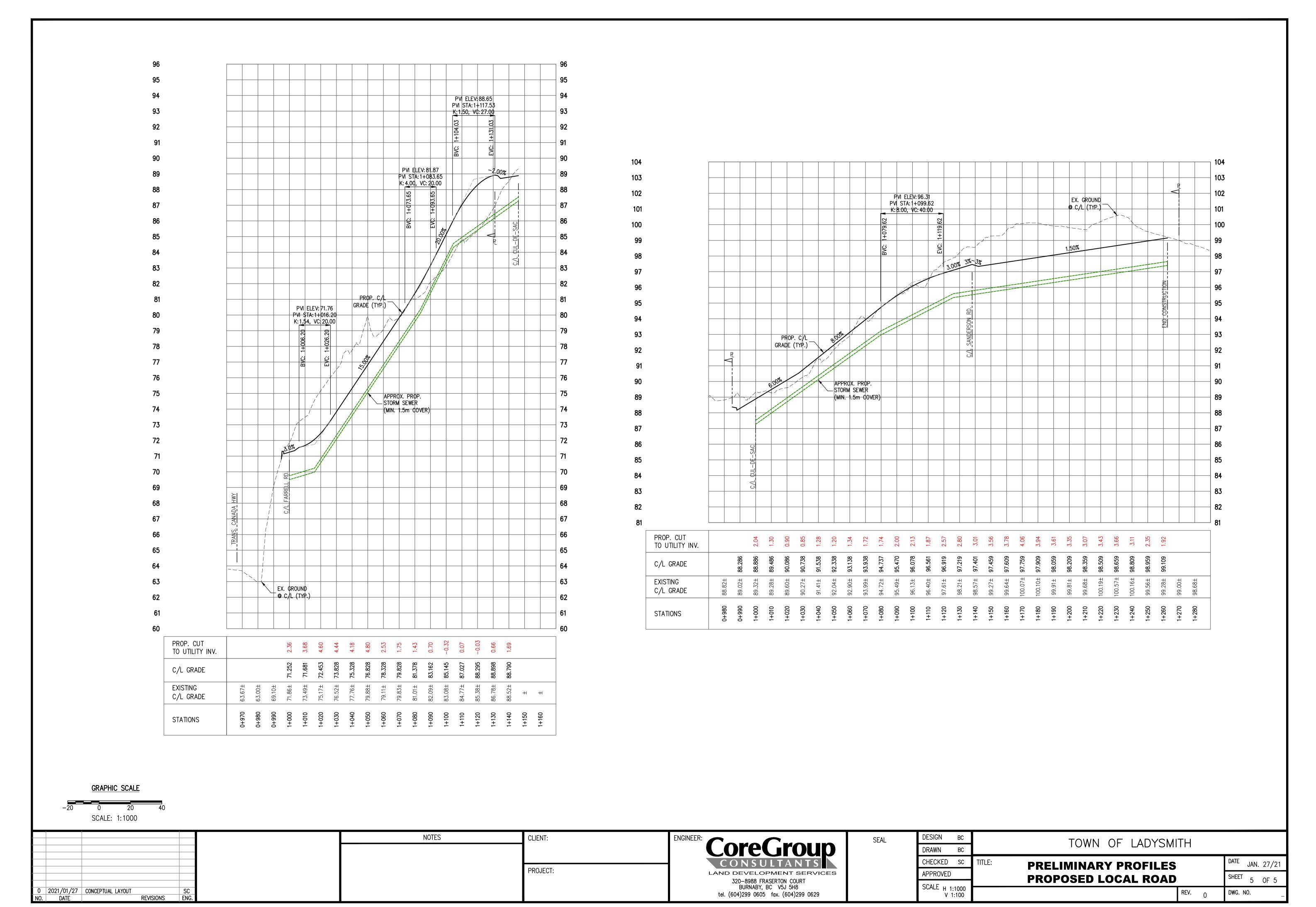


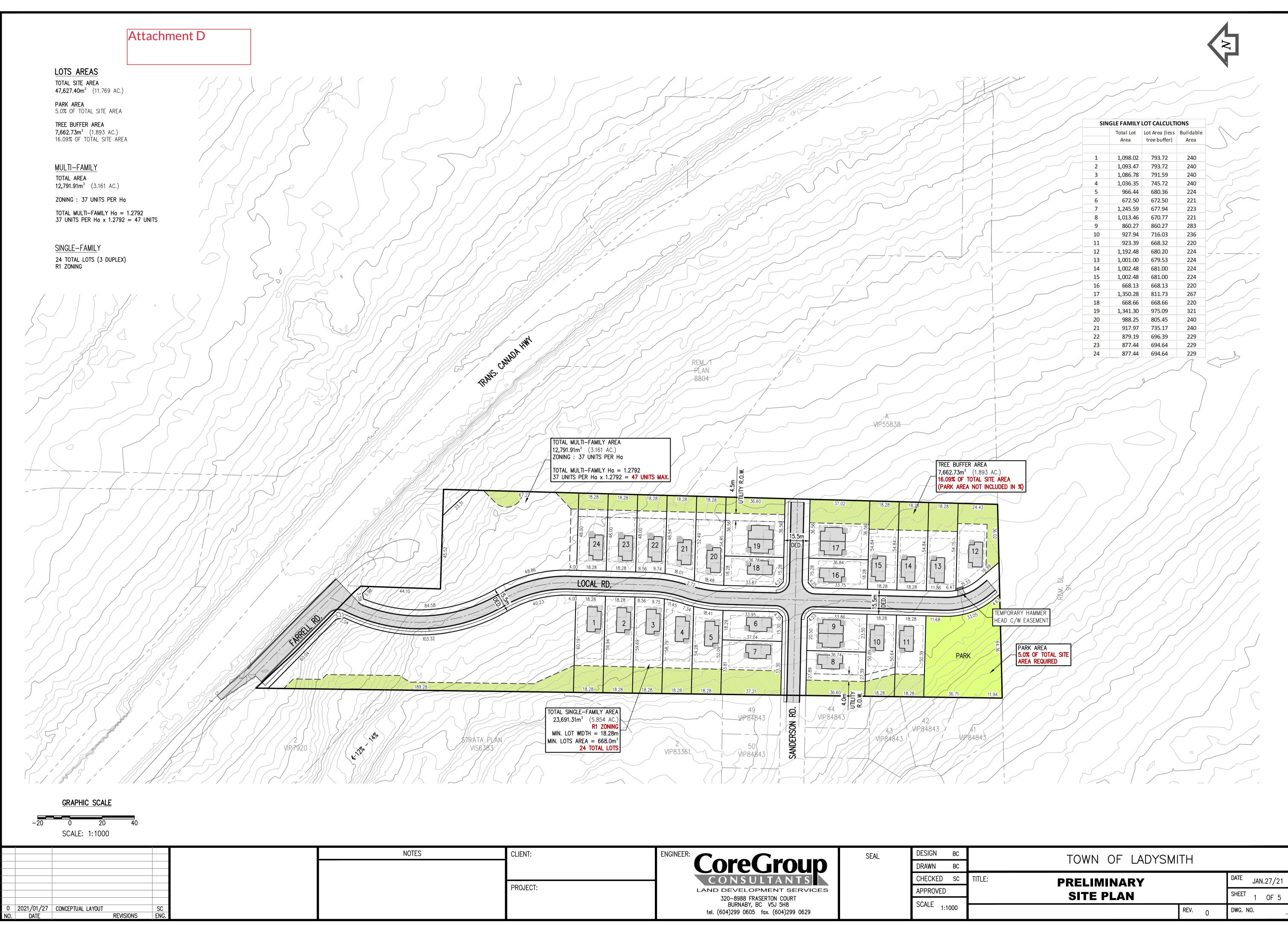
FARRELL ROAD (C/W FUTURE EXTENSION)

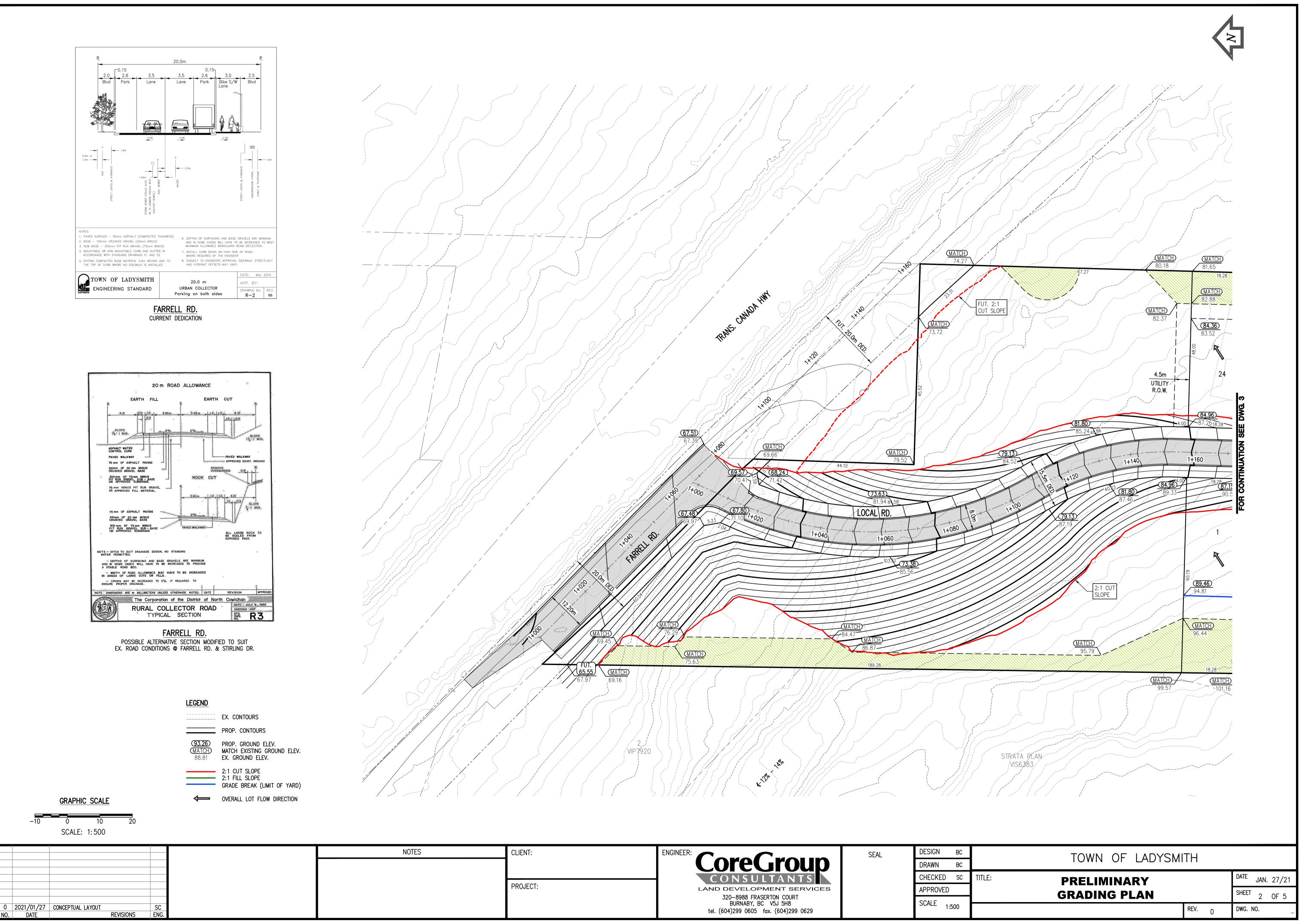
SANDERSON ROAD (EAST P/L TO WEST P/L)

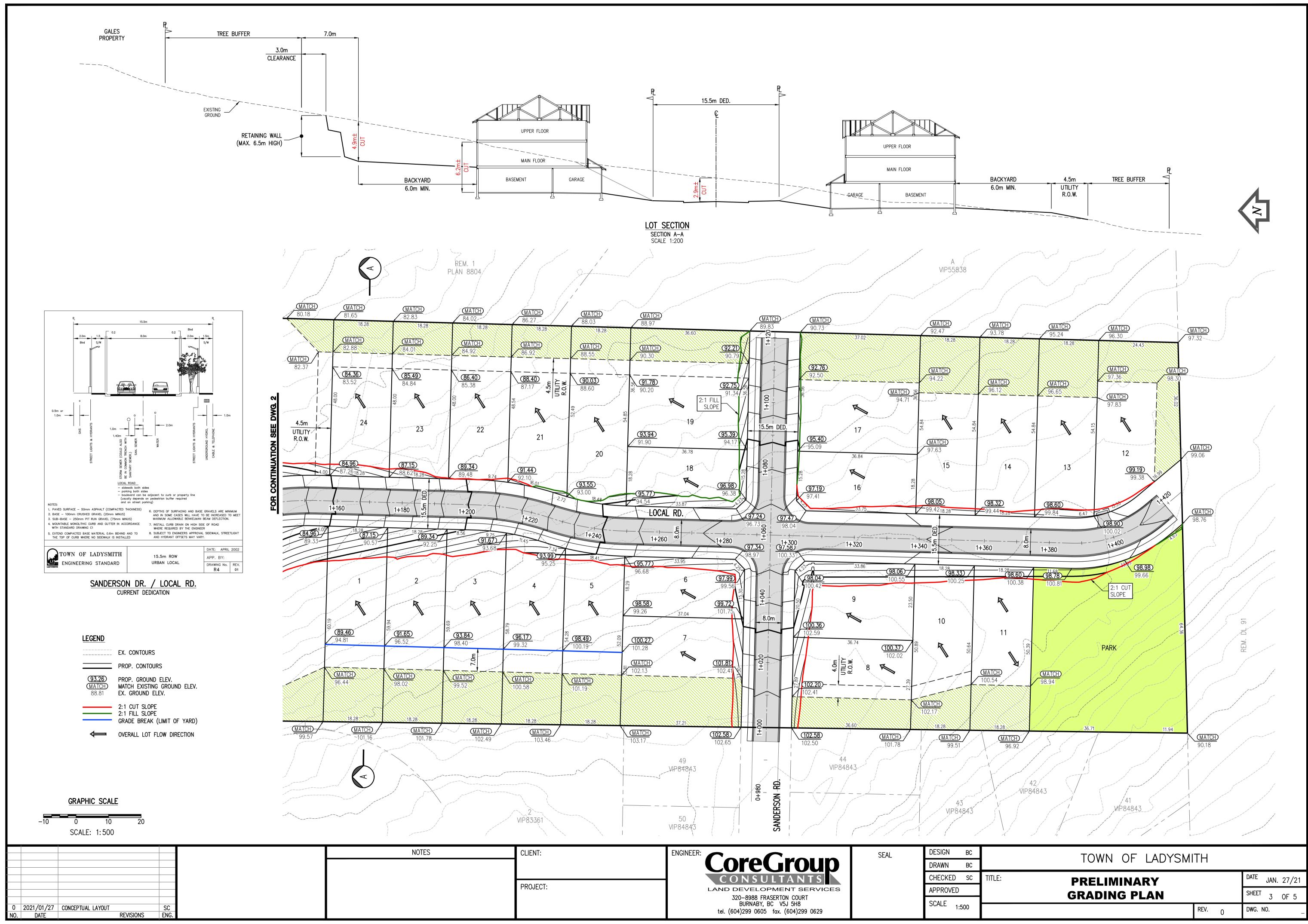


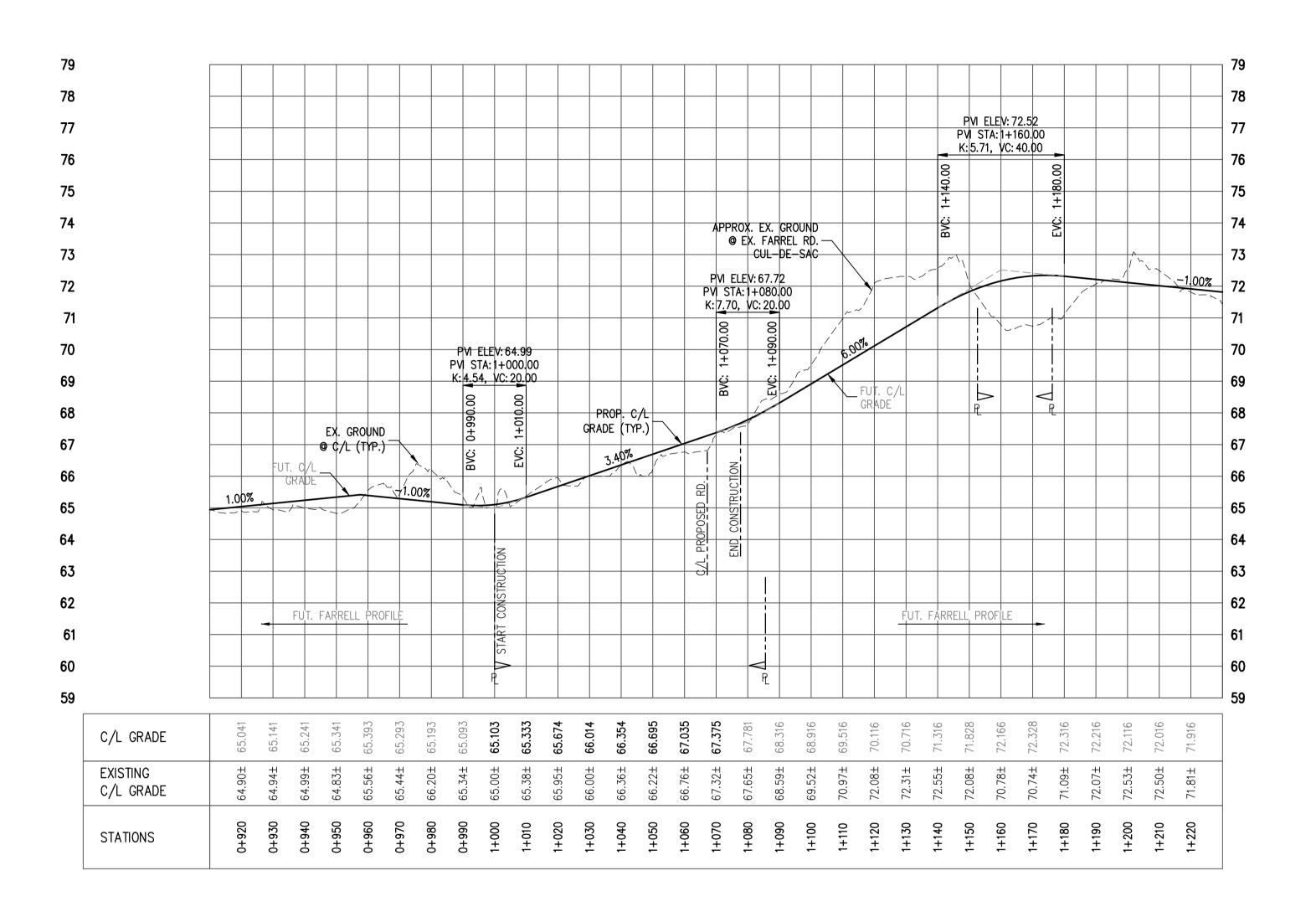
	NOTES	CLIENT:	ENGINEER:	SEAL	DESIGN BC	TOWN OF LADYSMITH
		PROJECT:	COPECTOUP CONSULTANTS LAND DEVELOPMENT SERVICES		DRAWN BC CHECKED SC APPROVED	
0 2021/01/27 CONCEPTUAL LAYOUT SC NO. DATE REVISIONS ENG.			320—8988 FRASERTON COURT BURNABY, BC V5J 5H8 tel. (604)299 0605 fax. (604)299 0629		SCALE H 1:1000 V 1:100	REV. 0 DWG. NO











PVI ELEV: 102.57 107 PVI STA: 1+008.69 K: 2.08, VC: 26.00 106 106 105 105 104 104 103 PVI ELEV: 96.98 102 102 PVI STA: 1+071.24 K: 2.00, VC: 16.00 100 PROP. C/L __ \$RADE |(TYP.)| 95 PV ELEV: 97.94 92 EX. GROUND @ ¢/L (TYP.) PVI \$TA:1+047.24 K: 2.00, VC: 16.00 C/L GRADE **EXISTING** C/L GRADE 0+970 0+980 0+980 1+000 1+010 1+050 1+050 1+080 1+100 1+110 1+130 STATIONS

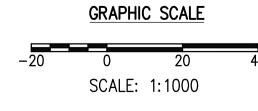
109

IIU

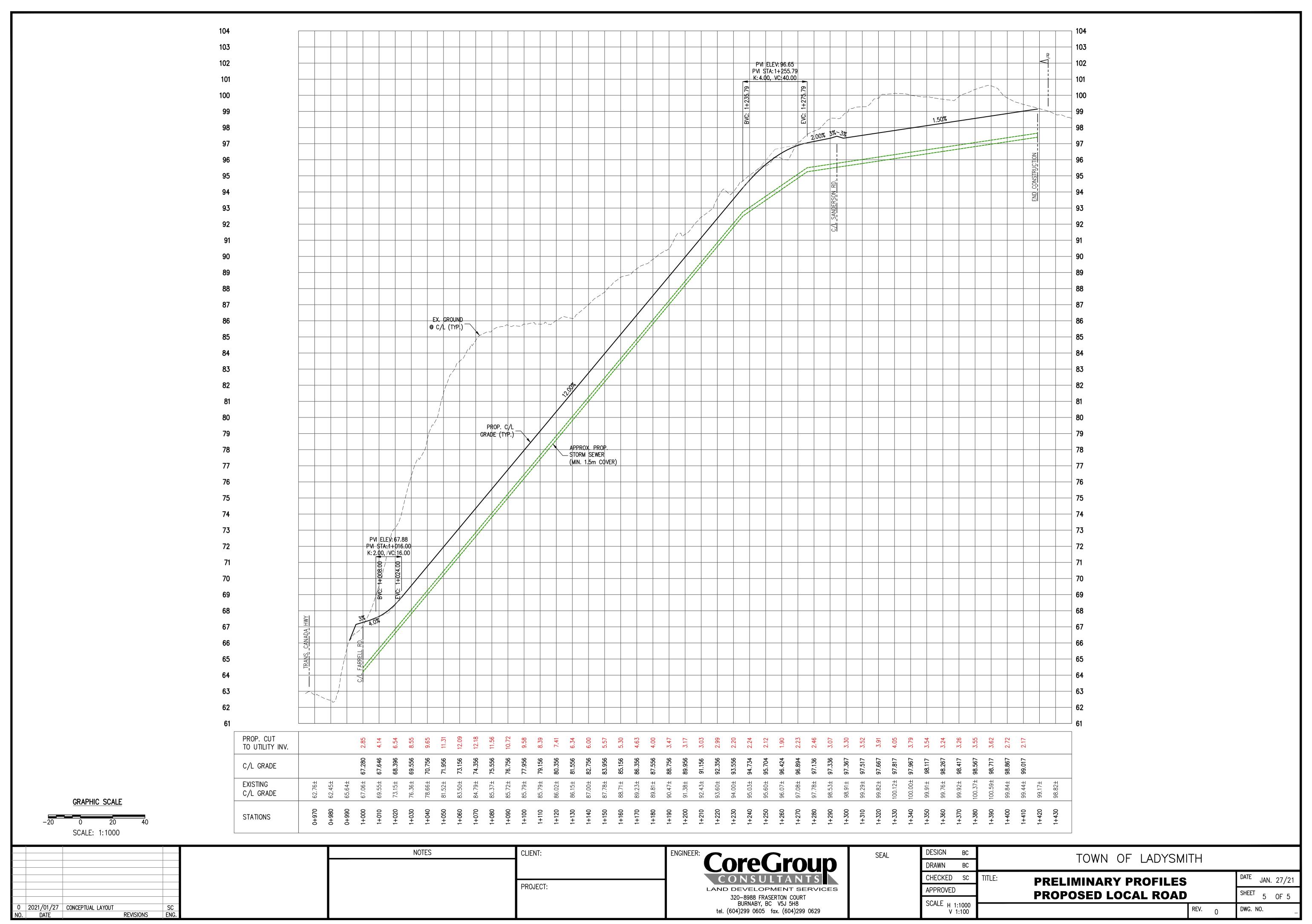
109

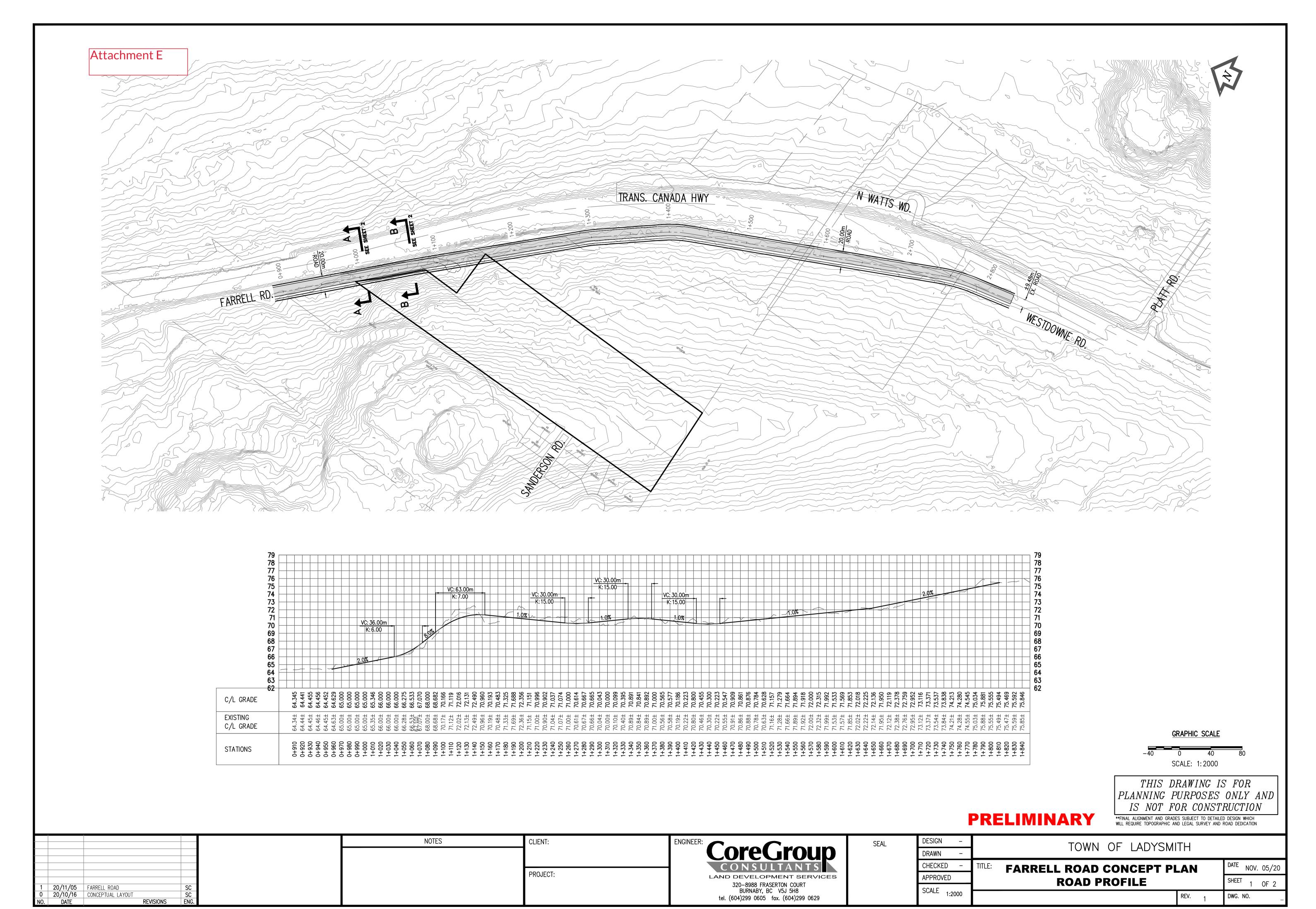
FARRELL ROAD (C/W FUTURE EXTENSION)

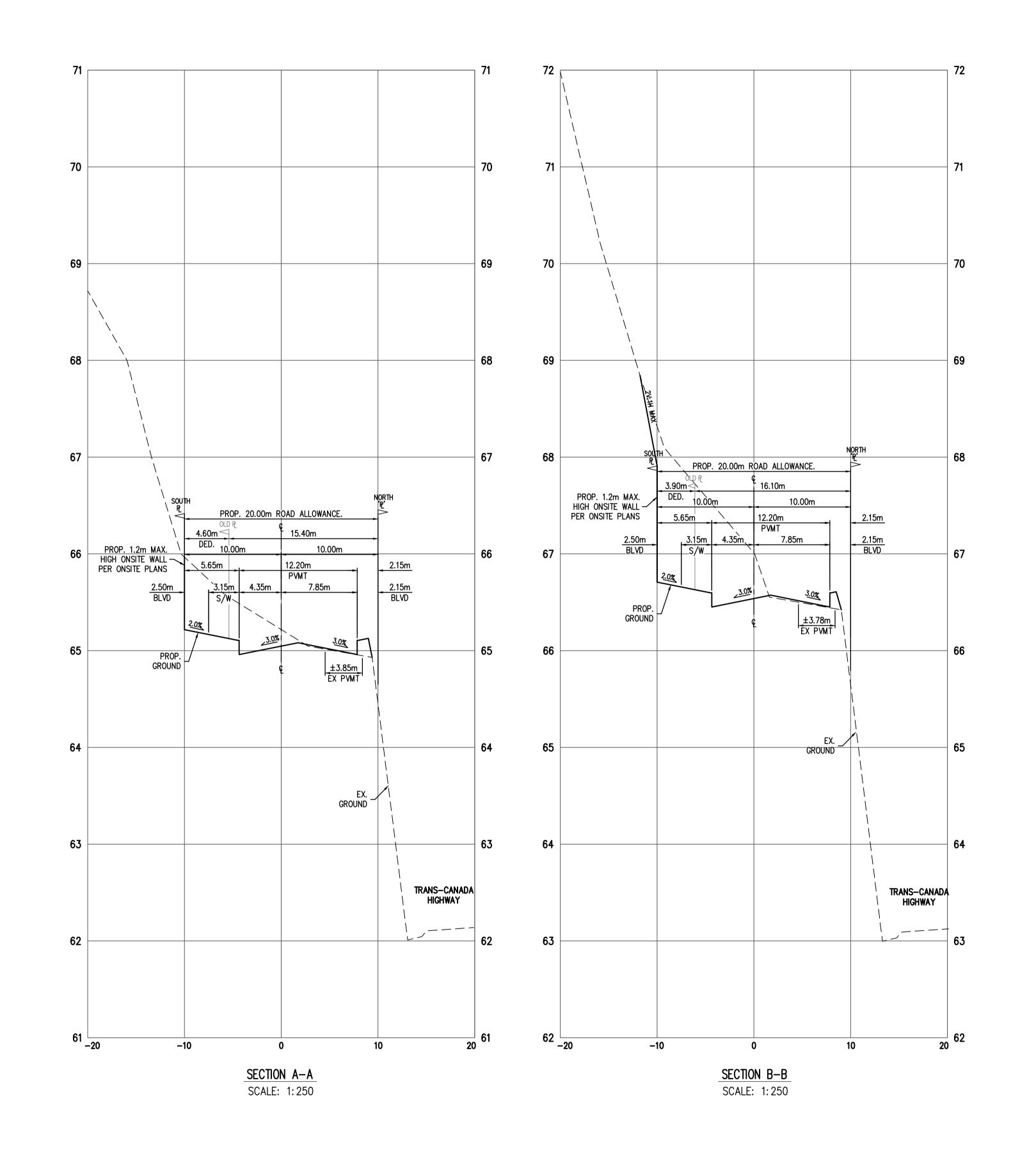
SANDERSON ROAD (EAST P/L TO WEST P/L)

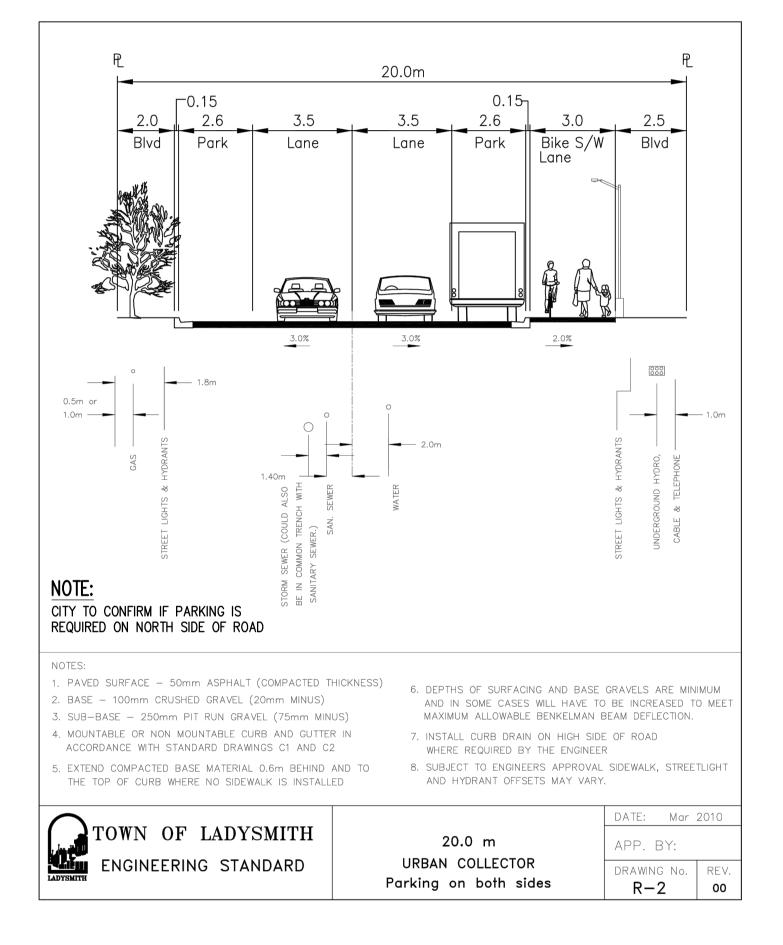


	NOTES	CLIENT:	CoreGroup	JLAL	DESIGN BC DRAWN BC	TOWN OF LADYSMITH
0 2021/01/27 CONCEPTUAL LAYOUT SC NO. DATE REVISIONS ENG.	PROJECT:	PROJECT:	CONSULTANTS LAND DEVELOPMENT SERVICES 320-8988 FRASERTON COURT BURNABY, BC V5J 5H8 tel. (604)299 0605 fax. (604)299 0629	Į	CHECKED SC APPROVED SCALE H 1:1000	PRELIMINARY PROFILES FARRELL RD. & SANDERSON RD. REV. O DWG. NO.









TYPICAL SECTION - FARRELL ROAD NOT TO SCALE

THIS DRAWING IS FOR PLANNING PURPOSES ONLY AND IS NOT FOR CONSTRUCTION **FINAL ALIGNMENT AND GRADES SUBJECT TO DETAILED DESIGN WHICH WILL REQUIRE TOPOGRAPHIC AND LEGAL SURVEY AND ROAD DEDICATION

PRELIMINARY

DESIGN -		TOWN OF LADYSMITH							
DRAWN -		TOWN OF LADISMITH							
CHECKED -	TITLE:	FARRELL ROAD CONCEPT PLAN	DATE NOV. 05/20						
APPROVED		CROSS SECTIONS	IONS SHEET 2 OF 2						
SCALE AS NOTED		REV. 1	DWG. NO.						

CoreGroup

LAND DEVELOPMENT SERVICES

320-8988 FRASERTON COURT BURNABY, BC V5J 5H8 tel. (604)299 0605 fax. (604)299 0629

SEAL

CLIENT:

PROJECT:

NOTES



File No.: F8176.01 Revision No.: 01 Prepared by: Chris Hudec, M.A.Sc., P.Eng. John Hessels, AScT

Lewkowich Engineering Associates Ltd. 1900 Boxwood Road Nanaimo, BC, V9S 5Y2 250-756-0355 (Office) 250-756-3831 (Fax) www.lewkowich.com





FILE NO.: F8176.01r1

DATE: February 10, 2021



DISCLAIMER

- 1. Lewkowich Engineering Associates Ltd. (LEA) acknowledges that this report, from this point forward referred to as "the Report," may be used by the Town of Ladysmith (ToL) as a precondition to the issuance of a subdivision permit and that this Report and any conditions contained in the Report may be included in a restrictive covenant under Section 56 of the Community Charter and registered against the title of the Property at the discretion of the ToL.
- 2. This report has been prepared in accordance with standard geotechnical engineering practice solely for and at the expense of Core Group Civil Consultants. We have not acted for or as an agent of the ToL in the preparation of this report.
- 3. The conclusions and recommendations submitted in this report are based upon information from relevant publications, a visual site-assessment of the property, anticipated and observed subsurface soil conditions, current construction techniques, and generally accepted engineering practices. No other warrantee, expressed or implied, is made. If unanticipated conditions become known during construction or other information pertinent to the development becomes available, the recommendations may be altered or modified in writing by the undersigned.
- 4. The conclusions and recommendations issued in this report are valid for a maximum of two (2) years from the date of issue. The 2-year team may be reduced as a result of updated bylaws, policies, or requirements by the authority having jurisdiction, or by updates to the British Columbia Building Code. Updates to professional practice guidelines may also impact the 2-year term. If no application of the findings in this report have been made to the subject development within the 2-year term, the conclusions issued in this report become void and re-assessment of the property will be required.
- 5. This report has been prepared by Mr. Chris Hudec, M.A.Sc., P.Eng., and reviewed by Mr. Jeff Scott, P.Eng. Messrs. Scott and Hudec are both adequately experienced and are also members in good standing with the Engineers and Geoscientists of British Columbia (EGBC).

FILE NO.: F8176.01r1

DATE: February 10, 2021



EXECUTIVE SUMMARY

- 1. The following is a brief synopsis of the Property, assessment methods, and findings presented in the Report. The reader must read the Report in its entirety; the reader shall not rely solely on the information provided in this summary.
- 2. The subject properties, Lot 20 Trans Canada Highway, 670 Farrell Road, and 674 Farrell Road, from this point forward referred to as "the Property," is located on the east coast of Vancouver Island within the jurisdictional boundaries of the ToL. (Lot 20 is located in the Cowichan Valley Regional District, but it is being brought within the jurisdiction of the ToL, so for the purposes of this report, we are referring to all lots as being within the ToL.) The proposed development for the Property at the time of this report consists of a twenty four (24) lot residential subdivision of the subject property, with an additional Lot for a future multi-family residence, for a total of twenty five (25) building lots.
- 3. A site-specific hazard assessment was conducted to identify potential geotechnical hazards for the subject Property. No significant geotechnical hazards were identified.
- 4. The findings confirm the development is considered safe as proposed, and that there is buildable area within each of the proposed lots.

List of Abbreviations Used in the Report

Abbreviation	Title				
ВСВС	British Columbia Building Code				
ВР	Building Permit				
EGBC	Engineers and Geoscientists of British Columbia				
LEA	Lewkowich Engineering Associates Ltd.				
ToL	Town of Ladysmith				
MoTI	BC Ministry of Transportation and Infrastructure				
CVRD	Cowichan Valley Regional District				
MoE	BC Ministry of Environment				
CGC	Core Group Civil Consultants				

FILE NO.: F8176.01r1
DATE: February 10, 2021



TABLE OF CONTENTS

DISCLA	MER	•••
EXECUT	TVE SUMMARY	II
TABLE (OF CONTENTS	. П
1.0	INTRODUCTION	. 1
1.1	General	. 1
1.2	Background	. 1
1.3	Assessment Methodology	. 1
2.0	SITE CONDITIONS	2
2.1	Physical Setting	. 2
2.2	Terrain and Features	. 2
2.3	Watercourses	. 3
2.4	Regional Geology	. 3
2.5	Soil Conditions	. 3
2.6	Groundwater	. 3
3.0	DISCUSSIONS AND RECOMMENDATIONS	. 4
3.1	Covenant Review	. 4
3.2	Steep Slopes	. 4
3.3	Seismic Criteria	. 4
3.4	Foundation Drainage	. 4
3.5	Emergency Road or Local Road Cut Slope	. 5
3.6		
3.7	Lateral Earth Pressures	. 5
4.0	CONCLUSIONS	
5.0	ACKNOWLEDGEMENTS	
6.0	LIMITATIONS	7
7.0	CLOSURE	
8.0	ATTACHMENTS	
9.0	REFERENCES	c

FILE NO.: F8176.01r1

DATE: February 10, 2021



1.0 INTRODUCTION

1.1 General

a. As requested, LEA has carried out a Geotechnical Hazard Assessment of the above referenced property.

This report provides a summary of our findings and recommendations.

1.2 Background

- a. We understand that the proposed development consists of subdividing the subject parent parcel (the property) to create a total of twenty five (25) residential lots. Twenty four (24) of the lots have a proposed R1 zoning, with the remaining 1.5081 Ha lot being zoned for a multi-family building(s) with 37 Units Per Ha, with a maximum of 55 Units on the proposed 1.5081 Ha lot. There are two proposed subdivision lot layouts, shown on the two attached Preliminary Site Plans, prepared by CGC. One site plan has a "Local Road" from the residential lots down to Farrell Road, with the second site plan having an "Emergency Road" from the residential lots down to Farrell road. The total property measures approximately 11 acres.
- b. The property is within the jurisdictional limits of the ToL. As per the ToL Official Community Plan, the property is not located within any Development Permit Areas.
- c. The legal address for Lot 20 is: LOT 20, DISTRICT LOT 41, OYSTER DISTRICT, PLAN 2519, EXCEPT PARTS IN PLAN 8993, 43985 AND EPP28332.
- d. The legal address for 670 Farrell Road is: LOT 2, DISTRICT LOT 41, OYSTER DISTRICT, PLAN VIP65993.
- e. The partial legal address for 674 Farrell Road is: LOT 1, PLAN20461 (assumed: DISTRICT LOT 41, OYSTER DISTRICT.)

1.3 Assessment Methodology

- a. This assessment included a desktop review of relevant background information, including available development plans, registered covenants on title, aerial photographs, and published geology, topography and floodplain mapping (if any). Please refer to the list of references at the end of this report.
- b. A site reconnaissance was conducted on April 1, 2020 to visually assess current site conditions.
- c. This assessment was prepared with consideration of the referenced EGBC *Guidelines for Legislated Landslide Assessments for Proposed Residential Development in British Columbia*.

FILE NO.: F8176.01r1

DATE: February 10, 2021



2.0 SITE CONDITIONS

2.1 Physical Setting

a. The subject property is located within the ToL near its eastern extents. The property is immediately bordered to the north by Farrell Road, then the Trans Canada Highway, to the west by single and multi family residential properties, and to the south and east by undeveloped and rural residential property. The property is currently accessed from the eastern end of Farrell Road and Sanderson Road. Refer to Figure 1 below (Google Maps).



Figure 1: Property Location

2.2 Terrain and Features

a. The property lies at the base of the foothills of the Nanaimo Lakes Highlands which rise to the west. The terrain generally rises from the northeast to the southwest, with elevations increasing from approximately 65m to 104m geodetic from Farrell Road to Sanderson Road, for a total vertical relief of 39m. From Sanderson Road, elevations decrease from 104m to approximately 91m in the southwest corner of the property. The terrain within the property varies greatly. However, it can be generally described as gently

FILE NO.: F8176.01r1

DATE: February 10, 2021



rolling to hilly (i.e. average slope angles vary between 10 to 26 degrees from horizontal).

- b. No significant slopes were observed during our site visit. The steepest observed slopes approach a 2H:1V angle. However, the site walk through did not cover every portion of the property, so there may be small or short steep slopes in localized areas.
- c. At the time of our field review, the property did not contain any buildings or structures. A dirt access road extended off of the end of Sanderson Road, and extended to the property line between Lot 20 and 670 Farrell Road. At that point, a newly cut trail extended north toward Farrell Road before turning east. Several other community trails and footpaths were observed throughout the property.

2.3 Watercourses

a. No watercourses were observed within the subject property.

2.4 Regional Geology

- a. Based on surficial geology mapping¹, the property is located within a composite soil structure, consisting of the more prominent Squally formation (a colluvium deposit of rapidly-draining, gravelly loamy sand), and the less prominent Shawnigan formation (a moraine deposit of well-draining, gravelly sandy loam).
- b. Bedrock geology for the area² is classified as granodioritic intrusive rock of the Island Plutonic Suite from the early to mid Jurassic period.
- c. There are no known active fault lines that cross the subject property.

2.5 Soil Conditions

- a. A subsurface investigation was not included as part of this Geotechnical Hazard Assessment. Visual inspection of the site allowed for observations of minor soil exposures within the subject property.
- b. Observed soil conditions were consistent with the reported surficial geology mapping, and predominately consisted of silty sands and gravels overlying granitic bedrock at shallow depths. We expect thickness of soil cover would generally be in the range of 0 to 5m, however thicker localized soil deposits may be encountered. Bedrock outcrops and exposures were observed throughout the property.
- c. Fill materials were observed in some areas near Farrell Road, presumably placed as part of the cut and fill operations for the road construction, or illegal dumping.

2.6 Groundwater

- a. There was no evidence of ponding water, nor abnormal groundwater conditions observed during our visual reconnaissance of the property.
- b. Groundwater levels can be expected to fluctuate seasonally with cycles of precipitation. Groundwater conditions at other times and locations can differ from those observed at the time of our assessment.

FILE NO.: F8176.01r1

DATE: February 10, 2021



3.0 DISCUSSIONS AND RECOMMENDATIONS

3.1 Covenant Review

- a. As part of our assessment, we have reviewed the legal title of the subject property, specifically relative to any restrictive covenants that may impact the conclusions or recommendations made in this report.
- b. At the time of this report the only covenant reviewed related to the siting of a septic field. This covenant, and any other geotechnical covenant would be superseded by the geotechnical recommendations contained in a geotechnical assessment that includes an assessment of subsurface soil.

3.2 Steep Slopes

- a. In general, the proposed lots within the property contain gentle to moderately steep slopes which can safely accommodate residential buildings under geotechnical review. No residence shall be constructed on a bedrock slope that is steeper than 1 Horizontal to 1 Vertical (1H:1V, or 45 degrees), or a soil slope that is steeper than 2H:1V (27 degrees). Where applicable, a safe setback to the crest and toe of bedrock slopes steeper than 1H:1V, and soil slopes steeper than 2H:1V, shall be established for each lot at the time of development/building permit application.
- b. As previously described, no slopes steeper than 2H:1V were observed on the property, though there may be localized steeper areas.

3.3 Seismic Criteria

- a. No liquefiable or compressible soils were encountered during our field review, nor are any expected to be encountered during construction.
- b. Based on the 2018 British Columbia Building Code, Division B, Part 4, Table 4.1.8.4.A, "Site Classification for Seismic Site Response," the soil and bedrock strata observed during our field review would be classified as "Site Class C" (very dense soil and soft rock).

3.4 Foundation Drainage

a. Conventional requirements of the 2018 British Columbia Building Code pertaining to building drainage are considered suitable at this site.

FILE NO.: F8176.01r1

DATE: February 10, 2021



3.5 Emergency Road or Local Road Cut Slope

a. There are two options for a road that connects the proposed subdivision to Farrell Road. The two options are an Emergency Road or a typical subdivision Local Road. Both of these options are viable and require grading the slope up from Farrell Road to a less steep configuration. The grading will require rock breaking or blasting, and potentially construction of retaining walls. Given the near surface bedrock, cut slopes are likely stable at steep inclinations, though slopes shallower than 1V:1H are recommended to reduce long term maintenance and safety from occasional rock fall hazards.

3.6 Utilities

b. There is near surface bedrock present in areas of the proposed development. Where bedrock is near the ground surface, it is possible that utility service trench lines will require blasting to provide sufficient depth and spacing between service lines. Supplemental investigation to determine depth to bedrock may be required for planning purposes.

3.7 Lateral Earth Pressures

- a. Any future retaining wall construction within the Property shall be reviewed by the Geotechnical and/or Structural Engineer(s). A retaining wall is shown on the plans to define or restrict lot access to one road frontage. Additional retaining walls may need to be constructed along lot lines either during subdivision construction or during build out.
- b. Lateral earth pressure coefficients (K) for the design of the cast-in-place retaining walls are outlined in Table 1. It is assumed that there will be a level (0 degree from horizontal) backslope and no additional surcharge on the wall. It is noted that the methods employed are estimates and further analysis may be required after dimensions of the proposed structure have been determined. Drainage requirements for any wall construction shall be reviewed by the Geotechnical Engineer prior to construction.
- c. An average soil friction angle of 27° has been used to calculate the lateral earth pressure coefficients. It is assumed that retained soils are well compacted, cohesion-less sands and gravels, with a unit weight of 21 kN/m³.
- d. Seismic forces used reflect values from the 2015 National Building Code interpolated seismic hazard values for the specific Property in the Town of Ladysmith which are 0.484 Peak Ground Acceleration (PGA) (2% in 50year probability) and 0.254 PGA (10% in 50year probability).
- e. The Mononobe-Okabe (M-O) Method has been used to calculate the seismic active earth pressure coefficient (Kae). The static active lateral earth pressure coefficient (Ka) has been calculated using Coulomb's theory. The static passive earth pressure coefficient (Kp) has been calculated using Rankine's

FILE NO.: F8176.01r1

DATE: February 10, 2021



theory. See the following Table 3.7.1 for design values.

Table 3.7.1 - Lateral Earth Pressure Coefficients

Lateral Earth Pressure Conditions	Earth Pressure Coefficient (K)			
Static Active	Ka	0.34 2.66 0.50		
Static Passive	Кр	2.66		
Seismic Active	Kae	0.50		

f. The thrust resulting from lateral earth pressures under each of the conditions outlined in Table 3.7.1 may be calculated using the following relationship in Table 3.7.2. A minimum uniform static load of 20 kPa shall be considered for compaction forces during wall construction.

Table 3.7.2 - Calculation of Lateral Earth Pressures

P = 0.5 K γ H ²
P = Total Thrust (kN/m Length of Wall)
K = Lateral Earth Pressure Coefficient
γ = Soil Unit Weight (kN/m³)
H = Height of Wall (m)

g. The seismic active coefficient provides a value that combines both static and dynamic forces to determine total active thrust (Pae). The static component (Pa) acts through a point that is approximately H/3 above the toe of the wall. The dynamic component (ΔPae) acts through a point at approximately 0.6H above the toe of the wall. The total active thrust may then be considered to act at a height from the base of the wall using the following relationship in Table 3.7.3.

Table 3.7.3 – Height from base of wall for Total Active Thrust

h = [Pa (H/3) + ΔPae (0.6H)] ÷ Pae
h = Height from base of wall (m)
Pa = Static Active Thrust (kN/m)
Pae = Total Active Thrust (kN/m)
ΔPae = Dynamic Active Thrust (kN/m)

FILE NO.: F8176.01r1

DATE: February 10, 2021



4.0 CONCLUSIONS

- a. From a geotechnical point of view, and provided the recommendations in this report are followed, the land is considered safe for the use intended (defined for the purposes of this report as a twenty five (25) lot residential subdivision), with the probability of a geotechnical failure resulting in property damage of less than:
 - i. 2% in 50 years for geotechnical hazards due to seismic events, including slope stability; and,
 - ii. 10% in 50 years for all other geotechnical hazards.
- b. Based on our field review of the subject property and the referenced project documentation, there are safe building sites within each of the proposed lots. Some lots may require manipulation and the construction of retaining walls to facilitate residential construction.
- c. We recommend that prior to the issuance of permits or approvals for residential construction on any of the proposed lots, that any proposed building sites are reviewed in the field by qualified engineering personnel.

5.0 ACKNOWLEDGEMENTS

a. Lewkowich Engineering Associates Ltd. acknowledges that this report may be requested by the Building Inspector (or equivalent) of the ToL as a precondition to the issuance of a building permit. It is acknowledged that the Approving Officers and Building Officials may rely on this report when making a decision on application for development of the land. We acknowledge that this report has been prepared solely for, and at the expense of Sharpe Sites. We have not acted for or as an agent of the ToL in the preparation of this report.

6.0 LIMITATIONS

a. The conclusions and recommendations submitted in this report are based upon the information available at the time of this assessment. The recommendations given are based on the anticipated subsurface soil conditions, current construction techniques, and generally accepted engineering practices. No other warrantee, expressed or implied, is made. If unanticipated conditions become known during construction or other information pertinent to the development become available, the recommendations may be altered or modified in writing by the undersigned.

FILE NO.: F8176.01r1

DATE: February 10, 2021



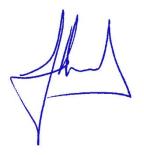
7.0 CLOSURE

a. Lewkowich Engineering Associates Ltd. appreciates the opportunity to be of service on this project. If you have any comments, or additional requirements at this time, please contact us at your convenience.

Respectfully Submitted, Lewkowich Engineering Associates Ltd.



Chris Hudec, M.A.Sc., P.Eng. Senior Project Engineer



John Hessels, AScT Managing Partner

FILE NO.: F8176.01r1

DATE: February 10, 2021

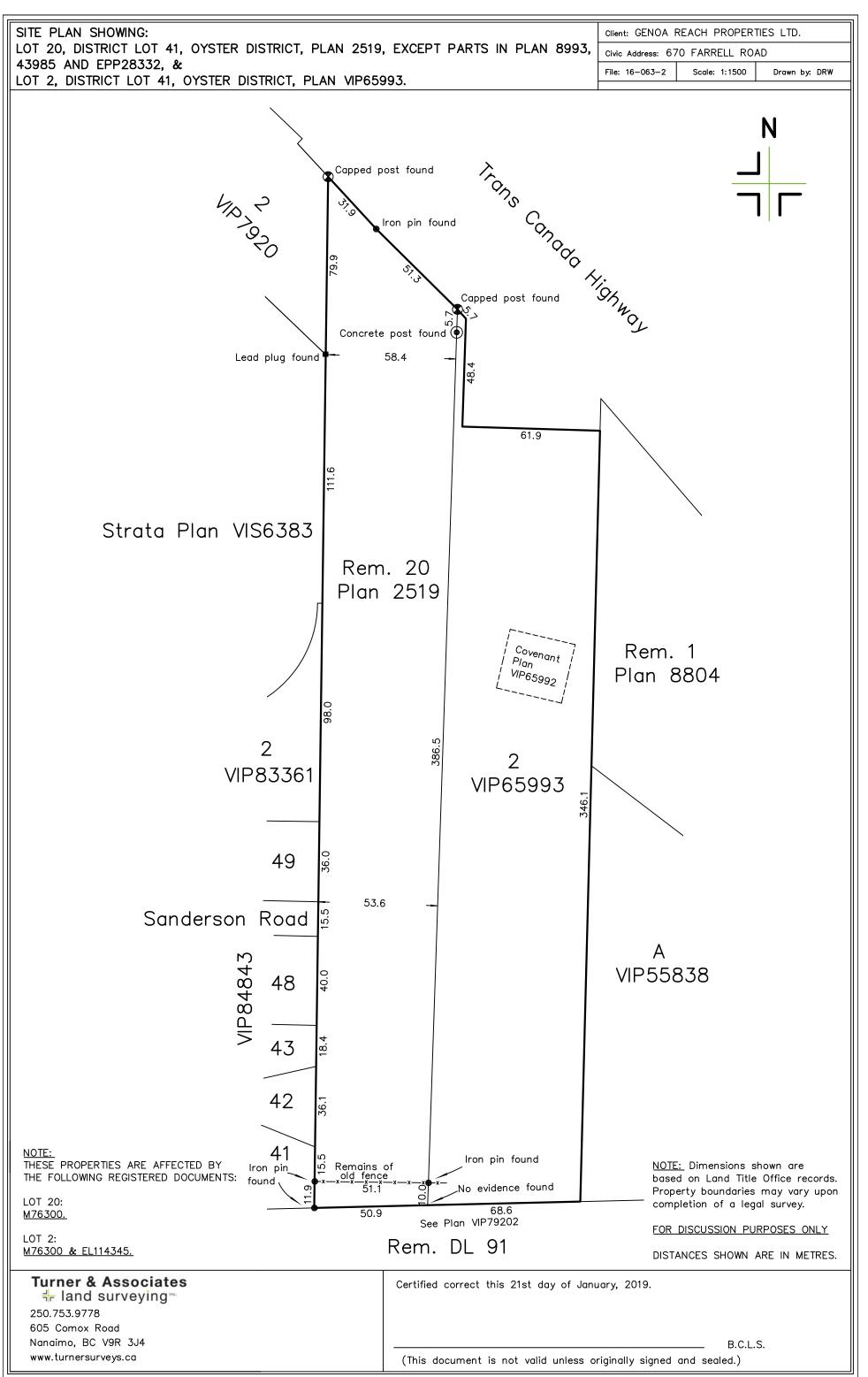


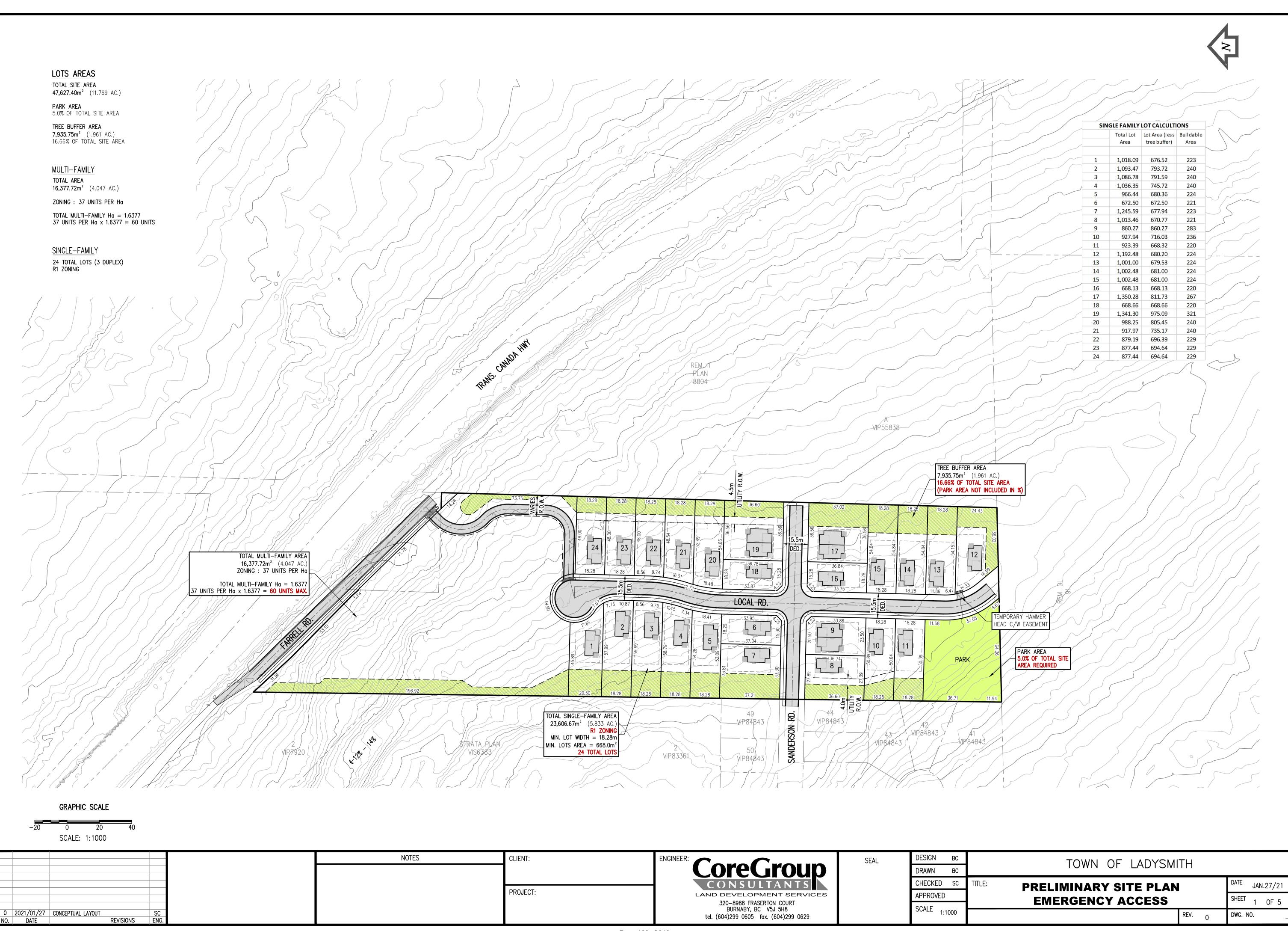
8.0 ATTACHMENTS

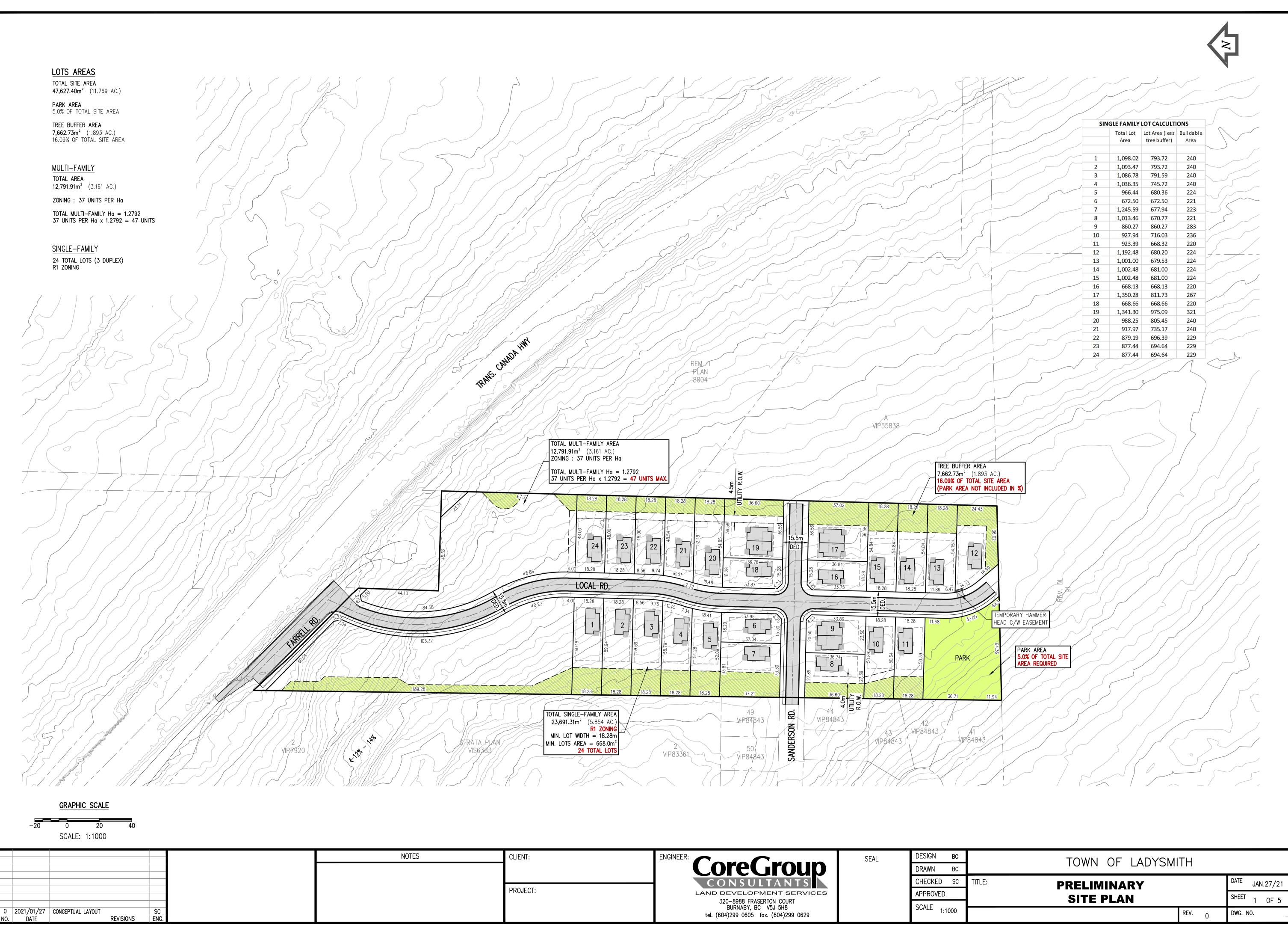
- Turner & Associates Land Surveying Ltd., "SITE PLAN SHOWING: LOT 20, DISTRCIT LOT 41, OYSTER
 DISTRICT, PLAN 2519, EXCEPT PARTS IN PLAN 8993, 43985 AND EPP 28332, & LOT 2, DISTRICT LOT 41,
 OYSTER DISTRICT, PLAN VIP65993.", File 16-063-2, dated January 21, 2019.
- CoreGroup Consultants, Land Development Services, "Preliminary Site Plan Emergency Access", dated January 27, 2021.
- 3. CoreGroup Consultants, Land Development Services, "Preliminary Site Plan", dated January 27, 2021.

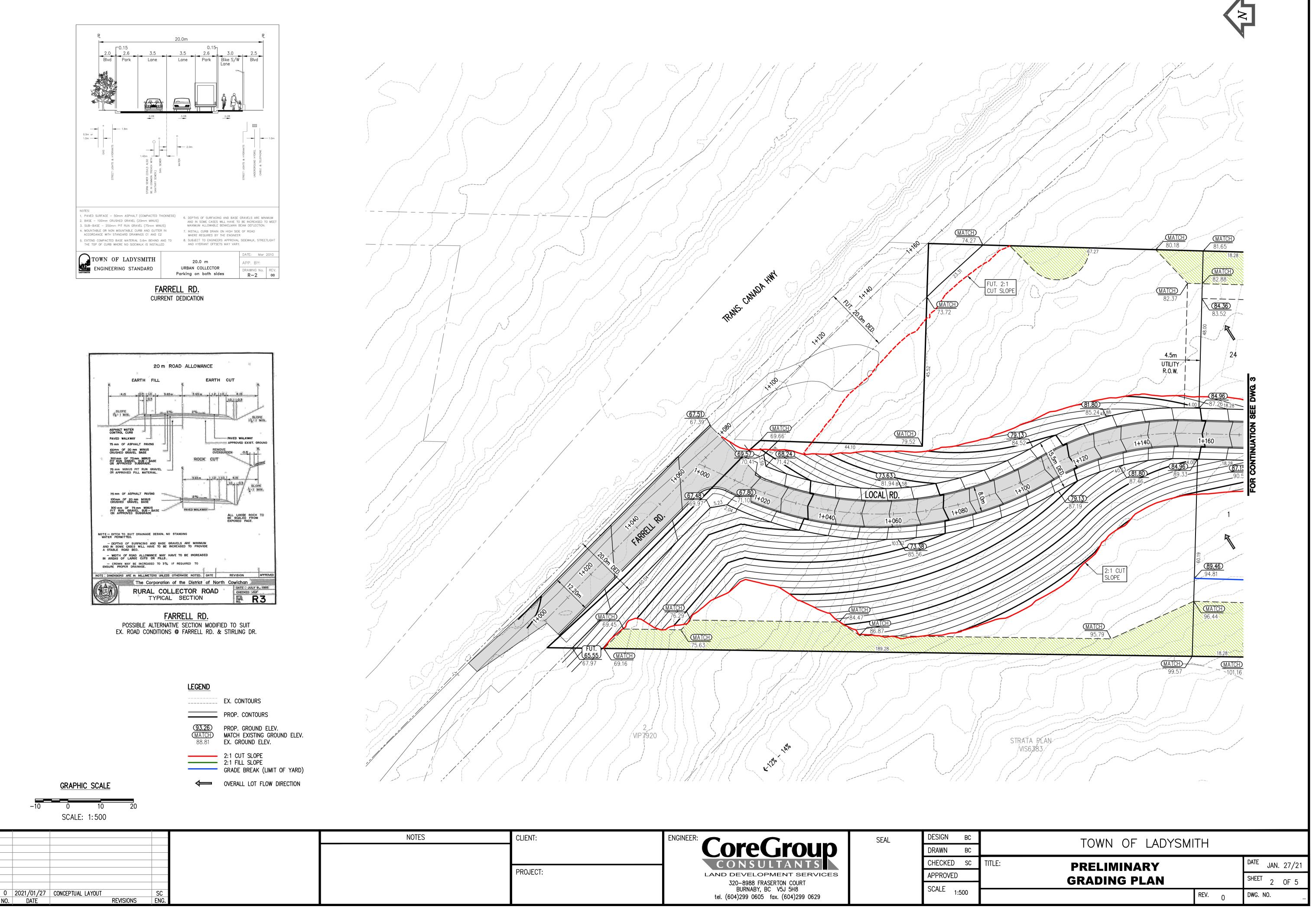
9.0 REFERENCES

- BC Ministry of Environment, Soils of South Vancouver Island British Columbia, Soil Survey Report No. 44, Sheet 1, dated 1986.
- 2. iMapBC interactive web-map, accessed March 2020.
- 3. BC Ministry of Environment, *Geomorphology of Vancouver Island: Mass Wasting Potential*, Report No. RR 01, December 2005.
- 4. BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development, *Flood Hazard Area Land Use Management Guidelines*, Amended January 1, 2018.
- 5. Engineers and Geoscientists of British Columbia, *Professional Practice Guidelines Legislated Flood Assessments in a Changing Climate in BC*, Version 2.1, dated August 28, 2018.
- 6. Engineers and Geoscientists of British Columbia, *Guidelines for Legislated Landslide Assessments for Proposed Residential Developments in BC*, dated May 2010.
- 7. Town of Ladysmith map titled "Official Community Plan, Map 1, Land Use," dated September 18, 2018.
- 8. Town of Ladysmith map titled "Official Community Plan, Map 2, Development Permit Areas," dated September 18, 2018.









Attachment G



670 Farrell Road, Ladysmith Transportation Impact Assessment

Draft Report

Prepared for

Core Group

Date

August 21, 2020

Project No.

04-20-0196

August 21, 2020 04-20-0196

Sean Carroll Core Group Civil Consultants 320-8988 Fraserton Court Burnaby, BC V5J 5H8

Dear Sean:

Re: 670 Farrell Road

Transportation Impact Assessment

Please find attached our Transportation Impact Assessment (TIA) report for the proposed residential development at 670 Farrell Road, Ladysmith, BC.

This report will examine the impacts of the proposed development on the adjacent road network as well as provide a multi-modal assessment including relevant transportation demand management strategies to minimize vehicular impacts.

Yours truly,

Bunt & Associates

Jason Potter, M.Sc., PTP

Senior Transportation Planner, Associate

CORPORATE AUTHORIZATION

Prepared By: Jason Potter, M.Sc., PTP Bunt & Associates Engineering Ltd.

1550-1050 West Pender Street

Vancouver, BC V6E 3S7

Canada

Reviewed By: Simon Button, P.Eng. Telephone: +1 604 685 6427

Transportation Engineer Facsimile: +1 604 685 6579

Date: August 21, 2020

Project No. 04-20-0196

Status: Draft

Engineer's Stamp

TO BE STAMPED UPON FINALIZATION OF REPORT (AFTER CLIENT AND TOWN COMMENTS)

This document represents an electronic version of the original hard copy document, sealed, signed and dated by TO BE COMPLETED and retained on file. The content of the electronically distributed document can be confirmed by referring to the original hard copy.

This document was prepared by Bunt & Associates for the benefit of the Client to whom it is addressed. The copyright and ownership of the report rests with Bunt & Associates. The information and data in the report reflects Bunt & Associates' best professional judgment in light of the knowledge and information available to Bunt & Associates at the time of preparation. Except as required by law, this report and the information and data contained are to be treated as confidential and may be used and relied upon only by the client, its officers and employees. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibilities of such third parties. Bunt & Associates accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

TABLE OF CONTENTS

1.	INTR	ODUCTION		1
	1.1	Study Purpose & O	bjectives	1
	1.2	Organization of Re	port	1
2.	PROF	OSED DEVELO	PMENT	2
	2.1	Site Access Design		2
3.	FXIS	ING CONDITIO	DNS	5
٠.	3.1			
	3.2		ation Network	
			vork	
		3.2.2 Local Road	d Vehicle Capacity	5
		3.2.3 Transit Ne	twork	5
		3.2.4 Cycling &	Pedestrian Networks	5
	3.3	Current Relevant P	olicies & Plans	7
	3.4			
			ta Collection Program	
			Traffic Volumes	
	3.5		S	
			rce Thresholds	
4	- LUTI	_	perational Analysis Results	
4.			ONDITIONS	
	4.1			
			nd Traffic Forecasts	
			National and Daniel	
		•	Neighbouring Local Roads	
			fic	
			of Traffic Impacts & Recommended Mitigations	
5.	TDM	_	DES	
٠.	5.1			
			Error! Bookmark not defi	
	5.3		M Measures for Site	
6.	CON	CLUSIONS AND	RECOMMENDATIONS	27
	6.1	Conclusions		27
	6.2			

APPENDIX A Binnie Report - Traffic Operations Review Highway 1 Ladysmith, January 31, 2019

EXHIBITS

Exhibit 1.1:	Site Location	3
Exhibit 1.2:	Site Plan	4
Exhibit 3.1:	Existing Laning & Traffic Control	6
Exhibit 3.2:	Existing 2020 Peak Hour Vehicle Traffic Volumes	8
Exhibit 3.3:	Existing 2020 AM Peak Hour Performance	10
Exhibit 3.4:	Existing 2020 PM Peak Hour Performance	12
Exhibit 4.1:	Site Traffic Forecasts	15
Exhibit 4.2:	Opening Day Total Traffic Forecasts	17
Exhibit 4.3:	2040 Total Traffic Forecasts	18
Exhibit 4.4:	Opening Day Total AM Peak Hour Performance	19
Exhibit 4.5:	Opening Day Total PM Peak Hour Performance	20
Exhibit 4.6:	2040 Background AM Peak Hour Performance	21
Exhibit 4.7:	2040 Background PM Peak Hour Performance	22
Exhibit 4.8:	2040 Total AM Peak Hour Performance	23
Exhibit 4.9:	2040 Total PM Peak Hour Performance	24
TABLES		
Table 3.1: I	ntersection Level of Service Thresholds	9
Table 4.1: W	eekday AM and PM Peak Hour Vehicle Trip Generation	13
Table 5.1: P	otential TDM Strategies Summary Table: ResidentialE	rror! Bookmark not defined.

1. INTRODUCTION

1.1 Study Purpose & Objectives

This Transportation Impact Assessment (TIA) report is prepared to accompany the proposed rezoning of 670 Farrell Road, Ladysmith. The proposed development will result in a total of 28 townhomes and 45 single family homes for a total of 73 residential units.

This study's scope was developed with input from Town of Ladysmith staff as well as the Ministry of Transportation and Infrastructure's (MOTI) TIA Terms of Reference document.

1.2 Organization of Report

This TIA report first considers the existing transportation conditions surrounding the site. The report estimates the vehicle trips generated by the proposed development and assesses the anticipated impact of the proposed development on the adjacent road network.

Future traffic operations are examined for the background (no development) condition as well as future with development scenarios.

At the request of Ladysmith staff, the future condition analysis modelled a 2040 scenario using growth rates obtained from a recent report from R.F. Binnie titled, "Traffic Operations Review, Ministry of Transportation and Infrastructure, Highway 1 Ladysmith", January 31, 2020 (referred to herein as the Binnie Highway 1 Ladysmith Report). This document proposed alterations to the Highway 1 and Davis Road intersection, specifically, eliminating the Davis Road westbound and eastbound through and left turn movements. The Binnie Highway 1 Ladysmith Report is attached as Appendix A.

The report evaluates the study area and examines the impact of the proposed development on the surrounding road network including impacts to *Binnie Highway 1 Ladysmith Report* recommendations pertaining to the Highway 1 & Davis Road intersection.

2. PROPOSED DEVELOPMENT

The proposed 73 units are comprised of 28 townhomes and 45 single family homes. As shown in **Exhibit** 1.1 the site is located between Farrell Road and Sanderson Road. The site plan is shown in **Exhibit** 1.2.

2.1 Site Access Design

Due to grade changes on the site it has been determined that an internal vehicle connection between Farrell Road and Sanderson Road in not feasible on the proposed development site but rather a future connection would occur with future development further to the east where there is less grade differential.

The result of not having an on-site connection is that the 28 townhomes will be accessible only from Farrell Road and the 45 single family homes would only be accessible from Sanderson Road until a future connection is built.



Exhibit 1.1
Site Location





Exhibit 1.2 Site Plan

bunt &associates

3. EXISTING CONDITIONS

3.1 Land Use

The development site is currently unoccupied. The site is adjacent to residential areas including single family and townhome/ duplexes.

3.2 Existing Transportation Network

3.2.1 Road Network

Farrell Road operates as a minor collector road. Sanderson Road operates as a local road. Stirling Drive operates as a minor collector road. Exhibit 3.1 presents the study area laning, traffic control as well as the location of the nearest BC Transit bus stops.

3.2.2 Local Road Vehicle Capacity

The Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads (2017) suggests that a local residential road is suitable for up to 1,000 vehicles per day. Peak hour volumes are generally calculated by applying a 10% factor to daily volumes. Therefore, TAC guidance suggests local residential roads should have fewer than 100 vehicle trips per peak hour.

Sanderson Road and Swettenham Place currently service approximately 30 single family homes before Sanderson Road's intersection with Stirling Drive. Similar to the proposed single-family homes these 30 existing homes are anticipated to generate approximately 1 peak hour trip per unit or in this scenario 30 two-way vehicle trips during peak hour periods. These vehicle trip rates are established with inclusion of homes that may have secondary suites.

3.2.3 Transit Network

Ladysmith is part of the Cowichan Valley Regional Transit System. The local area is serviced with two transit routes (#34 and #36) which have bidirectional stops on Davis Road, just east of Louise Road. These bus stops are approximately 900 m from the proposed development site. The two transit routes provide a total of 8-time options on weekdays and 6-time options on Saturdays. The two routes provide connections into Ladysmith's downtown area to the north as well as to Duncan and Chemainus to the south.

3.2.4 Cycling & Pedestrian Networks

Farrell Road has shoulder on its west edge which terminates at The Gales development driveway which can be used for walking and cycling. There are no shoulders or other pedestrian amenities on Farrell Road south of The Gales driveway alignment.

Sanderson Road has sidewalks along one read edge. Stirling Drive has sidewalks along both edges. Davis Road has as one sidewalk at minimum with a mix of two sidewalk and sidewalk plus shoulder segments.

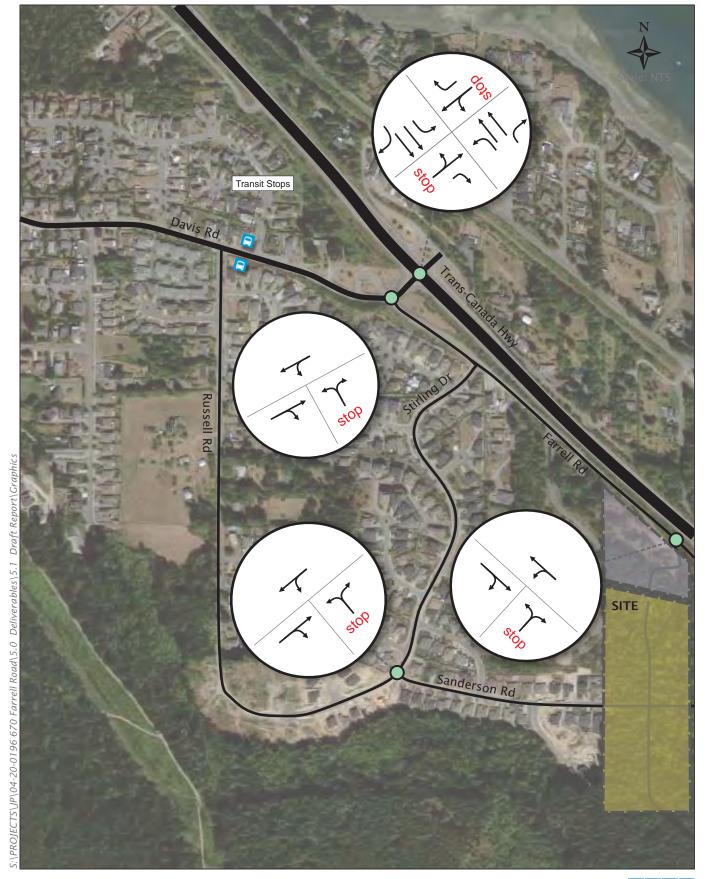


Exhibit 3.1 Existing Laning & Traffic Control



3.3 Current Relevant Policies & Plans

MOTI and R.F. Binnie conducted a *Traffic Operations Review Highway 1 Ladysmith* dated January 31, 2019. The report included detailed analysis and recommendations for Highway 1 intersections including the Highway 1 and Davis Road intersection. This document proposed alterations to the Highway 1 and Davis Road intersection. Specifically, it recommends eliminating the Davis Road westbound and eastbound through and left turn movements. This recommendation is intended to mitigate the anticipated over capacity conditions for vehicles turning from the minor Davis Road approaches onto or across Highway 1. The report is attached as Appendix A.

3.4 Data Collection

3.4.1 Traffic Data Collection Program

The R.F. Binnie study collected traffic volumes at the Highway 1 and Davis Road intersection on Thursday August 9, 2018. The AM period peak hour was found to be from 8:00 AM to 9:00 AM and the PM peak hour was from 4:15 PM to 5:15 PM. These traffic volumes were extrapolated to establish volumes at other study area intersections. Institute of Transportation Engineer (ITE) trip rates were used to estimate vehicle volumes from the existing neighbouring areas within the study area.

3.4.2 Peak Hour Traffic Volumes

2020 peak hour volumes were calculated by applying a 2% annual growth rate to the 2018 volumes. These volumes are presented in **Exhibit 3.2**.

Subsequent 2020 traffic counts were not feasible due to COVID-19 pandemic which has altered typical travel patterns.



Exhibit 3.2 Existing Peak Hour Vehicle Traffic Volumes



3.5 Existing Operations

3.5.1 Performance Thresholds

The existing operations of study area intersections and access points were assessed using the methods outlined in the 2000 Highway Capacity Manual (HCM), using the Synchro 9 analysis software. The traffic operations were assessed using the performance measures of Level of Service (LOS) and volume-to-capacity (V/C) ratio.

The LOS rating is based on average vehicle delay and ranges from "A" to "F" based on the quality of operation at the intersection. LOS "A" represents optimal, minimal delay conditions while a LOS "F" represents an over-capacity condition with considerable congestion and/or delay. Delay is calculated in seconds and is based on the average intersection delay per vehicle.

Table 3.1 below summarizes the LOS thresholds for the six Levels of Service, for both signalized and unsignalized intersections.

Table 3.1: Intersection Level of Service Thresholds

LEVEL OF SERVICE	AVERAGE CONTROL DELAY PER VEHICLE (SECONDS)				
LEVEL OF SERVICE	SIGNALIZED	UNSIGNALIZED			
А	≤10	≤10			
В	>10 and ≤20	>10 and ≤15			
С	>20 and ≤35	>15 and ≤25			
D	>35 and ≤55	>25 and ≤35			
Е	>55 and ≤80	>35 and ≤50			
F	>80	>50			

Source: Highway Capacity Manual

The volume to capacity (V/C) ratio of an intersection represents ratio between the demand volume and the available capacity. A V/C ratio less than 0.85 indicates that there is sufficient capacity to accommodate demands and generally represents reasonable traffic conditions in suburban settings. A V/C value between 0.85 and 0.95 indicates an intersection is approaching practical capacity; a V/C ratio over 0.95 indicates that traffic demands are close to exceeding the available capacity, resulting in saturated conditions. A V/C ratio over 1.0 indicates a very congested intersection where drivers may have to wait through several signal cycles. In downtown and Town Centre contexts, during peak demand periods, V/C ratios over 0.90 and even 1.0 are common.

As directed by Town correspondence and MOTI's Terms of Reference document, the performance thresholds that were used to trigger consideration of roadway or traffic control improvements to support roadway or traffic control improvements employed in this study are listed below:

Signalized Intersections:

Overall intersection Level of Service = LOS D or better;

- Overall intersection V/C ratio = 0.85 or less;
- Individual movement Level of Service = LOS E or better; and,
- Individual movement V/C ratio = 0.90 or less.

Unsignalized Intersections and Roundabouts:

• Individual movement Level of Service = LOS E or better, unless the volume is very low in which case LOS F may be acceptable.

In interpreting of the analysis results, note that the HCM methodology reports performance differently for various types of intersection traffic control. In this report, the performance reporting convention is as follows:

• For unsignalized minor-leg stop controlled intersections: HCM 2000 LOS and V/C output is reported just for individual lanes as the HCM methodology does not report overall performance.

The performance reporting conventions noted above have been consistently applied throughout this document.

3.5.2 Existing Operational Analysis Results

Exhibits 3.3 and **3.4** present existing 2020 study area intersection operations. As shown in Exhibits 3.3 and 3.4, all study area intersections are anticipated to operate within threshold criteria with the exception of the Highway 1 and Davis Road intersection where the through and left turn movements from the minor road (Davis Road) approaches exceed threshold criteria. This issue was identified in the *Highway 1 Ladysmith Report*.

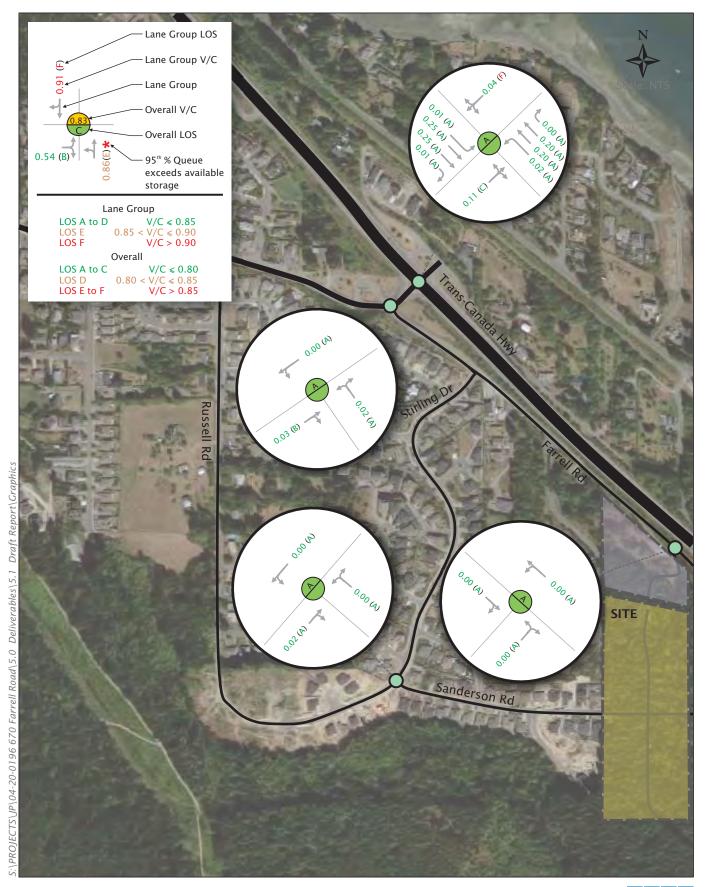


Exhibit 3.3 Existing AM Peak Hour Performance



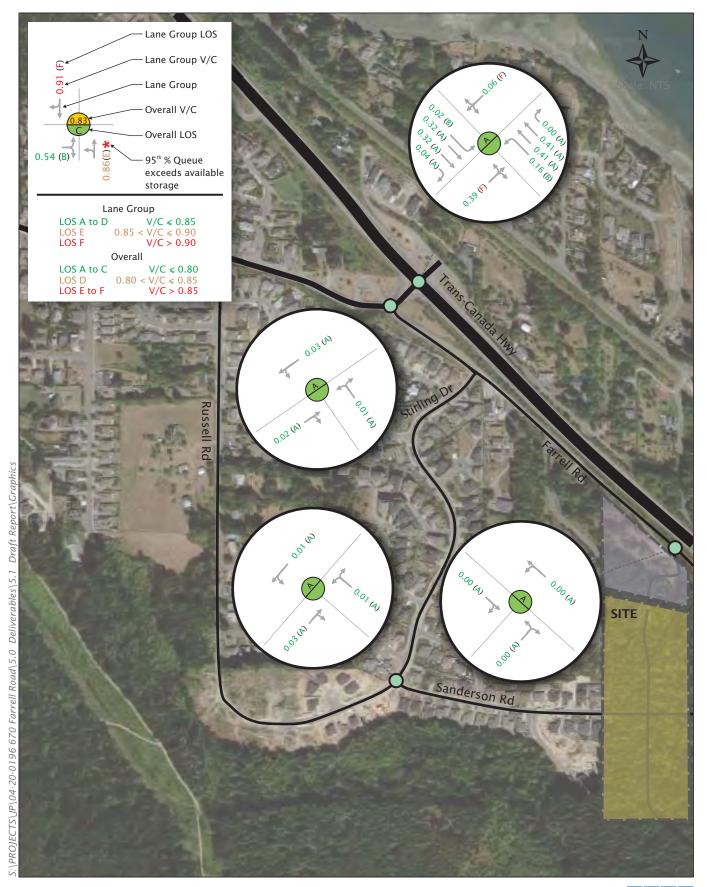


Exhibit 3.4 Existing PM Peak Hour Performance



4. FUTURE TRAFFIC CONDITIONS

4.1 Traffic Forecasts

4.1.1 Background Traffic Forecasts

This study assesses the traffic operations for the development's opening year (assumed to be between 2020 and 2022) and 2040.

Background traffic is traffic that would be present on the road network if the site did not redevelop. The 2022 background vehicle volumes were assumed to be equal to the 2020 volumes since the potential background traffic growth from 2020 to 2022 is considered to be within a reasonable margin of error considering the high-end applied growth rate and the longer than typical horizon year (opening day plus 20 years rather than 10- or 15-year horizons). The 2040 scenarios were calculated by applying a 2% annual growth rate to the 2020 study area volumes. This growth rate, used in the *Binnie Highway 1 Ladysmith Report*, results in nearly 50% growth over existing study area and Highway 1 volumes, representing significant Highway 1 vehicle growth.

4.1.2 Site Traffic

Trip Generation

The vehicle trip generation for the proposed development was estimated using trip rates provided in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition. ITE's "peak hour of generator" rates were used which are slightly higher than the "peak of adjacent street" rates. This ITE trip rate (ITE 210 – Single Family Home and ITE 220 – Townhome) was established through hundreds of surveys of a wide range of single-family home types and areas, including single-family homes with secondary suites.

The proposed development's weekday AM and PM peak hour vehicle trip generation is summarized in **Table 4.1**.

Table 4.1: Weekday AM and PM Peak Hour Vehicle Trip Generation

TIME PERIOD	USE	SIZE (UNITS)	RATE (TRIPS/UNIT)	SOURCE	% IN	% OUT	TRIPS IN	TRIPS OUT	TOTAL TRIPS
AM	Townhouse	28	0.56	ITE 220	28%	72%	4	12	16
Alvi	Single Family Home	45	0.76	ITE 210	26%	74%	9	25	34
DM	Townhouse	28	0.67	ITE 220	59%	41%	11	8	19
PM	Single Family Home	45	1.00	ITE 210	64%	36%	29	16	45

The 28 townhomes that will use Farrell Road as their access are anticipated to generate approximately 15 - 20 vehicle trips (a total of both inbound and outbound) during peak hour periods. This equates to approximately one vehicle every three to four minutes on Farrell Road.

Sanderson Road operates as a local road which terminates at the development site. The 45 single family homes that will use Sanderson Road as their access are anticipated to generate approximately 35 - 45 vehicle trips during peak hour periods. This equates to approximately one vehicle every one to two minutes on Sanderson Road.

Trip Distribution & Assignment

The townhomes and single-family homes will have separate accesses until they are connected through future development. The single-family homes were assigned to the road network using Sanderson Road and the townhome vehicle trips were assigned to Farrell Road.

It was assumed that vehicle trips generated from the proposed development would follow the same distribution as existing traffic patterns since the surrounding area is also residential. The resulting generated site volumes are shown in **Exhibit 4.1**.

4.1.3 Impact to Neighbouring Local Roads

The proposed 45 single family units that would use Sanderson Road as their access are anticipated to generate approximately 45 two-way vehicle trips per PM peak hour. These development homes will continue to use this route until the neighbouring land parcel to the east is developed. With this new volume of traffic added to the 30 existing single-family homes on Sanderson Road and Swettenham Place, the roadway is anticipated to remain within TAC suggestions for residential local roads. The level of vehicle trip generation is not anticipated to affect vehicle travel or queuing times in the local area.

4.1.4 Impact of Future Trip Distribution Changes

With a future road connection between the single-family homes and the townhomes it is anticipated that a portion of single-family homes will begin to use the Farrell Road route to access their homes. This future shift of approximately 10-20 vehicles per peak hour are not anticipated to materially impact traffic operations along Farrell Road or impact this report's findings and recommendations.

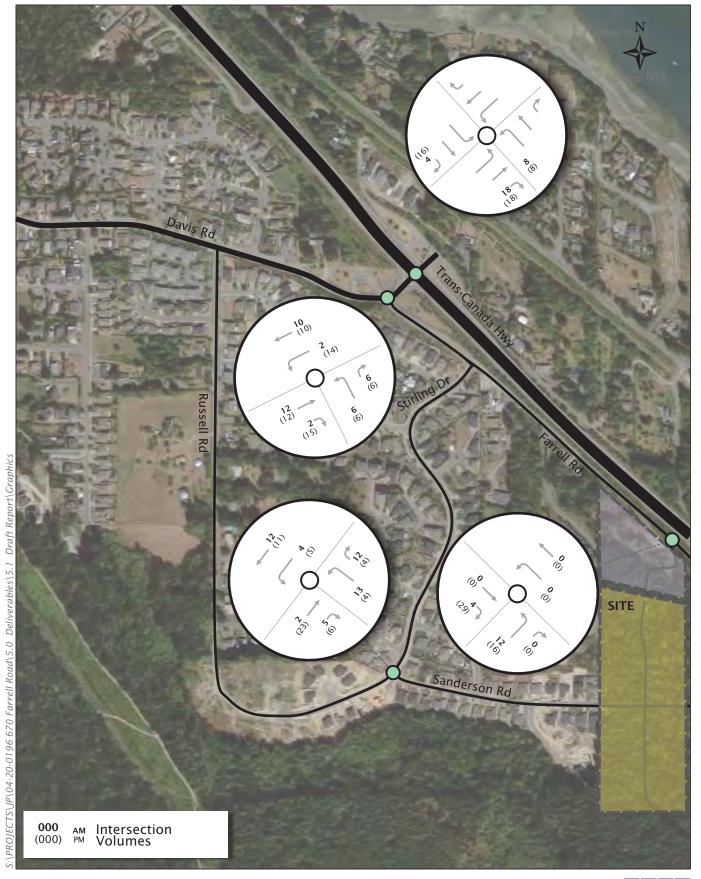


Exhibit 4.1 Site Traffic Peak Hour Forecasts



4.1.5 Future Traffic

Volumes

Total AM and PM peak hour volumes for Opening Day and the 2040 horizon year are illustrated in **Exhibits 4.2** and **4.3** respectively. They are the sum of the site traffic volumes added to the 2020 and 2040 background volumes.

Traffic Performance

The Opening Day total (with development) traffic operations are shown in **Exhibits 4.4** and **4.5** for the AM and PM periods, respectively. These Opening Day total operations compare with the Opening Day Background conditions which were presented in Exhibits 3.3 and 3.4 to evaluate the forecasted impact of the proposed development at Opening Day. Note, the Existing 2020 Background volumes and operations are the same as the Opening Day Background scenario volumes and operations since no growth was applied to this 2 year period (discussed in Section 4.1.1).

2040 Background operations are shown in **Exhibits 4.6** and **4.7** for the AM and PM periods respectively. These can be compared to the 2040 Total operations which are shown in **Exhibits 4.8** and **4.9** to evaluate the anticipated impact of the proposed development in 2040.

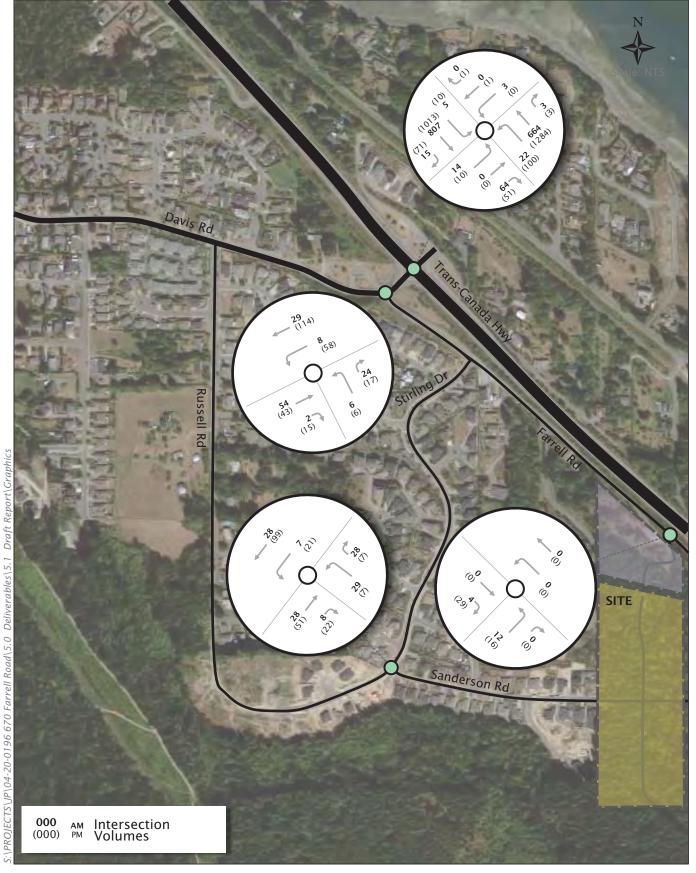


Exhibit 4.2 Opening Day Total Peak Hour Traffic Forecasts





Exhibit 4.3 2040 Total Traffic Peak Hour Forecasts



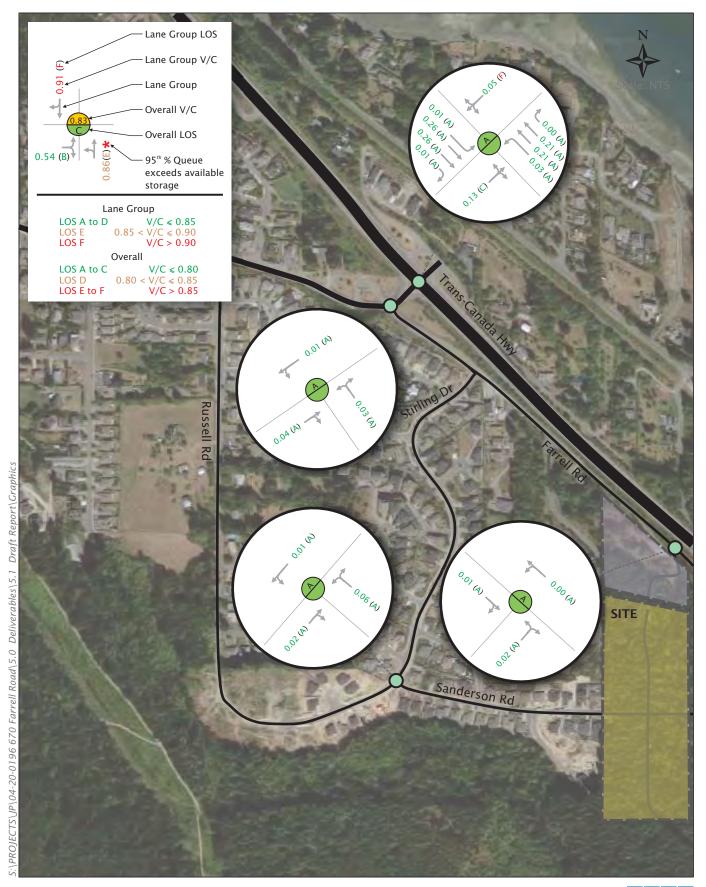


Exhibit 4.4 Opening Day Total AM Peak Hour Performance



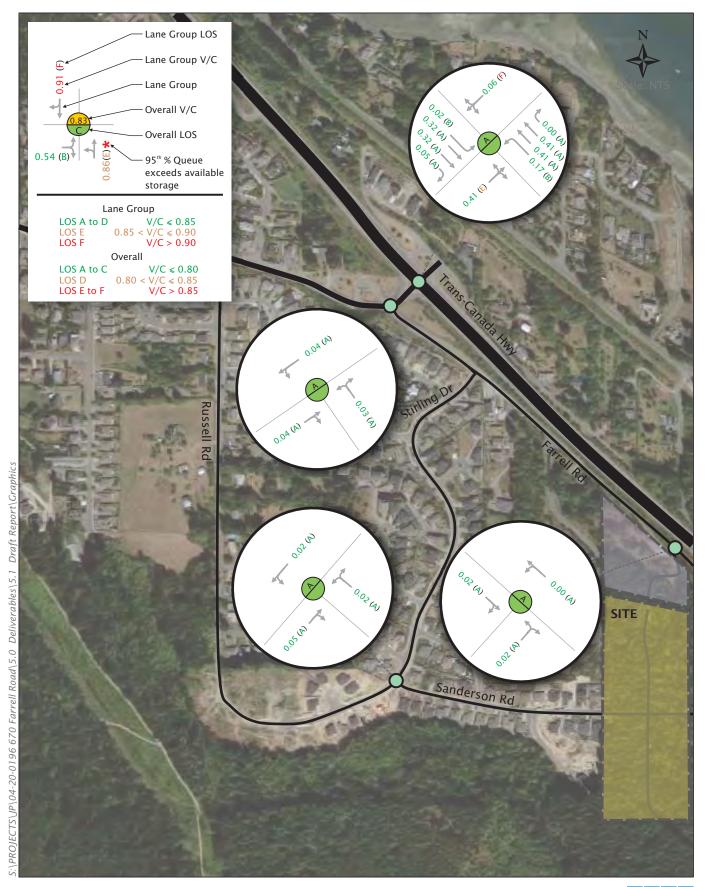


Exhibit 4.5
Opening Day PM Peak Hour Performance



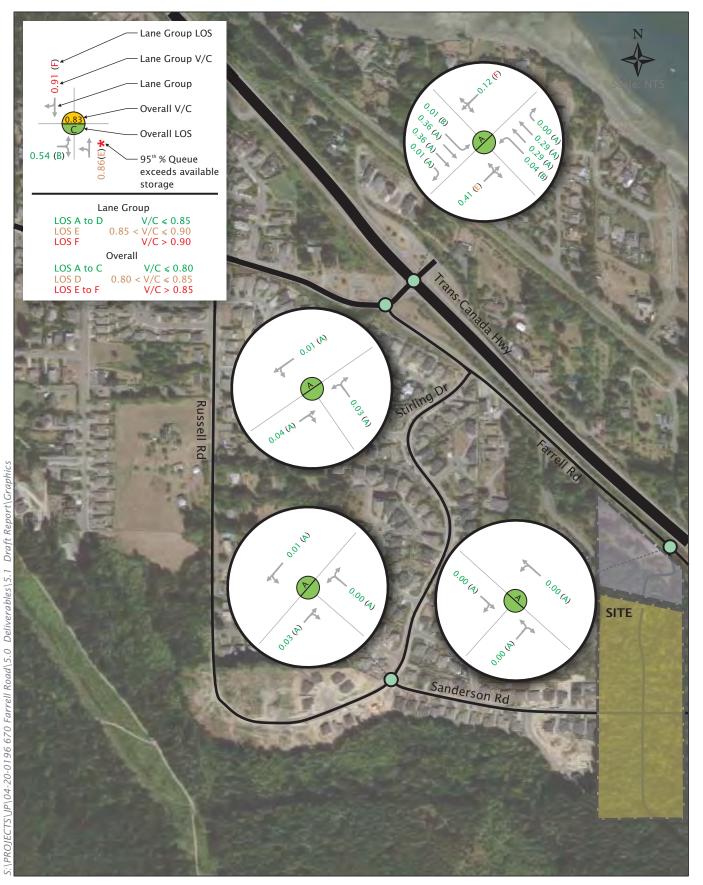


Exhibit 4.6 Background 2040 AM Peak Hour Performance



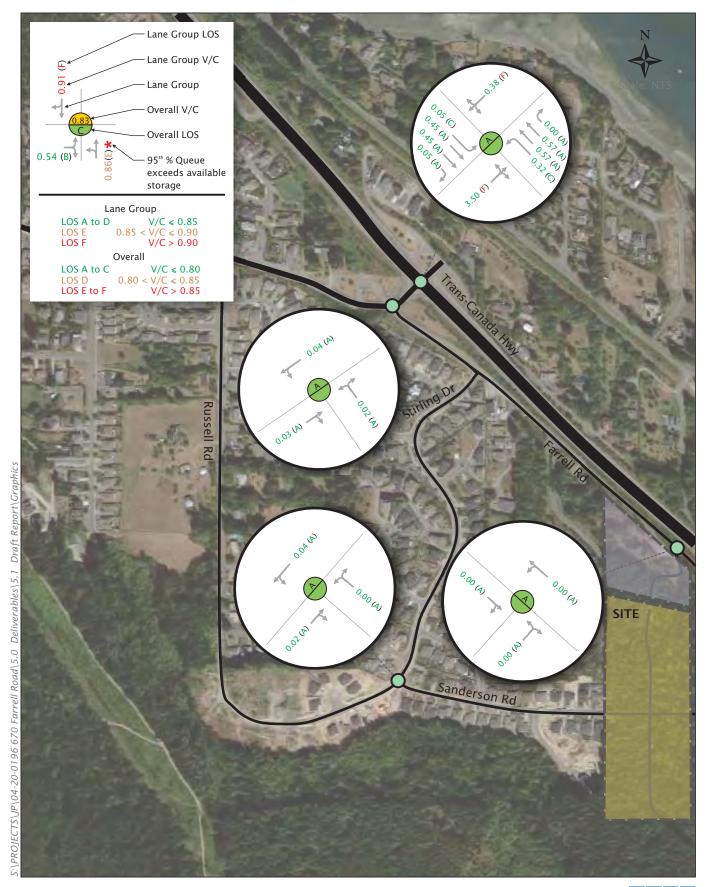


Exhibit 4.7 Background 2040 PM Peak Hour Performance



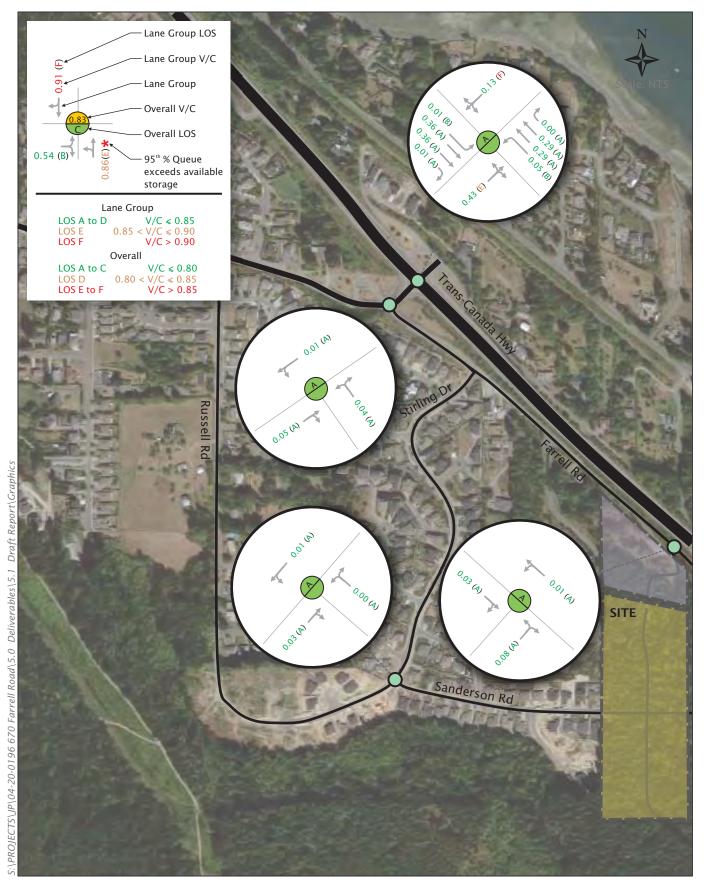


Exhibit 4.8 Total 2040 AM Peak Hour Performance





Exhibit 4.9 Total 2040 PM Peak Hour Performance



4.1.6 Summary of Traffic Impacts & Recommended Mitigations

The operational issue identified by R.F. Binnie at the Highway 1 & Davis Road intersection is observed in our existing, background and total operation scenarios.

The mitigation proposed by R.F. Binnie remains valid with our analysis. The proposed development does not impact or alter this recommendation. The proposed mitigation (removal of minor approach through and left turn movements) does not impact other the operations of other intersection movements but would improve their safety.

No other traffic issues in the study area were observed that would require mitigation.

5. TRANSPORTATION DEMAND MANAGEMENT

5.1 Definition

Transportation Demand Management (TDM) is defined as the "application of strategies and policies to reduce travel demand (specifically that of single-occupancy private vehicles), or to redistribute this demand in space or in time". A successful TDM program can influence travel behaviour away from Single Occupant Vehicle (SOV) travel during peak periods towards more sustainable modes such as High Occupancy Vehicle (HOV) travel, transit, cycling or walking. The responsibility for implementation of TDM measures can range across many groups, including regional and municipal governments, transit agencies, private developers, residents/resident associations or employers.

The majority of common TDM measures listed in Table 5.1 are more appliable to denser forms of residential units such as apartments and condos.

Townhomes and single-family areas are often best served with connected pedestrian routes and by persevering low vehicle speed local roads that can accommodate shared cyclist use.

5.2 Recommended TDM Measures for Site

The development should contribute to sidewalk on west side of Farrell Road connecting to existing sidewalk infrastructure to the north. This will help create a pedestrian connection to the transit stops located on Davis Road.

.

¹ http://ops.fhwa.dot.gov/tdm/index.htm FHWA Travel Demand Management home page

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

- 1. Vehicle trip generation was estimated using ITE trip rates which are established through hundreds of surveys of a wide range of single-family home types and areas, including single-family homes with secondary suites.
- 2. Due to grade changes on the site, an internal vehicle connection between Farrell Road and Sanderson Road is not feasible on the proposed development site but rather a future connection would occur with future development further to the east where there is less grade differential. The site plan includes the recommended road infrastructure that will connect the single-family homes to the currently vacant land east of the subject property.
- 3. The result of not having an on-site connection is that the 28 townhomes will be accessible only from Farrell Road and the 45 single family homes would only be accessible from Sanderson Road until a future connection is built.
- 4. The 28 townhomes that will use Farrell Road as their access are anticipated to generate approximately 15 20 vehicle trips during peak hour periods. This equates to approximately one vehicle every three to four minutes on Farrell Road.
- 5. Sanderson Road operates as a local road which terminates at the development site. The 45 single family homes that will use Sanderson Road as their access are anticipated to generate approximately 35 45 vehicle trips during peak hour periods. This equates to approximately one vehicle every one to two minutes on Sanderson Road.
- 6. With this new volume of development generated traffic added to the 30 existing single-family homes on Sanderson Road and Swettenham Place, the roadway is anticipated to remain within TAC suggestions for residential local roads.
- 7. With a future road connection between the single-family homes and the townhomes it is anticipated that a portion of single-family homes will begin to use the Farrell Road route to access their homes. This future shift of approximately 10-20 vehicles per peak hour are not anticipated to impact this report's findings and recommendations.
- 8. The *R.F. Binnie Highway 1 Ladysmith Report* recommended mitigation for the Davis Road & Highway 1 intersection is supported with our analysis. It is supported since vehicles that would make the to be restricted movements have viable alternative routes.
- 9. The proposed development does not alter or significantly impact the *R.F. Binnie Highway 1 Ladysmith Report* mitigation recommendation.

6.2 Recommendations

- 10. The Town of Ladysmith should support the proposed rezoning from a road capacity perspective.
- 11. The development plan should include a pedestrian connection from the site's Farrell Road driveway along the west side of Farrell Road towards existing pedestrian infrastructure to the north.

APPENDIX A

Binnie Report - Traffic Operations Review Highway 1 Ladysmith, January 31, 2019

Traffic Operations Review - FINAL Rev.0

Ministry of Transportation and Infrastructure Highway 1 Ladysmith

January 31, 2019

BINNIE CONSULTING LTD.

300 - 4940 Canada Way, Burnaby, BC V5G 4K6 Main: 604-420-1721







Prepared by:

Max Leung, EIT

Reviewed by:

Kelly Bullivant, P.Eng.

Approved by: _______ Jonathan Ho, P.Eng., PTOE

BINNIE

PROJECT TEAM MEMBER LIST

Project Manager: Jonathan Ho, P.Eng., PTOE

Technical Staff: Kelly Bullivant, P.Eng.

Max Leung, EIT

Gurjit Rajput



TABLE OF CONTENTS

1	INT	INTRODUCTION1				
	1.1	Background	1			
	1.2	Study Objectives	1			
2	EXIS	STING CONDITIONS	3			
	2.1	Study Road Network	3			
	2.2	Study Intersections	4			
	2.3	Traffic Volumes	5			
	2.4	Pedestrian and Cyclist Accommodation	6			
3	TRA	AFFIC OPERATION REVIEW	8			
	3.1	Traffic Signal Warrants	8			
	3.2	Pedestrian Crossing Demand	8			
	3.3	Highway 1 Operating Speeds	9			
	3.4	Highway 1 Vehicle Classification	10			
	3.5	Highway 1 Collision Data	11			
	3.6	Traffic Operation Analysis	18			
4	PRC	DPOSED IMPROVEMENTS	21			
	4.1	Signal Timing Improvements	21			
	4.2	Intersection Operation Improvements	21			
	4.3	Pedestrian Accommodations	23			
	4.4	Safety Improvements	23			
5	CON	NCLUSION AND RECOMMENDATIONS	25			
	5.1	Conclusion	25			
	5.2	Recommendations	25			



TABLES

Table 3-1: Summary of Existing Speed Classification10	
Table 3-2: Summary of Traffic Classification11	
Table 3-3: HCM LOS Criteria for Signalized Intersection18	
Table 3-4: HCM LOS Criteria for Unsignalized Intersection19	
Table 3-5: Existing Traffic Operations20	
FIGURES	
Figure 1-1: Map of Study Area2	
Figure 2-1: Existing Traffic Volumes7	
Figure 3-1: Collision Severity at Highway 1 and Grouhel Road12	
Figure 3-2: Collision Types at Highway 1 and Grouhel Road12	
Figure 3-3: Collision Severity at Highway 1 and Ludlow Road/1st Avenue13	
Figure 3-4: Collision Types at Highway 1 and Ludlow Road/1st Avenue14	
Figure 3-5: Collision Severity at Highway 1 and Transfer Beach Blvd./Roberts St15	
Figure 3-6: Collision Types at Highway 1 and Transfer Beach Blvd./Roberts St	
Figure 3-7: Collision Severity at Highway 1 and N. Davis Road16	
Figure 3-8: Collision Types at Highway 1 and N. Davis Road16	
Figure 3-9: Collision Severity at Highway 1 and Edgelow Road S./Thicke Road17	
Figure 3-10: Collision Types at Highway 1 and Edgelow Road S./Thicke Road18	

APPENDICES

Appendix A: Existing Turning Movement Count Data

Appendix B: MOTI Traffic Signal Warrant Analysis

Appendix C: Vehicle Operating Speeds and Vehicle Classification Data

Appendix D: Vehicle Collision Data

Appendix E: Synchro Analysis Results



1 INTRODUCTION

1.1 Background

R.F. Binnie & Associates Ltd. (Binnie) has been retained by the Ministry of Transportation and Infrastructure (the MOTI) under the current Traffic Engineering General Services Contract No. 880CS0933 to perform a traffic operation review on the Trans Canada Highway (Highway 1) segment through the Town of Ladysmith (the Town). The six intersections reviewed in this report are as follows:

- Highway 1 and Grouhel Road
- Highway 1 and Ludlow Road/1st Avenue
- Highway 1 and Transfer Beach Boulevard/Roberts Street
- Highway 1 and N. Davis Road
- Highway 1 and S. Davis Road
- Highway 1 and Edgelow Road S./Thicke Road

The purpose of this review is to evaluate the performance of these intersections and to provide recommendations for safety and performance improvements. The review will also evaluate the current pedestrian accommodations along this route and provide recommendations for improvement. For this report, Highway 1 is described in the north-south orientation while the minor roads are in the east-west orientation.

The study area is shown in **Figure 1-1**.

1.2 Study Objectives

The objectives of this traffic operations review are outlined as follows:

- Complete traffic signal warrant analysis at select intersections;
- Review existing pedestrian demands across Highway 1 and assess opportunities to improve pedestrian accommodations;
- Review existing operating speeds, vehicle classifications, and collision data on the highway; and
- Review the existing intersection operations at the six study intersections and determine if improvements are required to address existing operational and safety issues.



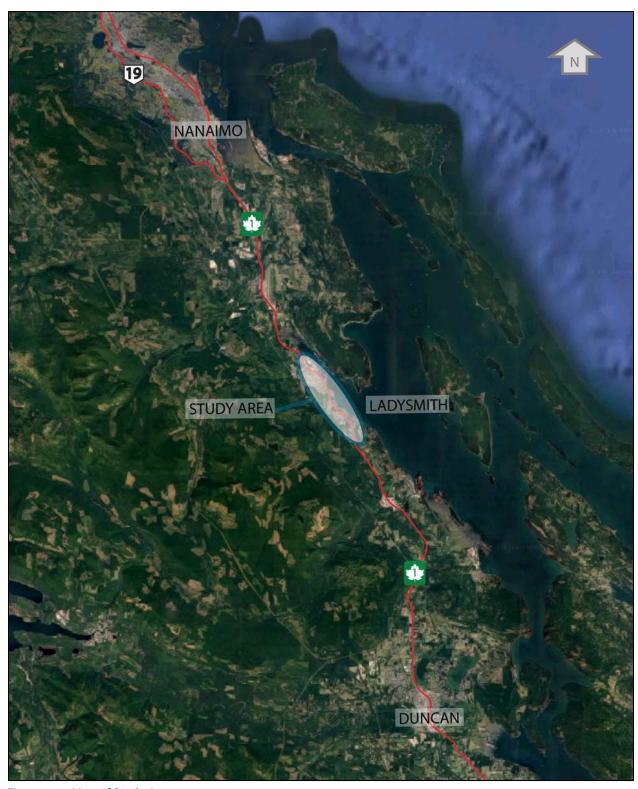


Figure 1-1: Map of Study Area



2 EXISTING CONDITIONS

2.1 Study Road Network

2.1.1 Highway 1

Highway 1 is a major highway that connects the communities on the east side of Vancouver Island and is under the jurisdictions of the MOTI. Within the study area, the highway has a four-lane cross-section, generally runs in the north-south direction through the Town, and has a posted speed of 70 km/h to 90 km/h. A railway track runs adjacent to Highway 1 on the east side.

The highway serves as a major link for the movement of goods and services across Vancouver Island; therefore, trucks make up a high percentage of the highway traffic demands. In addition to truck traffic, Highway 1 also facilitates commuter traffic to and from the nearby City of Nanaimo (Nanaimo).

2.1.2 Grouhel Road

Grouhel Road is a local two-lane roadway that generally runs in the east-west direction and has an assumed speed limit of 50km/h. The existing shoulders are generally grass and narrow, and there are no sidewalks provided. Grouhel Road provides access to a rural residential area.

2.1.3 Ludlow Road/1st Avenue

Ludlow Road/1st Avenue is a collector roadway that runs in the east-west direction. East of Highway 1, Ludlow Road intersects with the existing railroad and provides access to a commercial and industrial area of the Town. To the west of Highway 1, Ludlow Road becomes 1st Avenue, which provides access to the Town and connects residents to Highway 1. Ludlow Road has a four-lane cross-section and 1st Avenue has a two-lane cross-section. Ludlow Road has a posted speed of 40 km/h and 1st Avenue has a posted speed of 30 km/h.

2.1.4 Transfer Beach Boulevard/Roberts Street

Transfer Beach Boulevard/Roberts Street is a two-lane roadway that generally runs in the east-west direction. The roadway has a posted speed of 30 km/h. East of Highway 1, Transfer Beach Boulevard intersects with the existing railroad and connects vehicles to the Town's Transfer Beach Park. To the west of Highway 1, Transfer Beach Boulevard becomes Roberts Street. Roberts Street provides access to the Town and connects residents to Highway 1.

2.1.5 N. Davis Road

N. Davis Road is a two-lane roadway that primarily runs in the east-west direction and has an assumed speed limit of 50km/h. There are existing shoulders and sidewalks provided along the roadway. N. Davis Road provides access to residential and commercial areas.

2.1.6 S. Davis Road

S. Davis Road is a local two-lane roadway that generally runs in the east-west direction and has an assumed speed limit of 50km/h. The existing shoulders are narrow and there are no sidewalks provided. S. Davis Road provides access to a residential area.



2.1.7 Edgelow Road S./Thicke Road

Edgelow Road S./Thicke Road is a two-lane roadway that generally runs in the east-west direction and has an assumed speed limit of 50 km/h. To the west of Highway 1, Edgelow Road S. becomes Thicke Road. The existing shoulders are generally grass and narrow and there are no sidewalks provided. The roadway provides access to a rural residential area.

2.2 Study Intersections

The study road network is an approximately seven km long section of Highway 1 located on Vancouver Island that runs through the Town. It spans from north of the Highway 1 and Grouhel Road intersection to south of the Highway 1 and Edgelow Road S./Thicke Road intersection. The study road network includes the following four signalized intersections:

- Highway 1 and Ludlow Road/1st Avenue intersection
- Highway 1 and Transfer Beach Boulevard/Roberts Street intersection
- Highway 1 and N. Davis Road intersection
- Highway 1 and Edgelow Road S./Thicke Road

The study road network also includes the following two unsignalized intersections:

- Highway 1 and Grouhel Road intersection
- Highway 1 and S. Davis Road intersection

2.2.1 Highway 1 and Grouhel Road Intersection

The intersection of Highway 1 and Grouhel Road is an unsignalized three-legged intersection. The west approach from Grouhel Road is stop-controlled while Highway 1 is free-flowing. The highway has two through lanes in each direction with a northbound left-turn lane and a southbound channelized right-turn lane at the intersection. The eastbound movement has a shared left-turn/right-turn lane, with the right-turn movement channelized. A marked pedestrian crosswalk is provided across the west approach of the intersection.

2.2.2 Highway 1 and Ludlow Road/1st Avenue Intersection

The intersection of Highway 1 and Ludlow Road/1st Avenue is a signalized four-legged intersection. In each direction, the highway has a left-turn lane, two through lanes, and a channelized right-turn lane. The east approach has a left-turn lane, one through lane, and one right-turn lane with an acceleration lane onto the highway. The west approach has a left-turn lane and one shared though/right-turn lane. Vehicles are not permitted to park or stop in the vicinity of the intersection due to the presence of an existing at-grade railway crossing. There are marked pedestrian crosswalks on the east, south, and west approaches of the intersection.

2.2.3 Highway 1 and Transfer Beach Boulevard/Roberts Street Intersection

The intersection of Highway 1 and Transfer Beach Boulevard/Roberts Street is a signalized four-legged intersection. In each direction, the highway has a left-turn lane and two through lanes. The southbound



curb lane is a shared through/right-turn movement, while in the northbound direction, there is a channelized right-turn lane. The east approach has one shared left-turn/through lane and one shared through/right-turn lane, with the right-turn movement channelized. The west approach has one shared left-turn/through lane and one right-turn lane. There are marked pedestrian crosswalks on all four approaches of the intersection.

2.2.4 Highway 1 and N. Davis Road Intersection

The intersection of Highway 1 and N. Davis Road is a signalized four-legged intersection. In each direction, the highway has a left-turn lane, two through lanes, and a channelized right-turn lane. The east approach has a shared left-turn/through lane and a channelized right-turn lane. The west approach has one left-turn lane and one shared through/right-turn lane, with the right-turn movement channelized. Vehicles are not permitted to park or stop in the vicinity of the intersection due to the presence of an existing at-grade railway crossing. There are marked pedestrian crosswalks on the north, east, and west approaches of the intersection.

2.2.5 Highway 1 and S. Davis Road Intersection

The intersection of Highway 1 and S. Davis Road is an unsignalized four-legged intersection. The east and west approaches are stop-controlled while Highway 1 is free-flowing. In each direction, the highway has a left-turn lane, two through lanes, and a channelized right-turn lane. The east and west approaches have one shared left-turn/through/right-turn lane, with the right turn movement channelized.

2.2.6 Highway 1 and Edgelow Raod S./Thicke Road Intersection

The intersection of Highway 1 and Edgelow Road S./Thicke Road is a signalized four-legged intersection. In each direction, the highway has a left-turn lane and two through lanes. The northbound curb lane is a shared through/right-turn movement with the right-turn movement channelized, while in the southbound direction, there is a channelized right-turn lane. The east and west approaches have one shared left-turn/through/right-turn lane. Vehicles are not permitted to park or stop in the vicinity of the intersection. There are marked pedestrian crosswalks on the north, east, and west approaches of the intersection.

2.3 Traffic Volumes

Existing traffic volumes were collected by TransTech Data Services Ltd. (TransTech) on August 9, 2018 for the six study intersections during the weekday AM peak period and PM peak period.

Based on the traffic volume data collected, the AM peak hour of the study corridor was generally found to be from 08:00 to 09:00, with the dominant flow in the southbound direction along Highway 1. The PM peak hour was generally found to be from 16:15 to 17:15, with the dominant flow in the northbound direction.

The study intersections were found to have the following approximate traffic volumes during the AM peak and PM peak hours:

 Highway 1 and Grouhel Road: 1,950 vehicles in the AM peak hour and 3,050 vehicles in the PM peak hour



- Highway 1 and Ludlow Road/1st Avenue: 2,100 vehicles in the AM peak hour and 3,200 vehicles in the PM peak hour
- Highway 1 and Transfer Beach Boulevard/Roberts Street: 1,900 vehicles in the AM peak hour and 3,000 vehicles in the PM peak hour
- Highway 1 and N. Davis Road: 1,950 vehicles in the AM peak hour and 3,200 vehicles in the PM peak hour
- Highway 1 and S. Davis Road: 1,550 vehicles in the AM peak hour and 2,450 vehicles in the PM peak hour
- Highway 1 and Edgelow Road S./Thicke Road: 1,500 vehicles in the AM peak hour and 2,350 vehicles in the PM peak hour

The unadjusted turning movement count data are attached to this report in **Appendix A**. The existing traffic volumes for the study intersections are shown below in **Figure 2-1**.

2.4 Pedestrian and Cyclist Accommodation

There are pedestrian sidewalks provided along the west side of Highway 1 between the Ludlow Road/1st Avenue and Methuen Street intersections. Additionally, intersections that connect to the Town's downtown area often have a sidewalk on at least one side of the minor roadway to accommodate pedestrians. There are marked crosswalks at the following intersections within the study area:

- Highway 1 and Grouhel Road (unsignalized) west approach
- Highway 1 and Ludlow Road/1st Avenue (signalized) east, south, and west approaches
- Highway 1 and Kitchener Street (unsignalized) west approach
- Highway 1 and Buller Street (unsignalized) west approach
- Highway 1 and High Street (unsignalized) west approach
- Highway 1 and Gatacre Street (unsignalized) west approach
- Highway 1 and Transfer Beach Boulevard/Roberts Street (signalized) all four approaches
- Highway 1 and Baden Powell Street (unsignalized) west approach
- Highway 1 and N. Davis Road (signalized) north, east, and west approaches
- Highway 1 and Edgelow Road S./Thicke Road (signalized) north, east, and west approaches

Additionally, there is a Highway 1 pedestrian underpass located approximately 200 m south of Methuen Street that provides an alternate route across the highway for pedestrians and cyclists. The underpass provides a connection between the residential area west of the highway and Transfer Beach Park, east of the highway.

Based on information from the Town's website, there are two designated trail routes in the vicinity of the Highway 1 study corridor. The Heritage Walk Trail connects the downtown area to the waterfront via the Highway 1 and Transfer Beach Boulevard/Roberts Street intersection. The Town's section of the Trans Canada Trail is approximately 4.6 km long and crosses Highway 1 at the Ludlow Road/1st Avenue



intersection, the N. Davis Road intersection, and the pedestrian underpass. These trails are commonly used by both pedestrians and cyclists.

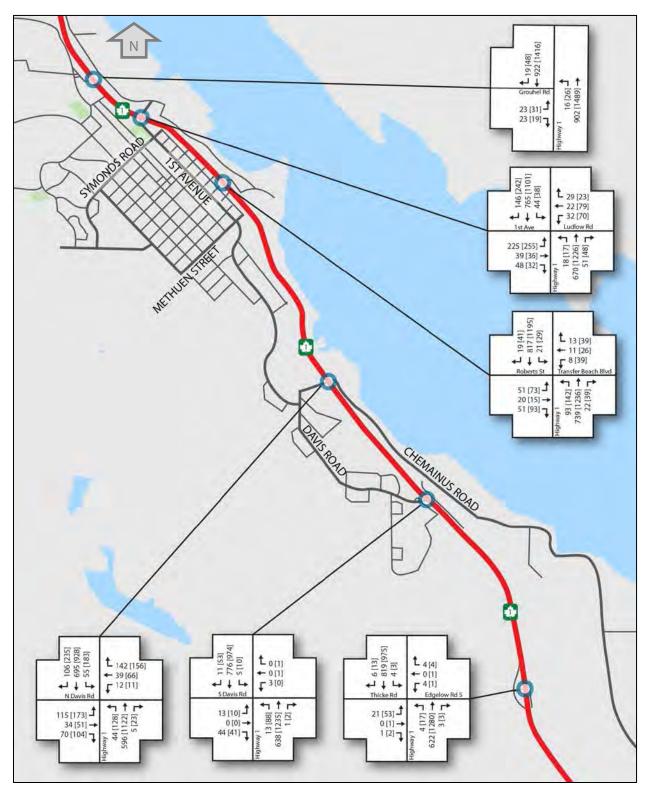


Figure 2-1: Existing Traffic Volumes



3 TRAFFIC OPERATION REVIEW

3.1 Traffic Signal Warrants

Binnie performed MOTI traffic signal warrant analysis at the following intersections:

- Highway 1 and Grouhel Road
- Highway 1 and S. Davis Road

Additionally, Binnie performed a MOTI left-turn signal warrant analysis for the following movement:

Southbound left-turn movement at the Highway 1 and Transfer Beach Boulevard/Roberts Street

The traffic signal warrants assumed an annual growth rate of 2%.

Based on the existing and forecast traffic volumes, a traffic signal is not warranted at the Highway 1 and Grouhel Road intersection unless there is considerable traffic that would detour from the Highway 1 and Ludlow Road/1st Avenue intersection to this intersection should it be signalized. The Highway 1 and S. Davis Road intersection is not warranted for a traffic signal.

The southbound left-turn movement on Highway 1 and Transfer Beach Boulevard/Roberts Street also does not warrant a protected or protected-permissive left-turn traffic signal based on existing and forecast traffic volumes.

The detailed MOTI traffic signal warrant analysis and left-turn signal warrant analysis for the above intersections are summarized in **Appendix B**.

3.2 Pedestrian Crossing Demand

Existing pedestrian volumes were also collected by TransTech at the following locations:

- Highway 1 and Buller Street on Thursday, August 9, 2018 from 8:00 AM to 8:00 PM
- Highway 1 pedestrian underpass near Methuen Street on Sunday, August 12, 2018 from 8:00
 AM to 8:00 PM

The Highway 1 and Buller Street intersection is unsignalized and only permits the right-in/right-out (RIRO) and left-in movements. There is a marked crosswalk across the west side street approach; however, there are no marked pedestrian accommodations provided across Highway 1. Based on the collected data, 43 pedestrians were found to cross Highway 1 at Buller Street in a 12-hour period. The peak hour was found to be from 6:00 PM to 7:00 PM with 12 pedestrians crossing Highway 1 during this time.

It is assumed that pedestrians cross at Buller Street to access the Trans Canada Trail, which is easily accessible via a dirt road on the east side of the highway. The nearest Highway 1 pedestrian crossing is approximately 300 m south of Buller Street at the Transfer Beach Boulevard/Roberts Street intersection. It is recommended that a grade-separated pedestrian crossing be provided to accommodate vulnerable



road users near this location. Further discussions between the MOTI and the Town should be undertaken to determine the best location for a pedestrian crossing and what improvements may be necessary along Highway 1 to accommodate it, including the compatibility with the potential waterfront developments planned by the Town.

The Highway 1 pedestrian underpass near Methuen Street provides access between the residential area west of the highway and Transfer Beach Park, Ladysmith Amphitheater, and the waterfront area. Additionally, the pedestrian underpass is part of the Trans Canada Trail. Based on the collected data, 171 pedestrians were found to use the underpass in a 12-hour period. A noticeable increase in use of the pedestrian underpass occurred during the evening. The peak hour was found to be from 5:15 PM to 6:15 PM with 30 pedestrians using the underpass during this time.

3.3 Highway 1 Operating Speeds

Existing two-way vehicle operating speed data were collected by TransTech along Highway 1 from August 9, 2018 to August 15, 2018, for 24 hours per day, at the following locations along Highway 1:

- North of Grouhel Road
- Between Ludlow Road/1st Avenue and Transfer Beach Boulevard/Roberts Street
- 700 m south of Transfer Beach Boulevard/Roberts Street
- Between N. Davis Road and S. Davis Road
- 400 m south of S. Davis Road
- 400 m south of Edgelow Road S./Thicke Road

Currently, Highway 1 southbound traffic transitions from 90 km/h to 70 km/h approximately two km north of the Grouhel Road intersection, while the northbound traffic transitions from 70 km/h to 90 km/h approximately 100 m north of the intersection. North of Grouhel Road, the existing average vehicle speed on Highway 1 was found to be between 95 km/h and 100 km/h for both northbound and southbound traffic, while the 85th percentile vehicle speed was found to be between 105 km/h and 110 km/h for both directions.

Between Ludlow Road/1st Avenue and Transfer Beach Boulevard/Roberts Street, the Highway 1 posted speed limit is 70 km/h. The existing average vehicle speed was found to be between 65 km/h and 70 km/h for southbound traffic and between 75 km/h and 80 km/h for northbound traffic. The 85th percentile vehicle speed was found to be between 75 km/h and 80 km/h for southbound traffic and between 85 km/h and 90 km/h for northbound traffic.

Approximately 700 m south of Transfer Beach Boulevard/Roberts Street near Gifford Road, Highway 1 southbound traffic transitions from 70 km/h to 90 km/h, while the northbound traffic transitions from 90 km/h to 70 km/h. The existing average vehicle speed was found to be between 80 km/h and 85 km/h for southbound traffic and approximately 70 km/h for northbound traffic. The 85th percentile vehicle speed was found to be between 90 km/h and 100 km/h for southbound traffic and approximately 85 km/h for northbound traffic.



Between N. Davis Road and S. Davis Road, the existing posted speed limit along Highway 1 is 90 km/h. The existing average vehicle speed was found to be between 95 km/h and 100 km/h for both northbound traffic and southbound traffic. The 85th percentile vehicle speed was found to be approximately 105 km/h for both directions.

400 m south of S. Davis Road, the existing posted speed limit along Highway 1 is 90 km/h. The existing average vehicle speed was found to be approximately 100 km/h for both northbound traffic and southbound traffic. The 85th percentile vehicle speed was found to be approximately 110 km/h for southbound traffic and between 110 km/h and 115 km/h for northbound traffic.

400 m south of Edgelow Road S./Thicke Road, the existing posted speed limit along Highway 1 is 90 km/h. The existing average vehicle speed was found to be between 95 km/h and 100 km/h for both northbound traffic and southbound traffic. The 85th percentile vehicle speed was found to be between 105 km/h and 110 km/h for southbound traffic and between 110 km/h and 115 km/h for northbound traffic. Currently, the nearest northbound posted speed limit sign is approximately 2.6 km south of the intersection.

Along the entire study corridor, the existing vehicle operating speed along Highway 1 is approximately 10 km/h to 25 km/h higher than the posted speed limit, as can be seen in **Table 3-1**.

Table 3-1: Summary of Existing Speed Classification

Higw hay 1 Location /	North of	Between Ludlow	Near Gifford	Between N.	400m south	400m south
Posted Speed	70	70	70	90	90	90
NB Average	95-100	75-80	70	95-100	100	95-100
NB 85th Percentile	105-110	85-90	85	105	110-115	110-115
SB Average	95-100	65-70	80-85	95-100	100	95-100
SB 85th Percentile	105-110	75-80	90-100	105	100	105-110

Based on the MOTI's *Technical Circular T-04/14 Corridor Speed Limit Procedure and Speed Limit Approvals*, dated June 23, 2014, the posted speed limit on a MOTI highway correlates, in part, with the 85th percentile vehicle operating speed on a highway segment in ideal conditions. Historically, when the posted speed limit is inconsistent with the speed that drivers are comfortable travelling at through a highway segment, issues such as driver frustration, excessive speeding, and unsafe driving manoeuvres can arise.

Given that in each segment of the study corridor the 85th percentile vehicle operating speed is higher than the posted speed limit, any further speed limit reduction is expected to have low compliance by drivers and it may potentially exacerbate any current safety concerns, e.g., significant speed differentials in operating speed that could result in more serious collisions; therefore, it is recommended that the current posted speed limits within the study area of Highway 1 be maintained and perform periodic enforcement to ensure the operating speed is consistent with the posted speed.

3.4 Highway 1 Vehicle Classification

Existing two-way vehicle classification data were collected by TransTech along Highway 1 from August 9, 2018 to August 15, 2018, for 24 hours per day, at the following locations along Highway 1:



- North of Grouhel Road
- Between Ludlow Road/1st Avenue and Transfer Beach Boulevard/Roberts Street
- 700 m south of Transfer Beach Boulevard/Roberts Street
- Between N. Davis Road and S. Davis Road
- 400 m south of S. Davis Road
- 400 m south of Edgelow Road S./Thicke Road

The vehicle survey classifies the following vehicle types as passenger vehicles:

- Motorcycles
- Passenger cars, including those with recreational trailers
- Two-axle pickup trucks, vans, and RVs, including those with recreational trailers

The vehicle survey classifies the following vehicle types as heavy trucks:

- Buses
- Two-axle, six-wheel vehicles
- Three+ axle vehicles as a single or double unit

Based on the data collected, two-way traffic along Highway 1 within the study corridor is approximately 83% passenger vehicles and 17% heavy trucks. The vehicle classification data is summarized in **Table 3-2** and the unadjusted survey results are attached in **Appendix C**.

Table 3-2: Summary of Traffic Classification

Highway 1 Location	Passenger Vehicles			Trucks		
riigiiway i Location	NB	SB	Tw o-Way%	NB	SB	Two-Way%
North of Grouhel Rd	84.4%	83.3%	83.9%	15.6%	16.7%	16.2%
Between Ludlow Rd / 1st Ave and	84.1%	82.2%	83.2%	15.9%	17.8%	16.9%
Near Gifford Rd	81.4%	82.8%	82.1%	18.6%	17.2%	17.9%
Between N. Davis Rd and S. Davis Rd	82.2%	82.9%	82.6%	17.8%	17.1%	17.5%
400m south of S. Davis Rd	84.0%	83.4%	83.7%	16.0%	16.6%	16.3%
400m south of Thicke Rd	83.8%	83.3%	83.6%	16.2%	16.7%	16.5%
Average	83.3%	83.0%	83.2%	16.7%	17.0%	16.9%

The MOTI permanent count station P-12-3NS is located approximately 10 km north of the study area. In 2017, two-way traffic on Highway 1 was approximately 90% passenger vehicles and 10% heavy trucks, which supports the vehicle classification survey results.

3.5 Highway 1 Collision Data

Existing collision data at the study intersections were provided by the MOTI and the Insurance Corporation of British Columbia (ICBC). ICBC data were recorded from 2011 to 2015 and are based on driver reported collisions. The MOTI data were recorded from 2012 to 2016 and are based on police reported collisions. The collision summary reports are attached in **Appendix D**.



3.5.1 Highway 1 and Grouhel Road Intersection

Based on ICBC data, the Highway 1 and Grouhel Road intersection had 12 property damage only (PDO) incidents and 11 collisions with injuries caused to drivers or passengers during the five-year period. No fatalities were reported. The histogram in **Figure 3-1** summarizes the collision data provided by ICBC between 2011 and 2015.

Based on MOTI data, police responded to four collisions at this intersection between 2012 and 2016. Three of the collisions involved a vehicle making a 90° left-turn movement at the intersection, while one collision involved a vehicle leaving the travel lane to the right-hand side. **Figure 3-2** summarizes the type of collisions at the intersection of Highway 1 and Grouhel Road.

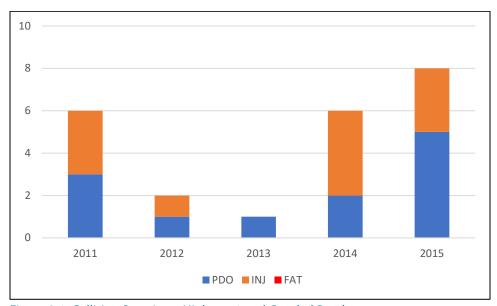


Figure 3-1: Collision Severity at Highway 1 and Grouhel Road

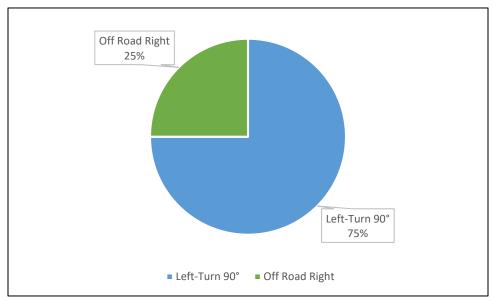


Figure 3-2: Collision Types at Highway 1 and Grouhel Road



3.5.2 Highway 1 and Ludlow Road/1st Avenue intersection

Based on ICBC data, the Highway 1 and Ludlow Road/1st Avenue intersection had 19 PDO incidents and ten collisions with injuries caused to drivers or passengers during the five-year period. No fatalities were reported. The histogram in **Figure 3-3** summarizes the collision data provided by ICBC between 2011 and 2015.

Based on MOTI data, police responded to eight collisions at this intersection between 2012 and 2016. Four of the incidents involved rear-end collisions, with two occurring in the northbound direction and two occurring in the southbound direction. Three collisions involved vehicles making the left-turn movement from the highway onto the side street, and one incident involved a head-on collision. **Figure 3-4** summarizes the type of collisions at the intersection of Highway 1 and Ludlow Road/1st Avenue.

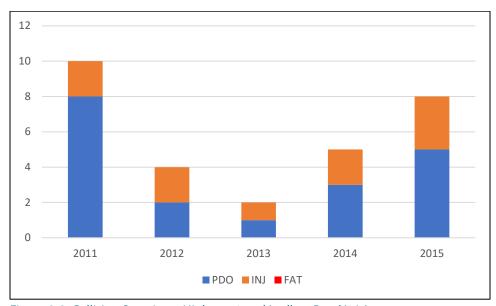


Figure 3-3: Collision Severity at Highway 1 and Ludlow Road/1st Avenue



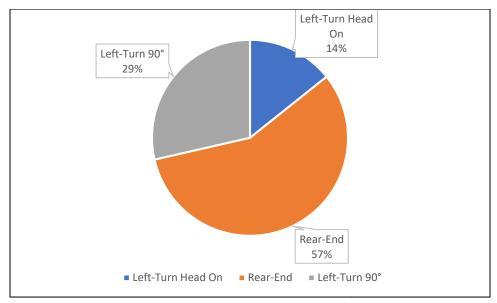


Figure 3-4: Collision Types at Highway 1 and Ludlow Road/1st Avenue

3.5.3 Highway 1 and Transfer Beach Boulevard/Roberts Street Intersection

Based on ICBC data, the Highway 1 and Transfer Beach Boulevard/Roberts Street intersection had 12 PDO incidents and 14 collisions with injuries caused to drivers or passengers during the five-year period. No fatalities were reported. The histogram in **Figure 3-5** summarizes the collision data provided by ICBC between 2011 and 2015.

Based on MOTI data, police responded to six collisions at this intersection between 2012 and 2016. Two of the incidents involved rear-end collisions in the northbound direction. Two collisions involved vehicles making the left-turn movement and one incident was a single vehicle leaving the travel lane. Lastly, one collision was reported as "other" and no further details were provided. **Figure 3-6** summarizes the type of collisions at the intersection of Highway 1 and Transfer Beach Boulevard/Roberts Street.



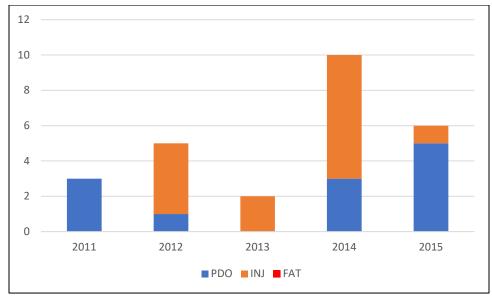


Figure 3-5: Collision Severity at Highway 1 and Transfer Beach Blvd./Roberts St.

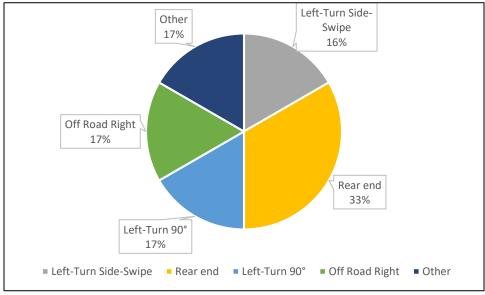


Figure 3-6: Collision Types at Highway 1 and Transfer Beach Blvd./Roberts St.

3.5.4 Highway 1 and N. Davis Road Intersection

Based on ICBC data, the Highway 1 and N. Davis Road intersection had 29 PDO incidents and 20 collisions with injuries caused to drivers or passengers during the five-year period. No fatalities were reported. The histogram in **Figure 3-7** summarizes the collision data provided by ICBC between 2011 and 2015.

Based on MOTI data, police responded to ten collisions at this intersection between 2012 and 2016. Seven of the incidents involved rear-end collisions with one in the southbound direction, five in the northbound direction, and one unspecified. One collision was a side-swipe incident during an overtaking manoeuvre and another incident was a single vehicle leaving the travel lane during



inclement weather conditions. Lastly, one collision involved hitting a wild animal. **Figure 3-8** summarizes the type of collisions at the intersection of Highway 1 and N. Davis Road.

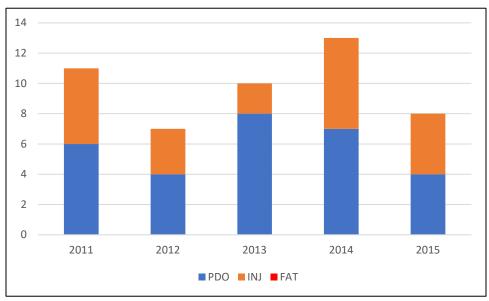


Figure 3-7: Collision Severity at Highway 1 and N. Davis Road

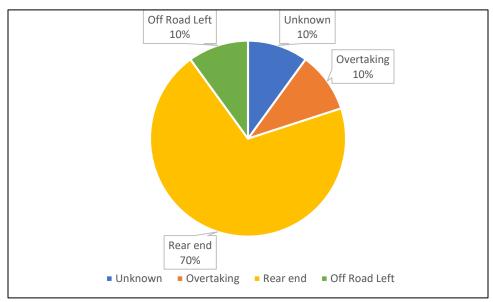


Figure 3-8: Collision Types at Highway 1 and N. Davis Road

3.5.5 Highway 1 and S. Davis Road Intersection

Based on ICBC data, there were no collisions at the Highway 1 and S. Davis Road between 2011 and 2015. Based on MOTI data, police responded to one rear-end collisions at this intersection between 2012 and 2016.

It is noted that in 2017, a collision that resulted in injury caused to drivers and passengers occurred at this intersection between an eastbound vehicle and a northbound vehicle. Although the primary collision type is unknown, both vehicles left the roadway due to the collision.



3.5.6 Highway 1 and Edgelow Road S./Thicke Road Intersection

Based on ICBC data, the Highway 1 and Edgelow Road S./Thicke Road intersection had four PDO incidents and six collisions with injuries caused to drivers or passengers during the five-year period. No fatalities were reported. The histogram in **Figure 3-9** summarizes the collision data provided by ICBC between 2011 and 2015.

Based on MOTI data, police responded to nine collisions at this intersection between 2012 and 2016. Six of the incidents involved rear-end collisions in the northbound direction. One collision involved a vehicle making a 90° left-turn movement at the intersection and one incident was a single vehicle leaving the travel lane. Lastly, one collision involved hitting a wild animal. **Figure 3-10** summarizes the type of collisions at the intersection of Highway 1 and Ludlow Road/1st Avenue.

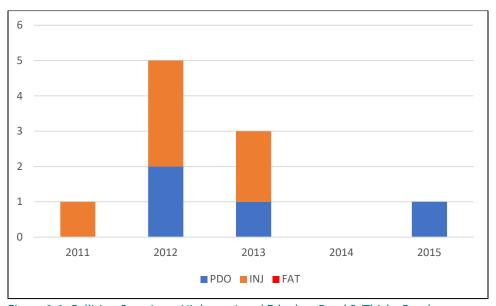


Figure 3-9: Collision Severity at Highway 1 and Edgelow Road S./Thicke Road



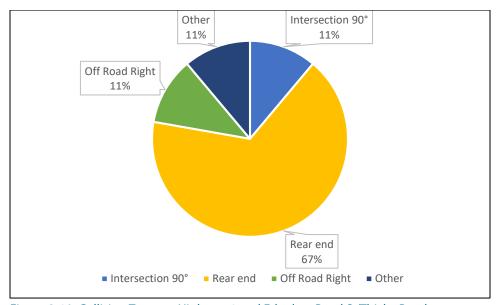


Figure 3-10: Collision Types at Highway 1 and Edgelow Road S./Thicke Road

3.6 Traffic Operation Analysis

3.6.1 Methodology

The traffic operation analysis in this report was performed using the Synchro 9 software suite, which is generally based on the Highway Capacity Manual (HCM) methodologies. The existing traffic operations were evaluated to estimate the volume to capacity (v/c) ratio, delay, level-of-service (LOS), and 95th percentile queue length at each of the study intersections.

When reviewing the traffic analysis results, a v/c ratio at or above 1.00 indicates that traffic volumes exceed the intersection capacity. Delay, in terms of seconds, represents the wait time experienced by a driver on the approach to the intersection. LOS is a grading system on intersection operation based on the calculated delay as per the criteria shown in **Table 3-3** for a signalized intersection and in **Table 3-4** for an unsignalized intersection. LOS A means that the intersection experiences little to no delay whereas a LOS F indicates significant delay is present.

Table 3-3: HCM LOS Criteria for Signalized Intersection

Level of Service	Average Control Delay (s/veh)
A	0 – 10
В	> 10 – 20
С	> 20 – 35
D	> 35 – 55
E	> 55 – 80
F	> 80



Level of Service	Average Control Delay (s/veh)
A	0 – 10
В	> 10 – 15
С	> 15 – 25
D	> 25 – 35
E	> 35 – 50
F	> 50

Table 3-4: HCM LOS Criteria for Unsignalized Intersection

The target intersection operation thresholds for this study were assumed to be as follows:

- LOS D or better for the overall intersection and individual turning movements;
- Delay less than 55 seconds (signalized) or 35 seconds (unsignalized) at an intersection; and
- v/c ratio of 0.85 or lower for the overall intersection and individual turning movements.

The detailed traffic analysis results output from Synchro are provided in **Appendix E**. The existing signal timing plans for the study road network were provided by the MOTI and were used in the following analysis.

3.6.2 Existing AM Peak Hour

Based on the Synchro analysis, all existing intersections within the study area were found to be operating overall at LOS B or better during the AM peak hour.

3.6.3 Existing PM Peak Hour

Based on the Synchro analysis, all existing intersections within the study area were found to be operating overall at LOS C or better during the PM peak hour; however, some intersections have individual turning movements that operate above the study thresholds.

At the Highway 1 and Grouhel Road intersection, the eastbound shared left-turn/right-turn movement was found to be operating at LOS F with a v/c ratio of 1.38.

At the Highway 1 and Ludlow Road/1st Avenue intersection, the eastbound left-turn movement was found to be operating at LOS F with a v/c ratio of 1.04.

At the Highway 1 and N. Davis Road intersection, the northbound and southbound left-turn movements were both found to be operating at LOS E with v/c ratios of 0.65 and 0.72, respectively. Additionally, the eastbound left-turn movement and westbound shared left-turn/through movement were both found to be operating at LOS E with v/c ratio of 0.78 and 0.53, respectively.

At the Highway 1 and S. Davis Road intersection, the eastbound shared left-turn/through/right-turn movement and the westbound shared left-turn/through movement were both found to be operating at LOS F with v/c ratios of 0.44 and 0.05, respectively.

The existing traffic operations for the AM peak and PM peak are summarized in **Table 3-5.**



Table 3-5: Existing Traffic Operations

Interconting	Turning		AM Pea	ak Hour			PM Pea	ak Hour	
Intersection	Movement	LOS	Delay (s)	V/C Ratio	95% Q (m)	LOS	Delay (s)	V/C Ratio	95% Q (m)
	EBL/R	D	33.5	0.28	8.5	F	432.5	1.38	42.4
	NBL	В	10.4	0.02	0.6	В	14.0	0.07	1.6
Hwy 1 / Grouhel Rd	NBT	А	-	0.29	-	A	-	0.48	-
(Unsignalized)	SBT	А	-	0.29	-	А	-	0.45	-
	SBR	А	-	0.01	-	A	-	0.03	-
	Int. LOS		······	4			·······	4	<u></u>
	EBL	D	36.9	0.69	#71.6	F	101.9	1.04	#102.0
	EBT/R	В	13.7	0.20	16.2	В	19.8	0.19	16.8
	WBL	С	23.3	0.11	11.3	С	33.5	0.29	23.6
	WBT	С	22.6	0.05	8.5	С	31.6	0.23	25.3
	WBR	Α	-	0.02	-	Α	-	0.02	-
Hwy1&1st	NBL	В	13.4	0.08	5.3	В	11.2	0.08	4.8
Ave/Ludlow Rd	NBT	В	15.3	0.50	49.4	В	16.4	0.70	106.6
(Signalized)	NBR	Α	0.6	0.08	1.1	A	0.1	0.06	0.3
	SBL	А	6.5	0.12	5.6	Α	6.1	0.16	4.8
	SBT	А	9.4	0.45	36.7	Α	8.9	0.54	57.8
	SBR	A	1.7	0.18	5.8	Α	1.3	0.24	6.7
	Int. LOS	 	~^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	B	·····		~^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	3	h
	EBL/T	С	32.7	0.35	23.5	D	44.5	0.52	29.8
	EBR	А	4.2	0.17	4.6	В	10.5	0.33	12.9
	WBL/T	С	27.6	0.05	4.5	C	33.5	0.18	11.3
	WBR	A	-	0.01	-	Α	-	0.03	-
Hwy 1 & Roberts St	NBL	Α	5.2	0.21	9.0	В	13.8	0.49	24.1
(Signalized)	NBT	А	4.8	0.31	31.2	A	7.0	0.53	71.2
, , ,	NBR	А	0.7	0.02	1.1	Α	1.6	0.04	2.8
	SBL	В	12.0	0.06	6.0	В	14.6	0.16	8.9
	SBT/R	В	13.5	0.46	67.4	В	19.1	0.74	125.0
	Int. LOS		·A	3			-A	3	
	EBL	С	27.7	0.40	33.5	E	61.5	0.78	#67.2
	EBT/R	В	11.9	0.24	18.1	С	24.0	0.43	38.0
	WBL/T	D	40.2	0.30	21.3	E	61.8	0.53	35.9
	WBR	Α	0.2	0.11	-	А	0.2	0.12	-
	NBL	D	40.0	0.26	19.3	E	62.0	0.65	53.3
Hwy 1 & N Davis Rd	NBT	С	20.9	0.50	62.8	D	35.6	0.84	#202.9
(Signalized)	NBR	Α	-	0.01	-	Α	0.1	0.04	-
	SBL	D	39.9	0.31	22.5	E	59.2	0.72	68.9
	SBT	В	19.5	0.53	73.7	С	25.1	0.64	127,7
	SBR	А	4.3	0.16	9.6	A	3.5	0.31	14.5
	Int. LOS	İ	Ē	3 3			(<u> </u>	å
	EBL/T/R	С	18.5	0.19	5.2	F	51.7	0.43	14.2
	WBL/T	D	31.8	0.02	0.5	F	194.8	0.05	1.1
	WBR	-	-	0.00	-	В	14.0	0.00	-
	NBL	Α	9.6	0.02	0.4	В	11.5	0.15	3.9
Hwy1 & Davis Rd	NBT	Α	-	0.20	-	Α	-	0.39	-
(Unsignalized)	NBR	Α	-	0.00	-	Α	-	0.00	-
	SBL	Α	9.0	0.01	0.1	В	12.2	0.02	0.5
	SDL	, , ,		·····	1	Α	-	0.31	-
_	SBT	A	-	0.25	- 1				
		<u> </u>	-	0.25 0.01		A A	-	0.03	-
	SBT	А	-	\	-		-	<i>}</i>	-
	SBT SBR	А	-	0.01	- - 2.9		-	0.03	- 17.7
	SBT SBR Int. LOS	A A	-	0.01 A	-	А	-	0.03 A	- 17.7 3.3
Lhuu 1 9 Thiaka	SBT SBR Int. LOS EBL/T/R	A A A	4.1	0.01 A 0.07	- 2.9	A C	29.4	0.03 A 0.28	(
Hwy 1 & Thicke	SBT SBR Int. LOS EBL/T/R WBL/T/R	A A A	4.1 0.1	0.01 A 0.07 0.02	2.9	A C B	29.4 20.0	0.03 A 0.28 0.02	3.3
Rd/Edgelow Rd	SBT SBR Int. LOS EBL/T/R WBL/T/R NBL	A A A A	4.1 0.1 2.5	0.01 A 0.07 0.02 0.01	2.9 - 0.9	A C B A	29.4 20.0 4.2	0.03 A 0.28 0.02 0.04	3.3 2.6
	SBT SBR Int. LOS EBL/T/R WBL/T/R NBL NBT/R	A A A A A	4.1 0.1 2.5 1.7	0.01 A 0.07 0.02 0.01 0.21	2.9 - 0.9 19.1	A C B A	29.4 20.0 4.2 4.9	0.03 A 0.28 0.02 0.04 0.47	3.3 2.6 59.3
Rd/Edgelow Rd	SBT SBR Int. LOS EBL/T/R WBL/T/R NBL NBT/R SBL	A A A A A A	4.1 0.1 2.5 1.7 2.5	0.01 A 0.07 0.02 0.01 0.21 0.01	2.9 - 0.9 19.1 0.9	C B A A	29.4 20.0 4.2 4.9 4.0	0.03 A 0.28 0.02 0.04 0.47 0.01	3.3 2.6 59.3 0.9



4 PROPOSED IMPROVEMENTS

4.1 Signal Timing Improvements

4.1.1 Highway 1 and Ludlow Road/1st Avenue Intersection

The Highway 1 and Ludlow Road/1st Avenue intersection is currently operating at a cycle length of 96.3 seconds. By increasing the cycle length to 100 seconds and optimizing the length of green time provided to each phase, the intersection's maximum v/c ratio is expected to decrease to be within study thresholds and the eastbound left-turn movement is expected to operate at LOS D.

As the intersection is currently over capacity, signal timing improvements can only increase the capacity by so much. As the area continues to develop and grow in population and employment opportunities in the future, geometric improvements to the intersection will be required to achieve additional capacity.

4.1.2 Highway 1 and Transfer Beach Boulevard/Roberts Street intersection

Redistributing the green time at this signal provides negligible changes to intersection performance in the AM peak hour. In the PM peak hour, redistributing the green time results in a minor delay decrease for the Highway 1 movement and a minor delay increases for the eastbound and westbound movements. Therefore, the existing signal timing may be maintained at this intersection.

4.1.3 Highway 1 and N. Davis Road

The Highway 1 and N. Davis Road intersection is currently operating at a cycle length of 140.5 seconds to facilitate more Highway 1 green time and to minimize the lost time. Although the eastbound left-turn movement was found to be operating at LOS E in the PM peak hour, providing more green time to this movement did not provide a noticeable improvement to the intersection as the delay is likely a result of the long Highway 1 green time. To increase the capacity of the intersection and improve the performance of the eastbound left-turn movement, it is likely that geometric improvements will be required.

4.1.4 Highway 1 and Edgelow Road S./Thick Road

As the Highway 1 and Edgelow Road S./Thicke Road intersection is operating at an overall LOS A for both AM and PM peak, and no individual movements are operating below LOS C, no signal timing improvements are recommended for this intersection.

4.2 Intersection Operation Improvements

4.2.1 Highway 1 and Grouhel Road Intersection

At the Highway 1 and Grouhel Road intersection, the shared eastbound left-turn/right-turn movement currently operates at LOS F during the PM peak as vehicles have difficulty finding suitable gaps on Highway 1 to make the left-out movement. As this intersection does not warrant a traffic signal, as discussed in **Section 3.1**, an alternative improvement option was considered.



Restricting the left-out movement at the Highway 1 and Grouhel Road intersection is expected to improve the eastbound movement to LOS C in the PM peak hour. This restriction would require traffic to detour to the Highway 1 and Ludlow Road/1st Avenue intersection via Christie Road, 3rd Avenue, and Symonds Street to make the eastbound left-turn movement. Alternatively, a protected-T intersection may be considered as well subject to detailed analysis regarding the platooning effects on its performance due to the traffic signal nearby.

4.2.2 Highway 1 and Ludlow Road/1st Avenue Intersection

As the Highway 1 and Ludlow Road/1st Avenue intersection eastbound left-turn movement is currently operating at LOS F, the addition of more vehicles making this movement is expected to further increase the delay; however, by implementing the signal timing improvements discussed in **Section 4.1**, additional capacity can be accommodated by this movement and the expected PM peak delay may improve to LOS D.

Alternatively, based on information provided by the Town, a roundabout has been proposed at the existing Rocky Creek Road and Ludlow Road T-intersection. Should this proposed reconfiguration be constructed, the Grouhel Road eastbound vehicles would be able to access Highway 1 northbound by making the right-out movement onto Highway 1 southbound, making the left-turn movement onto Ludlow Road, and using the roundabout as a turnaround facility. Given the existing low southbound left-turn volume at the Highway 1 and Ludlow Road/1st Avenue intersection, which operates as a protected-permissive movement, it is expected that the intersection will be able to accommodate the additional vehicles without any significant impacts.

4.2.3 Highway 1 and S. Davis Road Intersection

The Highway 1 and S. Davis Road intersection was found to experience significant delays in the eastbound shared left-turn/through/right-turn movement and the westbound shared left-turn/through movement in the PM peak hour. As this intersection does not warrant a traffic signal, as discussed in **Section 3.1**, it is proposed that the Highway 1 and S. Davis Road intersection be restricted to the right-in/right-out (RIRO) and left-in movements only. It is recommended that the Highway 1 left-in movements are maintained as they are currently operating within the study thresholds.

Under the proposed laning configuration, vehicles making the existing S. Davis Road eastbound left-out movement will be required to detour to the signalized N. Davis Road intersection to access Highway 1 northbound. Existing eastbound through vehicles will also be required to use this signalized intersection to access the west side of S. Davis Road via the Highway 1 southbound left-in movement. Similarly, the current westbound left-out movement will be required to use the N. Davis Road intersection and Davis Road as a turnaround facility to access Highway 1 southbound via the S. Davis Road eastbound right-out movement. Lastly, the existing westbound through movement will be able to access the east side of S. Davis Road via the signalized N. Davis Road intersection as well.

Given the low existing traffic volumes making the left-turn and through movements from S. Davis Road, it is expected that the N. Davis Road intersection will be able to accommodate the additional vehicles without any significant impact. It is noted that although the northbound left-turn movement at the



Highway 1 and N. Davis Road intersection is operating at LOS E, the movement has a v/c ratio of 0.65. This indicates the delay is due to the long signal cycle length and that the movement has reserve capacity to accommodate additional vehicles.

This option is preferred over a speed limit reduction along Highway 1 as it is assumed a lower speed will receive low compliance by drivers.

4.3 Pedestrian Accommodations

4.3.1 Highway 1 and Buller Street

At the unsignalized Highway 1 and Buller Street intersection, there are no marked pedestrian accommodations provided across Highway 1. Based on the collected data, 43 pedestrians were found to cross Highway 1 at Buller Street in a 12-hour period. The peak hour was found to be from 6:00 PM to 7:00 PM with 12 pedestrians crossing Highway 1 during this time.

To improve pedestrian safety at the Highway 1 and Buller Street intersection, it is recommended that pedestrians be discouraged from crossing the highway at this location as there are no marked facilities. In the short-term, the following strategy is recommended:

Install median fencing to direct pedestrians towards the nearest marked intersection.

In the long-term, the following additional strategy is recommended to improve pedestrian safety:

Coordinate with the Town to construct a grade-separated pedestrian crossing near this location.

4.3.2 Highway 1 Pedestrian Underpass

The Highway 1 pedestrian underpass near Methuen Street provides access between the residential area west of the highway and Transfer Beach Park, Ladysmith Amphitheater, and the waterfront area. Additionally, the pedestrian underpass is part of the Trans Canada Trail. Based on the collected data, 171 pedestrians were found to use the underpass in a 12-hour period. A noticeable increase in use of the pedestrian underpass occurred in the evening. The peak hour was found to be from 5:15 PM to 6:15 PM with 30 pedestrians using the underpass during this time.

The Highway 1 pedestrian underpass near Methuen Street is well utilized by pedestrians and cyclists as part of the Trans Canada Trail. To enhance user's experience along the trail, the MOTI may work with the Town to provide future public space improvements at the underpass.

In the long-term, the following additional strategy is recommended to enhance user experience:

 Coordinate with the Town to construct additional multi-use pathways on the east side of the highway that connect to existing trails for recreational use.

4.4 Safety Improvements

The following safety improvements are proposed for the six study intersections:



- Additional speed limit signage for southbound vehicles on Highway 1 upstream of Grouhel Road to alert drivers of the speed transition from 90 km/h to 70 km/h and to encourage drivers to slow down in more urban areas. The slower speeds will also benefit vehicles making the leftin and left-out movements at Grouhel Road.
- At the intersection of Highway 1 and Ludlow Road/1st Avenue, the Town has noted that some driver confusion has been observed for the southbound left-turn movement. Due to the wide chevron gore between the westbound through lane and left-turn lane, drivers confuse the location of the receiving lane. Providing intersection guiding lines for the southbound left-turn movement may improve the guidance for drivers making this turn.
- For the Highway 1 and Transfer Beach Boulevard/Roberts Street intersection, it is recommended that the signal timing sheet's Intersection Flash be updated to Red for all approaches. This will improve the safety of the egress traffic from the side roads in the event of a power outage or a signal controller fault.
- At the intersection of Highway 1 and N. Davis Road, rear-end collisions accounted for 70% of all collisions that occurred at this location based on the MOTI data, especially in the northbound direction. Until capacity improvements are provided at this intersection, active congestion ahead warning sign could be considered for the northbound traffic to supplement the advance warning flashers that are currently in place.
- Additional speed limit signage for Highway 1 northbound vehicles on the north side of the N.
 Davis Road intersection to alert drivers of the speed transition from 90 km/h to 70 km/h and to encourage drivers to slow down in more urban areas.
- Install No Right Turn signage on the west approach of the Highway 1 and Edgelow Road S./Thicke Road intersection. There is a yield-controlled eastbound right-turn lane onto Highway 1 southbound approximately 120 m south of the intersection to facilitate the turnaround movement for Highway 1 northbound vehicles. The available sightline for eastbound right-turn vehicles is better at the turnaround location than the upstream intersection due to the existing vertical grade of Highway 1 in the southbound direction.



5 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

Binnie has been retained by the MOTI to perform a traffic operation review on Highway 1 through the Town. The purpose of this review is to evaluate the performance of six intersections and to provide recommendations for safety and performance improvements. The study intersections are:

- Highway 1 and Grouhel Road
- Highway 1 and Ludlow Road/1st Avenue
- Highway 1 and Transfer Beach Boulevard/Roberts Street
- Highway 1 and N. Davis Road
- Highway 1 and S. Davis Road
- Highway 1 and Edgelow Road S./Thicke Road

The performance of the above intersections was analyzed based on the existing traffic volumes, operating speed, vehicle classification, and collision data. A summary of the study findings are as follows:

- All intersections within the study area were found to be operating overall at LOS B or better during the AM peak hour and at LOS C or better during the PM peak hour
- Traffic signals are not warranted at the Highway 1 and Grouhel Road intersection or the Highway 1 and S. Davis Road intersection. The southbound left-turn movement on Highway 1 and Transfer Beach Boulevard/ Roberts Street also does not warrant a protected or protectedpermissive left-turn traffic signal
- Traffic along Highway 1 generally travels above the posted speed limit through the study area by approximately 10 km/h to 25 km/h
- Two-way traffic along Highway 1 within the study corridor is approximately 83% passenger vehicles and 17% heavy trucks
- Based on ICBC data, 29 PDO incidents and 20 collisions with injury occurred at the intersection of Highway 1 and N. Davis Road between 2011 and 2015
- Significant number of pedestrians cross Highway 1 near Buller Street with seven pedestrians accounted for during the peak

5.2 Recommendations

The following recommendations are based on the analysis findings outlined in this report.

Short-Term

 Restrict the eastbound left-turn movement at the Highway 1 and Grouhel Road intersection to improve the traffic operations and safety at the unsignalized intersection



- Additional posted speed limit signage upstream of Grouhel Road for Highway 1 southbound traffic
- Implement an updated signal timing sheet at the Highway 1 and Ludlow Road/1st Avenue intersection that optimizes the green time provided for each phase
- Apply intersection guiding lines for the southbound left-turn movement at the intersection of Highway 1 and Ludlow Road/1st Avenue
- Consider installing an active congestion ahead warning sign for the northbound traffic approaching the Highway 1 and N. Davis Road intersection.
- Additional posted speed limit signage downstream of N. Davis Road for Highway 1 northbound traffic
- Restrict the unsignalized intersection of Highway 1 and S. Davis to RIRO and left-in movements only
- On Highway 1 near Buller Street, direct pedestrians to intersections with marked crosswalks by installing median fences

Mid-Term/Long-Term

- Geometric design changes at the intersection of Highway 1 and Ludlow Road/1st Avenue and the intersection of Highway 1 and N. Davis Road for noticeable traffic operations improvements
- Consider grade-separated pedestrian crossing facility near Highway 1 at Buller Street that is compatible with the planned waterfront developments in the Town.





MEMO

DATE: June 26, 2020 PROJECT NO: 04-20-0196

PROJECT: 670 Farrell Road, Ladysmith

SUBJECT: Vehicle Access Memo

TO: Sean Carroll

Core Group Civil Consultants Ltd.

PREPARED BY: Jason Potter, Senior Transportation Planner REVIEWED BY: Simon Button, P.Eng., Transportation Engineer

Bunt & Associates were retained to evaluate the proposed vehicle access of the proposed 73 residential unit development at 670 Farrell Road in Ladysmith, BC.

The proposed 73 units are comprised of 28 townhomes and 45 single family homes. As shown in **Exhibit** 1 the site is located between Farrell Road and Sanderson Road.

Due to grade changes on the site it has been determined that an internal vehicle connection between Farrell Road and Sanderson Road in not feasible on the proposed development site but rather a future connection would occur with future development further to the east where there is less grade differential.

The result of not having an on-site connection is that the 28 townhomes will be accessible only from Farrell Road and the 45 single family homes would only be accessible from Sanderson Road until a future connection is built.

This Memo estimates the vehicle trips generated by the proposed development and how the estimated vehicle trips impact the adjacent roadways.



Exhibit 1 Site Location





1. SITE GENERATED VEHICLE VOLUMES

The vehicle trip generation calculation for the proposed development are based on trip rates provided in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition. ITE's "peak hour of generator" rates were used which are slightly higher than the "peak of adjacent street" rates. This ITE trip rate was established through hundreds of surveys of a wide range of single-family home types and areas, including single-family homes with secondary suites.

The proposed development's weekday AM and PM peak hour vehicle trip generation is summarized in **Table 1**.

Table 1: Weekday AM and PM Peak Hour Vehicle Trip Generation

TIME PERIOD	USE	SIZE (UNITS)	RATE (TRIPS/UNIT)	SOURCE	% IN	% OUT	TRIPS IN	TRIPS OUT	TOTAL TRIPS
AM	Townhouse	28	0.56	ITE 220	28%	72%	4	12	16
AIVI	Single Family Home	45	0.76	ITE 210	26%	74%	9	25	34
PM	Townhouse	28	0.67	ITE 220	59%	41%	11	8	19
PIVI	Single Family Home	45	1.00	ITE 210	64%	36%	29	16	45

Farrell and Sanderson Roads operate as local roads which terminate at the development site. The 28 townhomes that will use Farrell Road as their access are anticipated to generate approximately 15 - 20 total two-way vehicle trips during peak hour periods. This equates to approximately one two-way vehicle every three to four minutes on Farrell Road.

The 45 single family homes that will use Sanderson Road as their access are anticipated to generate approximately 35 - 45 total two-way vehicle trips during peak hour periods. This equates to approximately one two-way vehicle every one to two minutes on Sanderson Road.

2. LOCAL ROAD VEHICLE CAPACITY

The Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads (2017) suggests that a local residential road is suitable for <1,000 vehicles per day. Peak hourly volumes are generally calculated by applying a 10% factor to daily volumes. Therefore, TAC suggests that local residential roads typically have fewer than 100 vehicle per peak hour. ITE's single family detached land use trip rate for a full weekday is 9.44 trips per unit which provides support for the applied factor (PM peak hour rate was 1.00 trips per unit).

Sanderson Road and Swettenham Place currently service approximately 30 single family homes before Sanderson Road's intersection with Stirling Drive, which is a minor collector road. Similar to the proposed single-family homes these 30 existing homes are anticipated to generate approximately 30 two-way vehicle trips during peak hour periods (assuming little to no secondary suites).



Adding the existing 30 trips from existing homes on Sanderson Road and Swettenham Place with the proposed homes equates to approximately 75 total vehicles during the PM peak hour. This level of vehicle traffic remains consistent with TAC's maximum volume guidelines for a residential local road classification.

3. CONCLUSIONS AND RECOMMENDATIONS

The proposed 45 single family units that would use Sanderson Road as their access are anticipated to generate approximately 45 two-way vehicle trips per PM peak hour. With this new volume of traffic added to the 30 existing single-family homes on Sanderson Road and Swettenham Place, the roadway is anticipated to remain within TAC suggestions for residential local roads. If the proposed single-family homes each have a secondary suite, and that suite is assigned a 0.55 peak hour trips per unit rate (similar to an independent low-rise apartment unit), in addition to the single family home rate, total vehicles would still be anticipated to remain under 100 vehicles per peak hour. This modest level of vehicle trip generation is not anticipated to affect vehicle travel or queuing times in the local area.

The site plan includes recommended road infrastructure that will connect the single-family homes to the currently vacant land east of the subject property. This road link will allow for a future connection between the single-family homes and Farrell Road (on the neighbouring property) when the land parcel to the east is developed (illustrated on Exhibit 1).

Best regards, **Bunt & Associates**

Jason Potter, M.Sc., PTP

Associate, Senior Transportation Planner



Steven Brehaut CFT/ISA Landscape and Tree Service Technician Certified Arborist

> **250-668-7668** 4230 Clubhouse Drive

www.facebook.com/spbrehaut steve brehaut@hotmail.com

Nanaimo, BC V9T 4H7

Project Name:

670 Farrell Road - Housing Development

For: Core Group Civil Consultants Ltd. 2021-02-11

Tree Risk Assessment

By: Steven Brehaut - CFT/ISA PR - 4871A

The following is an arborist field report for the property 670 Farrell Road, in the town of Ladysmith, British Columbia.

The purpose of this field report is to determine the potential impacts on the trees in and near the proposed construction of the new subdivision.

This field report was written by Steven Brehaut ISA/CFT and for Core Group Civil Consultants Ltd.

On-site inspections were made August 18, 2020, and January 31,2021. On both occasions a walk thru and visual inspection was performed, diameters on select trees were taken, property lines were checked, and existing adjacent infrastructures were noted.

The area to be developed was an old burn area, treed with immature to mature mixed timber and a healthy understory. The terrain was sloped and undulating with rocky outcrops. Average diameter of trees measured was 40 cm DBH. (Diameter breast height, 1.3m)

No tree of any significance was noted.

A concept plan of the proposed development is attached as reference to identify with the field notes.

Along the West side of the property, a buffer was suggested to be left along the existing dwellings as well as the new development.

My recommendation is to not leave any trees along this area, as there is not enough protection. Due to the height of the trees and lack of diameter it will be exposed and could be affected by southernly prevailing wind causing windthrow.

However, if a buffer were needed to be left due to public and town pushback, selectively logging the larger taller trees, and leaving the understory would suffice; and reforest with a faster growing species deciduous in nature at 4-6 meter spacing would aid in the regeneration of the area. A diameter limit would be set on the trees harvested and I would suggest planting Tower Poplar (*x canescens*)

*Please review attached concept plan marked as AREA "B".

However, I would recommend leaving the proposed group of trees on the south west corner the park area as there will be enough cover to help alleviate any potential for tree failure.

*Please review attached concept plan marked as AREA "A".

Along the East side of the property, a buffer was suggested to be left along the existing dwellings as well as the new development.

My recommendation is to not leave any trees along this area, as there is not enough protection. Due to the height of the trees and lack of diameter It will be exposed and could be affected by southernly prevailing wind causing windthrow.

However, if a buffer were needed to be left due to public and town pushback, selectively logging the larger taller trees, and leaving the understory would suffice; and reforest with a faster growing species deciduous in nature at 4-6 meter spacing would aid in the regeneration of the area. A diameter limit would be set on the trees harvested and I would suggest planting Tower Poplar (*x canescens*)

*Please review attached concept plan marked as AREA "C".

To summarize there were no significant trees identified during my walk thru. The delineated buffer areas proposed may not be able to withstand removal of the other taller trees surrounding and may be subject to blowdown excluding the park area. Where buffers are needed, I recommend that trees above 20 cm in diameter at breast height (1.3m) be removed and leave the remaining trees and vegetation in

the understory. These areas could be supplemented with additional planting of 600 stems per hectare of my suggested species or another shade tolerant fast-growing, adaptable species. The buffer areas should be protected from any construction activities during the servicing and dwelling building stage. The park area could be left in its natural state as it is large enough to ensure proper protection from blow down.

In conclusion, it is my professional opinion for this site is to log the area as per my recommendations. After treatment, buffered areas will be more than adequately treed in these areas; and it will not jeopardise the health and safety of the remaining trees left for vertical structure.

In preparing this Arborist field report, Brehaut's Landscaping and Tree Services has relied in good faith that all information given is true, correct, and accurate. Therefore, accepting no responsibility for any deficiencies, misinterpretations taken by this field report.

Steven Brehaut ISA/CFT
Brehaut's Landscaping and Tree Services
ISA PR-4871A

Attachment I

Wildfire Assessment and Management Plan

670 Farrell Road Ladysmith, BC

Submitted: August 6, 2020

Revised: February 12, 2021



Submitted to:

Sean Carroll, P. Eng. SCarroll@coregroupconsultants.com

Core Group Civil Consultants Ltd. 320 8988 Fraserton Court Burnaby, BC V5J 5H8





Table of Contents

2.0 INTRODUCTION 2.1 Site Planning Documents Reviewed 2.2 Policy Considerations and Background 3.0 METHODOLOGY 3.1 Wildfire behavior threat assessment 3.2 FireSmart wildfire hazard assessment 4.0 FUEL DESCRIPTIONS AND WILDFIRE THREAT ASSESSMENT 4.1 Summary of Fuel Types 4.2 Summary of Wildfire Threat from surrounding forest 5.0 WILDFIRE THREAT MITIGATION RECOMMENDATIONS 5.1 Buildings setback from hazardous fuels 5.2 Community design and construction 5.3 FireSmart Landscaping and Fuel Mitigation 5.4 Ongoing Maintenance 10 6.0 FUTURE CONDITION FIRESMART STRUCTURE AND HAZARD ASSESSMENT 11 APPENDIX 1 WILDLAND URBAN INTERFACE PLOTS 12 APPENDIX 2 GENERIC DESCRIPTION OF COASTAL FUEL TYPES 4 APPENDIX 3 RESOURCES AND LINKS 4 APPENDIX 4 DESCRIPTION OF TERMINOLOGY 4 APPENDIX 5 FIRE RESISTANT PLANTS FOR LANDSCAPING 4 LIMITATIONS	1.0	SUMMARY OF REPORT	1
2.2 Policy Considerations and Background 3.0 METHODOLOGY 3.1 Wildfire behavior threat assessment 3.2 FireSmart wildfire hazard assessment 4.0 FUEL DESCRIPTIONS AND WILDFIRE THREAT ASSESSMENT 4.1 Summary of Fuel Types 4.2 Summary of Wildfire Threat from surrounding forest 5.0 WILDFIRE THREAT MITIGATION RECOMMENDATIONS 5.1 Buildings setback from hazardous fuels 5.2 Community design and construction 5.3 FireSmart Landscaping and Fuel Mitigation 5.4 Ongoing Maintenance 10 6.0 FUTURE CONDITION FIRESMART STRUCTURE AND HAZARD ASSESSMENT 11 7.0 FINAL REMARKS 11 APPENDIX 1 WILDLAND URBAN INTERFACE PLOTS 11 APPENDIX 2 GENERIC DESCRIPTION OF COASTAL FUEL TYPES 12 APPENDIX 3 RESOURCES AND LINKS 14 APPENDIX 4 DESCRIPTION OF TERMINOLOGY 15 APPENDIX 5 FIRE RESISTANT PLANTS FOR LANDSCAPING	2.0	INTRODUCTION	2
3.0 METHODOLOGY	2.1	Site Planning Documents Reviewed	2
3.1 Wildfire behavior threat assessment 3.2 FireSmart wildfire hazard assessment. 4.0 FUEL DESCRIPTIONS AND WILDFIRE THREAT ASSESSMENT 4.1 Summary of Fuel Types 4.2 Summary of Wildfire Threat from surrounding forest 5.0 WILDFIRE THREAT MITIGATION RECOMMENDATIONS 5.1 Buildings setback from hazardous fuels 5.2 Community design and construction 5.3 FireSmart Landscaping and Fuel Mitigation 5.4 Ongoing Maintenance 1 6.0 FUTURE CONDITION FIRESMART STRUCTURE AND HAZARD ASSESSMENT 1 7.0 FINAL REMARKS 1 APPENDIX 1 WILDLAND URBAN INTERFACE PLOTS 1 APPENDIX 2 GENERIC DESCRIPTION OF COASTAL FUEL TYPES 4 APPENDIX 3 RESOURCES AND LINKS 4 APPENDIX 4 DESCRIPTION OF TERMINOLOGY 4 APPENDIX 5 FIRE RESISTANT PLANTS FOR LANDSCAPING	2.2	Policy Considerations and Background	3
3.2 FireSmart wildfire hazard assessment	3.0	METHODOLOGY	5
4.0 FUEL DESCRIPTIONS AND WILDFIRE THREAT ASSESSMENT 4.1 Summary of Fuel Types 4.2 Summary of Wildfire Threat from surrounding forest 5.0 WILDFIRE THREAT MITIGATION RECOMMENDATIONS 5.1 Buildings setback from hazardous fuels 5.2 Community design and construction 5.3 FireSmart Landscaping and Fuel Mitigation 5.4 Ongoing Maintenance 10.0 FUTURE CONDITION FIRESMART STRUCTURE AND HAZARD ASSESSMENT 11.7.0 FINAL REMARKS 12.1 APPENDIX 1 WILDLAND URBAN INTERFACE PLOTS 13.4 APPENDIX 2 GENERIC DESCRIPTION OF COASTAL FUEL TYPES 44.4 APPENDIX 3 RESOURCES AND LINKS 45.4 APPENDIX 4 DESCRIPTION OF TERMINOLOGY 46.5 FIRE RESISTANT PLANTS FOR LANDSCAPING	3.1	Wildfire behavior threat assessment	5
4.1 Summary of Fuel Types	3.2	FireSmart wildfire hazard assessment	5
4.2 Summary of Wildfire Threat from surrounding forest 5.0 WILDFIRE THREAT MITIGATION RECOMMENDATIONS 5.1 Buildings setback from hazardous fuels 5.2 Community design and construction 5.3 FireSmart Landscaping and Fuel Mitigation 5.4 Ongoing Maintenance 1 6.0 FUTURE CONDITION FIRESMART STRUCTURE AND HAZARD ASSESSMENT 1 7.0 FINAL REMARKS 1 APPENDIX 1 WILDLAND URBAN INTERFACE PLOTS 1 APPENDIX 2 GENERIC DESCRIPTION OF COASTAL FUEL TYPES 4 APPENDIX 3 RESOURCES AND LINKS 4 APPENDIX 4 DESCRIPTION OF TERMINOLOGY 4 APPENDIX 5 FIRE RESISTANT PLANTS FOR LANDSCAPING	4.0	FUEL DESCRIPTIONS AND WILDFIRE THREAT ASSESSMENT	6
5.0 WILDFIRE THREAT MITIGATION RECOMMENDATIONS 5.1 Buildings setback from hazardous fuels 5.2 Community design and construction 5.3 FireSmart Landscaping and Fuel Mitigation 5.4 Ongoing Maintenance 16.0 FUTURE CONDITION FIRESMART STRUCTURE AND HAZARD ASSESSMENT 17.0 FINAL REMARKS 11 APPENDIX 1 WILDLAND URBAN INTERFACE PLOTS 12 APPENDIX 2 GENERIC DESCRIPTION OF COASTAL FUEL TYPES 42 APPENDIX 3 RESOURCES AND LINKS 43 APPENDIX 4 DESCRIPTION OF TERMINOLOGY 44 APPENDIX 5 FIRE RESISTANT PLANTS FOR LANDSCAPING	4.1	Summary of Fuel Types	6
5.1 Buildings setback from hazardous fuels 5.2 Community design and construction 5.3 FireSmart Landscaping and Fuel Mitigation 5.4 Ongoing Maintenance 1 6.0 FUTURE CONDITION FIRESMART STRUCTURE AND HAZARD ASSESSMENT 1 7.0 FINAL REMARKS 1 APPENDIX 1 WILDLAND URBAN INTERFACE PLOTS 1 APPENDIX 2 GENERIC DESCRIPTION OF COASTAL FUEL TYPES 4 APPENDIX 3 RESOURCES AND LINKS 4 APPENDIX 4 DESCRIPTION OF TERMINOLOGY 4 APPENDIX 5 FIRE RESISTANT PLANTS FOR LANDSCAPING 4 4 APPENDIX 5 FIRE RESISTANT PLANTS FOR LANDSCAPING	4.2	Summary of Wildfire Threat from surrounding forest	7
5.2 Community design and construction 5.3 FireSmart Landscaping and Fuel Mitigation	5.0	WILDFIRE THREAT MITIGATION RECOMMENDATIONS	9
5.3 FireSmart Landscaping and Fuel Mitigation	5.1	Buildings setback from hazardous fuels	9
5.4 Ongoing Maintenance	5.2	Community design and construction	9
6.0 FUTURE CONDITION FIRESMART STRUCTURE AND HAZARD ASSESSMENT	5.3	FireSmart Landscaping and Fuel Mitigation	12
7.0 FINAL REMARKS	5.4	Ongoing Maintenance	14
APPENDIX 1 WILDLAND URBAN INTERFACE PLOTS	6.0	FUTURE CONDITION FIRESMART STRUCTURE AND HAZARD ASSESSMENT	15
APPENDIX 2 GENERIC DESCRIPTION OF COASTAL FUEL TYPES	7.0	FINAL REMARKS	17
APPENDIX 3 RESOURCES AND LINKS	APPEN	IDIX 1 WILDLAND URBAN INTERFACE PLOTS	18
APPENDIX 4 DESCRIPTION OF TERMINOLOGY	APPEN	IDIX 2 GENERIC DESCRIPTION OF COASTAL FUEL TYPES	41
APPENDIX 5 FIRE RESISTANT PLANTS FOR LANDSCAPING4	APPEN	IDIX 3 RESOURCES AND LINKS	44
	APPEN	IDIX 4 DESCRIPTION OF TERMINOLOGY	45
	APPEN	IDIX 5 FIRE RESISTANT PLANTS FOR LANDSCAPING	47
			48

List of Figures

Figure 1. Preliminary Site Plan – Emergency Access.	3
Figure 2. Location of the fuel types relative to project site	6
Figure 3. Wildfire threat mapping	8
Figure 4. Ignition pathways for homes during a wildfire.	11
Figure 5. The FireSmart priority zones.	
Figure 6. Plot locations	40
List of Tables	
Table 1. Requirements for building design	10
Table 2. Recommendations during construction.	10
Table 3. Recommendations for site layout and servicing	12
Table 4. Requirements for On-site Landscaping	13
Table 5. Requirements for ongoing maintenance	14
Table 6. FireSmart Structure and Hazard Assessment	

Professional Qualification

This report has been prepared by Matthew Shields, RPF. Matt is a Registered Professional Forester with two years of experience in professional hazard assessment the Lower Mainland. He has conducted forestry surveys and risk assessments for Community Wildfire Protection Plans around BC, including in the nearby District of North Cowichan. Matt's graduate studies used Canadian Forest Service Fire Behavior Prediction System fuel types to qualify fire behavior benefits associated with long-term forest management for a community forest in central BC.

Matt's work has been reviewed by Conor Corbett, RPF. Conor has 10 years of experience in wildfire response and management. Conor's experience as a supervisor with the Wildfire Branch has provided operational firefighting experience and an understanding of fire behavior in various fuels. His graduate studies focused on community wildfire planning and hazard abatement in British Columbia.

1.0 Summary of Report

- The property at 670 Farrell Road is currently heavily forested with native coniferous trees typical of the Coastal Douglas-fir ecosystem. Wildland fire and landscape burning for cultural purposes are historically important disturbances in this ecosystem generally, making wildfire hazard a concern for interface development in this area.
- The development plan is subject to review; currently, most of the on-site forest cover will be removed to accommodate development, with small pockets of tree retention. Continuous forests extend east and south of the property and will not be removed. This Report examines on-site forests and forests within 200 metres on adjacent public land, determining most of the area has a moderate fire behavior threat by applying 2020 Wildfire Threat Assessment Guide and Worksheets (MFLNRO, 2019). A small area within adjacent public land has high fire behavior threat. Modifications to fuels are proposed on-site to reduce the overall risk from wildfire.
- Future structural hazard of the proposed development using the <u>FireSmart</u>
 Homeowners Manual (Partners in Protection and Province of BC, 2019) found the new
 development would likely have a **low** overall wildfire risk rating. This report requires the
 development to implement FireSmart home building and landscaping techniques to
 mitigate wildfire risk.
- Landscaping requirements from within this report must be followed to mitigate wildfire risk. Ensure that no conifer species or long grasses with a mature height greater than 30cm are planted within the landscaping.
- Ensure the exterior building materials including roofs and decks are ignition resistant and meet the requirements from within this report.

2.0 Introduction

Diamond Head Consulting Ltd. (DHC) was retained to prepare an assessment of wildfire interface risks and mitigation measures for the following proposed development.

Civic address: 670 Farrell Road, Ladysmith, BC

Legal Address: LOT 2 PLAN VIP65993 DL 41 LAND DISTRICT 43

Client name: Core Group Civil Consultants Ltd.

Date of site visit: July 28, 2020

This development proposes the subdivision and rezoning of the RU-1 Rural Residential lot at 670 Farrell Road to create up to 100 units of single-family and townhouse/duplex housing under R1, R1-B and R-3-A Zoning. The Town of Ladysmith has required the proponent assess the risk to the development from wildfire through this *Wildfire Assessment and Management Plan*. The overall objective of this report is to assess the potential wildfire threat and provide recommendations and tools to reduce this threat to the development site. This detailed assessment report is meant to be submitted as a part of the Development Permit application. Specific goals for this assessment are:

- To assess interface fuels, determine the extent, location and presence of wildfire hazard
- To recommend site-specific fuel treatments for adjacent high fuel hazards that will reduce the risk to structures, human lives, and critical natural features
- To make recommendations for improving suppression capabilities in and around the proposed development
- To make recommendations for access, building and landscape materials that will minimize wildfire threat.

2.1 Site Planning Documents Reviewed

Diamond Head Consulting was provided with the following documentation from the client that provides the basis for all comments and recommendations:

- 1. Conceptual Lot Layout [unfiled]. Core Group Consultants. June 10, 2020. 1 Sheet.
- Preliminary Site Plan Emergency Access. Core Group Consultants. January 27, 2021. 1
 Sheet

Any changes to these site plans should be provided to Diamond Head Consulting so that this wildfire report can be updated accordingly.

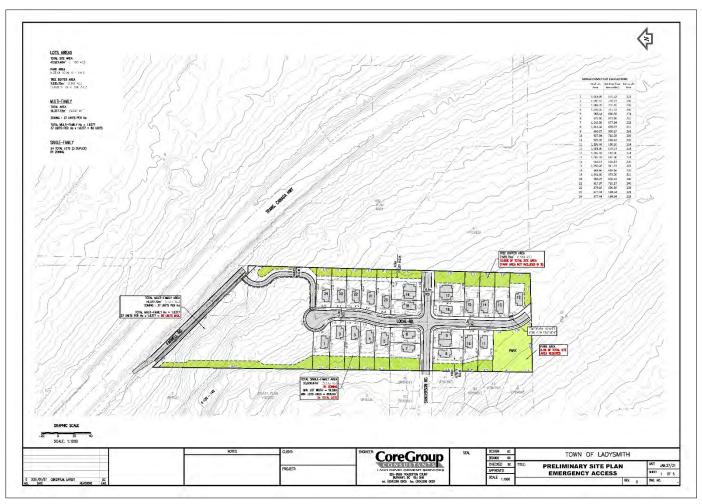


Figure 1. Preliminary Site Plan – Emergency Access.

2.2 Policy Considerations and Background

The Town of Ladysmith has no guidance related to wildfire hazard in its Official Community Plan, Subdivision Bylaw, or Zoning Bylaw. The Town has required this report under the Development Approval Information Bylaw (2015, No. 1887), which gives latitude to the Approving Officer to require additional information about matters of infrastructure and the natural environment.

Wildfire was historically the dominant disturbance in forested Coastal Douglas-fir ecosystems, with both natural fires and cultural burning by indigenous people occurring. Fire suppression and the exclusion of indigenous land management practices has led to increased fuel loads within the region's remaining forest landscapes. Over several decades, land development has increased the footprint of our communities and expanded the area of wildland-urban interface (WUI) where urban uses are directly adjacent to forest fuels. Climate change is an additional stressor on forest ecosystems, causing tree decline and death that can alter fuel conditions. The trend on much of the south coast of British Columbia has been toward longer summers with

greater extremes of temperature and drought length, which encourages more intense wildfire behavior independent of its effects on forest health.

Of the three basic elements of fire behavior – fuels, weather, and topography – only fuels can readily be changed in response to the wildfire threat. As a result, communities of the south coast in British Columbia are responding to the threat of wildfire in a variety of ways. This includes:

- Adopting assessment guidelines to understand the context of forest fuels near development
- Sponsoring Community Wildfire Protection Plans to identify landscape level risk and parallel education and fire suppression capacity improvements
- Amending their Official Community Plans to include special development conditions in Wildfire Hazard Development Permit Areas r
- Requiring FireSmart design principles in the construction of new buildings and landscaping within interface areas

During a wildfire, homes can be ignited by ember transport, radiant heat, and direct flame. Crown fire conditions can generate large ember showers which are carried by wind several hundred metres or even kilometres from the head of the fire. Radiant heat from intense fire behavior can ignite landscape vegetation or buildings within 10 metres of the fire. Direct flame ignites buildings when combustible fuels are stored immediately adjacent to the surfaces of the home, including from overhanging tree branches.

This report describes the types of forest fuels within 200 m of the proposed development in terms of sixteen national benchmark fuel types used by the Canadian Fire Behavior Prediction System and establishes the level of threat to the development from interface forest fuels. In making recommendations to mitigate the threats associated with forest fuels, we consider both NFPA 1144 standards and Canadian FireSmart standards to guide building and landscape design.

3.0 Methodology

3.1 Wildfire behavior threat assessment

To establish the wildfire behavior threat, forest stands within 200 metres of the proposed development have been classified into one of sixteen national fuel types from the Canadian Fire Behavior Prediction System. There are no fuel classifications specific to the coastal region in the Canadian Fire Behaviour Prediction System; instead, the site has been classified as the fuel type that best represents the fire behavior potential of the forest types found locally. Fuel type interpretations can be reviewed in Appendix 2. The assessment has been limited to stands within 200 metres because these forests are, if ignited during a wildfire, likeliest to direct an ember shower, radiant heat, or direct flame onto the development site.

Detailed fuel hazard assessment plots were completed within using the provincial assessment system, 2020 Wildfire Threat Assessment Guide and Worksheets (MFLNRO, 2019). Plots were only completed in on-site forests or where adjacent forests were located on public land that was accessible during the site visit. These plots are shown on Figure 2. Data collected at each fuel plot included:

- Soil and humus characteristics
- Slope, aspect and terrain classification
- Forest stand composition by layer (species, density, age, diameter, height, etc.)
- Vertical and horizontal stand structure
- Quantity and distribution of ladder fuels
- Composition and coverage of understory brush, herbs and grasses
- Quantity and distribution of ground fuels by size class

Forest stands that were inaccessible during the site visit have been assessed visually. Their wildfire threat ratings are provided for completeness based on characteristics of the nearby observed fuel types and have not been confirmed.

3.2 FireSmart wildfire hazard assessment

To assess the risk to new structures, a Wildfire Hazard Assessment has been completed using:

- Current forest fuel threat in and adjacent to the proposed development using the 2020 Wildfire Threat Assessment Guide and Worksheets (MFLNRO, 2019); and,
- 2. Future structural hazard of the proposed development using the <u>FireSmart</u> Homeowners Manual (Partners in Protection and Province of BC, 2019).

This portion of the report examines the effects of proposed building materials and landscaping for risk mitigation, and considers potential building setbacks and tree retention.

4.0 Fuel Descriptions and Wildfire Threat Assessment

4.1 Summary of Fuel Types

Forested areas nearby the proposed development site were classified into the fuel types mapped in Figure 2. Detailed descriptions of these fuel types as observed on-site are compiled in Appendix 1. Generic descriptions of the fuel types as typically applied in coastal British Columbia are provided in Appendix 2.

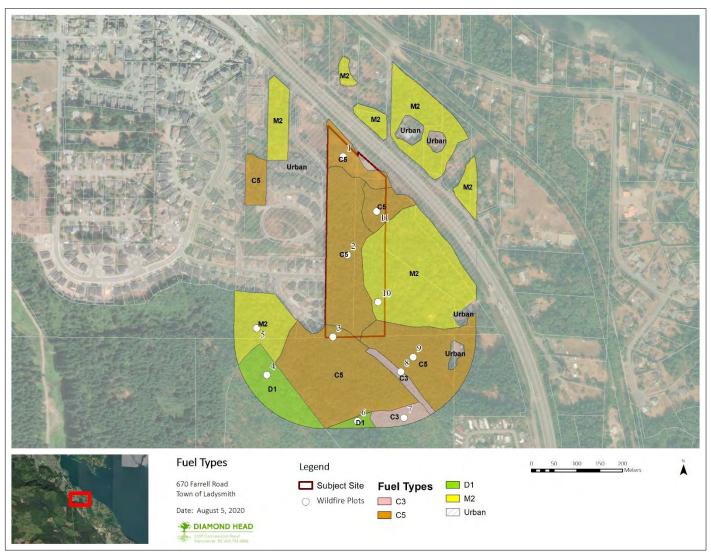


Figure 2. Location of the fuel types relative to project site

Four fuel types were found within the scope of assessment. C5 stands occupy much of the project area, including most of the subject site. These stands represent semi-mature or mature forests dominated by the native coastal conifer Douglas-fir (*Pseudotsuga menziesii*). M2 stands represent areas where deciduous trees such as red alder and bigleaf maple form more than 25% of the overstorey stems with conifers contributing the remainder. These areas can have variable fire behavior owing to their mixed composition and patchy characteristics. D1 stands represent

areas where deciduous trees dominate forest cover. Conifers can occur in the understorey or comprise less than 25% of the overstorey of these stands. These stands have subdued fire behavior owing to their lower flammability. Finally, two C3 stands were identified in the project area. C3 is a more typical fuel type in the interiorOn the coast, C3 can be used to represent dense stands of juvenile conifers, where Douglas-fir and western redcedar are densely stocked and less than 60 years old. These stands can have high crown fuel loading and greater continuity between surface and crown fuels than in mature stands of the same native conifers.

4.2 Summary of Wildfire Threat from surrounding forest

The subject site was assessed to have an overall moderate risk from wildfire.

Each fuel type and distinct stand was assessed for wildfire threat using the Wildfire Urban Interface worksheet. Figure 3 outlines the wildfire threat. The Wildfire Urban Interface ratings and plot characteristics are summarized in Appendix 1. This assessment accounts for the fire behavior potential of these stands but does not consider building or landscaping plans. Surrounding forests are generally dominated by the conifer Douglas-fir with scattered deciduous species in small patches or along stand edges. While the conifer trees generally have high crown heights, accumulations of dead branches and needles under these trees (as in plots 2 and 8, see Appendix 1) could increase the vigor of a surface fire in these stands, providing a pathway to torching of single trees or other crown fire behavior. A crown fire could generate these forests however this would likely require drought weather conditions combined with high winds. The greatest wildfire risk to the development is from embers spotting from a crown fire and igniting buildings or landscaping.

On-site forests

C5 stands associated with plots 1 and 2 have **moderate threat**. Plot 1 represents a low density stand of Douglas-fir with some tree mortality and combustible scotch broom and vernal grass understorey fuels. Separation between tree crowns and surface fuels varies but continuous crown fire is unlikely due to very low crown closure. Combustible surface fuels are broken up by patches of rock and deciduous shrubs that may dampen fire behaviour.

Plot 2 represents a relatively high-density stand of Douglas-fir with some surface fuel accumulation of dead and down materials including branches and needles. Most trees have high crowns (>10 m from surface fuels) but some laddering potential exists where conifers have regenerated near stand edges. A crown fire could develop in this stand, though it would likely require drought conditions and high winds. This stand was the second highest-ranked wildfire threat score observed by the assessment.

On-site forests will be significantly modified by the development, reducing the wildfire behavior threat. Further recommendations for development design and layout are made in Section 5.0.

Off-site forests

High threat is associated with a limited area of C3 stand (plot 8) where advanced conifer regeneration on an old road bed has created a high-density stand of cedar and Douglas-fir with limited separation of surface and crown fuels and moderate accumulations of surface fuels. This area could more easily sustain a crown fire, with the additional risk of spreading fire to crowns in neighbouring C5 stands. This area is located on provincial crown land.

Moderate threat is associated with a limited area of C3 stand (plot 7), where a juvenile conifer plantation of Douglas-fir, western redcedar, and Sitka spruce shows low vertical fuel separation. Horizontal fuel separation is expected to decrease as these trees grow. Young planted stands are not well represented by the sixteen CFBPS fuel types. This stand is developing rapidly and may eventually have lower threat after a period of heightened fire threat.

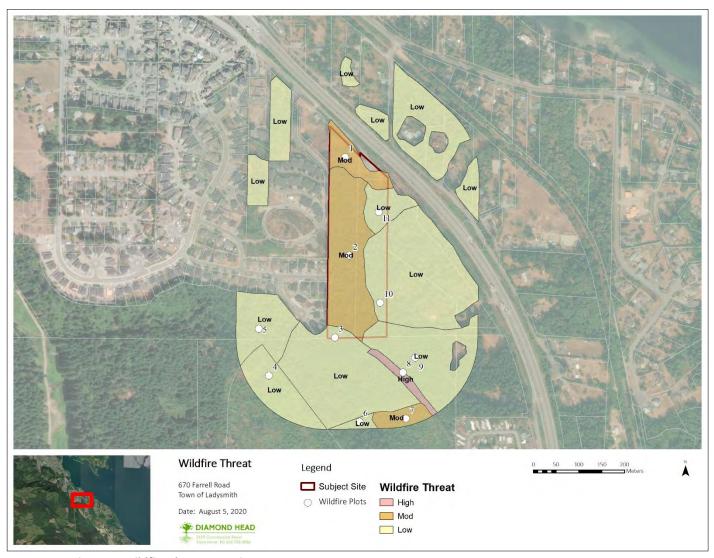


Figure 3. Wildfire threat mapping

5.0 Wildfire Threat Mitigation Recommendations

The following are recommendations to mitigate risk to the development. Community and design recommendations focus on siting of structures, construction materials, access, water sources and utilities. These are factors that provide long term mitigation against a wildfire event. Vegetation fuels on and adjacent to the development will change over time and require maintenance. Recommendations are made for on-site landscaping as well as treatments and required maintenance for forest areas adjacent to the property.

At the time this assessment was completed, finalized architectural plans and detailed building locations were not available for review. It is the responsibility of the owner and their project team to understand the following restrictions and to comply with them. Guidelines in this section are adapted from the BC FireSmart Homeowners Manual and from the National Fire Protection Association (NFPA) 1144: Standard for Reducing Structure Ignition Hazards and NFPA 1141: Standard for Fire Protection Infrastructure for Land Development in Wildland, Rural, and Suburban Areas.

5.1 Buildings setback from hazardous fuels

FireSmart recommends that a 10m fuel free zone be established and maintained between structures and hazardous fuels. The greatest risk is along the south and east sides of the property, where off-site forests will be retained. Ensure buildings are set back by no fewer than 10 metres from these edges. The trees along these forest edge have high crown heights and no mitigation work is recommended.

Many on-site trees will be retained. Ensure no retained conifer is within 10 metres of buildings. This requirement reduces the feasibility of retaining on-site trees along the west boundary of the property. While the wildfire behavior threat for this stand (plot 8) will be reduced by land clearing, individual trees in this stand may have poor characteristics for an aesthetic buffer, with high, narrow crowns and poor trunk taper. Retention suitability along this edge should be assessed by the Project Arborist during preparations of a detailed landscape plan. The setback requirement of 10 metres from hazardous fuels must be met in the landscape plan for any retention of on-site trees.

5.2 Community design and construction

The highest risk to homes is from ignition by embers landing and accumulating on vulnerable surfaces such as roofs, verandas, eaves, and openings. Embers can also land on or in nearby flammable materials such as bushes, trees, or woodpiles. If the resulting fire is near the home, it could create enough radiant heat to ignite the walls of the home. Small fires in the yard can also spread towards the structures, beneath porches or under homes. Therefore, the building material and construction techniques are important for homes in the interface.

Table 1 contains proposed guidelines for building design.

Table 1. Requirements for building design.

Feature	Requirements for building materials
Roofing	 Class A or B rated roofing material* should be used, and asphalt or metal roofing should be given preference. Any spaces between roof decking and covering should be blocked. Screen or enclose rain gutters to prevent accumulation of plant debris. Exterior vertical walls should be cladded with non-combustible materials*. Preference should
Siding	 Exterior vertical walls should be cladded with non-combustible materials*. Preference should be given to stucco, metal, brick and concrete cladding. Ensure that fire resistant materials extend from the foundation to the roof. Flame resistant coatings that require ongoing maintenance or reapplication are not acceptable. Exterior wall assemblies that have exterior wood that is untreated and rely on the interior wall for fire resistance are not acceptable.
Vents, openings, eaves, attics, overhanging projections, soffits Exterior windows and doors	 Vents should be screened using 3mm, non-combustible wire mesh, and vent assemblies should use fire shutters or baffles. Eaves, soffits, attics, overhanging projections and underfloor openings should be protected with non-combustible covers. All windows should be double glazed, or of glass block. Radiant faces exposed to the forest edge should be multi-paned with one pane glazed with annealed or tempered insulating glass. Limit the size and number of windows that face large areas of vegetation. Window screens should be non-combustible.
	 Exterior doors on radiant faces exposed to the forest edge should be of fire resistant materials.
Decks, porches, balconies	 Decks, porches and balconies should be sheathed with fire-resistant or non-combustible materials. Slotted deck surface allows needle litter to accumulate beneath the deck. Provide access to this space to allow for removal of this debris. Any covers should be built of the same ignition-resistant materials as a roof.
Exterior sprinklers	 While exterior wall or roof sprinklers were considered, they are not presently recommended because of the lack of accepted standards for design and installation, and the uncertainty regarding maintenance and triggering of sprinklers during a wildfire event when homes are evacuated. Irrigation sprinklers should be installed on private property and in landscaped parks to keep plants healthy and fire-resistant. The switch for these should be made accessible to turn on in the case of a wildfire.
Fences	Where fencing is within 10 m of the building or accessory buildings, use fire-resistant or non-combustible materials.

Table 2. Recommendations during construction.

Feature	Recommendations during construction
Combustible materials	 During construction of houses, all waste construction materials including brush and land clearing debris; needs to be cleaned up on a regular basis, to minimize the potential risk. No combustible materials should be left at the completion of construction.
Hydrants	 Prior to construction of any wood frame buildings, there must be fire hydrants within operating range.
Fire Suppression	 The contractor should be familiar with the BC Wildfire Act and the current provincial standards for wildfire suppression and have the appropriate tools on-site for the duration of the project.

^{*} Non-combustible materials: means that a material meets the acceptance criteria of CAN/ULC S114, (Standard Method of test for determination of non-combustibility in Building Materials)

Fire-resistant materials: means that a material meets the acceptance criteria of CAN/ULC-S101, (Fire Endurance Tests of Building Construction and Materials)

Rated roofing materials: Class A, B or C is a measure of the external spread of flame on a roof surface. Tests are conducted using CAN/ULC S107M methods of fire tests of roof coverings, or equivalent. The best rating achieved is Class A, which may be described as effective against severe fire exposure.

Following these specifications will reduce the risk of a home ignition during a wildfire event. Of the proposed guidelines, specifications for roofing and exterior siding impact the greatest surface area and therefore offer the most protection from an ember shower or radiant heat/direct flame from landscaping.

Roofing must be fire retardant. These have a Class A flame spread rating defined as "Class A roof coverings are not readily flammable, are effective against severe fire exposures, and do not carry or communicate (i.e., spread) fire". ANSI/UL 790, "Tests for Fire Re-sistance of Roof Covering Materials," and ASTM E 108, "Standard Test Methods for Fire Tests of Roof Coverings," are the fire-resistance capacity tests used to determine a product's or roof assembly's classification. Any products that are certificated as Class A with an "Assembly" requirement must have a project engineer or architect provide signed proof that the product has been installed as per the specifications of the manufacturer.

Exterior siding must be fire resistant. (Stucco, brick, fibre cement boards/panels and poured concrete). Untreated wood products do not meet this standard. Flame resistant coatings that require ongoing maintenance or reapplication should not be used. Exterior wall assemblies that have exterior wood that is untreated and rely on the interior wall for fire resistance are not acceptable. Wood products that have permanent treatments or are naturally fire resistant can be accepted, but product specifications and certified testing should be provided as part of the development application to the Approving Officer.

Community layout and site servicing can impact the vulnerability of homes by determining the setback of buildings from fuels and provision of access to homes for fire suppression. Table 3 presents guidelines for site layout and servicing.

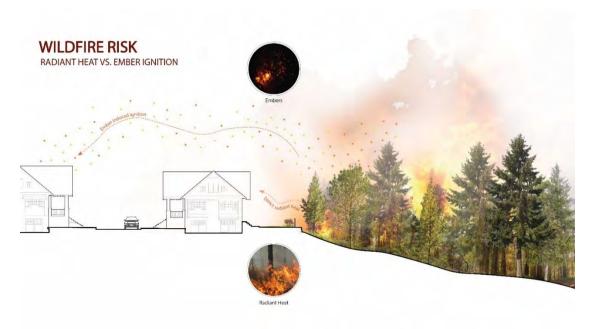


Figure 4. Ignition pathways for homes during a wildfire.

Table 3. Recommendations for site layout and servicing.

Feature	Recommendation
Building Siting	All buildings should be located a minimum of 10 metres away from any adjacent forest edge. This 10 m distance should be created between all sides of the foundation and the intact forest edge. It is acceptable to have a low density of fire-resistant plants and shrubs within this 10 m zone. This requirement may affect the feasibility of tree retention proposed in the Concept Layout.
Separation between buildings	Accessory structures within 10 m of homes must have the same FireSmart considerations as the home. Any such accessory structures must meet the requirements in Table 1.
Access road passing width and turn-around distance	The development as proposed does not allow continuous road access through the site due to steep grades. The northern (lower) portion of the site is accessed from Farrell Road and will replace the turnaround at the end of Farrell Road with a gated emergency access route to the upper site. This layout should be sufficient for fire suppression vehicles in providing an emergency second access to the site. The southern (upper) portion of the site will have one turnaround at the north end of the new street servicing the development. This turnaround has an outside ROW diameter of no less than 15.5 metres. Creation of a temporary turnaround of the same dimensions at the south end of this new street would assist fire suppression response in the adjacent forest; however, this road end is expected to extended by future development, making the consideration of temporary measures such as a hammerhead configuration or extended gravel shoulder acceptable. The Preliminary Site Plan – Emergency Access (January 27, 2021) has updated the concept layout to include this hammerhead design in this location. Future development on adjacent properties to the east and south may create an additional secondary access for fire suppression vehicles.
Water supply	A municipal water connection will be extended into the subdivision from Farrell Road and Sanderson Way. Ensure hydrants are operational before construction proceeds above the ground level.
Utilities - Electric	Electrical lines will run underground through the subdivision, reducing the likelihood of ignition from contact between trees and aboveground wires.

5.3 FireSmart Landscaping and Fuel Mitigation

Landscaping and maintenance for the site should follow FireSmart principles as established in the most recent edition of the FireSmart Homeowners Manual. FireSmart establishes four "priority zones" which measure the distance from building surfaces and determine preferred vegetation and landscaping. The priority zones are shown in Figure 5. Zone 1a (Home Ignition Zone) includes building materials and landscaping within 1.5 metres of the home. Zone 1 (Fuel Free Zone) includes the yard within 10 metres of the home. Zones 2 and 3 include extended yard area out to 100 metres where lighter modification of hazardous fuels is appropriate.

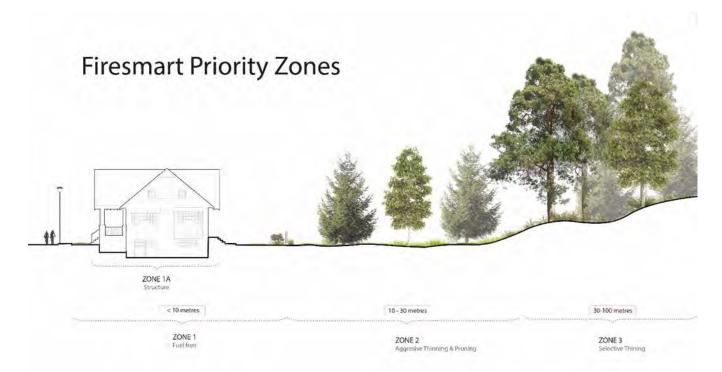


Figure 5. The FireSmart priority zones.

Within 10 metres of homes (Zone 1), landscape planning and maintenance should establish an area free of hazardous fuels. The goal in this zone is to remove hazardous fuels and convert vegetation to fire resistance species, producing an environment that does not readily support combustion. These recommendations include strategic selection of fire resistant replacement trees as well as landscaping and maintenance standards are summarized in Table 4.

It is recommended that the use of conifer trees be minimized in the landscape plan. If they are included, they should be greater than 10m from the structure and spaced apart at a distance of greater than 8m.

Table 4. Requirements for On-site Landscaping

Footure	Decemberdations
Feature	Recommendations
Planting	 Remove all highly flammable vegetation and other combustibles from within 10 metres of
	buildings.
	 No conifer trees species should be planted within 10m of any buildings.
	• Landscaping should incorporate species that are fire resistant. These types of plants tend
	to have moist, supple leaves with low amounts of sap or resin. They also have a tendency
	not to accumulate dead material. A list of suitable species has also been provided in
	Appendix 5 or can be found at the FireSmart Canada website.
	Ensure that vegetation will not grow to touch or overhang buildings.
	Irrigation sprinklers should be installed in landscaping within Zone 1 where drought-
	tolerant vegetation is not used.
	 Within on-site portions of Zone 2 (10m – 30m from buildings), remove accumulations of
	dead branches and needles under retained trees.
Maintenance	 Annual grasses within 10 meters of buildings should be kept mowed to 10 centimeters or
	less and watered regularly during the summer months;
	 Ground litter and downed trees should be removed regularly and prior to the fire season.

5.4 Ongoing Maintenance

To ensure that FireSmart standards are maintained on the property, periodic re-treatment or maintenance is recommended in Table 5

Table 5. Requirements for ongoing maintenance

Recommendation

Homeowners responsibility

- Regularly remove debris from roofs, gutters and beneath overhanging projections.
- Grass and landscaping should be kept mowed to 10 cm or less and watered regularly during the summer months.
- Landscape sprinkler systems should be installed and maintained by the homeowner.
- Remove any local accumulations of woody or combustible material (e.g., no woodpile or yard waste accumulations).
- Remove any over mature, dead or dying shrubs and trees.
- Plant only fire resistant trees and shrubs. A list of fire resistant plants and trees can be
 found at the fire smart canada website
 (https://www.firesmartcanada.ca/images/uploads/resources/FireSmart-Guide-to-Lanscaping.pdf).

6.0 Future Condition FireSmart Structure and Hazard Assessment

The form below provides an assessment of the proposed development using the FireSmart Structure and Hazard Assessment form. Assessment ratings are made assuming that the recommendations outlined in this report are adhered to.

Table 6. FireSmart Structure and Hazard Assessment

	ZONE 1		
HOME/10 m	Criteria	Rating Options	RATING
What type of roofing	Metal, clay tile, asphalt shingle or ULC rated shakes (may be affected by the condition of your roof)	0	0
material do you have?	Unrated Wood Shakes	30	_
	No needles, leaves or other combustible materials	0	_
How clean is your roof?	A scattering of needles and leaves	2	0
	Clogged gutters and extensive leaves	3	_
What is the exterior of your	Non-combustible material, stucco, metal siding or brick	0	
home built of?	Logs of heavy timbers	1	- 0
	Wood, vinyl siding or wood shakes	6	-
	Tempered glass in all doors/windows	0	
	Double-pane glass - small/medium (smaller than 1 metre x 1 metre)	1	-
How fire-resistant are your	Double-pane glass - large (greater than 1 metre x 1 metre)	2	2
windows and doors?	Single-pane glass - small/medium (smaller than 1 metre x 1 metre)	2	-
	Single-pane glass - large (greater than 1 metre x 1 metre)	4	-
Are your eaves closed up	Closed eaves, vents screened with 3-millimetre wire mesh	0	- 0
and your vents screened?	Closed eaves, vents without mesh	1	
	Open eaves, vents not screened	6	
Have you sheathed-in the	Sheathed with fire-resistant materials	0	_
underside of your balcony,	Sheathed with combustible materials	2	- - 0
deck, porch or open foundation?	Not sheathed	6	v
Is your home set back from	Building is located on the bottom or lower portion of a hill	0	•
the edge of a slope?	Building is located on the mid to upper portion of a hill or the crest of a hill	6	- 0
	ZONE 1 HOME SCORE		2

	ZONE 1		
YARD/within 10 m	Criteria	Rating Options	RATING
Where are your	More than 10 metres from home	0	N1/A
outbuildings (or adjacent buildings) located	Less than 10 metres from home	6	N/A
Where is your woodpile	More than 10 metres from any building	0	N/A
located?	Less than 10 metres away from any building	6	
What type of forest* grows	Deciduous trees	0	_
within 10 metres of your	Mixed wood trees (deciduous and conifer)	30	0
home?	Conifer trees	30	
What kind of surface vegetation and combustible	Well-drained lawn or non-combustible landscaping material	0	_
materials are within 10	Uncut grass or shrubs	30	0
metres of your home and outbuildings?	Twigs, branches and tree needles on the ground	30	
	ZONE 1 YARD SCORE		0

^{*}a forest is considered a continuous intact treed area

	ZONE 2		
YARD/10 – 30 m	Criteria	Rating Options	RATING
	Deciduous trees	0	_
What type of forest	Mixed wood trees (deciduous and conifer)	10	10
surrounds your home?	Conifer trees separated	10	_
	Conifer trees continuous	30	
What kind of surface vegetation grows within 10-30 metres of your home and around your buildings?	Well-drained lawn or non-combustible landscaping material	0	
	Uncut grass or shrubs	5	•
	Scattered twigs, branches and tree needles on the ground	5	0
	Abundant twigs, branches and tree needles on the ground	30	•
Are there shrubs and low	None within 10-30 metres	0	•
branches (within 2 metres	Scattered within 10- 30 metres of buildings	5	0
of the ground) in the surrounding forest?	Abundant within 10-30 metres of buildings	30	-
	ZONE 2 YARD SCORE		10

TOTAL SCORE			
			Rating
ZONE 4 / Home and York	Home		2
ZONE 1/ Home and Yard	10 metres from home		0
ZONE 2 / Yard	10 – 30 metres from home		10
	Т	OTAL	12 - Low

HAZARD SCORE: Low: <21 Moderate: 21-29 High: 30 – 35 Extreme: >35

Following the recommendations in this report will achieve a FireSmart hazard score of low

The Firesmart Hazard Assessment Sheet gives the property a low hazard rating, assuming all recommendations are followed on-site. The forest accounted for in this assessment includes the forested areas within 30 metres of proposed homes. As off-site forests within 30 metres of proposed homes have been assessed "low" wildfire behavior threat, no treatments to off-site trees have been recommended.

7.0 Final Remarks

The Town of Ladysmith has requested the proponent prepare this *Wildfire Assessment and Management Plan*. Planners, engineers, and landscape architects should refer to this report and the FireSmart manual during the design phase of this development. All construction operations should be conducted according to the Wildfire Act and the regulations. Following these regulations will help reduce liability and protect the development.

The Town may require that an inspection be done following construction to ensure that the structures and landscaping meet these requirements.

If the recommendations made within this report are complied with, the development will meet FireSmart standards to a reasonable extent within the limitations of zoning and ownership and the on-site wildfire behavior threat will have been substantially mitigated.

If there are any questions or concerns as to the contents of this report, please contact us at any time.

Sincerely,

Author:

Matthew Shields

Mother Sil

Registered Professional Forester (5137)

Reviewer:

Conor Corbett

Registered Professional Forester (5105)

Date: 2020-08-05

Appendix 1 Wildland Urban Interface Plots

Threat Rating (Max				
		Score 110)		
Eco - province	Low	Moderate	High	Extreme
Coast and	0 - 43	44 -59	60 - 72	73 – 110
Mountains,				
Georgia				
Depression				

Wildfire Threat Assessment Worksheet - Fuel Setting Scoring				
Location	Plot 1	Date	28-Jul	
Assessor	MS			
Crown species composition (spe	ecies 10%)	Fd7Ra3		

Component/subcomponent	PULLDOWNS	SCORE		
Depth of organic layer	1-<2	1		
Surface and ladder fuel (.1-3m in height)				
Surface fuel composition	Pinegrass	10		
Dead and down material				
continuity (<7cm)	Scattered <10% coverage	4		
Ladder fuel composition	Other conifer	5		
Ladder fuel horizontal				
continuity	Sparse <10% coverage	2		
Stems/ha (understory)	<900	2		
Stand structure and	compostion (dominant ar	nd co-dominant)		
	Conifer with low CBH (<5			
Overstory composition/CBH	m)	15		
Crown closure	<20%	0		
Fuel strata gap	<3	10		
Stems/ha (overstory)	<400	0		
Dead and dying (% of dominant and co-dominant stems)	Standing dead/partial down 21-50%	5		
Comments:	TOTAL	54		
	RATING	MODERATE		



Photo 1. Plot 1 -- Ladder and surface fuels.



Photo 2. Plot 1 – Crown closure and crown conditions.



Photo 3. Plot 1 – Surface fuels.

Wildfire Threat Assessment Worksheet - Fuel Setting Scoring					
Location	Plot 2	Date	28-Jul		
Assessor	MS				
Crown species composition (spe	ecies 10%)	Fd10(Ra)	·		

Component/subcomponent	PULLDOWNS	SCORE		
Depth of organic layer	1-<2	1		
Surface and ladder fuel (.1-3m in height)				
Dead fines (leaves,				
Surface fuel composition	needles, fine branches)	8		
Dead and down material				
continuity (<7cm)	10-25% coverage	8		
Ladder fuel composition	Other conifer	5		
Ladder fuel horizontal				
continuity	Sparse <10% coverage	2		
Stems/ha (understory)	901-1,500	4		
Stand structure and	compostion (dominant ar	nd co-dominant)		
	Conifer with high CBH			
Overstory composition/CBH	(>10 m)	10		
Crown closure	41-60%	2		
Fuel strata gap	3-6	7		
Stems/ha (overstory)	601-900	3		
Dead and dying (% of dominant and co-dominant stems)	Standing dead/partial	2		
Comments:	TOTAL	52		
	RATING	MODERATE		



Photo 4. Plot 2 -- Ladder and surface fuels.



Photo 5. Plot 2 – Ladder fuels.

High stand density contributes to the wildfire behavior risk in this stand.



Photo 6. Plot 2 – Surface fuels.

Wildfire Threat Assessment Worksheet - Fuel Setting Scoring				
Location	Plot 3	Date	28-Jul	
Assessor	MS			
Crown species composition (spe	ecies 10%)	Fd10(MbBg)		

Component/subcomponent	PULLDOWNS	SCORE		
Depth of organic layer	1-<2	1		
Surface and ladder fuel (.1-3m in height)				
Moss, herbs and				
Surface fuel composition	deciduous shrubs	4		
Dead and down material				
continuity (<7cm)	Scattered <10% coverage	4		
Ladder fuel composition	Other conifer	5		
Ladder fuel horizontal				
continuity	Sparse <10% coverage	2		
Stems/ha (understory)	<900	2		
Stand structure and	d compostion (dominant ar	nd co-dominant)		
	Conifer with high CBH			
Overstory composition/CBH	(>10 m)	10		
Crown closure	41-60%	2		
Fuel strata gap	>10	0		
Stems/ha (overstory)	401-600	2		
Dead and dying (% of dominant and co-dominant stems)	Standing dead/partial down <20%	2		
Comments:	TOTAL	34		
	RATING	LOW		



Photo 7. Plot 3 -- Ladder and surface fuels.



Photo 8. Plot 3 – Crown closure.



Photo 9. Plot 3 – Surface fuels.

Wildfire Threat Assessment Worksheet - Fuel Setting Scoring				
Location	Plot 4	Date	28-Jul	
Assessor	MS		•	
Crown species composition (spe	ecies 10%)	Dr10(Mb)		

Component/subcomponent	PULLDOWNS	SCORE		
Depth of organic layer	1-<2	1		
Surface and ladder fuel (.1-3m in height)				
	Moss, herbs and			
Surface fuel composition	deciduous shrubs	4		
Dead and down material				
continuity (<7cm)	Scattered <10% coverage	4		
Ladder fuel composition	Mixedwood	3		
Ladder fuel horizontal				
continuity	Sparse <10% coverage	2		
Stems/ha (understory)	<900	2		
Stand structure and compostion (dominant and co-dominant)				
	Deciduous (<25%			
Overstory composition/CBH	conifer)	0		
Crown closure	61-80%	5		
Fuel strata gap	3-6	7		
Stems/ha (overstory)	>1200	5		
Dead and dying (% of dominant and co-dominant stems)	Standing dead/partial down <20%	2		
Comments:	TOTAL	35		
	RATING	LOW		



Photo 10. Plot 4 -- Ladder and surface fuels.



Photo 11. Plot 4 – Crown closure.



Photo 12. Plot 4 – Surface fuels.

Wildfire Threat Assessment Worksheet - Fuel Setting Scoring			
Location	Plot 5	Date	28-Jul
Assessor	MS		
Crown species composition (species 10%)		Fd7Mb3(CwBg)	

PULLDOWNS	SCORE
2-<5	3
and ladder fuel (.1-3m in he	eight)
Moss, herbs and	
deciduous shrubs	4
Scattered <10% coverage	4
Other conifer	5
Sparse <10% coverage	2
<900 2	
d compostion (dominant an	nd co-dominant)
Mixwood 75%	7
20-40%	1
>10	0
<400	0
Standing dead/partial	
down <20%	2
TOTAL	30
	2-<5 and ladder fuel (.1-3m in he Moss, herbs and deciduous shrubs Scattered <10% coverage Other conifer Sparse <10% coverage <900 d compostion (dominant ar Mixwood 75% 20-40% >10 <400 Standing dead/partial



Photo 13. Plot 5 -- Ladder and surface fuels.



Photo 14. Plot 5 – Crown closure.



Photo 15. Plot 5 – Surface fuels.

Wildfire Threat Assessment Worksheet - Fuel Setting Scoring			
Location	Plot 6	Date	28-Jul
Assessor	MS		
Crown species composition (species 10%)		Dr10(Mb)	

1-<2 adder fuel (.1-3m in he Moss, herbs and deciduous shrubs ttered <10% coverage Mixedwood	1 eight) 4 4 3
Moss, herbs and deciduous shrubs ttered <10% coverage Mixedwood	4
deciduous shrubs ttered <10% coverage Mixedwood	4
ttered <10% coverage Mixedwood	4
Mixedwood	•
Mixedwood	•
	3
arse <10% coverage	2
0	2
npostion (dominant an	nd co-dominant)
Deciduous (<25%	
conifer)	0
61-80%	5
3-6	7
>1200	5
anding dead/partial	
down <20%	2
TOTAL	35
RATING	LOW
<u> </u>	npostion (dominant ar Deciduous (<25% conifer) 61-80% 3-6 >1200 anding dead/partial down <20%



Photo 16. Plot 6 -- Ladder and surface fuels.



Photo 17. Plot 6 – Crown closure.



Photo 18. Plot 6 – Ladder and surface fuels.

Wildfire Threat Assessment Worksheet - Fuel Setting Scoring			
Location	Plot 7	Date	28-Jul
Assessor	MS		
Crown species composition (species 10%)		Fd8Cw2(Ss)	

Component/subcomponent	PULLDOWNS	SCORE
Depth of organic layer	2-<5	3
Surface a	and ladder fuel (.1-3m in he	eight)
	Moss, herbs and	
Surface fuel composition	deciduous shrubs	4
Dead and down material		
continuity (<7cm)	Absent	0
Ladder fuel composition	Other conifer	5
Ladder fuel horizontal		
continuity	Absent	0
Stems/ha (understory)	<900	2
Stand structure and	d compostion (dominant ar	nd co-dominant)
	Conifer with low CBH (<5	
Overstory composition/CBH	m)	15
Crown closure	<20%	0
Fuel strata gap	<3	10
Stems/ha (overstory)	>1200	5
Dead and dying (% of dominant and co-dominant stems)	Standing dead/partial down <20%	2
Comments:	TOTAL	46
	RATING	MODERATE
	RATING	MODERATE



Photo 19. Plot 7 – Juvenile stand with developing fuel conditions

Typed C3 due to vertical fuel continuity and decreasing horizontal separation.



Photo 20. Plot 7 – Crown closure.

Low crown closure expected to develop into closed stand.



Photo 21. Plot 7 – Surface fuels.

Wildfire Threat Assessment Worksheet - Fuel Setting Scoring			
Location	Plot 8	Date	28-Jul
Assessor	MS		
Crown species composition (species 10%)		Cw6Fd4	

Component/subcomponent	PULLDOWNS	SCORE	
Depth of organic layer	2-<5	3	
Surface a	and ladder fuel (.1-3m in he	eight)	
	Dead fines (leaves,		
Surface fuel composition	needles, fine branches)	8	
Dead and down material			
continuity (<7cm)	10-25% coverage	8	
Ladder fuel composition	Other conifer	5	
Ladder fuel horizontal	Scattered 10-30%		
continuity	coverage	5	
Stems/ha (understory)	901-1,500	4	
Stand structure and compostion (dominant and co-dominant)			
	Conifer with moderate		
Overstory composition/CBH	CBH (6-9 m)	12	
Crown closure	41-60%	2	
Fuel strata gap	3-6	7	
Stems/ha (overstory)	601-900	3	
Dood and dring 10/ of dominant	Chandina da di Arabia		
Dead and dying (% of dominant and co-dominant stems)	Standing dead/partial	2	
,	down <20%	2	
	TOTAL	59	
Comments:	RATING	MODERATE	



Photo 22. Plot 8 -- Ladder and surface fuels.



Photo 23. Plot 8 – Crown closure.



Photo 24. Plot 8 – Surface fuels.

Wildfire Threat Assessment Worksheet - Fuel Setting Scoring			
Location	Plot 9	Date	28-Jul
Assessor	MS		
Crown species composition (species 10%)		Fd10(Mb)	

Component/subcomponent	PULLDOWNS	SCORE		
Depth of organic layer	1-<2	1		
Surface and ladder fuel (.1-3m in height)				
	Moss, herbs and			
Surface fuel composition	deciduous shrubs	4		
Dead and down material				
continuity (<7cm)	Scattered <10% coverage	4		
Ladder fuel composition	Other conifer	5		
Ladder fuel horizontal				
continuity	Sparse <10% coverage	2		
Stems/ha (understory)	<900	2		
Stand structure and compostion (dominant and co-dominant)				
	Conifer with high CBH			
Overstory composition/CBH	(>10 m)	10		
Crown closure	41-60%	2		
Fuel strata gap	>10	0		
Stems/ha (overstory)	401-600	2		
Dead and dying (% of dominant and co-dominant stems)	Standing dead/partial down <20%	2		
Comments:	TOTAL	34		
	RATING	LOW		



Photo 25. Plot 9 -- Ladder and surface fuels.



Photo 26. Plot 9 – Crown closure.



Photo 27. Plot 9 – Surface fuels.

Wildfire Threat Assessment Worksheet - Fuel Setting Scoring			
Location	Plot 10	Date	28-Jul
Assessor	MS		
Crown species composition (species 10%)		Dr5Fd4(MbCw)	

Component/subcomponent	PULLDOWNS	SCORE			
Depth of organic layer	2-<5	3			
Surface and ladder fuel (.1-3m in height)					
	Moss, herbs and				
Surface fuel composition	deciduous shrubs	4			
Dead and down material					
continuity (<7cm)	Scattered <10% coverage	4			
Ladder fuel composition	Mixedwood	3			
Ladder fuel horizontal	Scattered 10-30%				
continuity	coverage	5			
Stems/ha (understory)	<900	2			
Stand structure and compostion (dominant and co-dominant)					
Overstory composition/CBH	Mixwood 50%	5			
Crown closure	20-40%	1			
Fuel strata gap	3-6	7			
Stems/ha (overstory)	401-600	2			
Dead and dying (% of dominant	Standing dead/partial				
and co-dominant stems)	down <20%	2			
Comments:	TOTAL	38			
	RATING	LOW			



Photo 28. Plot 10 -- Ladder and surface fuels.



Photo 29. Plot 10 – Crown closure.



Photo 30. Plot 10 – Surface fuels.

Wildfire Threat Assessment Worksheet - Fuel Setting Scoring				
Location	Plot 11	Date	28-Jul	
Assessor	MS			
Crown species composition (species 10%)		Fd8Dr2(CwRa)		

PULLDOWNS	SCORE				
2-<5	3				
Surface and ladder fuel (.1-3m in height)					
Moss, herbs and					
deciduous shrubs	4				
Scattered <10% coverage	4				
Mixedwood	3				
Sparse <10% coverage	2				
<900	2				
Stand structure and compostion (dominant and co-dominant)					
Conifer with high CBH					
(>10 m)	10				
<20%	0				
>10	0				
<400	0				
Standing dead/partial					
down <20%	2				
TOTAL	30				
	LOW				
	2-<5 Ind ladder fuel (.1-3m in he Moss, herbs and deciduous shrubs Scattered <10% coverage Mixedwood Sparse <10% coverage <900 I compostion (dominant ar Conifer with high CBH (>10 m) <20% >10 <400 Standing dead/partial down <20%				



Photo 31. Plot 11 -- Ladder and surface fuels.



Photo 32. Plot 11 – Crown closure.



Photo 33. Plot 11 – Surface fuels.



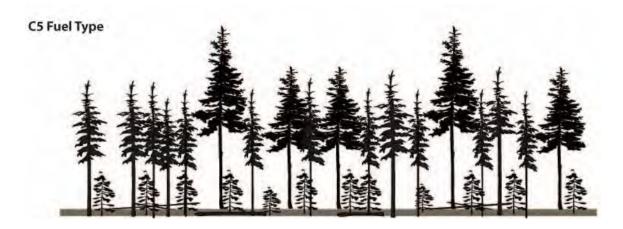
Figure 6. Plot locations

Appendix 2 Generic Description of Coastal Fuel Types

The current Canadian Forest Fire Behavior Prediction (FBP) System does not include coastal forests in their fuel type descriptions. These fuel types reflect stand conditions that were modeled to predict fire behavior potential. On the coast the fuel type that most closely represents forest stand structure and conditions has been used. The following fuel types are the most common interpretations used on the coast.

C5 – Uniform Second Growth Conifer Stand – Moderate Risk

This fuel type is characterized by mature second growth stands dominated by Douglas-fir, Western Red Cedar (Thuja plicata) and Western Hemlock (Tsuga heterophylla). This fuel type is moderately dense (500-1000 stems per ha) and has a high crown base height of 10 to 15m. The understory is of moderate density, usually consisting of Western Redcedar and Western Hemlock regeneration. The ground fuel component consists of moderately dense fine fuel layer (>7cm) and a low percent cover of large woody debris (>7cm). It takes a large amount of energy to create a crown fire.



C3 – Multistoried Second Growth Conifer Stand – High Risk

This fuel type is characterized by a uniform mature second growth conifer dominated stand. This stand consists of semi-mature Douglas-fir (Pseudotsuga menziesii), Western Red Cedar (Thuja plicata) and Western Hemlock (Tsuga heterophylla). Compared to a C5 stand, a C3 stand is more densely stocked (1000-2000 stems per ha) and there is a lower crown base height (usually 4-8 m). The understory is more densely stocked with Western Redcedar and Western Hemlock. The ground fuel component consists of moderately dense fine fuel layer (>7cm) and a low percent cover of large woody debris (>7cm). A crown fire in a C3 stand takes less energy to create than a C5 stand.



M2 - Mature Stands Consisting of a mix of Conifer and Deciduous Trees – Low to Moderate Risk

This fuel type consists of a mixed conifer and deciduous tree type. This stand is not uniform in structure and is composed of a wide variety of species. These may include and not limited to:

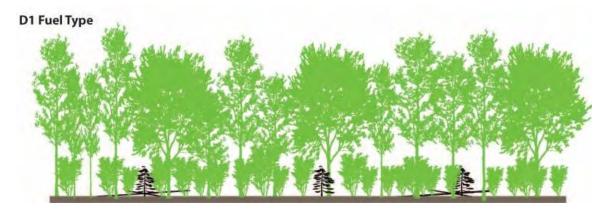
Western Red Cedar (Thuja plicata), Western Hemlock (Tsuga heterophylla), Douglas-fir (Pseudotsuga menziesii), Red Alder (Alnus rubra), Bigleaf Maple (Acer macrophyllum), and Paper Birch (Betula papyrifera).

These stands usually consist of less than a 70% of conifer trees, reducing the wildfire risk. There is usually a low crown height (5m) and a high percentage of ladder fuels. There is a high percent cover of suppressed trees, but they are usually composed of deciduous species.



D1 - Deciduous Dominated Stands - Low Risk

This fuel type is dominated by deciduous trees consisting mostly of Red Alder (Alnus rubra), Bigleaf Maple (Acer macrophyllum), and Paper Birch (Betula papyrifera). D1 stand structure is not uniform with a wide variety of tree ages. There is a well-developed shrub layer, but is mostly composed of low-flammable species. Crown fires are not expected because of the deciduous fuel type. D1 stands on the coast can be used as fuel buffers as they present a low wildfire risk.



C4 - Uniform Densely Stocked Conifer Stand

This fuel type is rare within the lower mainland as it is mostly defined by densely stocked Lodgepole pine (Pinus contorta). This fuel type can be found more towards Squamish and Pemberton. Some small densely stocked Western Red Cedar (Thuja plicata), Western Hemlock (Tsuga heterophylla), and Sitka Spruce (Picea sitchensis) can be found in the Lower Mainland, but these stands are often isolated and small. Stands are densely stocked, (approximately 10,000-30,000 stems/ha) with a large quantity of fine and large woody debris. These stands are characterized as having vertical and horizontal fuel continuity. The shrub community in this stand is of very low density.

Appendix 3 Resources and Links

Agee, James K. 1993. Fire Ecology of the Pacific Northwest. Island Press. Covelo, California.

Agee, J.K. 1996. The influence of forest structure on fire behavior. Presented at the 17th Annual Forest Vegetation Management Conference, Redding CA, January 16-18, 1996.

Agee, J.K., G. Bahro, M.A Finney, P.N. Omin, D.B. Sapsis, C.N. Skinner, J.W. van Wagtendonk, and C.P. Weatherspoon. 2000. The use of shaded fuelbreaks in landscape fire management. Forest Ecology and Management 127 (2000):55-66

Agee, J.K. and M.H. Huff. 1986. Structure and process goals for vegetation in wilderness areas. Pages 17-25 in Lucas, R.C. compiler. Proceedings-National wilderness research conference: current research, 23-26 July 1985, Fort Collins, Colorado, USA. USDA Forest Service General Technical Report INT-212.

Arno, S.F., 1980. Forest fire history in the northern Rockies. Journal of Forestry. 78: 460-465.

Brown, R. 2000. Thinning, Fire and Forest Restoration: A science-based approach for national forests in the interior northwest. for Defenders of Wildlife. West Linn, Oregon.

Graham, Russel T., Dr. Sarah McCaffrey, and Dr. Theresa B. Jain. 2004. Science Basis for Changing Forest Structure to Modify Wildfire Behavior and Severity. U.S. Department of Agriculture Forest Service. RMRS-GTR-120.

Graham, Russel T., A. Harvey, T.B. Jain and J.R. Tonn. 1999. The Effects of Thinning and Similar Stand Treatments on Fire Behavior in Western Forests. USDA Forest Service General Technical Report PNW-GTR-463.

Ingalsbee, Timothy. 2004. American Lands proposal for fuels reduction and restoration.

URL: http://www.kettlerange.org/salvagelogging/Ingalsbee-restoration.html.

Meidinger, D. Pojar, J.1991. Ecosystems of British Columbia. BC Ministry of Forests, Research Branch. Victoria, BC.

URL: http://www.for.gov.bc.ca/hfd/pubs/Docs/Srs/SRseries.htm

Morrow, B., K. Johnston and J. Davies. 2013. Wildland Urban Interface Wildfire Threat Assessments in BC. Online http://fness.bc.ca/wp-content/uploads/2015/09/swpi-WUI-WTA-Guide-2012-Update.pdf

National Fire Protection Association. 2013. NFPA 1141. Standard for Fire Protection Infrastructure for Land Developments in Suburban and Rural Areas.

National Fire Protection Association. 2013. NFPA 1144. Standard for Reducing Structure Ignition Hazards from Wildland Fire.

National Fire Protection Association. 2013. NFPA 1141. Standard for Fire Protection Infrastructure for Land Developments in Suburban and Rural Areas.

Pacific Northwest Research Station. Science Update. Issue 7. June 2004. Retrieved Nov. 2004.

URL: http://www.fs.fed.us/pnw/pubs/science-update-7.pdf

Partners in Protection and Province of British Columbia. 2016. FireSmart Homeowner's Manual: FireSmart Begins at Home. Online http://bcwildfire.ca/prevention/docs/homeowner-firesmart.pdf

Appendix 4 Description of Terminology

Term	Definition
Co-dominant Trees	Defines trees with crowns forming the general level of the main canopy in even-aged groups of trees, receiving full light from above and partial light from the sides.
Coarse fuels (coarse woody debris)	Combustible material over 7cm in diameter
Crown base height	The height, above ground, where the live crown of coniferous trees begins. Measured in meters (m).
Crown Closure	An assessment of the degree to which the crowns of trees are nearing general contact with one another. The percentage of the ground surface that would be considered by a downward vertical projection of foliage in the crowns of trees.
Diameter at Breast Height	The diameter of a tree measured at 1.3m above the point of germination.
Dominant Trees	Defines trees with crowns extending above the general level of the main canopy of even-aged groups of trees, receiving full light from above and comparatively little from the sides.
Fire-resistant materials	These meet the acceptance criteria of CAN/ULC-S101, (Fire Endurance Tests of Building Construction and Materials)
Fuel Break	An area of non-combustible materials that inhibits the continuous burning of fuels.
Fuel Load	The mass of combustible materials expressed as a weight of fuel per unit area.
Fuel Moisture	Percent water content of vegetation. This is an important factor in rate of spread.
Fuel Types	Classification of forested stands as described by Canadian Forest Fire Behavior Prediction (FBP) System. There are currently no fuel type classifications specific to coastal fuels.
Fine fuels (fine woody debris)	Combustible woody debris under 7cm in diameter.
Fire Behaviour	The manner in which a fire reacts to the influences of fuel, weather, and topography.
Intermediate Trees	Defines trees with crowns extending into the lower portion of the main canopy of even-aged groups of trees, but shorter in height than the co-dominants. These receive little direct light from above and none from the sides, and usually have small crowns that are crowded on the sides.

Term	Definition	
Ladder Fuels	Live or dead vegetation that allows a fire to burn into the canopy (crown) of a forested stand.	
Lift Pruned	The removal of ladder fuels to increase the crown base height.	
Litter Layer	Surface buildup of leaves and woody material.	
Live Crown Ratio	Is the percentage of the total stem length covered with living branches. It provides a rough but convenient index of the ability of a tree's crown to nourish the remaining part of the tree. Trees with less than 30 percent live crown ratio are typically weak, lack vigor, and have low diameter growth, although this depends very much on the tree's age and species.	
Non-combustible materials	Means that a material meets the acceptance criteria of CAN/ULC S114, (Standard Method of test for determination of non-combustibility in Building Materials)	
Open Grown	Defines trees with crowns receiving full light from all sides due to the openness of the canopy.	
Rated roofing materials	Class A, B or C is a measure of the external spread of flame on a roof surface. Tests are conducted using CAN/ULC S107M methods of fire tests of roof coverings, or equivalent. The best rating achieved is Class A, which may be described as effective against severe fire exposure.	
Spotting	Fire producing sparks or embers that are carried by the wind and start new fires.	
Stems Per Hectare	The number or size of a population (trees) in relation to some unit of space (one hectare). It is measured as the amount of tree biomass per unit area of land.	
Suppressed Trees	Defines trees with entirely below the general level of the canopy of even-aged groups of trees, receiving no direct light either from above or from the sides.	
Wildfire	An unplanned, unwanted wildland fire, including unauthorized human-caused fires, escaped wildland fire use events, escaped prescribed fire projects, lightning strikes, downed power lines, and all other wildland fires where the objective is to put the fire out.	

Appendix 5 Fire Resistant Plants for Landscaping

Fire resistant and drought tolerant ground covers	Fire resistant and drought tolerant perennials
 Achillea species (when mowed, turf alternative) Ajuga reptans Arctostaphaylos uva-ursi Autennaria rosea Aubrieta detoidea Ceanothus prostatus Cerastium tomentosum Dianthus species Delosperma nubigenum and the less cold hardy cooperi Fragaria species (turf alternative) Phlox subulata Sedums Semperviums Thymus praecox turf alternative) Veronica species 	 Achillea species Armeria maritima Aquilegia Aurinia saxatilis Coreopsis Echinacea purpurea Epilebium angustifolium Gaillardia varieties Geranium species Helianthemum Hemerocallis Kniphofia uvaria Iris - bearded Lavendula Lupinus Penstemon Oenothera species Papaver orientale Perovskia atriplicifolia Ratibida columnifera Salvia species Stachys byzantina
Fire resistant and drought tolerant shrubs:	Fire resistant and drought tolerant trees:
 Amelanchier alnifolia Caryopteris x clandonesis Ceanothus Cistus Cotoneaster species Euonymus alatus Fremontoden on californium Fuchsia (dieback) Gaultheria shallow Holodiscus discolour Lagerstroemia indica Mahonia Pachystima myrsinites Philadelphus speceis Paxistima myrthifolia Pyracantha species Ribes species Ribes species Rosa species and hardy own root shrub Spiraea bumalda Symphoricarpos albus Syringa vulgaris, spidouglasii Yucca species 	 Acer circinatum, glabrum, macrophyllum, plantanoides, rubrum Aesculus hippocastanum Alnus rubra tenuifolia Betula species Catalpa speciosa Celtis occidentalis Cercis canadensis Cornus florida, stolonifera, nuttallii Crataegus species Fagus species Fraxinus species Gingko biloba Gleditsia triacanthos Gymnocladus dioicus Juglans Liquidambar styraciflua Malus species Populus species Prunus cherry Quercus agrifolia, rubra, palustria, garryana Robinia pseudoacacia Salix species Sorbus aucuparia

Source: Master Gardeners Association of BC. http://mgabc.org/node/1514.

Limitations

- Except as expressly set out in this report and in these Assumptions and Limiting Conditions, Diamond Head Consulting Ltd. ("Diamond Head") makes no guarantee, representation or warranty (express or implied) with regard to: this report; the findings, conclusions and recommendations contained herein; or the work referred to herein.
- This report has been prepared, and the work undertaken in connection herewith has been conducted, by Diamond Head for the "Client" as stated in the report above. It is intended for the sole and exclusive use by the Client for the purpose(s) set out in this report. Any use of, reliance on or decisions made based on this report by any person other than the Client, or by the Client for any purpose other than the purpose(s) set out in this report, is the sole responsibility of, and at the sole risk of, such other person or the Client, as the case may be. Diamond Head accepts no liability or responsibility whatsoever for any losses, expenses, damages, fines, penalties or other harm (including without limitation financial or consequential effects on transactions or property values, and economic loss) that may be suffered or incurred by any person as a result of the use of or reliance on this report or the work referred to herein. The copying, distribution or publication of this report (except for the internal use of the Client) without the express written permission of Diamond Head (which consent may be withheld in Diamond Head's sole discretion) is prohibited. Diamond Head retains ownership of this report and all documents related thereto both generally and as instruments of professional service.
- 3. The findings, conclusions and recommendations made in this report reflect Diamond Head's best professional judgment in light of the information available at the time of preparation. This report has been prepared in a manner consistent with the level of care and skill normally exercised by arborists and foresters currently practicing under similar conditions in a similar geographic area and for specific application to the trees subject to this report as at the date of this report. Except as expressly stated in this report, the findings, conclusions and recommendations set out in this report are valid for the day on which the assessment leading to such findings, conclusions and recommendations was conducted. If generally accepted assessment techniques or prevailing professional standards and best practices change at a future date, modifications to the findings, conclusions, and recommendations in this report may be necessary. Diamond Head expressly excludes any duty to provide any such modification if generally accepted assessment techniques and prevailing professional standards and best practices change.
- 4. Conditions affecting the trees subject to this report (the "Conditions", including without limitation structural defects, scars, decay, fungal fruiting bodies, evidence of insect attack, discoloured foliage, condition of root structures, the degree and direction

of lean, the general condition of the tree(s) and the surrounding site, and the proximity of property and people) other than those expressly addressed in this report may exist. Unless otherwise stated: information contained in this report covers only those Conditions and trees at the time of inspection; and the inspection is limited to visual examination of such Conditions and trees without dissection, excavation, probing or coring. While every effort has been made to ensure that the trees recommended for retention are both healthy and safe, no guarantees, representations or warranties are made (express or implied) that those trees will remain standing or will not fail. The Client acknowledges that it is both professionally and practically impossible to predict with absolute certainty the behaviour of any single tree, or groups of trees, in all given circumstances. Inevitably, a standing tree will always pose some risk. Most trees have the potential for failure and this risk can only be eliminated if the risk is removed. If Conditions change or if additional information becomes available at a future date, modifications to the findings, conclusions, and recommendations in this report may be necessary. Diamond Head expressly excludes any duty to provide any such modification of Conditions change or additional information becomes available.

- 5. Nothing in this report is intended to constitute or provide a legal opinion, and Diamond Head expressly disclaims any responsibility for matters legal in nature (including, without limitation, matters relating to title and ownership of real or personal property and matters relating to cultural and heritage values). Diamond Head makes no guarantee, representation or warranty (express or implied) as to the requirements of or compliance with applicable laws, rules, regulations, or policies established by federal, provincial, local government or First Nations bodies (collectively, "Government Bodies") or as to the availability of licenses, permits or authorizations of any Government Body. Revisions to any regulatory standards (including bylaws, policies, guidelines an any similar directions of a Government Bodies in effect from time to time) referred to in this report may be expected over time. As a result, modifications to the findings, conclusions and recommendations in this report may be necessary. Diamond Head expressly excludes any duty to provide any such modification if any such regulatory standard is revised.
- 6. Diamond Head shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.
- 7. In preparing this report, Diamond Head has relied in good faith on information provided by certain persons, Government Bodies, government registries and agents and representatives of each of the foregoing, and Diamond Head assumes that such information is true, correct and accurate in all material respects. Diamond Head accepts no responsibility for any deficiency, misinterpretations or fraudulent acts of or information provided by such persons, bodies, registries, agents and representatives.

- 8. Sketches, diagrams, graphs, and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys.
- 9. Loss or alteration of any part of this report invalidates the entire report.

Attachment J

Neighborhood Information Meeting Report

670 Farrell Road

Meeting Date: July 15,2020

Application File No. 3360-19-02

Host Attendees: Sean Carroll, P.Eng., Agent and Project Engineer

Public Attendees: 25 (Signed In)

Attachments:

- 1. Summary of Meeting/ Host Summary
- 2. Copy of Newspaper Notice
- 3. Copy of Invitation
 - a. Invitation Cover Letter
 - b. Rezoning Proposal Site Plan
 - c. Conceptual Lot Layout Plan
 - d. Comment sheet
 - e. Self addressed stamped envelope
- 4. Copy of Sign In Sheet
- 5. Copies of comment forms /received emails and letters. Responses also attached
- 6. Covid meeting procedures

Submitted By:

Sean Carroll, P.Eng.

July 21,2020

Neighborhood Information Meeting Report #2

670 Farrell Road

Meeting Date: July 15,2020

Application File No. 3360-19-02

Host Attendees: Sean Carroll, P.Eng., Agent and Project Engineer

Public Attendees:25 (Signed In)

Summary;

Meeting was conducted in open house style but became a Question and Answer session from the attendees. Sean Carroll provided the answers and responses.

Main Discussion Items

The Tree Buffer zone – it was explained that it is the intention to leave the existing trees as a buffer zone if it is determined by an arborist that it would be safe to do so. Otherwise selective planting could be completed within the buffer zone.

Farrell Road Upgrade – It was confirmed that Farrell Road along the frontage of this project would be upgraded along with services brought from their existing locations on Farrell Road

Construction Timing and Length – the construction could begin as early as this fall but would most likely be in the spring. Some of the site servicing construction works could be phased. House construction would be market driven.

Park Location – it was explained that the Park location and size was determined by staff based on its eventual connection to a larger green space area as identified in the South Ladysmith Area Plan. Residents backing onto the park requested that it be fenced to ensure visitors do not wander onto private property.

Power/Tel/Cable Servicing – it was confirmed that these services would be underground through the development

Host Summary;

The open house was well attended based on the number of mailouts and the current COVID conditions. As part of the mailout, there were self-addressed stamped envelopes to encourage comments along with providing phone numbers and email address. The meeting was also placed in the local paper.

In general, it seemed like the reduction in size of the multi-family from the first neighbourhood meeting was well received by the attendees. There were several discussions about the tree buffer and the separation from The Gales development. It was noted that the separation will include the interior road of the Gales along with the tree buffer zone. It was also noted that one of the two condo apartment buildings on the Gales would also provide some buffering from the single family density.

Submitted By:

Sean Carroll, P.Eng.

July 21,2020



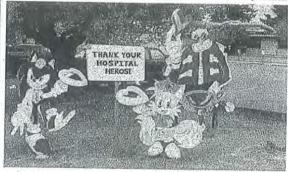
DR. SUZANNE OTTERSON Family Dentistry

121 Forward Road, Ladysmith









A brazen mid-day theft saw Knuckles the Enchidna stolen from the LCHC display (Submitted photo)

NOTICE OF NEIGHBOURHOOD INFORMATION MEETING

Members of the public are invited to attend an OPEN HOUSE information meeting regarding the proposed rezoning of the properties located at Lot 20 Trans Canada Highway and 670 Farrell Road.

The proposal is to rezone from RU -1 Zoning into R-3A Zoning and R-1 Zoning to allow the development of townhomes on land fronting Farrell Road and single family homes on the southern portion of the 2 sites.

DATE: Wednesday, July 15, 2020

TIME: 5:00 PM to 7:00 PM

LOCATION: Eagles Hall 921 - 1st Avenue, Ladysmith, BC

The meeting will follow COVID restrictions and if an in-person meeting is not desired or for further information/questions of clarification contact: Sean Carroll, P.Eng. at 604-329-5630 and for email: scarroll@coregroupconsultants.com

Upcoming Online Events COMMUNITY CONVERSATIONS Front Line Social Service Signy Madden Wed. July 15th 7-8pm Visit PaulManlyMP.ca for details and more upcoming Community Conversations. Paul Manly, MP

Thief steals, then returns, Knuckl character from LCHC display

A brazen daytime theft of Knuckles the Echidna from a display in front of the Lady-smith Community Health Centre, (LCHC) resulted in a safe return of the Sonic universe

Knuckles was stolen between 11:00am -12:00pm on July 1. LCHC nurse, Louise Gil-

foy took to Facebook to denounce the theft, "This display is extremely special to us and our community. This is so disappointing and sad," Louise Gilfoy, a nurse at the LCHC said

in a Facebook post.

The display was created by Jackie Bates, her brother Ricky Bates, and her fiance Mark Turner. It took the trio two weeks worth of work to create and set up the display. Jackie Bates suffers from cystic fibrosis, and

knows many of the nurses at the LCHC. Bates said she was inspired to make the display because of her close relationship with the LCHC "We thought it would be awesome to the nurses here and made the Sonic d When they saw that Knuckles ha stolen, it was disheartening.

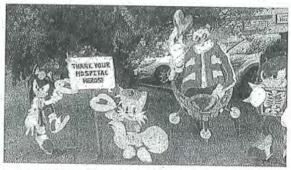
"We're pretty upset. We saw a lot of of kids in the community really loving the characters on walks," Bates said. "Mark worked the hardest on Knuck

pretty disheartened. I can't believe K was actually taken. We're all shocke stolen in the middle of the day."
Turner created an original design of K

holding an X-ray over his chest that a

Sometime during the night time he tween July 2, and July 3, Knuckles turned to the LCHC display. Knuck undamaged and placed back in the sa

he was taken from.
"We don't know, and don't care ho turned or what he got up to while he and about," Gilfoy said. "We are jus he's back."



Knuckles was returned to the display shortly after being taken (Submitted photo)



NOTICE OF NEIGHBOURHOOD INFORMATION MEETING

Members of the public are invited to attend an open house meeting regarding the proposed rezoning of the properties located at Lot 20 Trans Canada Highway and 670 Farrell Road.

The proposal is to rezone from RU -1 Zoning into R-3A Zoning and R-1 Zoning to allow the development of townhomes on the lands fronting Farrell Road and single family homes on the southern portion of the 2 sites.

Summary

The revised site plan attached has reduced the number of townhomes from the previous plan. The proposed townhomes will front onto Farrell Road and provide an affordable housing option for the area.

The remainder of the site will consist of single-family homes and a park area adjoining the future open space.

The connection road between Sanderson and Farrell Road has been eliminated due to grade tolerances but an emergency access road has been placed which will also act as a pathway connection.

The Traffic engineers have reviewed the proposed layout and have determined that the current road standards can accommodate this level of development.

Please refer to the attached site plan

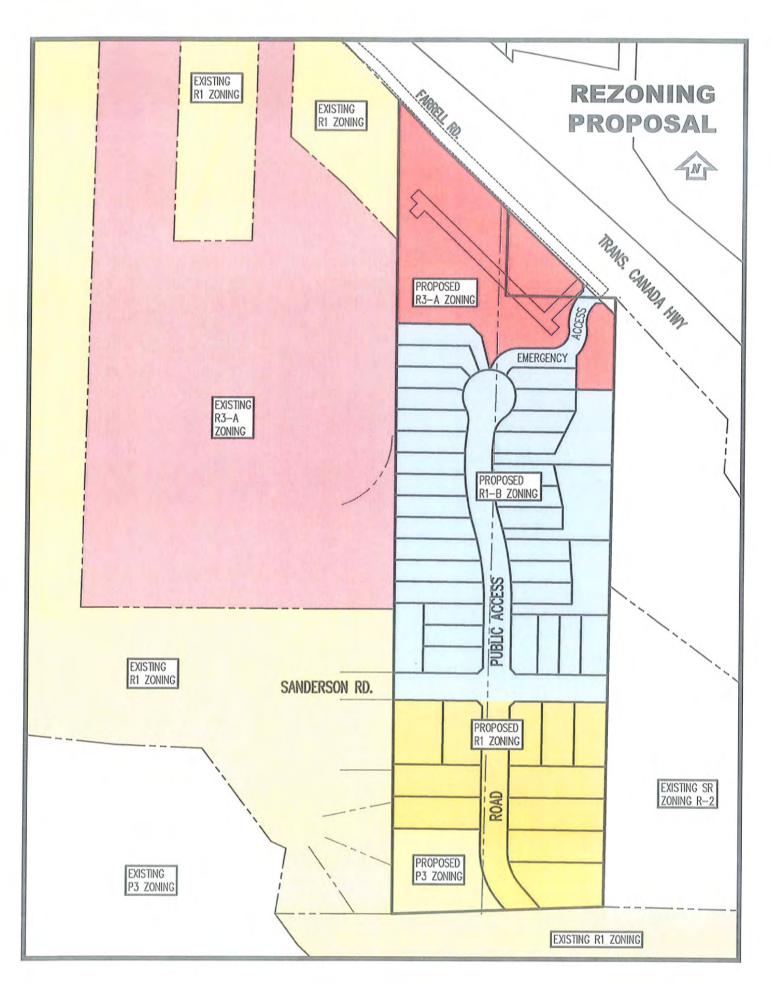
DATE: July 15th, 2020

TIME: 5:00 PM to 7:00 PM

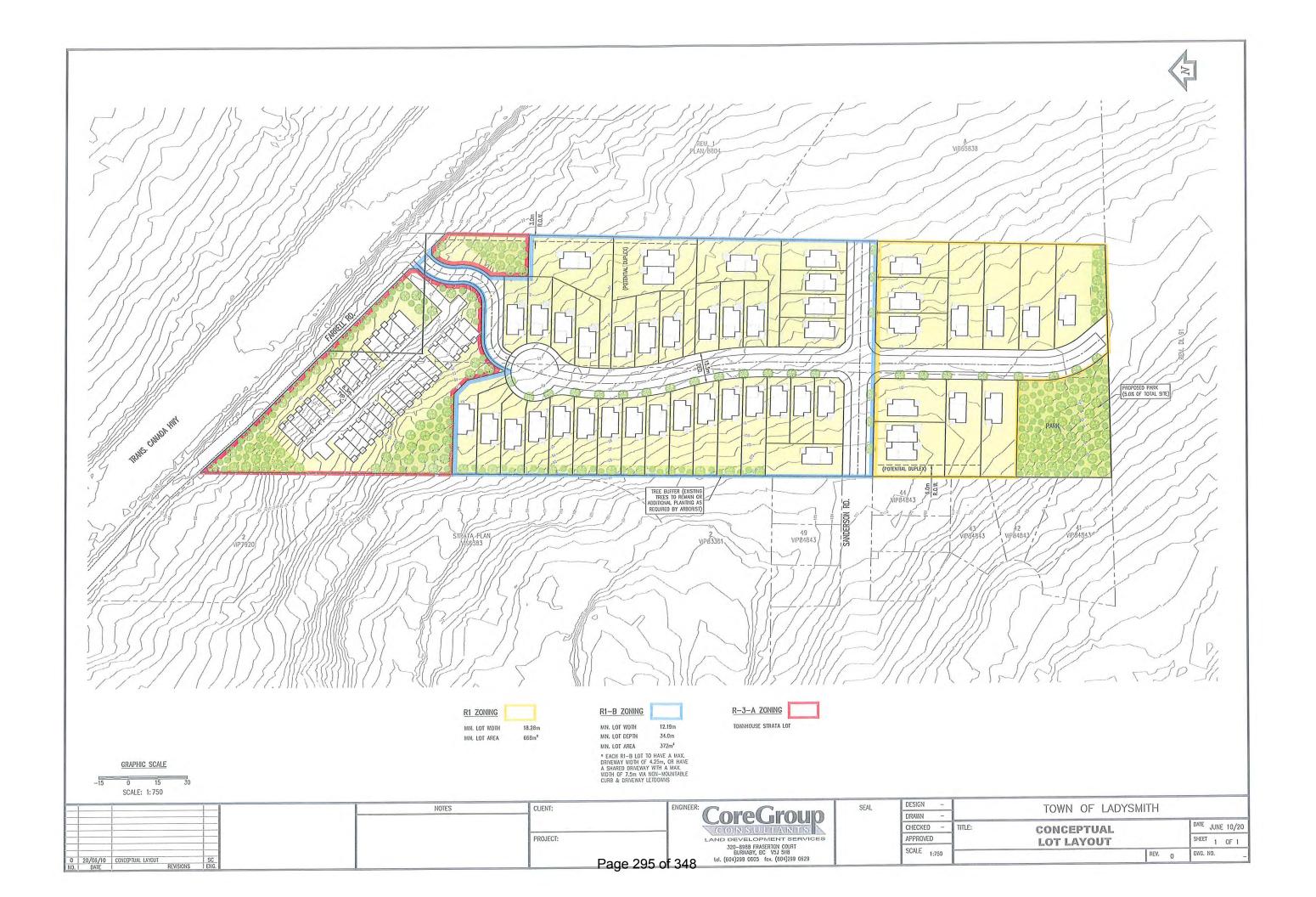
LOCATION: Eagles Hall

921 1St Ave, Ladysmith, BC

The meeting will be under COVID standards. If you do not want to attend but want your voice to be heard simply fill out the attached comment sheet and/or contact Sean Carroll, P.Eng. at 604-329-5630 and /or email: scarroll@coregroupconsultants.com



Page 294 of 348



Rezoning Application for Lot 20 TCH and 670 Farrell Road Comment Sheet

If you do not wish to attend in person or cannot, please send back this comment form using enclosed envelope or by email to scarroll@coregroupconsultants.com

or by email to scarroll@coregroupconsulta	ints.com		
Date: Wednesday July 15,2020	Eagles Hall		
Regarding rezoning of Lot 20 TCH and 670 Farrell Road			
	Comments/Questions		
ime:			
dress:			

Phone:

Neighbourhood Information Meeting Sign In Sheet

Date: July 15.2020 Time: 5:00 PM to 7:00 PM Eagles hall

Regarding rezoning of Lot 20 TCH and 670 Farrell Road

Name	Address
50 S - 72 A - 4	7.444.005
BRIAN MCLAURIN	
Anita Stewart	
Debbie Timmends	
Jocka Judy Clasar	
ONK PORTE	
Wendy + Harold Ro	sen
ADAM KELCN	
Richard Ridley	
ROBYN KEUN	
Set Vitares	
-DKME GAIT	
DON SWIDER T Shanto	
Marsh Stevens	
GADAT BOTHER	
Balan Johnson	
Jame Colligar	
Jeff Keichert	
LAVID & GLORIA GARVIE	
CHRIS/DORZEN CLACAL	
TODO HANGOCK	
	Page 297 of 348

From: Gerry Stasiuk

Sent: July 15, 2020 7:04 PM

To: Sean Carroll

Subject: Comment Sheet - Rezoning Lot 20 TCH and 670 Farrell Road

Attachments: The Forest - 15 Jul 20 Meeting.doc

Mr Carroll ...attached to this note is an email copy of the Comments Sheet supplied to you today at the Neighbourhood Meeting for above mentioned. As requested, would appreciate a written response to each of the questions/comments posed. Sincerely, Gerry Stasiuk

Neighbourhood Information Meeting - 15 Jul 2020 Re: Rezoning application Lot 20 TCH and 670 Farrell Road

Attachment to Comment Sheet (Questions)

- 1- Notice says to request rezone from RU-1 into R-3A aand R-1 but included diagram shows existence a zone R1-B. Please account for.
- 2- Reduction in number of Townhomes from previous (2019) plan From what to what?
- 3- Stated that Townhomes will "provide an affordable housing option for the area" ... please describe in detail what is meant here. View this as a major concern, in that must be fully congruent with the OCP and all by-laws (without variance) and will not, in any way, subtract from the surrounding properties and neighbourhoods, and will not be out of character with surrounding homes on Stirling Road, The Gales, and other surrounding properties.
- 4- The increased traffic flow will add to the already outstanding issue with the problematic South Davis/Highway Number One intersection. How will this matter be dealt with given the increase in traffic flow arising from said project? This needs to be addressed up-front and not just kicked down the road.
- 5- Regarding the Townhomes:
 - a. what are the parking provisions for owners and guests?
 - b. do the units have garages?
 - c. floor area size?
 - d. height of each?
 - e. parcel coverage?
 - f. setbacks?
 - g. underground wiring to be deployed?
 - h. garbage handling and storage?
 - i. mailboxes?
 - j. security/surveillance provisions?
 - k. the plan with the Town to upgrade Farrell Road? e.g. street lighting, sidewalks, road width, etc
 - I. landscaping plans
- 6. How will you ensure that the Emergency Access will be used only for that purpose and not for ease of exit by home owners?
- 7. What is the Tree Retention plan to be implemented that will be fully congruent with OCP and BC Landscaping Standards? Especially for the East Boundary (as a buffer)
- 8. Will the proposed R-1-B homes have garages?
- 9. Noise abatement is an issue in the immediate area. What will be done here with appropriate government levels to address?
- 10. Who is/are the property owner(s) and the developer(s)? Track record? References?
- 11. Project Timeline for the undertaking. Ability to finish what is started?
- 12. Am happy to see development around our neighbourhood, but want to see any undertaking consistent with the Town's "green" objectives as articulated in the Town bylaws and development to fully complement, and be in full character what we already have ... do not want to see diminished property values as a result. The OCP states that the design of new developments are to complement the overall character of Ladysmith to provide attractive and sustaining neighbourhoods.

By: Gerry Stasiuk,

Neighbourhood Information Meeting - 15 Jul 2020 Re: Rezoning application Lot 20 TCH and 670 Farrell Road

Attachment to Comment Sheet (Questions) Answers supplied by Sean Carroll in red

- 1- Notice says to request rezone from RU-1 into R-3A aand R-1 but included diagram shows existence a zone R1-B. Please account for. The R1 zoning was meant to include both the R-1 and the R-1B
- 2- Reduction in number of Townhomes from previous (2019) plan From what to what? See attached plan. It doesn't reference number of units but rather total area for townhomes.
- 3- Stated that Townhomes will "provide an affordable housing option for the area" ... please describe in detail what is meant here. View this as a major concern, in that must be fully congruent with the OCP and all by-laws (without variance) and will not, in any way, subtract from the surrounding properties and neighbourhoods, and will not be out of character with surrounding homes on Stirling Road, The Gales, and other surrounding properties. The term "Affordable" in this case was meant to be lesser cost than a single family home.
- 4- The increased traffic flow will add to the already outstanding issue with the problematic South Davis/Highway Number One intersection. How will this matter be dealt with given the increase in traffic flow arising from said project? This needs to be addressed up-front and not just kicked down the road. A Traffic report has been completed indicating that the current road network has sufficient capacity for this development
- 5- Regarding the Townhomes: Most of these items are contained in the zoning bylaw which can be found on the town of Ladysmith website. Farrell Road will be upgraded,
 - a. what are the parking provisions for owners and guests?
 - b. do the units have garages?
 - c. floor area size?
 - d. height of each?
 - e. parcel coverage?
 - f. setbacks?
 - g. underground wiring to be deployed?
 - h. garbage handling and storage?
 - i. mailboxes?
 - j. security/surveillance provisions?
 - k. the plan with the Town to upgrade Farrell Road? e.g. street lighting, sidewalks, road width, etc.
 - I. landscaping plans
- 6. How will you ensure that the Emergency Access will be used only for that purpose and not for ease of exit by home owners? We understand it will be a locked gate that allows pedestrian/bicycle use.
- 7. What is the Tree Retention plan to be implemented that will be fully congruent with OCP and BC Landscaping Standards? Especially for the East Boundary (as a buffer) The landscaping will follow Township of Ladysmith bylaws, I do not know if the bylaws follow BC Landscaping standards.
- 8. Will the proposed R-1-B homes have garages? R-1-B Zoning allows for garages.
- 9. Noise abatement is an issue in the immediate area. What will be done here with appropriate government levels to address? This development will be under the jurisdiction of all noise bylaws.

- 10. Who is/are the property owner(s) and the developer(s)? Track record? References? The developers are a group of people that have successfully completed projects throughout BC over the last 30 years.
- 11. Project Timeline for the undertaking. Ability to finish what is started? Project would like to start as soon as possible after completing all approvals.
- 12. Am happy to see development around our neighbourhood, but want to see any undertaking consistent with the Town's "green" objectives as articulated in the Town bylaws and development to fully complement, and be in full character what we already have ... do not want to see diminished property values as a result. The OCP states that the design of new developments are to complement the overall character of Ladysmith to provide attractive and sustaining neighbourhoods. Agreed

By: Gerry Stasiuk

Rezoning Application for Lot 20 TCH and 670 Farrell Road Comment Sheet

If you do not wish to attend in person or cannot, please send back this comment form using enclosed envelope or by email to scarroll@coregroupconsultants.com

Date: Wednesday July 15,2020

Eagles Hall

Regarding rezoning of Lot 20 TCH and 670 Farrell Road

Comments/Questions
Two areas of Concern for residents of
the east end of Sanderson Roan.
D There is a tree buffer shown on
the nerth side but not on the South
side. For nesting bird reverlations, as
well as privary & the reduction in history
TOISE (all taxtors that intluned our
decision to live here that tree buffer
noods to extend south from Sanderson
a be deep enough to support the objectives
1157 2d OMOGVO,
& Please no draplex on that lot south of the Sanderson extension. The offert we lots are un
the Sanderson later Sian. The offert we lots are UK
Name: DOHN & KMKEN LAING
Address:
Phone:
thorquestion: Where will added shapping
located as this extra development occurs?
thorquestion: Where will added shapping? Located as this extra development occurs? constion Wall is already over Used.

Rezoning Application for Lot 20 TCH and 670 Farrell Road Comment Sheet

If you do not wish to attend in person or cannot, please send back this comment form using enclosed envelope or by email to scarroll@coregroupconsultants.com

Date: Wednesday July 15,2020

Eagles Hall

Regarding rezoning of Lot 20 TCH and 670 Farrell Road

			Comm	ents/Que	stions			
TOWN	Houses	ARE O	REAT	LAC	YSMIFM	NEEDS	MURE T	OWNHOM:
MAKES					SHWOT			
							_	
Name: A	DAM 1	TELLN						
Address:								
Phone:								

From:

Sharron Haynes

Sent:

July 16, 2020 11:05 AM

To:

Sean Carroll

Subject:

Re: Rezoning Application for Lot 20 TCH and 670 Farrell Road Comment Sheet

Hello Shaun,

My husband and I attended your presentation on Wednesday July 15. We would like to say that we are very pleased with this plan. It is much better than the previous plan. Thank you!

We asked a number of questions during the meeting and indicated that we would also be sending these to you by email. The questions are below.

Thanks again,

Sharon Havnes and Don Snider

Questions for developers

- 1. When will the project begin should all approval be given?
- 2. Approximately how long will construction be from beginning to end.
- 3. If there are phases which will start first. -In what order will the phases be constructed?
- Would all of the properties be logged? Will park area be groomed or left as is. (Currently unsightly and unhealthy looking trees in some of the designated park areas)
- 5. What are the plans for a buffer zone? Will trees/ shrubs be planted and maintained in each lot backing into the Gales property? Will we be able to consult?
- 6. What is meant by 'affordable housing'? Is it based on a \$ figure to build....or ..?
- Will the single dwelling homes be in keeping with the surrounding residential homes as in cost of the home and finished landscaping.

Page 304 of 348

8. What are current maximum height of the units?

9. Are Hydro services going to be buried?
10. Is Lighting going to follow Dark Skies principals?
11. Is the traffic flow based on maximum anticipated numbers? Whose decision is it not to expand Farrell Rd. Is this based on city assessment and agreement or the developer? Please also note that although a connection road is not proposed from Sanderson and Farrell for steep grades, exactly this has been done on Sterling.
12. Is this a strata development or City services / freehold only?
13. What is the cut off date to submit additional concerns and questions to Develope and Town Council?
14. Do you anticipate any changes to zoning rules (eg R3A regulations)

Hello Shaun,

My husband and I attended your presentation on Wednesday July 15. We would like to say that we are very pleased with this plan. It is much better than the previous plan. Thank you!

We asked a number of questions during the meeting and indicated that we would also be sending these to you by email. The questions are below.

Thanks again, Sharon Haynes and Don Snider



- 1. When will the project begin should all approval be given? Construction could start as early as this fall
- Approximately how long will construction be from beginning to end. The servicing is typically a 4 month duration but house construction will be market driven.
- 3. If there are phases which will start first. -In what order will the phases be constructed? It is being contemplated that a first phase on lots at the end of the current Sanderson Road could be the first phase as that is an extension of existing servicing. The rest of the servicing requires extension from Farrell Road
- 4. Would all of the properties be logged? Will park area be groomed or left as is. (Currently unsightly and unhealthy looking trees in some of the designated park areas) The developed areas will be logged the exception based on an arbourist report would be the buffer zone area. If the tress can be safely retained they will be. The Parks Department have not determined at this time the final treatment for their park.
- 5. What are the plans for a buffer zone? Will trees/ shrubs be planted and maintained in each lot backing into the Gales property? Will we be able to consult? See item 4 above on the buffer zone. Consultation is welcome however the Arbourist will have final decision regarding safety.

- 6. What is meant by 'affordable housing'? Is it based on a \$ figure to build....or ..? The term was used to state that the townhomes will cost less than the single family homes. The final price will be market driven
- 7. Will the single dwelling homes be in keeping with the surrounding residential homes as in cost of the home and finished landscaping. We expect the single family homes will be in keeping with similar fee simple single family pricing in the area. Individual landscaping will be up to the lot owners.
- 8. What are current maximum height of the units? With the 3 types of zoning being contemplated it is best to review the Town of Ladysmith zoning bylaw for each zoning.
- 9. Are Hydro services going to be buried? yes
- 10. Is Lighting going to follow Dark Skies principals? The streetlights have to follow Town of Ladysmith standards. Currently these are davit style lights which is a form of dark skies principals.
- 11. Is the traffic flow based on maximum anticipated numbers? Whose decision is it not to expand Farrell Rd. Is this based on city assessment and agreement or the developer? Please also note that although a connection road is not proposed from Sanderson and Farrell for steep grades, exactly this has been done on Sterling. Traffic flows are calculated based on the full build out. Farrell Road could not connect to Sanderson road due to the steep grades and the narrow site. Stirling has a longer length which allows the slope to be used up.
- 12. Is this a strata development or City services / freehold only? The townhomes will be strata and the lots will be freehold

13. What is the cut off date to submit additional concerns and questions to Developer and Town Council? That will be up to the Town of Ladysmith to determine but it is always better to bring up questions and comments early in the process. I would expect comments can be received up to the Public Hearing date.

14. Do you anticipate any changes to zoning rules (eg R3A regulations)

Not at this time, however any changes from the zoning would require public input.

From: Jake Belobaba

Sent: July 16, 2020 9:14 AM

To: Sean Carroll

Cc: Diane Webber; Julie Thompson; Christina Hovey
Subject: RE: Informational Meeting 670 Farrell Road

Please add to Farrell Road File

Cheers

From:

Sent: July 15, 2020 10:25 PM

To: scarroll@coregroupconsultants.com

Cc: Jake Belobaba

Subject: Informational Meeting 670 Farrell Road

Thanks for answering questions at the neighbourhood informational meeting today. I thought I would write down my questions and concerns in this email for the record. As I mentioned at the meeting, I live at the Gales strata which is just west of the proposed development.

I like the proposed development although I question whether the lot sizes might be too small and the resulting density too high.

I think the proposed townhomes along the highway are a good use of marginal land. The very small lot sizes will make affordable homes for first time buyers. It looks like they may enjoy ocean views and hopefully they will have decks on the quieter uphill side of the homes. The row housing will have the benefit of reducing highway noise for the upper homes. I hope that the row housing will be aesthetically pleasing and upscale. Will there be an opportunity to review and comment on building facades?

The conceptual lot layout shows a few areas where existing trees are saved, subject to an arborist report. I like the concept and hope that the Town of Ladysmith makes this a condition of their approval. It would be nice if the park area at the SW corner of the lot connected to the greenway that has been proposed by the town. There are quite a few mature trees along the Gales driveway that abuts the west edge of the development. I believe some of the trees are on Gales property. As some of our trees could be affected by the removal of trees on the development, it would be good if the arborist could also evaluate the trees on the Gales property up to the edge of our roadway. The Gales strata would be willing to work with the arborist or developer to achieve a buffer that would be beneficial to both properties.

The development has a significant frontage on Farrell Road. I assume the development will include improvements to Farrell Road including sidewalks, curb and gutter and street lighting.

Regards,

Jeff Reichert

From:

Sent: July 15, 202

To:

Cc:

Subject:

July 15, 2020 10;25 PM

Sean Carroll

Informational Meeting 670 Farrell Road

Thanks for answering questions at the neighbourhood informational meeting today. I thought I would write down my questions and concerns in this email for the record. As I mentioned at the meeting, I live at the Gales strata which is just west of the proposed development.

I like the proposed dévélopment although I question whether the lot sizes might be too small and the resulting density too high.

I think the proposed townhomes along the highway are a good use of marginal land. The very small lot sizes will make affordable homes for first time buyers. It looks like they may enjoy ocean views and hopefully they will have decks on the quieter uphill side of the homes. The row housing will have the benefit of reducing highway noise for the upper homes. I hope that the row housing will be aesthetically pleasing and upscale. Will there be an opportunity to review and comment on building facades?

The conceptual lot layout shows a few areas where existing trees are saved, subject to an arborist report. I like the concept and hope that the Town of Ladysmith makes this a condition of their approval. It would be nice if the park area at the SW corner of the lot connected to the greenway that has been proposed by the town. There are quite a few mature trees along the Gales driveway that abuts the west edge of the development. I believe some of the trees are on Gales property. As some of our trees could be affected by the removal of trees on the development, it would be good if the arborist could also evaluate the trees on the Gales property up to the edge of our roadway. The Gales strata would be willing to work with the arborist or developer to achieve a buffer that would be beneficial to both properties.

The development has a significant frontage on Farrell Road. I assume the development will include improvements to Farrell Road including sidewalks, curb and gutter and street lighting.

Regards,

Jeff Reichert

From:

Daniel Potts

Sent:

July 17, 2020 10:20 AM

To: Cc: Sean Carroll

Subject:

Regarding rezoning of Lot 20 TCH and 670 Farrell Road

Hi Sean.

I wasn't at the meeting this week but received the handout from someone who was. My wife and I are future neighbours, directly to the north of the proposed development at We understand the transportation plan looked closely at the local roads, but we have some concern about the intersection of Davis Road and Hwy 1, which we also share.

That intersection has been a local and Town concern for some time, and the 2019 traffic study by Binnie, available on the Town website, recommended the following:

Only allow the Trans-Canada Highway and South Davis Road intersection to be used by motorists for right-in, right-out turns and left-in movements. This proposed change means motorists could no longer turn left from South Davis Road into the northbound highway lanes. The consultant performed a 'signal warrant analysis' at the intersection and found data does not presently support the need for traffic lights. This analysis also assumes an average annual growth rate of 2%.

The study also recommended a symmetric restriction of left-out turns from Baker Rd, which would make it very difficult for us to head south. Furthermore, the intersection is currently very dangerous for pedestrian traffic: we have no protection for crossing with children to access the school bus point at the South Davis loop. A signal would provide much better protection. We are therefore keenly interested in the signalized intersection. Considering the additional traffic expected from the proposed development, we request that the South Davis traffic signal warrant be revisited.

For your further consideration,

- Will prospective property owners be alerted to the traffic study recommendation that their northbound trips be routed through the signalized North Davis Rd intersection?
- Did Bunt & Associates look at the effects on Davis Rd traffic, and at the intersections with North and South Davis and Hwy 1?
- Will the proposed development bring the area's growth rate above 2%, thus invalidating the assumption of Binnie's study?

Thanks for considering our feedback. We look forward to any response you can provide, and to a safe traffic future for us and our children. Best regards,

Daniel Potts, P.Eng. Marta Potts, M.D.

670 Farrell Road

July 15,2020

Covid Meeting Procedures

The following procedures were in place for the neighborhood meeting;

- 1. Signs indicating 2 meter separation
- 2. Information Boards were placed allowing separation
- 3. Hand sanitizer was supplied
- 4. Pens were encouraged to be kept rather than shared
- 5. No food or drinks were supplied.
- Most conversations were conducted sitting down to encourage lessened movement around the room
- Mail out included a self addressed stamped envelope to allow people to submit comments without attending meeting
- 8. Email and phone number was provided on mailout and newspaper ad to allow distant commenting.



Committee of the Whole Recommendations to Council March 16, 2021

At its March 9, 2021 meeting, the Committee of the Whole recommended that Council:

1. Approve the allocated amounts of 2021 Grant in Aid requests as follows:

ORGANIZATION	Request (\$)
Ladysmith Community Gardens Society	\$1,600.00
Old English Car Club Central Island Branch	\$600.00
Ladysmith Downtown Business Association	\$4,000.00
Ladysmith Family and Friends Society	\$2,500.00
Ladysmith Celebrations Society	\$10,000.00
Ladysmith & District Historical Society	\$7,500.00
Ladysmith and District Marine Rescue Society	\$2,500.00
Cowichan Family Caregivers Support Society	\$1,000.00
Ladysmith Festival Of Lights	\$15,000.00
Ladysmith Show and Shine	\$2,000.00
Ladysmith Maritime Society	\$1,500.00
Ladysmith Little Theatre	\$2,500.00
Cowichan Trail Stewardship Society - Ladysmith Chapter	\$2,000.00





Ladysmith Secondary School Parent Advisory Council	\$500.00
LSS - Frank Jameson Bursary	\$1,500.00
Waiving Fees	\$4,000.00
Late Applications/Council Discretion	\$3,850.00

2. Direct staff to:

- a. Implement a yard waste pilot project, starting with two spring pickup dates targeted for the end of April and May 2021;
- b. Bring a summary report of costs and participation levels after the first two spring pickups, in order that Council can provide direction on a fall pickup schedule; and
- c. Include \$20,000 in the Solid Waste budget for 2021 with the funds to come from the Solid Waste Reserve.

3. Direct staff to:

- a. Prepare a Park Dedication Bylaw which includes Town-owned properties identified in the staff report dated March 9, 2021; and
- b. Identify portions of road right of way that are currently being used as park space and bring forward the necessary bylaws to:
 - i. close and remove the road dedication pursuant to section 40 of the *Community Charter;* and
 - ii. dedicate the resulting legal parcels as park.
- 4. Direct staff to bring forward amendments to the Zoning Bylaw related to twostorey coach houses as identified by the Committee of the Whole.



MINUTES OF A MEETING OF THE COMMITTEE OF THE WHOLE

Tuesday, March 9, 2021 6:30 P.M.

This meeting was held electronically as per Ministerial Order No. M192

Council Members Present:

Councillor Tricia McKay, Chair Councillor Duck Paterson
Mayor Aaron Stone Councillor Marsh Stevens
Councillor Amanda Jacobson Councillor Jeff Virtanen

Councillor Rob Johnson

Staff Present:

Allison McCarrick Geoff Goodall Erin Anderson Donna Smith Chris Barfoot Mike Gregory Jake Belobaba Sue Bouma

1. CALL TO ORDER AND ACKNOWLEDGEMENT

Councillor McKay, Chair, called this Committee of the Whole meeting to order at 6:30 p.m., and acknowledged with gratitude that this meeting was being held on the traditional unceded territory of the Stz'uminus First Nation.

2. AGENDA APPROVAL

CW 2021-017

That the agenda for this March 9, 2021 Committee of the Whole meeting be approved as amended to include additional background information identifying existing parkland dedicated by bylaw under Item 4.3., "Identified Properties for Parkland Dedication Consideration".

Motion Carried

3. MINUTES

3.1 Minutes of the Committee of the Whole Meeting held January 12, 2021

CW 2021-018

That the minutes of the Committee of the Whole meeting held January 12, 2021 be approved.

Motion Carried

4. REPORTS

4.1 2021 Grant in Aid Requests

CW 2021-019

That the Committee recommend that Council, during Financial Plan discussions, allocate \$3000 from the General Government Reserve to offer a 2021 Grant Writing Workshop to local organizations.

Motion Carried

CW 2021-020

That the Committee recommend allocating \$10,000 to the Ladysmith Celebrations Society for their 2021 Grant in Aid request.

Motion carried

Councillor Johnson declared a conflict of interest due to his association with the Ladysmith & District Historical Society and did not vote regarding their Grant in Aid request.

Councillor Paterson declared a conflict of interest due to his association with the Ladysmith Show and Shine organization and did not vote regarding their Grant in Aid request.

CW 2021-021

That the Committee recommend allocating the following amounts for the 2021 Grant in Aid requests as follows:

ORGANIZATION	Request (\$)
Ladysmith Community Gardens Society	\$1000.00
Old English Car Club Central Island Branch	\$600.00
Ladysmith Downtown Business Association	\$4,000.00
Ladysmith Family and Friends Society	\$2,500.00
Ladysmith Celebrations Society	\$10,000.00
Ladysmith & District Historical Society	\$7,500.00
Ladysmith and District Marine Rescue Society	\$2,500.00
Cowichan Family Caregivers Support Society	\$1,000.00
Ladysmith Festival Of Lights	\$15,000.00
Ladysmith Show and Shine	\$2,000.00
Ladysmith Maritime Society	\$1,500.00
Ladysmith Little Theatre	\$2,500.00
Cowichan Trail Stewardship Society - Ladysmith Chapter	\$2,000.00
Ladysmith Secondary School Parent Advisory Council	\$500.00

LSS - Frank Jameson Bursary	\$1,500.00
Waiving Fees	\$2,500.00
Late Applications/Council Discretion	\$4,000.00

CW 2021-022

AMENDMENT

That the Committee amend the amount of the Grant in Aid for the Ladysmith Community Gardens Society from \$1,000 to \$1,600. Amendment Carried

Resolution CW 2021-021 as amended, reads:

That the Committee recommend allocating the following amounts for the 2021 Grant in Aid requests as follows:

ORGANIZATION	Request (\$)
Ladysmith Community Gardens Society	\$1,600.00
Old English Car Club Central Island Branch	\$600.00
Ladysmith Downtown Business Association	\$4,000.00
Ladysmith Family and Friends Society	\$2,500.00
Ladysmith Celebrations Society	\$10,000.00
Ladysmith & District Historical Society	\$7,500.00
Ladysmith and District Marine Rescue Society	\$2,500.00
Cowichan Family Caregivers Support Society	\$1,000.00
Ladysmith Festival Of Lights	\$15,000.00

Ladysmith Show and Shine	\$2,000.00
Ladysmith Maritime Society	\$1,500.00
Ladysmith Little Theatre	\$2,500.00
Cowichan Trail Stewardship Society - Ladysmith Chapter	\$2,000.00
Ladysmith Secondary School Parent Advisory Council	\$500.00
LSS - Frank Jameson Bursary	\$1,500.00
Waiving Fees	\$4,000.00
Late Applications/Council Discretion	\$3,850.00

Main Motion, as Amended, Carried

CW 2021-023

That the Committee of the Whole recommend that Council approve the allocated amounts of 2021 Grant in Aid requests.

Motion carried

4.2 Yard Waste Pilot

CW 2021-024

That the Committee of the Whole recommend that Council direct staff to:

- 1. Implement a yard waste pilot project, starting with two spring pickup dates targeted for the end of April and May 2021;
- 2. Bring a summary report of costs and participation levels after the first two spring pickups, in order that Council can provide direction on a fall pickup schedule; and
- 3. Include \$20,000 in the Solid Waste budget for 2021 with the funds to come from the Solid Waste Reserve.

Motion Carried

4.3 Identified Properties for Parkland Dedication Consideration

CW 2021-025

That the Committee of the Whole recommend that Council direct staff to:

- 1. Prepare a Park Dedication Bylaw which includes Town-owned properties identified in the staff report dated March 9, 2021; and
- 2. Identify portions of road right of way that are currently being used as park space and bring forward the necessary bylaws to:
 - a. close and remove the road dedication pursuant to section 40 of the Community Charter; and
 - b. dedicate the resulting legal parcels as park.

Motion Carried

4.4 Two-Storey Coach Houses

CW 2021-026

That the Committee of the Whole recommend that Council direct staff to bring forward amendments to the Zoning Bylaw related to two-storey coach houses as identified by the Committee of the Whole.

Motion Carried

4.5 Proposed Amendments to "Town of Ladysmith Streets and Traffic Bylaw 1998, No. 1309"

CW 2021-027

That the Committee of the Whole recommend that Council direct staff to prepare amendments to "Town of Ladysmith Streets and Traffic Bylaw 1998, No. 1309" as identified in the staff report dated March 9, 2021.

CW 2021-028

REFERRAL

That the Committee of the Whole refer back to staff proposed amendments to "Town of Ladysmith Streets and Traffic Bylaw 1998, No. 1309" in order that staff provide further information and clarification regarding:

1. Potential liability issues related to providing timeframes for parked trailers or vehicles on boulevards; and

2. Regulations related to parking attached or unattached trailers a safe distance from the roadway.

Motion Carried

5. COUNCIL SUBMISSIONS

5.1 Request to Update the Ladysmith Heritage Strategic Plan

The Committee discussed the possibility of updating the Ladysmith Heritage Strategic Plan, as requested by Quentin Goodbody of the Ladysmith and District Historical Society in his letter to Council dated February 2, 2021, during the Official Community Plan review. Staff advised that they had been in contact with the Ladysmith and District Historical Society and would keep this consideration in mind during the OCP review process.

6. ADJOURNMENT

CW 2021-029

That this meeting of the Committee of the Whole be adjourned at 8:55 p.m. *Motion Carried*

	CERTIFIED CORRECT:
Chair (Councillor T. McKay)	Corporate Officer (D. Smith)

TOWN OF LADYSMITH

Minutes of the Public Art Task Group (PATG) Thursday, February 4th, 2021 at 4:15pm

COMMITTEE MEMBERS PRESENT:

STAFF PRESENT: Shannon Wilson

Lynda Baker Kathy Holmes

Councillor Tricia McKay

Julia Noon

Lesley Lorenz

REGRETS:

Ora Steyn

WELCOME & INTRODUCTIONS

L. Baker welcomed group and opened the meeting at 4:18 pm.

AGENDA

Moved and seconded: K. Holmes / J. Noon

2020-12: That PATG members approve the agenda for the meeting

as amended.

Motion carried.

MINUTES

Moved and seconded: K. Holmes / L. Lorenz

2020-13: That PATG members approve the minutes from January

7th as circulated. *Motion carried.*

OLD BUSINESS

Guidelines for Donations of Public Art - Draft
 Staff presented the updated draft copy of the Guidelines for Donations of Public Art..

Discussion re: Cultural Sensitivity in Public Art.

Action: Staff to reach out to Stz'uminus

Moved and seconded: L. Lorenz / K. Holmes

2020-14: That PATG members move to adopt the Guidelines for the Donation of Public Art and present to the PRCAC for their recomendation and approval.

Motion carried.

2) Donation of Public Art Request









TOWN OF LADYSMITH

This item is tabled until the Guidelines for Donation of Public Art is complete at which time it will be brought forward in a closed meeting for review.

3) Public Art Collection Review Update Staff shared the Public Art Inventory Review to date. This process is ongoing as we identify and update the inventory list including "notable community art" and "heritage artifacts".

NEW BUSINESS

- 1) Next Steps
 - Toolkit for Guidelines for Donations of PA
 - Guidelines / Toolkit for PA Acquisition
 - · Guidelines for De-accession of PA

PRC DEPARTMENT UPDATE

- 1) Staff acknowledged Arts Council of Ladysmith & District
 - Fine Art Show Update
 - Public Art Hearts Love Ladysmith theme
- 2) Staff shared discussion with David James, from the City of Kelowna re: Public Art Policy.

Moved and seconded: K. Holmes / J. Noonn 2020-15: That the PATG meeting is adjourned at 5:15 p.m. Motion carried

Next meeting will be held at 4:15 pm, March 4th, 2021 via Zoom.

Lynda baker (Mar 10, 2021 09:21

Chair (L. Baker)

RECEIVED:

Corporate Office (D. Smith)



STAFF REPORT TO COUNCIL

Report Prepared By: Erin Anderson, Director of Financial Services

Meeting Date: March 16, 2021

File No:

Re: 2021 Financial Plan Update

RECOMMENDATION:

That Council approve the changes to the 2021-2025 Financial Plan as presented by the Director of Financial Services on March 16, 2021, including:

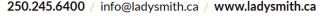
- Single Axle Dump Truck for \$230,000 with funds from prior year surplus;
- Yard Waste Clean-up Pilot for \$20,000 with funds from solid waste reserve;
- Water main breaks for \$200,000 with funds from the water reserve;
- Parks, Recreation & Culture additional loss in revenues for \$29,863 with the funds to come from the COVID-19 Provincial funds;
- Arts & Heritage Hub design changes for \$1,352,340 with funds from Real Property Reserve for \$234,812, Amenity Fund for \$96,588, General Government Reserves for \$336,940 and the relocation of the Artist's Studio using \$400,000 from Prior Year Surplus and \$284,000 from Government - Development Reserves;
- Engineering coverage for \$62,044 with funds to come from General Government staff vacation sick leave reserve; and
- Fire Department used SCBA for \$11,300 with funds from the fire equipment reserve.

EXECUTIVE SUMMARY:

In November of 2020, staff presented the operating and capital budgets for 2021. Since that time, some additional information has been received that requires updates to the Financial Plan.

PREVIOUS COUNCIL DIRECTION:

CS 2021-	01/19/2021	That Council:
025		1. Direct staff to retain Tetra Tech to complete geotechnical drilling at the
		Ladysmith Community Marina retaining wall site for a cost of approximately
		\$25,000; and
		2. Give early budget approval for this project so that this work can be completed
		as soon as possible.
CS 2020-	12/15/2020	That Council provide early budget approval for the following capital projects:
363		· Chicken Ladder Culvert Replacement - \$75,000;
		· Chicken Ladder Gate Replacement - \$7,500;
		· Skid Steer Trailer - \$12,000;
		· Watermain Replacement - French St - \$190,000;
		· Caretaker Building - \$50,000;
		· Sewer Main upgrade Rocky Creek Main - Oyster Bay Rd - \$80,750;
		- Spirogester Valve Removal - \$10,000;







· UV Phase 1 – Design - \$100,000;
· Storm main - French to Kitchener - \$40,000;
· Bollards - 1st Avenue – \$30,000; and
· Half road including sidewalk - Russell Rd: 760 to 740 - \$42,000.

INTRODUCTION/BACKGROUND:

Budget discussions began in November 2020. Council reviewed the general, water and sewer operating budgets as well as the detailed projects for the capital budgets. Council also set the water and sewer utility rates for 2021 and confirmed the water and sewer parcel tax rates and provided early budget approval to select capital projects.

Staff presented a budget increase for 2021 as \$413,442 for municipal taxation and payment in lieu of taxation and \$39,375 for policing taxation on November 3, 2020. Since that time, that amount has been changed by:

Net increase (November 3 rd)	\$ 447,817
Increase due to a reduction of expected 1% revenue sharing	2,243
Cost savings in various departments	(11,651)
Use of Province COVID-19 Safe Restart Recreation Revenues shortfall & COVID Supplies	(55,000)
Use of Province COVID-19 Safe Restart – Additional contribution to reserve	(185,161)
	\$ 198,248

Apart from taxation, additional information was received:

Single Axle Dump Truck - \$230,000

The purchase of an additional single axle dump truck was approved in 2020, though the uncertainties with COVID led to staff postponing the purchase. The project was originally to be funded using short-term borrowing. Staff now recommend that the purchase is funded using surplus funds from the additional revenues realized from building permit revenues (\$90,000), subdivision permit revenues (\$98,000), planning permit revenues (\$27,000), and miscellaneous revenues such as film permits (\$15,000).

Yard Waste Cleanup Pilot- \$20,000

Due to the cancellation of the Spring Cleanup last year, there were surplus funds set aside in the solid waste accounts, apart from the MMBC rebate. It is expected that these reserve funds can be used to test the demand for this pilot project. The Committee of the Whole endorsed this pilot project at its meeting held March 9, 2021.

Water Main Breaks - \$200,000

The Town has experienced many water main breaks. The Utilities Crew is dispatched as soon as possible to patch the break and return later to complete the repair. Due to the volume and frequency of the breaks, the Crew is not able to quickly return to complete the repair. Since the water rates were already set for 2021, Staff request that \$200,000 of the anticipated reserving amount from the unexecuted Water Supply Systems debt be reallocated to the water repairs

budget. The repair work will be completed by the contractor, temporary staff and the utilities crews.

Changes to Parks, Recreation & Culture Programs

When the 2021 budget was presented, Staff had hoped that the recreation facilities would be almost fully operational by April. With the recent Provincial Health Orders, it appears the earliest that some programs could be offered is at least July. Fortunately, there is Provincial funding to offset this loss in revenue, though the Financial Plan will be adjusted to reduce the expense as well. Staff are proposing an additional \$29,863 of COVID funds to be used to offset the loss of revenue and expense for recreation programs.

Arts & Heritage – Design Changes & Grant funding

The Town was successful in obtaining a large grant (\$3,307,500) to fund the first phase of the Waterfront Area Plan – Arts & Heritage Hub. The grant received was not for the full request, leaving the Café and Gift shop unfunded by \$668,340. Staff suggest funding this non-grant project using \$234,812 from the Real Property Fund, \$96,588 from the Amenity fund and \$336,940 from General Government. Additionally, changes to the physical location of the Artist's Studio requires the further architectural design and costs for \$684,000. Staff suggest funding this design change and scope change, using Prior Year Surplus \$400,000, and Government - Development Reserves \$284,000.

Engineering – Position Coverage - \$62,044

Due to a department retirement, there is an anticipated position overlap occurring in the latter part of 2021. Staff are recommending funding this one-time cost in the amount of \$62,044 using excess funds from General Government – staff vacation sick leave reserve.

Fire Department - SCBA

The Fire Department's SCBA (Self Contained Breathing Apparatus) will be up for replacement starting in 2024. This will be a phased-in capital investment with 24 units to be replaced at a cost of ~\$12,000 each. Neighbouring Fire Departments are phasing their new SCBA purchases over a few years and have offered to sell their used systems to the Town for \$11,300 for 9 units plus 20 spare cylinders. These new units can defer the Town's upgrade to 2027 when these units and the Town's current units, will reach the end of their useful life. The new units also allow an additional 15 minutes of air. Staff are proposing making this purchase using funds from the Fire Equipment reserve.

ALTERNATIVES:

Council can choose to:

- 1. Modify the above projects.
- 2. Direct staff to make any amendments.

FINANCIAL IMPLICATIONS:

Many of the above budget changes do not affect property taxation.

The Property Tax amounts are currently:

		Budget Changes	
	2020 Levy	(above)	2021 Proposed
General	7,406,415	158,873	7,565,288
Police	1,315,963	39,375	1,355,338
	8,722,378	198,248	8,920,626

The amounts charged to individual property owners will be calculated once the Revised Assessment Roll from BC Assessment is received (late March). Staff will present options to Council regarding how the property tax amount is allocated to each assessment class.

LEGAL IMPLICATIONS:

The 2021-2025 Financial Plan must be adopted before May 15. The 2021 Property Tax Rates Bylaw (and parcel tax bylaws) must also be adopted before May 15.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

Citizens are encouraged to provide feedback regarding the budget.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

Each department is responsible for managing their budgets.

ALIGNMENT WITH SUSTAINABILITY VISIONING	G REPORT:
□Complete Community Land Use	☐ Low Impact Transportation
□Green Buildings	☐ Multi-Use Landscapes
□Innovative Infrastructure	☐ Local Food Systems
☐Healthy Community	☐ Local, Diverse Economy
ALIGNMENT WITH STRATEGIC PRIORITIES:	
⊠Infrastructure	⊠ Economy
⊠ Community	☐ Not Applicable
⊠Waterfront	

I approve the report and recommendation(s).

Allison McCarrick, Chief Administrative Officer

TOWN OF LADYSMITH

BYLAW NO. 2059

A Bylaw to Amend "Town of Ladysmith Fees and Charges Bylaw 2008, No. 1644"

The Council of the Town of Ladysmith in open meeting assembled enacts as follows:

- 1. "Town of Ladysmith Fees and Charges Bylaw 2008, No.1644" is amended as follows:
 - (a) By deleting Schedule "1" Miscellaneous Fees in its entirety and replacing it with the attached Schedule "1" Miscellaneous Fees.
 - (b) By deleting in its entirety Schedule "4" Trolley Transit Service and Fee.

Citation

2. This Bylaw may be cited for all purposes as "Town of Ladysmith Fees and Charges Bylaw 2008, No. 1644, Amendment Bylaw (No.9) 2021, No. 2059".

READ A FIRST TIME on the	2 nd day of	March, 2021	
READ A SECOND TIME on the	2 nd day of	March, 2021	
READ A THIRD TIME on the	2 nd day of	March, 2021	
ADOPTED on the	day of ,		
	_		NAS (A. Chana)
			Mayor (A. Stone)
		Corporate	Officer (D. Smith)

 $\underline{\text{SCHEDULE "1"}}$ "TOWN OF LADYSMITH FEES AND CHARGES BYLAW 2008, NO. 1644"

Item:	Fee:
Miscellaneous Fees:	
Copies of Extracts of Minutes	\$0.25/page
Copies of Bylaws and Council Minutes	\$0.25/page
Certificate of Outstanding Taxes	\$20.00
Fence Line Fee	\$75.00
Topographic Maps	\$25.00
Waterfront Area Plan	\$10.00
Holland Creek Area Plan	\$10.00
South Ladysmith Area Plan	\$10.00
Official Community Plan (including Schedule A.I - DPAs)	\$35.00
Engineering Specifications	\$30.00
Comfort Letter	\$100.00
Memorial Park Bench	\$3,950.00
Zoning Bylaw	\$40.00
Official Community Plan and Zoning Bylaw Maps (Large Size)	\$15.00/map
NSF cheques/Returned items/Stop payments	\$25.00
Refunds of overpayments for property taxes or user fees	10% of refund amount up to \$25.00
Mortgage listings of property taxes owing (per folio)	\$3.00
Annual Property tax levies - Vancouver Island Real Estate Board	\$450.00
Current year property tax notice after tax due date (for owner)	No charge
Previous years' property tax notice on year-specific paper (for owner)	\$25.00 per copy
Subdivision trees	\$750.00/tree
Recycling bags	\$1.25/bag

Application Fees:	
Official Community Plan Amendment	\$2,000.00 +Advertising and Delivery Costs
Zoning Bylaw Amendment	\$2,000.00 + Advertising and Delivery Costs
Zoning Bylaw Amendment - Coach House (R-1 Zone)	\$1000.00 + Advertising and Delivery Costs
Combined OCP/Zoning Bylaw Amendment	\$3,000.00+ Advertising and Delivery Costs
Subdivision - PLA	\$500.00 + \$250.00/lot
Subdivision- Approval, Extension, Form P	\$500.00
Development Permit - Multi-Unit, Commercial, Downtown, Industrial	\$1,000.00
Development Permit - High Street Intensive Residential	\$750.00
Development Permit - Riparian, Hazard Lands	\$250.00
Development Permit - Coach House Intensive Residential	\$250.00
Development Permit - Façade Improvement	\$100.00
Development Permit - Amendment	\$100.00
Development Variance Permit	\$750.00 + Delivery Costs
Board of Variance	\$750.00 + Delivery Costs
Temporary Use Permit	\$1,500.00 + Advertising and Delivery Costs
Strata Conversion	\$500.00 + \$250.00/unit
Boundary Extension Proposal	\$2,000.00 + \$50.00/hectare plus advertising and electoral approval costs
Liquor License Primary Referral Review Community Consultation	\$250.00 + \$1,500.00 + Advertising Costs
ALR Application - Subdivision/Non-Farm Use	\$600.00 + ALR Fees
ALR Application - Exclusion	\$2,000.00 + ALR Fees
Film Permit	\$250.00
Revitalization Tax Exemption Application Fee	\$250.00
Sign Permit	\$100.00
Real Estate Sign	\$20.00/agency
	

Temporary Sign/Banner Deposit	\$10.00 + \$100.00 performance bond per sign/banner
Ladysmith Visioning Report	\$25.00
Application for Recommendation of Cannabis Retail Licence Application/Amendment	\$2,000.00 + Advertising and Delivery Costs
Note: All fees are subject to applicable taxes	

TOWN OF LADYSMITH

BYLAW STATUS SHEET March 16, 2021

Bylaw No.	Description	Status
2059	Town of Ladysmith Fees and Charges Bylaw 2008, No. 1644, Amendment Bylaw No. 9, 2021, No. 2059	Three readings, March 2, 2021.
2062	Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 64) 2021, No. 2062	First and second readings, March 2, 2021. Public hearing required.
2063	Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 34) 2021, No. 2063	First and second readings, March 2, 2021. Public hearing required. MOT approval required prior to adoption.



UBCM Community Emergency Preparedness Fund 2021

Emergency Operations Centre Grant

Regional Emergency Communication Enhancements

Emergency Operations Centers and Emergency Communications: Emergency Communications describes communications equipment, plans and systems used in operation of Emergency Operation Centres (EOC) for response to emergency events. The same equipment and system capacity is also used as alternative or redundant communications for responders in the event of regular telecommunications outages, which are frequently encountered during emergency events.

The current Cowichan Emergency Communications program: The CVRD supports emergency communications by way of a regional "Disaster Radio" program, a 25-person volunteer communications team, amateur radio stations, radio repeater sites, a regional communications plan, a deployable satellite phone and a small cache of spare two-way radio equipment. The Emergency Communications Program of the Emergency Program service is supported by a .5 FTE Emergency Telecommunication Coordinator.

Intent of the UBCM funding: The intent of this funding stream is to support eligible applicants to build local capacity through the purchase of equipment and supplies required to maintain or improve Emergency Operations Centres (EOC) and to enhance EOC capacity through training and exercises. Ongoing operational costs are not eligible. Communications systems are specifically eligible under the EOC grant stream to build EOC capacity. All local governments (municipalities and regional districts) and all First Nations (bands and Treaty First Nations) in BC are eligible to apply.

Regional approach: Each applicant is eligible for up to \$25,000, however the CEPF EOC grant allows for a regional approach whereby the maximum funding available is based on the number of eligible applicants included in the regional application. The CVRD proposes a regional grant approach in the total amount of \$200,000 with the following as partners: City of Duncan, Cowichan Tribes, Cowichan Valley Regional District, Malahat First Nation, Municipality of North Cowichan, Town of Ladysmith, Town of Lake Cowichan, and Stz'uminus First Nation.

Cowichan EOC Grant Proposal: A combined grant would be used to enhance regional emergency communications capacity by expanding and upgrading a dedicated EOC radio network, upgrading existing amateur radio installations, modernizing the existing regional disaster radio program (Equipment is 20+ years old), continuing to build volunteer capacity (training, equipment), as well as increasing the number of deployable communications, computer and power kits for use in primary, secondary, remote or ad-hoc EOCs. Additionally, the grant application will request funding to meet specific EOC equipment needs. Equipment upgrades on this scale, with a far-reaching impact and scalability, would likely be unavailable without grant funding.

The objectives would be as follows:

- 1) Increase two-way radio capacity to enhance secure EOC to EOC communications in the Cowichan area by adding a radio repeater to increase coverage; and upgrading existing radio repeaters. This will also increase responder communications capacity.
- 2) Modernize and expand the "disaster radio" program by upgrading each individual kit with a digital ready radio; add 5 new disaster radio kits and distribute to partner organizations or

- agencies. The "Disaster Radio" program provides a dedicated emergency two-way radio to enable emergency communications between emergency response agencies, local governments and First Nation in the event of disaster. Disaster radios are stationed at EOCs, fire halls, police stations, ambulance stations, local government offices, First Nations office, etc.
- 3) Increase number of deployable communications assets such as an MSAT satellite telephone (+1), EOC Laptop and Computer Kit (+4 kits), EOC Power Kit (+5). These kits will be able to be deployed to any emergency program partner as required.
- 4) Equip EOC and emergency communications volunteers with personal protective equipment and radios (+42 radios).
- 5) Purchase and replenish EOC supplies (ICS Vests, EOC form kits, EOC signage)
- 6) Provide all partner municipalities, First Nations, and agencies with training to build knowledge and experience with the regional emergency communications systems

FOR ACTION: Each interested municipality and First Nation must resolve "for the Cowichan Valley Regional District to apply for, receive, and manage the UBCM Community Emergency Preparedness Fund Emergency Operations Centre grant funding up to \$25,000 on behalf of <u>insert Municipality or First</u> Nation name".

2021 EOC Regional Communications Modernization

Proposed Project Budget

	Description	N	orth Zone	So	uth Zone	We	st Zone		ral Zone of River)		al Zone of River)		ALL	ZONES						
Project Phase		North Oyster, Stz'munis, Town of Ladysmith, Thetis Island, Areas G, H, I		Mill Bay, Malahat, Shawnigan Lake, Cobble Hill, Areas A, B, C		Town of Lake Gowichan, Area F, H		North Cowichan, City of Duncan, Halalt, H Cowichan Tribes, Area D, E		Municipality of North Cowichan, City of Duncan, Cowichan Tribes, Area D, E				Regional Resources		TOTAL (net of tax)	CEPF Portion	Partners	CVRD In-Kind	Comments
	Quantity & Cost	#	Cost	#	Cost	#	Cost	#	Cost	#	Cost	#	Cost	#	Cost					
	VHF Repeater (Digital Capablity)													1	\$13,500	\$13,500	\$13,500			
	Microwave Equipment (Antennas)													6	\$5,100	\$5,100	\$5,100			
EOC Repeater System	Microwave Equipment (Radios)													6	\$16,650	\$16,650	\$16,650			
Enhancement & Expansion	Repeater System Design and Installation													1	\$12,500	\$12,200	\$12,200			
	Amateur Radio Repeater Batteries													1	\$15,000	\$15,000	\$15,000			
	Project Management & Installation															\$7,500	\$0		\$7,500	ETC Staff Time
"Disaster Radio"	Disaster Radio Replacements - VHF Radio	15	\$595	15	\$595	10	\$595	17	\$595	8	\$595			65	\$37,375	\$37,375	\$37,375			
Revitalization Program	Disaster Kit Refurbishment - Misc Parts													1	1000	\$1,000	\$1,000			
Deployable Kits - EOC Satellite Communications	MSAT Satellite Telephone - Portable Kit	-	-	-	-	-	-	-	-	-	-	-	-	1	7725	\$7,725	\$7,725			
	Laptop (with Office)	4	6000	4	6000	4	6000	-	-	4	6000	-	-	-	-	\$24,000	\$24,000			
	Network Switch including cables	1	300	1	300	1	300	1	300	1	300	-	-	-	-	\$1,500	\$1,500			
Deployable Kits - EOC Computers and	Router with LTE capability	1	275	1	275	1	275	1	275	1	275					\$1,375	\$1,375			
Networking	Phone Sets	2	40	2	40	2	40	2	40	2	40	-	-	-	-	\$200	\$200			
	Equipment Storage - Pelican Cases	1	700	1	700	1	700	1	700	1	700	-	-	-	-	\$3,500	\$3,500			
5	Power Pack + Solar Panels	1	1200	1	1200	1	1200	1	1200	1	1200	-	-	-	-	\$6,000	\$6,000			
Deployable Kits - EOC Power resources	Portable Generators (Gasoline)	1	1295	1	1295	1	1295	1	1295	1	1295	-	-	-	-	\$6,475	\$6,475			
	Power Cords, power bars, extension cords	1	250	1	250	1	250	1	250	1	250	-	-	-		\$1,250	\$1,250			
EOC Supplies	EOC Vests, Signage, Display Boards	-	-	-	-	-	-	1	5,500.00	-	-	-	-	-	10,000.00	\$15,500	\$15,500			
Equip Volunteers	Volunteer Radios - ESS & ECT Teams	-	-	-	-	-	-	-	-	-	-	42	24900	-	-	\$24,900	\$24,900			
	Volunteer Jackets - ECT Team	-		-	-	-	-	-	-	-	-	25	6675	-	-	\$6,675	\$6,675			
EOC Communications Training	EOC Communications Training														\$20,000	\$20,000	\$0	\$10,000	\$10,000	Staff Time
	TOTAL		10,655		10,655		10,655		4,655		10,655		31,575		118,850	\$227,425	\$199,925			







Dear Mayor and Council,

We are writing to request your support for the recently launched <u>Help Cities Lead Campaign</u>. Help Cities Lead is an education and awareness campaign to accelerate building decarbonization through collaboration between the Province of British Columbia and local governments. The campaign is led by Climate Caucus and supported by local governments and environmental NGOs.

We are asking that Council:

- endorse the Help Cities Lead Campaign campaign; and
- commit to sending a letter of support to the Hon. Josie Osbourne, Minister of Municipal Affairs, the Hon.
 George Heyman, Minister of Environment and Climate Change Strategy (ECCS), the Hon. Selina Robinson,
 Minister of Finance, the Hon. Bruce Ralston, Minister of Energy Mines and Low Carbon Innovation (EMLCI)
 and Hon. David Eby, Attorney-General and Minister responsible for Housing

Allowing for local government leadership is critical to developing innovative policies and programs to achieve deep emissions reductions from the building sector throughout the province. However, tools currently available to local governments to pursue these critical reduction targets are largely limited to information campaigns and incentives and are insufficient to achieve broad and deep energy and GHG reductions at scale.

The Help Cities Lead campaign identifies a suite of measures that will enable local governments to take effective action on reducing GHG emissions from new and existing buildings. Five regulatory measures have been identified where additional authority would be instrumental for municipalities in accelerating climate action:

- Regulating GHG emissions for new buildings
- Home energy labelling
- Property assessed clean energy (PACE) enabling legislation as outlined in the accompanying <u>letter from PACE BC.</u>
- Regulating GHG emissions for existing buildings
- Building energy benchmarking and reporting

Direction to implement the first three of these measures - enabling local governments to regulate GHG emissions for new buildings, home energy labelling, and PACE financing - were included in the ministerial mandate letters issued in November 2020. Help Cities Lead encourages the province to move as quickly as possible and in close consultation with local governments to develop and implement these measures.

Help Cities Lead would also like the province to enable local governments to choose, when ready, to opt into the remaining two measures not addressed by the mandate letters - namely, regulating GHG emissions for existing buildings and Building energy benchmarking and reporting.

All five of these initiatives will complement what the provincial government and utilities are already doing in these areas. Additional information about each of the initiatives can be found at https://www.helpcitieslead.ca/

It is our hope that you will put forward a motion to Council which endorses this campaign and commits to sending letters of support to Ministers Osbourne, Heyman, Robinson, Eby, and Ralston.

Sincerely,

Will Cole-Hamilton
Councillor, City of Courtenay
Director, Climate Caucus
Steering Committee, Help Cities Lead

SUPPORT FOR HELP CITIES LEAD FROM LOCAL GOVERNMENTS

Sample Resolution

WHEREAS emissions by buildings account for 40-60% of a community's green-house gas (GHG) emissions;

WHEREAS climate policy modelling completed for Help Cities Lead shows current actions to reduce greenhouse gas (GHG) emissions from buildings are insufficient to achieve the province's GHG targets for 2030 and 2050;

WHEREAS the November 2020 mandate letters to ministers include direction to provincial ministries to move forward with three of the five policy measures included in the Help Cities Lead climate policy modelling: GHG requirements for new buildings, Property Assessed Clean Energy (PACE) financing, and home energy labelling.

THEREFORE, BE IT RESOLVED THAT [your local government] write a letter to the Minister of Environment and Climate Change Strategy, the Minister of Energy, Mines and Low Carbon Innovation, the Minister of Municipal Affairs, the Attorney-General and Minister responsible for Housing, and the Minister of Finance, expressing its endorsement of the Help Cities Lead campaign; support for the directions set out in the November 2020 ministerial mandate letters regarding GHG requirements for new buildings, PACE financing, and home energy labelling; and also requesting that the province empower local governments to opt to take action, if they so choose, on the two remaining items of the Help Cities Lead's campaign, namely GHG requirements for existing buildings and building energy benchmarking.

Dear Honourable Ministers,

The [City/Town/Village] of [BLANK] is sending this letter to you as an endorsement of the Help Cities Lead (HCL) campaign.

As you are aware, municipalities are on the front lines of climate change dealing with the impacts of floods, droughts, forest fires, heat waves, etc. We directly influence about half of Canada's energy use and emissions. The success of the province in achieving deep emissions reductions from the building sector is directly connected to the success of local governments in achieving their own targets. While municipalities have shown strong climate leadership, expanded regulatory authority is needed for taking bolder steps to achieving our climate targets.

HCL is an education and awareness campaign focused on accelerating building decarbonization through collaboration between the Province of British Columbia and local governments. The group is led by Climate Caucus and supported by local governments and environmental NGO's.

Why buildings? Emissions from buildings account for about 11% of the province's greenhouse gas (GHG) emissions and for municipalities, GHG emissions from existing buildings account for 40-60% of community emissions. A number of BC local governments have made climate emergency declarations and set ambitious targets to significantly reduce GHG emissions from buildings over the next 10 years. However, local governments are largely limited to information campaigns and incentives for pursuing these ambitious reduction targets. Recent climate policy modelling shows that on their own, these policy tools are insufficient to achieve broad and deep energy and GHG reductions given limited budgets.

HCL campaign recommends a suite of expanded authorities for local governments that will enable communities to take bolder action on reducing GHG emissions from new and existing buildings:

- Property assessed clean energy (PACE) financing
- Mandatory home energy labelling
- Regulating GHG emissions for new buildings
- Regulating GHG emissions for existing buildings
- Mandatory building energy benchmarking and reporting

We are pleased to see that the November 2020 mandate letters to the Ministers of Municipal Affairs and Energy, Mines and Low Carbon Infrastructure support the implementation of PACE financing. We also note that the mandate letter for the Minister of Finance supports home energy labelling. Finally we pleased to see that the mandate letter to the Attorney-General and Minister Responsible for Housing includes support for regulation of GHG emission of new buildings.

We support the directions set out in these new mandate letters regarding PACE financing, home energy labelling, and GHG requirements for new buildings and request that the province empower local governments to opt to take action, if they so choose, on the two remaining items of the Help Cities Lead's campaign, namely GHG requirements for existing buildings and building energy benchmarking. Additional information about each of the initiatives can be found at https://www.helpcitieslead.ca/

It is our hope that you would consider meeting with a delegation from Help Cities Lead for further discussion on these initiatives.

Sincerely,
Mayor of [BLANK]
сс
The Hon. Minister George Heyman, Minister of Environment and Climate Change Strategy, ENV.Minister@gov.bc.ca
The Hon. Josie Osborne, Minister of Municipal Affairs, MAH.Minister@gov.bc.ca
The Hon. Bruce Ralston, Minister of Energy, Mines, and Low Carbon Innovation, EMPR.Minister@gov.bc.ca
The Hon. David Eby, Attorney General and Minister responsible for Housing, AG.Minister@gov.bc.ca
The Hon. Selina Robinson, Minister of Finance, FIN.Minister@gov.bc.ca



Dear Mayor and Council,

We are writing on behalf of <u>PACE BC</u>, a coalition of organizations working toward the adoption of Property Assessed Clean Energy (PACE) financing in British Columbia. You can learn more about our vision for a third-party, province-wide BC PACE program here.

We are entering a critical window when it comes to tackling the climate crisis, and local governments are at the forefront of this endeavour. The building sector represents more than 30% of emissions in B.C. municipalities, and in order for cities to meet their community-wide emissions reduction targets over the coming decades, our existing building stock needs rapid decarbonization and extensive energy efficiency upgrades. However, currently only the most affluent of residents can afford alternative energy infrastructure or substantial energy efficiency retrofits, and high upfront costs still act as a major barrier to uptake at scale.

PACE programs allow property owners to borrow money they can invest into a broad spectrum of clean energy and resiliency improvements to their buildings. The loan is paid back on the owner's property tax bill, with the energy bill savings afforded by the improvements, often resulting in net gains for the property owner. While existing Canadian PACE programs have been piloted by municipalities and resulted in relatively limited uptake, American PACE programs have seen explosive results, financing hundreds 1 of thousands of successful projects and creating tens of thousands of great green jobs. These highly successful programs are typically administered by third-party, nongovernmental organizations and financed by private capital. These features dramatically reduce the fiscal and administrative burdens of PACE on local governments, removing the need for municipalities to contribute any upfront capital, project management capacity, or long-term administrative staff to the programs.

A critical first step toward establishing a robust and thriving PACE financial sector in B.C. is the enactment of PACE-enabling legislation by the province of British Columbia. PACE BC is encouraging the province to pass legislation that ensures the program:

- ★ Is voluntary and opt-in for all parties
- ★ Allows for capital investment from the private sector
- ★ May be administered by third-party organizations

¹ https://pacenation.us/pace-market-data/

- ★ Makes PACE available for a broad spectrum of building level improvements including most energy efficiency and resiliency upgrades, and renewable energy projects
- ★ Is available for both residential and commercial property owners
- ★ Is available for retrofits and new construction
- ★ Makes financing available for 100% of the projects hard and soft costs
- ★ Ensures loans are tied to the property, and not the individual borrower, such that in the event of a property sale, remaining loan payments become transferable to the new owner.
- ★ Protects consumers from predatory practices

We are asking municipalities in B.C. to express their support for this win-win proposition by passing a resolution in support of PACE and sending a letter of support for province-wide, third party enabling legislation to the B.C. government. A sample resolution is pasted at the bottom of this letter. If you have any further questions about PACE BC, the attached resolution or next steps for moving it forward, please feel welcome to contact Katie Harrison, at katie@forceofnaturealliance.ca.

Together, we can bring B.C. municipalities one step closer to delivering a deep and swift reduction in carbon emissions that is required of all of us in order to achieve our climate goals over the coming decade.

Sincerely,

The PACE BC Steering Committee:

SUPPORT FOR PACE FROM MUNICIPAL GOVERNMENTS

Sample Resolution & Letter to Ministry

PART 1: DRAFT RESOLUTION

Support for PACE BC from Municipal Governments

WHEREAS [your local government] has shown itself to be a climate leader by [list steps you have taken or are taking];

WHEREAS retrofitting buildings across B.C. is crucial to reducing green-house gas (GHG) emissions and meeting our provincial climate targets;

WHEREAS upfront costs of retrofitting homes and businesses for climate resilience are cost prohibitive to many of our property owners, and Property Tax Assisted Clean Energy (PACE) lowers barriers to implementing GHG reductions, adding value to buildings and making them more desirable places to live or work;

WHEREAS PACE BC is working with interested municipalities *across B.C.* to assist in the establishment of a successful province-wide PACE program that meets the needs of residents and that local governments of all sizes can participate in with minimal start up costs or staff time;

WHEREAS PACE and the resulting ecosystem of retrofitting programs would create well-paying green jobs during a just recovery from the COVID-19 pandemic and a just transition away from fossil fuel infrastructure-related jobs;

THEREFORE, BE IT RESOLVED THAT [your local government] write a letter to the Ministry of Environment, the Minister of Energy, Mines and Low Carbon Innovation, the Minister of Municipal Affairs, Minister of Housing and PACE BC expressing support for B.C. Legislation enabling PACE by third-party administration and confirming [your community's] interest in having a PACE program when it becomes available in B.C.

PART 2: DRAFT LETTER OF SUPPORT

Dear Minister Osborne, Minister Heyman, Minister Ralston and Minister Eby,

During the council meeting of [Date], the [local government] passed the following resolution:

[Insert above resolution]

We are entering a critical window when it comes to addressing the climate crisis, and our province's aggressive new climate targets require us to reduce emissions by 40% over the next decade. The majority of B.C.'s residential and commercial building stock is not energy efficient, and accounts for a significant percentage of province-wide GHGs. The Pembina Institute has calculated that in order to meet our climate targets, British Columbians will need to retrofit 3% of our building stock — that's 30,000 homes, 17,000 apartment units, and 3 million square metres of commercial space — every year until 2050.

Climate change is the greatest challenge of our time, and though local governments are at the front lines, we do not have all the tools we need to meaningfully tackle mitigation or adaptation, let along both at once. We know that building operations are one of the biggest drivers of emissions [not everyone is urban so I removed that reference]; however, the start up costs and staff time required to establish community-wide retrofit programs are prohibitive for local governments smaller than Vancouver, and even then such programs have not demonstrated extensive uptake in Canada. This means that retrofits and building GHG reductions are available solely to property owners who can access considerable upfront financing, thereby excluding the majority of our community.

PACE programs with third party administration and opt-in bylaws for local governments have been implemented in the United States since 2009, and have created hundreds of thousands of projects and clean local jobs. In the wake of COVID-19, we feel that PACE and the resulting ecosystem of retrofitting programs would give our economy a boost and provide a path toward a just transition away from fossil fuel infrastructure, all while complementing Clean BC and Resilient BC. It will also support the B.C. Poverty Reduction Strategy, as energy poverty is a major concern for B.C. residents, and those with the lowest incomes will be most impacted by more extreme temperatures, trying to keep their homes cool or warm.

Upfront cost is one of the most significant barriers to retrofitting and the installation of renewable energy options by citizens, businesses and institutions despite the fact that these investments will save property-owners money over the long term. PACE solves that problem by using an innovative financing instrument which permits building and land owners to upgrade their buildings with energy- and resource-saving retrofits, or install renewable energy systems, without putting any money down, and with the repayment of the financing done via an assessment on the building's property tax bill. The capital used to finance the PACE upgrades typically comes from private sources, such as insurance companies and pension funds, who are attracted by the long term secure investment PACE provides. This type of program is favoured compared to public funding in part because it is not subject to political will during changes in government. Therefore, the jobs provided and GHG reductions would not be affected by changes of elected decision-makers.

[Local government] requests that the British Columbia provincial government take immediate steps to enact PACE-enabling legislation as advocated for by PACE BC that ensures the program:

- ★ Is voluntary and opt-in for all parties
- ★ Allows for capital investment from the private sector
- ★ May be administered by third-party organizations
- ★ Makes PACE available for a broad spectrum of building level improvements including most energy efficiency and resiliency upgrades, and renewable energy projects

- \star Is available for both residential and commercial property owners \star Is available for retrofits and new construction
- \bigstar Makes financing available for 100% of the projects hard and soft costs
- \star Ensures loans are tied to the property, and not the individual borrower, such that in the event of a property sale, remaining loan payments become transferable to the new owner.
- \star Protects consumers from predatory practices

With gratitude,

[Mayor of your community or your Council]



Paul Manly

Member of Parliament Nanaimo-Ladysmith

March 4th, 2021

Office of Mayor Aaron Stone Town of Ladysmith 410 Esplanade, PO Box 220 Ladysmith BC V9G 1A2

Dear Mayor Stone and Ladysmith Councillors,

As you know, the federal riding of Nanaimo-Ladysmith has high per capita levels of homelessness, and we are not alone. Housing affordability and homelessness are twin national crises affecting communities from coast to coast to coast. Housing is a human right recognized under International law. Canada is a signatory to various international declarations and conventions and the human right to housing is affirmed by the Canadian government in the National Housing Strategy Act.

Recently, I put forward Motion 66 in the House of Commons. It calls on the government to recognize these crises and to address the structural issues that have brought us to this breaking point. These issues include, but are not limited to: the use of Canadian residential real estate for money laundering and as a tax haven by the world's ultra wealthy, the financialization of housing, and predatory practices employed by corporate investors and Real Estate Investment Trusts (REITs).

Money laundering and the use of residential real estate as a tax haven were initially centred on Vancouver and Toronto, but the ripple effects have spread out to smaller communities including Ladysmith. The federal government has passed legislation that makes it more difficult to hide the beneficial owners of real estate in Canada, but much more needs to be done in order to close money laundering and tax evasion loopholes.

Ottawa

Constituency

Tel.: 250-734-6400 Fax.: 250-734-6404 While it is positive to see the federal government assuming greater responsibility for funding affordable housing after a decades-long absence, the measures being taken do not meet the enormity of the crisis. There are a number of government initiatives for funding the construction of new units, and for the renewal and repair of existing units. Unfortunately these initiatives cannot keep pace with the rapid conversion of affordable housing stock to market rate housing by corporate investors and REITs. The federal government has committed to building 6,000 new affordable units each year for the next 10 years through the National Housing Co-Investment Fund and other initiatives. Compare this to the largest real estate investment trust CAPREIT, which flips an estimated 14,000 units from affordable housing to market rate housing each year.

There is no way that Canadian taxpayers can keep up, or should be expected to keep up, with subsidizing new affordable housing units when predatory investors are harming affordability by exploiting regulation loopholes and weak tenancy laws. We cannot build our way out of the housing affordability crisis. We need strong regulations to curtail the activities that are distorting Canada's residential real estate market and driving unaffordability.

Currently there are rent freezes and moratoriums on evictions in some Canadian jurisdictions. Such measures are in place in British Columbia. Other Canadian jurisdictions have limited protection for tenants, or no protection at all. Prior to the pandemic, BC already had rent controls in place that regulate how much a landlord may increase a current tenant's rent on an annual basis. There is more work that needs to be done. Vacancy control is a more effective form of rent control that ties the cost of rent to the housing unit, rather than to the tenant, and controls how much the rent can be increased when a unit is taken over by a new tenant. Our current system of rent control is insufficient to protect affordability. When an affordable unit is vacated, landlords can increase the rent by any amount. Landlords are also incentivized to evict tenants to perform cheap cosmetic renovations and flip the unit to market rate. Market rates reflect the distortion in the real estate market and the cost of housing is increasingly decoupled from average local incomes. For example, we know that in Nanaimo rents have risen 59% in five years and I am certain you are seeing a similar trend in Ladysmith. This is not a positive turn of events, it is a looming disaster. Greater and greater numbers of community members are on the edge of homelessness. It's time to talk about what all levels of government can do to address the structural issues that are harming affordability. And as home ownership becomes less accessible, and more people become long term renters, it's also time to address the stigma attached to renting vs. owning a home, and to give tenants a real voice in community conversations around the challenges of housing affordability.

On February 10th the City of Vancouver passed a <u>motion</u> that covers similar ground to the motion I brought forward in the House of Commons. Here is the resolution of that motion:

THEREFORE BE IT RESOLVED

- A. THAT the Mayor write to the federal government on behalf of Council to:
 - a. Express concern about the growing share of units that Real Estate
 Investment Trusts (REITs) and other big investors own across the country and
 their impacts on the human right to housing, the commodification of
 housing, housing security and affordability for Vancouver residents;
 - b. Ask that the federal and provincial governments take more measures to protect and reinvest in existing rental stock and to facilitate their acquisition by non-profits and co-operatives.
- B. THAT staff investigate ways the City could mitigate harm to affordability of older housing stock by Real Estate Investment Trusts (REITS) and other investors using action such as, but not limited to, vacancy control, right of first refusal, and supporting a non-profit acquisition strategy and to report back as part of ongoing work;

FURTHER THAT pursuant to Vancouver Charter 565A or any similar statutes, staff report back on any potential by-law remedies that might apply conditions on development permits, in order to mitigate harm to affordability of older housing stock and in particular low capitalization high yield REIT renovations.

I strongly encourage Ladysmith Council to consider passing a similar motion asking the federal government to do more to protect existing affordable housing stock. Municipalities should also urge the government to direct more funding toward nonprofit and cooperative housing, rather than funding programs that amount to a transfer of tax dollars to the private sector in exchange for housing that is only temporarily affordable, as is the case with the rental construction financing initiative.

As always, if you cc me on communications with the federal government I am ready to advocate on Ladysmith's behalf with the relevant minister or parliamentary secretary.

Sincerely,

Paul Manly

Member of Parliament Nanaimo-Ladysmith