

**A REGULAR MEETING
OF THE TOWN OF LADYSMITH COUNCIL
AGENDA
5:00 P.M.**

Tuesday, November 17, 2020

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

Pages

1. CALL TO ORDER

Call to Order 5:00 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:

- negotiations and related discussions respecting the proposed provision of a municipal service - section 90(1)(k)

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

Please follow this link to view the meeting:

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

4. AGENDA APPROVAL

Recommendation

That Council approve the agenda for this Regular Meeting of Council for November 17, 2020.

5. RISE AND REPORT- Items from Closed Session

Item from the Closed Meeting of Council held November 3, 2020

CE 2020-148

That Council:

1. Approve the renewal of the lease agreement with land owner Paul Jorjorian for use of 17 and 25 Roberts Street as a municipal parking lot for a period of three (3) years at a rate of \$775 per month in 2021; \$800 per month in 2022; and \$825 per month in 2023, plus applicable taxes;
2. Authorize the Mayor and Corporate Officer to execute the agreement.

6. MINUTES

6.1. Minutes of the Regular Meeting of Council held November 3, 2020

7

Recommendation

That Council approve the minutes of the Regular Meeting of Council held November 3, 2020.

7. PROCLAMATIONS

7.1. National Child Day

16

Mayor Stone has proclaimed November 20, 2020 as National Child Day in the Town of Ladysmith.

8. 2021 BUDGET WORKSHOP: FINALIZE WATER AND SEWER UTILITY AND INTRODUCE CAPITAL BUDGET

8.1. Budget Presentation

8.2. 2021 Water Sewer and Preliminary Capital Plan

17

Recommendation

That Council:

1. Direct staff to prepare an amendment to the Water Rates Bylaw 1999, No.1298 to increase each consumption rate by 3%, effective January 1, 2021;
2. Confirm the Sewer Rates remain the same;
3. Direct staff to prepare the 2021 Sewer Parcel Tax Bylaw at \$350; and

4. Direct staff to prepare the 2021 Water Parcel Tax Bylaw at \$459.

8.3. Public Input and Questions

Residents can submit questions to Council via email at info@ladysmith.ca during the meeting.

9. DEVELOPMENT APPLICATIONS

9.1. Development Permit and Development Variance Permit for Multi-family Development at 107 Rollie Rose Drive (Lot 13)

45

Recommendation

That Council:

1. Issue Development Variance Permit 3090-20-04 to vary the maximum height of a principal building from 10m to 14.9m, and to reduce the number of parking stalls from 2.0 to 1.5 per dwelling unit with two or more bedrooms, for a multi-family residential use located on Lot 13 District Lot 103 Oyster District Plan EPP75579 (107 Rollie Rose Drive)
2. Issue Development Permit 3060-20-09 for a multi-family residential development on Lot 13 District Lot 103 Oyster District Plan EPP75579 (107 Rollie Rose Drive) on the condition that:
 - a) the permittee provide security in the amount of \$5,000 to be used in the event of damage to the Streamside Protection and Enhancement Area (SPEA) resulting from a contravention of Development Permit 3060-20-09; and
 - b) the permittee provide security in the amount of \$180,547 in the event that conditions respecting landscaping in Development Permit 3060-20-09 are not satisfied.
3. Authorize the Mayor and Corporate Office to sign Development Variance Permit 3090-20-04 and Development Permit 3060-20-09.

10. REPORTS

10.1. Official Community Plan Review

214

Recommendation

That Council:

1. Approve the Official Community Plan Steering Committee Terms of Reference attached as Appendix A to the report from the Director of Development Services;
2. Approve the Official Community Plan Project Charter attached as Appendix B to the report from the Director of Development Services;
3. Endorse a legal budget of \$7,000 and incidentals budget of \$10,000 for the Official Community Plan Review ; and
4. Direct staff to increase the Official Community Plan Development budget from \$150,000 to \$220,000 with \$200,000 to come from Gas Tax, \$10,283 to come from the OCP Reserve, and \$9,717 to come from General Government Reserves.

10.2. UBCM Community to Community (C2C) Forum Program Application

223

Recommendation

That Council:

1. Authorize staff to apply to the Union of BC Municipalities, for up to \$5,000 during the December 2020 application intake for the Regional Community to Community Forum Program to support a community forum with the Stz'uminus First Nation Council, to be held prior to March 31, 2021; and
2. Approve the allocation of up to \$5,000 as the Town's contribution.

11. BYLAWS

11.1. Bylaw Status Sheet

There are currently no bylaws awaiting consideration.

12. CORRESPONDENCE

12.1. Correspondence dated November 9, 2020, from Ladysmith Family and Friends (LaFF)

232

Recommendation

That Council consider whether it wishes to sponsor the Ladysmith Family and Friends 12 days of Holiday Cheer fundraiser by:

- Sponsoring a specific Holiday Cheer Day; and/or
- Sponsoring the LaFF Holiday Cheer Crate(s); and/or
- Another option identified by Council; or
- Receive the correspondence for information.

13. NEW BUSINESS

14. UNFINISHED BUSINESS

14.1. Mayor's Reconsideration of Resolution No. CS 2020-322 Holland Creek Supply Main (Phase 2) Tender Award

In accordance with Section 131 of the *Community Charter*, the Mayor may require Council reconsideration of a matter, and vote again on a matter that was the subject of a vote. The Mayor may initiate a reconsideration either at the same Council meeting as the vote took place, or within 30 days following that meeting. Therefore, Mayor Stone requests reconsideration of Resolution No. CS 2020-322, defeated at the November 3, 2020 Regular Council Meeting, as follows:

"That Council award the contract for the Holland Creek Supply Main (Phase 2) to Don Mann Excavating Ltd. for \$288,298.50 including GST."

Recommendation

That Council reconsider Resolution No. CS 2020-322 regarding the Holland Creek Supply Main (Phase 2) Tender Award.

Note: If the motion to reconsider is successful, the original motion from November 3, 2020 is again on the floor.

Note: The following recommendation may proceed if Council reconsiders Resolution No. CS 2020-322 and awards the tender to Don Mann Excavating Ltd.

Recommendation

That Council direct staff to include in the contract with Don Mann Excavating Ltd. a construction period of 45 days plus up to 3 days in the spring to complete final preparations and paving for the Holland Creek Supply Main (Phase 2).

15. QUESTION PERIOD

Residents can submit questions to Council 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

16. ADJOURNMENT



MINUTES OF A REGULAR MEETING OF COUNCIL

Tuesday, November 3, 2020

6:30 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:

Allison McCarrick
Erin Anderson
Chris Barfoot
Jake Belobaba
Geoff Goodall

Donna Smith
Mike Gregory
Chris Geiger
Sue Bouma

1. CALL TO ORDER

Mayor Stone called this Regular Meeting of Council to order at 6:30 p.m., in order to retire immediately into Closed Session.

2. CLOSED SESSION

CS 2020-312

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:

- personal information about an identifiable individual being considered for a position as an officer, employee or agent of the municipality - section 90(1)(a)
- 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 legal advice - section 90(1)(i)
- negotiations and related discussions respecting the proposed provision of a municipal service - section 90(1)(k)

Motion Carried

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

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

4. AGENDA APPROVAL

CS 2020-313

That Council approve the agenda for this Regular Meeting of Council for November 3, 2020.

Motion Carried

5. RISE AND REPORT- Items from Closed Session

Council rose from Closed Session at 6:55 p.m. with report on the following item:

- **CE 2020-147**

That Council, pursuant to requirements under the *Land Title Act*:

1. Rescind the appointment of Geoff Goodall as Approving Officer and appoint Jake Belobaba as Approving Officer;
2. Appoint Geoff Goodall as Deputy Approving Officer;
3. Confirm that Ryan Bouma will continue as a Deputy Approving Officer; and,
4. Rise and report on all appointments.

The following item from the Closed Meeting of Council held October 20, 2020 was reported:

- **CE 2020-142**

1. That Council direct the Mayor and Corporate Officer to execute the Partnership Agreement with the Boys & Girls Clubs of Central Vancouver Island for the provision of child care services for a fifteen-year period from October, 2020 until September, 2035;
2. Direct staff to give notice of the Town's intent to enter into an agreement with the Boys & Girls Clubs of Central Vancouver Island in accordance with the Community Charter; and
3. Rise and report on this item once the agreement has been signed by both parties.

6. MINUTES

6.1 Minutes of the Regular Meeting of Council held October 20, 2020

CS 2020-314

That Council approve the minutes of the Regular Meeting of Council held October 20, 2020.

Motion Carried

7. PROCLAMATIONS

7.1 Louis Riel Day

Mayor Stone proclaimed November 16, 2020 as Louis Riel Day in the Town of Ladysmith, recognizing the enormous contribution Louis Riel made to the development of this country and commemorating the 135th anniversary of his death.

8. ANNUAL APPOINTMENTS

8.1 Deputy Mayor

Mayor Stone made the following appointments for Deputy Mayor:

- November 4, 2020 to April 30, 2021 Councillor Amanda Jacobson
- May 1, 2021 to October 31, 2021 Councillor Rob Johnson

8.2 Parcel Tax Review Panel

Mayor Stone appointed the following members to the 2021 Parcel Tax Review Panel:

- Councillor Duck Paterson
- Councillor Rob Johnson
- Councillor Amanda Jacobson

8.3 Cowichan Valley Regional District Director

CS 2020-315

That Mayor Aaron Stone be appointed as Director to the Cowichan Valley Regional District Board.

Motion Carried

8.4 Cowichan Valley Regional District Alternate Director

CS 2020-316

That Councillor Duck Paterson be appointed as Alternate Director to the Cowichan Valley Regional District Board.

Motion Carried

8.5 Vancouver Island Regional Library Board Director

CS 2020-317

That Councillor Jeff Virtanen be appointed as Director to the Vancouver Island Regional Library Board.

Motion Carried

8.6 Vancouver Island Regional Library Board Alternate Director

CS 2020-318

That Councillor Amanda Jacobson be appointed as Alternate Director to the Vancouver Island Regional Library Board.

Motion Carried

8.7 Standing and Community Committee Representatives

Mayor Stone made the following appointments to Council Advisory Commissions and Committees:

Committee of the Whole

Chair: Councillor Tricia McKay

Vice Chair: Councillor Rob Johnson

Members: All members of Council

Waterfront Implementation Committee

Representative: Mayor Aaron Stone

Representative: Councillor Tricia McKay

Representative: Councillor Marsh Stevens

Community Planning Advisory Committee

Council Liaison: Councillor Tricia McKay

Alternate: Councillor Amanda Jacobson

Protective Services

Chair: Councillor Duck Paterson

Alternate: Councillor Marsh Stevens

Parks Recreation and Culture Advisory Committee

Council Liaison: Councillor Duck Paterson

Alternate: Councillor Rob Johnson

Liquid Waste Management Plan

Council Liaison: Councillor Rob Johnson

Council Liaison: Councillor Amanda Jacobson

Council Liaison: Councillor Marsh Stevens

Youth Advisory

Council Liaison: Councillor Marsh Stevens

Alternate: Councillor Amanda Jacobson

Stocking Lake Advisory Committee

Chair: Mayor Aaron Stone

Council Liaison: Councillor Rob Johnson

Celebrations Committee (Ladysmith Days)

Council Liaison: Councillor Jeff Virtanen

Alternate: Councillor Duck Paterson

Festival of Lights

Council Liaison: Councillor Marsh Stevens

Alternate: Councillor Rob Johnson

Chamber of Commerce

Council Liaison: Mayor Aaron Stone

Alternate: Councillor Tricia McKay

Ladysmith Downtown Business Association

Council Liaison: Councillor Duck Paterson

Alternate: Councillor Rob Johnson

Social Planning Cowichan

Council Liaison: Mayor Aaron Stone

Alternate: Councillor Marsh Stevens

Ladysmith Community Justice Program

Council Liaison: Councillor Amanda Jacobson

9. 2021 BUDGET WORKSHOP - PRELIMINARY OPERATING BUDGET

9.1 2021-2025 Preliminary Financial Plan Discussions

CS 2020-319

That Council receive for information the report dated November 3, 2020 regarding the 2021-2025 Preliminary Financial Plan Discussions.

Motion Carried

9.2 Presentation and Council Discussion

Staff gave a presentation outlining the draft 2021 Operational Budget, and responded to questions from Council. Council identified their concerns regarding the ongoing COVID-19 pandemic and requested a conservative 2021 budget.

9.3 Public Input and Questions

Council recessed at 7:28 p.m. to allow the public to submit questions regarding the preliminary operating budget discussion. Council resumed the meeting at 7:36 p.m. There were no questions submitted by the public.

10. COMMITTEE MINUTES

10.1 October 27, 2020 Special Committee of the Whole Recommendations

CS 2020-320

That Council adopt the following resolution related to the Official Community Plan Development report presented at the Special Committee of the Whole Meeting held October 27, 2020:

- Resolution CW 2020-048

That Council endorse a comprehensive review of the existing Official Community Plan using previously completed plans, growth projections and background materials as a foundation with a project budget of \$200,000, excluding legal and incidentals, and an estimated timeline of 18-21 months.

Motion Carried

CS 2020-321

That Council adopt the following resolution related to the Official Community Plan Development report presented at the Special Committee of the Whole Meeting held October 27, 2020:

- Resolution CW 2020-049

That Council direct staff to bring the proposed Project Charter and Steering Committee Terms of Reference, including amendments to membership numbers and descriptors, consultant selection process and desired level of engagement to the November 17, 2020 Council meeting for Council consideration.

Motion Carried

11. REPORTS**11.1 Holland Creek Supply Main (Phase 2) Award**

Staff provided Council with an overview of the phases of the Holland Creek Supply Main project and responded to Council's questions regarding the tenders submitted for phase two of the project.

CS 2020-322

That Council award the contract for the Holland Creek Supply Main (Phase 2) to Don Mann Excavating Ltd. for \$288,298.50 including GST.

Motion Defeated

OPPOSED: Councillors Jacobson, Johnson, McKay, Paterson

11.2 In-Channel Spiral Screen – Waste Water Treatment Plant - Award**CS 2020-323**

That Council direct staff to:

1. Increase the budget for the replacement of In-Channel Spiral Screen for the Waste Water Treatment Plant from \$100,000 to \$165,000;
2. Award the contract for the replacement of In-Channel Spiral Screen for the Waste Water Treatment Plant to West Coast Prefab, for a bid amount of \$163,339.52 including PST; and
3. Amend the 2020-2024 Financial Plan accordingly.

Motion Carried

Councillor Paterson declared a conflict of interest with agenda item 12.1 due to his association with the Kinsmen organization and the public washroom project, and recused himself from the meeting at 8:21 p.m.

12. BYLAWS

12.1 Town of Ladysmith Road Closure Bylaw 2020, No. 2055

CS 2020-324

That Council adopt "Town of Ladysmith Road Closure Bylaw 2020, No. 2055".

Motion Carried

Councillor Paterson returned to the meeting at 8:22 p.m.

12.2 Town of Ladysmith Community Centre and Facilities Fees and Charges Bylaw 2018, No. 1968, Amendment Bylaw 2020, No. 2056

CS 2020-325

That Council adopt "Town of Ladysmith Community Centre and Facilities Fees and Charges Bylaw 2018, No. 1968, Amendment Bylaw 2020, No. 2056".

Motion Carried

12.3 Bylaw Status Sheet

13. QUESTION PERIOD

A member of the public submitted a question regarding the Holland Creek outdoor washroom and the possibility of keeping it open during the winter. Staff advised that unheated washrooms such as the one at Holland Creek are closed during the winter season to avoid damages from water freezing in the pipes.

14. ADJOURNMENT

CS 2020-326

That this Regular Meeting of Council adjourn at 8:24 p.m.

Motion Carried

Mayor (A. Stone)

Corporate Officer (D. Smith)

Subject to Adoption



TOWN OF LADYSMITH

PROCLAMATION

NATIONAL CHILD DAY

- WHEREAS:** *Children and youth are our present and future citizens; and*
- WHEREAS:** *Canada has designated November 20 as National Child Day to commemorate the adoption of the UN Declaration of the Rights of the Child in 1959; the adoption of the UN Convention on the Rights of the Child in 1991 and a World Fit for Children arising from the UN Special Session on Children in 2002; and*
- WHEREAS:** *Canada has pledged the implementation of children's and youth's rights - including rights to protection, rights to be provided services, rights to meaningful participation in society and community life, the right to enjoy their childhood freely and safe from those who would harm them - and furthermore recognizes the important role of the family in bringing up children;*
- THEREFORE,** *I, Aaron Stone, Mayor of the Town of Ladysmith, do hereby proclaim November 20, 2020 as National Child Day in the Town of Ladysmith, British Columbia.*

Mayor A. Stone

November 1, 2020

STAFF REPORT TO COUNCIL

Report Prepared By: Erin Anderson, Director of Financial Services
Meeting Date: November 17, 2020
File No:
Re: **2021 Water Sewer and Preliminary Capital Plan**

RECOMMENDATION:

That Council:

1. Direct staff to prepare an amendment to the Water Rates Bylaw 1999, No.1298 to increase each consumption rate by 3%, effective January 1, 2021;
2. Confirm the Sewer Rates remain the same;
3. Direct staff to prepare the 2021 Sewer Parcel Tax Bylaw at \$350; and
4. Direct staff to prepare the 2021 Water Parcel Tax Bylaw at \$459.

EXECUTIVE SUMMARY:

This is the third in a series of budget meetings held to discuss the 2021 Financial Plan. This report focuses on capital projects proposed for 2021 and confirms water and sewer rates for 2021 by directing staff to prepare the necessary bylaws.

PREVIOUS COUNCIL DIRECTION

Per Town of Ladysmith Financial Plan Bylaw 2020, No. 2036:

Pursuant to Council's direction, the Town will build a reserve to fund major capital projects. A minimum of 10% prior year's municipal tax levy will be transferred to General Capital projects. For the year 2020, the Town will put aside 2.5% of the prior year's municipal tax levy. For the future years beginning in 2021, the Town will set aside a total of 5% of the prior year's municipal tax levy for asset replacement.

INTRODUCTION/BACKGROUND:

At the November 10th Special Council Meeting, staff presented the water and sewer operating and capital budgets. Staff are seeking direction to prepare an amendment to the Water Rate Bylaw 1999, No.1298 to increase each consumption rate by 3%, effective January 1, 2021.

Staff have also prepared a list of the capital projects proposed for 2021. Please note that this list does not include unfinished projects from 2020 that will be carried forward to 2021.

ALTERNATIVES:

Council can choose to:

1. Direct staff to revise the water and sewer utility budgets, though any rate increases

should be approved, by bylaw, before January 1, 2021 in order for the bylaw to be in effect for the first quarter meter readings.

FINANCIAL IMPLICATIONS:

The funding for the general capital projects comes from general taxation. The calculation is per policy, at 10% of the previous municipal taxation levy. For 2021, the general capital allocation is \$740,642. Funds from other reserves are used to complete the capital plan.

The majority of funding for the water and sewer capital projects comes from the funds' respective parcel tax.

LEGAL IMPLICATIONS:

The necessary bylaw to increase the proposed water rates should be adopted before January 1, 2021 in order to be in effect for the first quarterly billing.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

If approved, the information regarding the new rates will be included in the final 2020 utility bill newsletter.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

Infrastructure Services provides the Finance Department with the utility budget expenses.

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

- | | |
|--|--|
| <input type="checkbox"/> Complete Community Land Use | <input type="checkbox"/> Low Impact Transportation |
| <input type="checkbox"/> Green Buildings | <input type="checkbox"/> Multi-Use Landscapes |
| <input type="checkbox"/> Innovative Infrastructure | <input type="checkbox"/> Local Food Systems |
| <input type="checkbox"/> Healthy Community | <input type="checkbox"/> Local, Diverse Economy |
| <input checked="" type="checkbox"/> Not Applicable | |

ALIGNMENT WITH STRATEGIC PRIORITIES:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Infrastructure | <input type="checkbox"/> Economy |
| <input type="checkbox"/> Community | <input type="checkbox"/> Not Applicable |
| <input type="checkbox"/> Waterfront | |

I approve the report and recommendation(s).

Allison McCarrick, Chief Administrative Officer

ATTACHMENT(S):

- 2021 Finance Plan – Proposed Capital List

2021 Financial Plan - Proposed Capital List

Parks & Rec

Facility Maintenance

Project Name **Fire hall vehicle exhaust systems**

Description The current system removing vehicle exhaust is outdated and in need of repairs. The two new bays also need to have a system installed. This system is used in many new fire halls

Purpose To remove exhaust from the vehicles as they are running indoors

Consequence of not funding Could become an OHS issue with the staff and volunteers in the detachment

Department Parks & Rec Area Facility Maintenance YEAR 2021

Priority Critical Risk Level Medium Risk

Aligns with Strategic Priority Infrastructure Asset Mgmt New Asset

Amount **\$60,000**

Requires Early Budget Approval? ☐

Funding Sources:

Taxation	0	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	60,000	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

Project Name **Museum siding, Roof & Gutters**

Description Wood siding, and cement cladding replacement if building is to be retained. Replace gutter system & extension roof

Purpose Asset Management - determine if building is needed long-term

Consequence of not funding Ongoing costs for repairs

Department Parks & Rec Area Facility Maintenance YEAR 2021

Priority Critical Risk Level Medium Risk

Aligns with Strategic Priority Asset Management Asset Mgmt Repair

Amount **\$70,000**

Requires Early Budget Approval? ☐

Funding Sources:

Taxation	70,000	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

2021 Financial Plan - Proposed Capital List

Project Name **PW Building -Roof Replacement**

Description Replace roofing

Purpose Asset Management, upon inspection the roof has 0-3 years left before major repairs will be necessary.

Consequence of not funding This will result in a failing roof.

Department Parks & Rec Area Facility Maintenance YEAR 2021

Priority Medium Risk Level Medium Risk

Aligns with Strategic Priority Asset Management Asset Mgmt Replacement

Amount **\$100,000**

Requires Early Budget Approval? ☐

Funding Sources:

Taxation	100,000	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

Project Name **Doorway from Gym to FJCC Hallway**

Description Install Doorway to access hallway from eastern end of the gymnasium

Purpose To construct a secondary access point to the gymnasium to the hallway.

Consequence of not funding Not installing this will create traffic flow issues entering the gymnasium.

Department Parks & Rec Area Facility Maintenance YEAR 2021

Priority Medium Risk Level Medium Risk

Aligns with Strategic Priority Infrastructure Asset Mgmt New Asset

Amount **\$7,000**

Requires Early Budget Approval? ☐

Funding Sources:

Taxation	7,000	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

2021 Financial Plan - Proposed Capital List

Project Name **FJCC Floor Scrubber**

Description Purchase of a new floor scrubber

Purpose New flooring in the facility requires new cleaning practices to increase the longevity of our floors

Consequence of not funding Current cleaning equipment and procedures will damage the new floors

Department Parks & Rec Area Facility Maintenance YEAR 2021

Priority Medium Risk Level Medium Risk

Aligns with Strategic Priority Asset Management Asset Mgmt New Asset

Amount **\$13,000**

Requires Early Budget Approval? ☐

Funding Sources:

Taxation	3,000	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	10,000	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

Project Name **FJCC Aerobics studio floor refinish**

Description Refinishing the floor

Purpose The floor is in need of a new life and will be done to the same standards as the gym, sanded and recoated

Consequence of not funding Could become a safety concern

Department Parks & Rec Area Facility Maintenance YEAR 2021

Priority Medium Risk Level Medium Risk

Aligns with Strategic Priority Asset Management Asset Mgmt Repair

Amount **\$11,000**

Requires Early Budget Approval? ☐

Funding Sources:

Taxation	11,000	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

2021 Financial Plan - Proposed Capital List

Project Name **Aggie Hall Exhaust fan/mop sink install**

Description Install a exhaust fan where previous unit was but removed due to a fire. Also installing a mop sink.

Purpose Heat is a major issue in the building during the summer months and this will help with air flow. There is currently no mop sink.

Consequence of not funding Heat will continue to be an issue reducing our rentals and not installing the mop sink could lead to and OHS incident

Department	Parks & Rec	Area	Facility Maintenance	YEAR	2021
Priority	Medium			Risk Level	Medium Risk
Aligns with Strategic Priority	Infrastructure			Asset Mgmt	Replacement
	Amount		\$10,000	<i>Requires Early Budget Approval?</i> <input type="checkbox"/>	
	<u>Funding Sources:</u>				
Taxation	0	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	10,000	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

Project Name	<u>HVAC unit (City Hall)</u>				
Description	Replace HVAC unit				
Purpose	Asset management				
Consequence of not funding	No A/C or heating in City Hall				
Department	Parks & Rec	Area	Facility Maintenance	YEAR	2021
Priority	Medium			Risk Level	Medium Risk
Aligns with Strategic Priority	Asset Management			Asset Mgmt	Replacement
	Amount		\$15,000	<i>Requires Early Budget Approval?</i> <input type="checkbox"/>	
	<u>Funding Sources:</u>				
Taxation	15,000	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

2021 Financial Plan - Proposed Capital List

Project Name **Paint Wood Cladding - LRCA**

Description Painting the exterior of the LRCA building.

Purpose Painting the exterior will protect the exterior siding.

Consequence of not funding Not painting the siding will result in the buildings siding deteriorating faster

Department	Parks & Rec	Area	Facility Maintenance	YEAR	2021	
Priority	Optional		Risk Level	Low Risk		
Aligns with Strategic Priority	Asset Management		Asset Mgmt	Repair		
	Amount		\$24,000	Requires Early Budget Approval? <input type="checkbox"/>		
		<u>Funding Sources:</u>				
Taxation	24,000	DCC	0	Grant - TBD	0	
Water Utility	0	Reserve	0	Borrow	0	
Sewer Utility	0	Gas Tax	0	Donation/Other	0	
C/F	0	Grant-confirmed	0			

Recreation

Project Name **VET Baffles - Gymnasium**

Description Sound control for increase usage of gymnasium – reduce unwanted echoes, lowering crowd noise, increasing user friendly space with greater clarity to speech – reduce negative voice

Purpose Improve the quality and overall experience of the patrons

Consequence of not funding Difficulty programming both sides of gymnasium due to noise levels

Department	Parks & Rec	Area	Recreation	YEAR	2021	
Priority	Medium		Risk Level	Medium Risk		
Aligns with Strategic Priority	Community		Asset Mgmt	New Asset		
	Amount		\$10,000	Requires Early Budget Approval? <input type="checkbox"/>		
		<u>Funding Sources:</u>				
Taxation	10,000	DCC	0	Grant - TBD	0	
Water Utility	0	Reserve	0	Borrow	0	
Sewer Utility	0	Gas Tax	0	Donation/Other	0	
C/F	0	Grant-confirmed	0			

2021 Financial Plan - Proposed Capital List

Project Name **Fitness equipment - Cardio**

Description Replacing Cardio equipment that is the need of repair or replacing.

Purpose Improve the quality and overall experience of the patrons

Consequence of not funding Not replacing the equipment will result in a shortage of adequate and functional equipment

Department	Parks & Rec	Area	Recreation	YEAR	2021	
Priority	Medium			Risk Level	Low Risk	
Aligns with Strategic Priority	Asset Management			Asset Mgmt		
	Amount		\$70,000	<i>Requires Early Budget Approval?</i> <input type="checkbox"/>		
		<u>Funding Sources:</u>				
Taxation	0	DCC	0	Grant - TBD	0	
Water Utility	0	Reserve	70,000	Borrow	0	
Sewer Utility	0	Gas Tax	0	Donation/Other	0	
C/F	0	Grant-confirmed	0			

Project Name **Seniors Strategy**

Description Development of a strategy to align resources with Senior's needs

Purpose develop a "Seniors Strategy" so that services can be coordinated in a manner that makes best use of limited resources to serve a growing population with specific needs

Consequence of not funding Not being able to identify emerging needs of the community and fully supporting those needs identified.

Department	Parks & Rec	Area	Recreation	YEAR	2021	
Priority	Optional			Risk Level	Low Risk	
Aligns with Strategic Priority	Communications & Engagement			Asset Mgmt		
	Amount		\$25,000	<i>Requires Early Budget Approval?</i> <input type="checkbox"/>		
		<u>Funding Sources:</u>				
Taxation	25,000	DCC	0	Grant - TBD	0	
Water Utility	0	Reserve	0	Borrow	0	
Sewer Utility	0	Gas Tax	0	Donation/Other	0	
C/F	0	Grant-confirmed	0			

Parks & Playgrounds

2021 Financial Plan - Proposed Capital List

Project Name	<u>Paved accessible pathway transfer beach</u>					
Description	Pave a pathway from the handicap parking spots located in the gravel parking lot down the path to the amphitheatre.					
Purpose	To construct a hand railing that will prevent users of the playground from falling off the sidewalk to the playground surface below that has approximately a 3' fall height.					
Consequence of not funding	There will be people with accessible challenges that may no be able to get down to the lower area of the amphitheatre.					
Department	Parks & Rec	Area	Parks & Playgrounds	YEAR	2021	
Priority	Critical		Risk Level	High Risk		
Aligns with Strategic Priority	Infrastructure		Asset Mgmt	New Asset		
	Amount			<div style="border: 1px solid black; padding: 2px; display: inline-block;">\$5,000</div>	Requires Early Budget Approval? <input type="checkbox"/>	
		<u>Funding Sources:</u>				
Taxation	<div style="border: 1px solid black; padding: 2px; display: inline-block;">5,000</div>	DCC	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	Grant - TBD	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	
Water Utility	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	Reserve	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	Borrow	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	
Sewer Utility	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	Gas Tax	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	Donation/Other	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	
C/F	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	Grant-confirmed	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>			

Project Name	<u>Brown Drive Park - Railing</u>					
Description	Construct a hand safety railing at the Brown Drive playground					
Purpose	To construct a hand railing that will prevent users of the playground from falling off the sidewalk to the playground surface below that has approximately a 3' fall height.					
Consequence of not funding	The walkway adjacent to the playground will continue to be a safety risk.					
Department	Parks & Rec	Area	Parks & Playgrounds	YEAR	2021	
Priority	Critical		Risk Level	High Risk		
Aligns with Strategic Priority	Infrastructure		Asset Mgmt	New Asset		
	Amount			<div style="border: 1px solid black; padding: 2px; display: inline-block;">\$5,500</div>	Requires Early Budget Approval? <input type="checkbox"/>	
		<u>Funding Sources:</u>				
Taxation	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	DCC	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	Grant - TBD	<div style="border: 1px solid black; padding: 2px; display: inline-block;">5,500</div>	
Water Utility	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	Reserve	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	Borrow	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	
Sewer Utility	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	Gas Tax	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	Donation/Other	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	
C/F	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	Grant-confirmed	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>			

2021 Financial Plan - Proposed Capital List

Project Name	<u>Lower Holland Creek Trail Boardwalk Repairs</u>				
Description	Repair Holland Creek Boardwalk				
Purpose	To replace rotten wood that is becoming a safety risk to the public users of the trail.				
Consequence of not funding	The boardwalk is in poor condition, repairs to the rotten wood components will continue, at some point the board walk may need to be closed if replacement funding is not made available.				
Department	Parks & Rec	Area	Parks & Playgrounds	YEAR	2021
Priority	Critical		Risk Level	High Risk	
Aligns with Strategic Priority	Infrastructure		Asset Mgmt	Repair	
	Amount			\$10,500	
				<i>Requires Early Budget Approval?</i> <input type="checkbox"/>	
	<u>Funding Sources:</u>				
Taxation	10,500	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

Project Name	<u>High Street Ball Field - infield turf & irrigation</u>				
Description	Install turf and irrigation to the infield				
Purpose	To improve the infield by removing the gravel surface and replacing it with a turf infield that will be irrigated.				
Consequence of not funding	The ball field will continue to be used but will not be ideal. Residents will continue to complain about dust be created when field is in use.				
Department	Parks & Rec	Area	Parks & Playgrounds	YEAR	2021
Priority	Medium		Risk Level	Medium Risk	
Aligns with Strategic Priority	Infrastructure		Asset Mgmt	Repair	
	Amount			\$25,000	
				<i>Requires Early Budget Approval?</i> <input type="checkbox"/>	
	<u>Funding Sources:</u>				
Taxation	25,000	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

2021 Financial Plan - Proposed Capital List

Project Name **Tree replacement Program**
 Description Annual replacement program for boulevard and park trees
 Purpose To replace diseased, damaged trees within community

Consequence of not funding No replacement without funding

Department Parks & Rec Area Parks & Playgrounds YEAR 2021
 Priority Medium Risk Level Low Risk
 Aligns with Strategic Priority Asset Management Asset Mgmt Replacement

Amount **\$12,000** Requires Early Budget Approval? ☐

Funding Sources:

Taxation	6,000	DCC	0	Grant - TBD	6,000
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

Project Name **Root Street Kin Park**
 Description Playground Apparatus

Purpose Replace existing aged infrastructure and bringing the park to compliance meeting current Canadian Playground Safety Institute (CPSI) playground safety standards.

Consequence of not funding Playground would not meet current CPSI safety standards.

Department Parks & Rec Area Parks & Playgrounds YEAR 2021
 Priority Optional Risk Level Medium Risk
 Aligns with Strategic Priority Asset Management Asset Mgmt

Amount **\$65,000** Requires Early Budget Approval? ☐

Funding Sources:

Taxation	0	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	65,000	Donation/Other	0
C/F	0	Grant-confirmed	0		

2021 Financial Plan - Proposed Capital List

Public Works

Water

Project Name **Chicken Ladder Culvert Replacement**

Description Replace failing culvert on the chicken ladder intake road

Purpose To upgrade failing infrastructure, before it washes out the road and the water main to the WTP.

Consequence of not funding Road will washout and will compromise water main intake to the WTP. It could create a water supply issue to the WTP.

Department Public Works Area Water YEAR 2021

Priority Critical Risk Level Very High Risk

Aligns with Strategic Priority Infrastructure Asset Mgmt New Asset

Amount \$75,000

Requires Early Budget Approval? ☒

Funding Sources:

Taxation	0	DCC	0	Grant - TBD	0
Water Utility	75,000	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

Project Name **Water Valve Replacement Program**

Description Water Valve Replacement Program
Water Valve Replacement Program

Purpose To Replace water main valves on a annual program that are broken and that are failing due to age

Consequence of not funding If valves are broken they can not be operated. If valves cannot be operated, water mains cannot be turned off for maintenance and for water breaks.

Department Public Works Area Water YEAR 2021

Priority Critical Risk Level Very High Risk

Aligns with Strategic Priority Infrastructure Asset Mgmt

Amount \$25,000

Requires Early Budget Approval? ☐

Funding Sources:

Taxation	0	DCC	0	Grant - TBD	0
Water Utility	25,000	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

2021 Financial Plan - Proposed Capital List

Project Name	<u>Chicken Ladder Gate Replacement</u>				
Description	Replace Chicken Ladder Gate				
Purpose	Remove the old gate and replace with a new gate that is stronger, this will prevent vandals from damaging the gate.				
Consequence of not funding	Vandals will continue to destroy the existing gate and will continue to cost the Town money				
Department	Public Works	Area	Water	YEAR	2021
Priority	Critical			Risk Level	Very High Risk
Aligns with Strategic Priority	Infrastructure			Asset Mgmt	New Asset
		Amount	\$7,500	Requires Early Budget Approval? <input checked="" type="checkbox"/>	
		<u>Funding Sources:</u>			
Taxation	<input type="text" value="0"/>	DCC	<input type="text" value="0"/>	Grant - TBD	<input type="text" value="0"/>
Water Utility	<input type="text" value="7,500"/>	Reserve	<input type="text" value="0"/>	Borrow	<input type="text" value="0"/>
Sewer Utility	<input type="text" value="0"/>	Gas Tax	<input type="text" value="0"/>	Donation/Other	<input type="text" value="0"/>
C/F	<input type="text" value="0"/>	Grant-confirmed	<input type="text" value="0"/>		

Project Name	<u>Skid Steer Trailer</u>				
Description	Skid Steer trailer				
Purpose	To transport the skid and mower to Holland Lake Dam				
Consequence of not funding	Will need to hire a contractor to haul skid steer to Holland Lake Dam, over the long term this would not be cost effective.				
Department	Public Works	Area	Water	YEAR	2021
Priority	Critical			Risk Level	Very High Risk
Aligns with Strategic Priority	Infrastructure			Asset Mgmt	Repair
		Amount	\$12,000	Requires Early Budget Approval? <input checked="" type="checkbox"/>	
		<u>Funding Sources:</u>			
Taxation	<input type="text" value="0"/>	DCC	<input type="text" value="0"/>	Grant - TBD	<input type="text" value="0"/>
Water Utility	<input type="text" value="12,000"/>	Reserve	<input type="text" value="0"/>	Borrow	<input type="text" value="0"/>
Sewer Utility	<input type="text" value="0"/>	Gas Tax	<input type="text" value="0"/>	Donation/Other	<input type="text" value="0"/>
C/F	<input type="text" value="0"/>	Grant-confirmed	<input type="text" value="0"/>		

2021 Financial Plan - Proposed Capital List

Project Name	<u>Confined Space Equipment</u>				
Description	Installation of confined spaces safety equipment and apparatuses				
Purpose	To install equipment to allow access to maintenance and repair of equipment throughout Filtration Plant				
Consequence of not funding	Out of compliance				
Department	Public Works	Area	Water	YEAR	2021
Priority	Critical			Risk Level	High Risk
Aligns with Strategic Priority	Infrastructure			Asset Mgmt	New Asset
		Amount	\$100,000	Requires Early Budget Approval? <input type="checkbox"/>	
		<u>Funding Sources:</u>			
Taxation	<input type="text" value="0"/>	DCC	<input type="text" value="0"/>	Grant - TBD	<input type="text" value="0"/>
Water Utility	<input type="text" value="100,000"/>	Reserve	<input type="text" value="0"/>	Borrow	<input type="text" value="0"/>
Sewer Utility	<input type="text" value="0"/>	Gas Tax	<input type="text" value="0"/>	Donation/Other	<input type="text" value="0"/>
C/F	<input type="text" value="0"/>	Grant-confirmed	<input type="text" value="0"/>		

Project Name	<u>Water Leak Detection Device</u>				
Description	Water Leak detection				
Purpose	To purchase a listening device that will assist staff in locating water leaks				
Consequence of not funding	Staff will continue to find water leaks through other methods such as excavations and water coming to the ground surface.				
Department	Public Works	Area	Water	YEAR	2021
Priority	Critical			Risk Level	High Risk
Aligns with Strategic Priority	Infrastructure			Asset Mgmt	New Asset
		Amount	\$8,500	Requires Early Budget Approval? <input type="checkbox"/>	
		<u>Funding Sources:</u>			
Taxation	<input type="text" value="0"/>	DCC	<input type="text" value="0"/>	Grant - TBD	<input type="text" value="0"/>
Water Utility	<input type="text" value="8,500"/>	Reserve	<input type="text" value="0"/>	Borrow	<input type="text" value="0"/>
Sewer Utility	<input type="text" value="0"/>	Gas Tax	<input type="text" value="0"/>	Donation/Other	<input type="text" value="0"/>
C/F	<input type="text" value="0"/>	Grant-confirmed	<input type="text" value="0"/>		

2021 Financial Plan - Proposed Capital List

Project Name **Arbutus Reservoir Cleaning**

Description Hire a contractor dive team to clean the reservoir

Purpose The Arbutus reservoir was last cleaned by a dive team in 2015. A 5 year cleaning program is important to ensure that there continues to be high quality water delivered to the customer.

Consequence of not funding There will continue to be residue in the bottom of the reservoir.

Department	Public Works	Area	Water	YEAR	2021
Priority	Medium			Risk Level	Medium Risk
Aligns with Strategic Priority	Infrastructure			Asset Mgmt	Repair
	Amount		\$20,000	<i>Requires Early Budget Approval?</i> <input checked="" type="checkbox"/>	
	<u>Funding Sources:</u>				
Taxation	0	DCC	0	Grant - TBD	0
Water Utility	20,000	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

Project Name **Water main Replacement - French St**

Description Abandoning cast iron main between 1st & 2d Ave.

Purpose Replace with 250 mm pipe as on main flow path from PRV to highway crossing

Consequence of not funding Cast iron pipe will continue to fail and will cause water pressure issues and water quality issues

Department	Public Works	Area	Water	YEAR	2021
Priority	Medium			Risk Level	Medium Risk
Aligns with Strategic Priority	Infrastructure			Asset Mgmt	
	Amount		\$190,000	<i>Requires Early Budget Approval?</i> <input checked="" type="checkbox"/>	
	<u>Funding Sources:</u>				
Taxation	0	DCC	0	Grant - TBD	0
Water Utility	190,000	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

2021 Financial Plan - Proposed Capital List

Project Name **Water Meter replacement**
 Description Replace failing and or failed meters throughout the Town
 Purpose Water meters are approximately 15 years old and beginning to show age

Consequence of not funding Revenue loss

Department Public Works Area Water YEAR 2021
 Priority Medium Risk Level Low Risk
 Aligns with Strategic Priority Asset Management Asset Mgmt Replacement

Amount \$50,000 Requires Early Budget Approval? ☐

Funding Sources:

Taxation	0	DCC	0	Grant - TBD	0
Water Utility	50,000	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

Sewer/Compost

Project Name **Spirogester Valve Removal**
 Description Remove leaking cracked valve and replace with spool piece and blind flange
 Purpose Valve is cracked and needs to be removed

Consequence of not funding Valve will continue to leak and may completely fail releasing effluent onto the ground

Department Public Works Area Sewer/Compost YEAR 2021
 Priority Critical Risk Level Very High Risk
 Aligns with Strategic Priority Infrastructure Asset Mgmt Repair

Amount \$10,000 Requires Early Budget Approval? ☒

Funding Sources:

Taxation	0	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	10,000	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

2021 Financial Plan - Proposed Capital List

Project Name	<u>Sandy Beach Lift Station Generator</u>				
Description	Generator Sandy Beach Lift Station				
Purpose	Install a generator at the sandy beach lift station located on Chemainus Road. The generator will keep the lift station functional in the event of a power failure.				
Consequence of not funding	Staff will continue to pump and haul sewage in the event of a power failure and there could be a risk of a release of raw sewage into the receiving environment if the lift station overflowed.				
Department	Public Works	Area	Sewer/Compost	YEAR	2021
Priority	Critical			Risk Level	Very High Risk
Aligns with Strategic Priority	Infrastructure			Asset Mgmt	New Asset
		Amount	\$250,000	<i>Requires Early Budget Approval?</i> <input type="checkbox"/>	
		<u>Funding Sources:</u>			
Taxation	0	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	250,000	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

Project Name	<u>Salsnes UV Air Filter</u>				
Description	A UV air filter as purchased several years ago and has never been installed.				
Purpose	Installation of the UV Air filter in the Salsnes room will help eliminate and filter odors				
Consequence of not funding	Foul air will continue to be released into the air from the Salsnes room.				
Department	Public Works	Area	Sewer/Compost	YEAR	2021
Priority	Critical			Risk Level	Very High Risk
Aligns with Strategic Priority	Infrastructure			Asset Mgmt	New Asset
		Amount	\$15,000	<i>Requires Early Budget Approval?</i> <input type="checkbox"/>	
		<u>Funding Sources:</u>			
Taxation	0	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	15,000	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

2021 Financial Plan - Proposed Capital List

Project Name **Caretaker Building**
 Description Purchase a 10x40 caretaker building
 Purpose To provide onsite security
 Consequence of not funding Risk of theft and vandalism at the Compost site

Department Public Works Area Sewer/Compost YEAR 2021
 Priority Medium Risk Level Very High Risk
 Aligns with Strategic Priority Infrastructure Asset Mgmt New Asset

Amount \$50,000 Requires Early Budget Approval? ☒

Funding Sources:

Taxation	0	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	50,000	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

Project Name **Spirogester Pump Room - Roof Replacement**
 Description Remove old tar & gravel roof and replace with new membrane roof
 Purpose Roof is leaking and requires replacement

Consequence of not funding Water will damage pumps and other electrical components

Department Public Works Area Sewer/Compost YEAR 2021
 Priority Medium Risk Level Very High Risk
 Aligns with Strategic Priority Infrastructure Asset Mgmt Repair

Amount \$10,000 Requires Early Budget Approval? ☐

Funding Sources:

Taxation	0	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	10,000	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

2021 Financial Plan - Proposed Capital List

Project Name **UV Phase 1 - Design**

Description UV Design

Purpose Begin design on the new UV disinfection system

Consequence of not funding Will not be ready for implementation of construction

Department Public Works Area Sewer/Compost YEAR 2021

Priority Medium Risk Level High Risk

Aligns with Strategic Priority Infrastructure Asset Mgmt Design/Study

Amount \$100,000

Requires Early Budget Approval? ☒

Funding Sources:

Taxation	0	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	100,000	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

Project Name **Sewer main upgrade Rocky Creek Main - Oyster Bay Rd**

Description Upgrade sewer main on Rocky Creek - Developer dependent

Purpose This upgrade project may be triggered by development that is serviced by this main

Consequence of not funding In the DCC program

Department Public Works Area Sewer/Compost YEAR 2021

Priority Medium Risk Level Medium Risk

Aligns with Strategic Priority Natural & Built Infrastructure Asset Mgmt Replacement

Amount \$80,750

Requires Early Budget Approval? ☒

Funding Sources:

Taxation	0	DCC	40,375	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	40,375	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

2021 Financial Plan - Proposed Capital List

Project Name	<u>Inflow & Infiltration Connections</u>				
Description					
Purpose	Asset Replacement				
Consequence of not funding					
Department	Public Works	Area	Sewer/Compost	YEAR	2021
Priority	Medium		Risk Level	Medium Risk	
Aligns with Strategic Priority	Infrastructure		Asset Mgmt	Replacement	
		Amount	\$100,000	Requires Early Budget Approval? <input type="checkbox"/>	
		<u>Funding Sources:</u>			
Taxation	<input type="text" value="0"/>	DCC	<input type="text" value="0"/>	Grant - TBD	<input type="text" value="0"/>
Water Utility	<input type="text" value="0"/>	Reserve	<input type="text" value="0"/>	Borrow	<input type="text" value="0"/>
Sewer Utility	<input type="text" value="100,000"/>	Gas Tax	<input type="text" value="0"/>	Donation/Other	<input type="text" value="0"/>
C/F	<input type="text" value="0"/>	Grant-confirmed	<input type="text" value="0"/>		

Storm

Project Name	<u>Storm main - French to Kitchener</u>				
Description	Storm water mains collect storm water run off				
Purpose	To replace aging infrastructure that no longer has the capacity to deal with large volumes of storm water				
Consequence of not funding	Infrastructure will continue to be inadequate to deal with large volumes of storm water run off, this may cause flooding of public and private property.				
Department	Public Works	Area	Storm	YEAR	2021
Priority	Critical		Risk Level	High Risk	
Aligns with Strategic Priority	Infrastructure		Asset Mgmt		
		Amount	\$40,000	Requires Early Budget Approval? <input checked="" type="checkbox"/>	
		<u>Funding Sources:</u>			
Taxation	<input type="text" value="40,000"/>	DCC	<input type="text" value="0"/>	Grant - TBD	<input type="text" value="0"/>
Water Utility	<input type="text" value="0"/>	Reserve	<input type="text" value="0"/>	Borrow	<input type="text" value="0"/>
Sewer Utility	<input type="text" value="0"/>	Gas Tax	<input type="text" value="0"/>	Donation/Other	<input type="text" value="0"/>
C/F	<input type="text" value="0"/>	Grant-confirmed	<input type="text" value="0"/>		

2021 Financial Plan - Proposed Capital List

Project Name	<u>Storm Water Master Plan</u>
Description	Master plan for storm water upgrades
Purpose	Create a storm water master plan that will guide staff and council in determining storm water deficiencies that will assist in the decision making process for replacement and upgrades
Consequence of not funding	The storm water systems in some areas will not be able to handle inflow and may result in flooding of Town and private property

Department	Public Works	Area	Storm	YEAR	2021
Priority	Medium			Risk Level	High Risk
Aligns with Strategic Priority	Infrastructure			Asset Mgmt	
		Amount	\$300,000	Requires Early Budget Approval? <input type="checkbox"/>	
		Funding Sources:			
Taxation	0	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	300,000	Donation/Other	0
C/F	0	Grant-confirmed	0		

Project Name	<u>Storm Water Manhole Replacement Program</u>				
Description	Storm water manholes collect sediment before entering into the storm water main				
Purpose	To continue with upgrades to the storm water system, manhole replacement is required.				
Consequence of not funding	The storm water system will continue to be deficient in some areas				
Department	Public Works	Area	Storm	YEAR	2021
Priority	Medium		Risk Level	High Risk	
Aligns with Strategic Priority	Infrastructure		Asset Mgmt		
	Amount		\$20,000	Requires Early Budget Approval? <input type="checkbox"/>	
	Funding Sources:				
Taxation	20,000	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

2021 Financial Plan - Proposed Capital List

Project Name	<u>Walkem Culvert Engineering</u>				
Description	Intersection of Walkem & Cloke				
Purpose	To investigate the life expectancy of the culvert and to have engineering completed for budget purposes				
Consequence of not funding	The Town will not have a good understanding of the life of the culvert and will not be ready for capital replacement				
Department	Public Works	Area	Storm	YEAR	2021
Priority	Medium			Risk Level	Medium Risk
Aligns with Strategic Priority	Infrastructure			Asset Mgmt	
	Amount		\$15,000	Requires Early Budget Approval? <input type="checkbox"/>	
	<u>Funding Sources:</u>				
Taxation	15,000	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

Roads/Sidewalks

Project Name	<u>Retaining Wall</u>				
Description	Reinforcement of LMS access road retaining wall				
Purpose	To ensure continued access to the Marina				
Consequence of not funding	Current retaining wall appears to be failing				
Department	Public Works	Area	Roads/Sidewalks	YEAR	2021
Priority	Critical			Risk Level	High Risk
Aligns with Strategic Priority	Infrastructure			Asset Mgmt	Repair
	Amount		\$100,000	Requires Early Budget Approval? <input type="checkbox"/>	
	<u>Funding Sources:</u>				
Taxation	100,000	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

2021 Financial Plan - Proposed Capital List

Project Name **Half Road incl Sidewalk - Russell Rd: Ridgeway to Simpson**
 Description DCC (2019) Project
 Purpose Development at 800 Russell moving forward in 2021. Road works to be completed at that time

Consequence of not funding More community disruption if not done at time of adjacent development

Department	Public Works	Area	Roads/Sidewalks	YEAR	2021
Priority	Critical			Risk Level	Medium Risk
Aligns with Strategic Priority	Natural & Built Infrastructure			Asset Mgmt	
	Amount		\$50,000	Requires Early Budget Approval? <input type="checkbox"/>	
	<u>Funding Sources:</u>				
Taxation	37,625	DCC	12,375	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

Project Name **Half Road incl Sidewalk - Russell Rd: 760 to 740**
 Description DCC (2019) Project
 Purpose Development at 800 Russell moving forward in 2021. Road works to be completed at that time

Consequence of not funding More community disruption if not done at time of adjacent development

Department	Public Works	Area	Roads/Sidewalks	YEAR	2021
Priority	Critical			Risk Level	Medium Risk
Aligns with Strategic Priority	Natural & Built Infrastructure			Asset Mgmt	
	Amount		\$42,000	Requires Early Budget Approval? <input checked="" type="checkbox"/>	
	<u>Funding Sources:</u>				
Taxation	31,605	DCC	10,395	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

2021 Financial Plan - Proposed Capital List

Project Name **Bollards - 1st Avenue**
 Description Bollard locations to be confirmed by Council prior to installation
 Purpose Install Bollards on 1st Ave per CS2018-144

Consequence of not funding Possibility of accidents

Department Public Works Area Roads/Sidewalks YEAR 2021

Priority Medium Risk Level Medium Risk

Aligns with Strategic Priority Operations Asset Mgmt

Amount **\$30,000**

Requires Early Budget Approval? ☒

Funding Sources:

Taxation	<input type="text" value="30,000"/>	DCC	<input type="text" value="0"/>	Grant - TBD	<input type="text" value="0"/>
Water Utility	<input type="text" value="0"/>	Reserve	<input type="text" value="0"/>	Borrow	<input type="text" value="0"/>
Sewer Utility	<input type="text" value="0"/>	Gas Tax	<input type="text" value="0"/>	Donation/Other	<input type="text" value="0"/>
C/F	<input type="text" value="0"/>	Grant-confirmed	<input type="text" value="0"/>		

Cemetery

Project Name **Cemetery - Fence & Gate**
 Description Replace existing fence & gate @ cemetery
 Purpose Old fence and gate are failing

Consequence of not funding Appearance of the cemetery will continue to suffer

Department Public Works Area Cemetery YEAR 2021

Priority Medium Risk Level Low Risk

Aligns with Strategic Priority Infrastructure Asset Mgmt

Amount **\$50,000**

Requires Early Budget Approval? ☐

Funding Sources:

Taxation	<input type="text" value="50,000"/>	DCC	<input type="text" value="0"/>	Grant - TBD	<input type="text" value="0"/>
Water Utility	<input type="text" value="0"/>	Reserve	<input type="text" value="0"/>	Borrow	<input type="text" value="0"/>
Sewer Utility	<input type="text" value="0"/>	Gas Tax	<input type="text" value="0"/>	Donation/Other	<input type="text" value="0"/>
C/F	<input type="text" value="0"/>	Grant-confirmed	<input type="text" value="0"/>		

2021 Financial Plan - Proposed Capital List

Protective Services

Fire

Project Name **Fire Pro 2**

Description Records Management Software for Fire/Rescue Incidents

Purpose To organize and maintain the data the fire halls runs on. Tracks inspections, permits, inventory

Consequence of not funding Manual records, time spent filing & reviewing

Department Protective Services Area Fire YEAR 2021

Priority Critical Risk Level Medium Risk

Aligns with Strategic Priority Community Asset Mgmt New Asset

Amount \$8,560

Requires Early Budget Approval? ☐

Funding Sources:

Taxation	8,560	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

Project Name **Chief's Truck - Command 1 Vehicle**

Description Command vehicle fire apparatus

Purpose Vehicle is used by the Duty Chief to respond quickly to emergency situations, providing a size up and critical information to responding crews

Consequence of not funding Continue to rely on 2007 GMC Yukon command vehicle which is showing its age. Maintenance costs are continuing to rise and it will require paint and some other updates soon.

Department Protective Services Area Fire YEAR 2021

Priority Medium Risk Level Medium Risk

Aligns with Strategic Priority Community Asset Mgmt Replacement

Amount \$80,752

Requires Early Budget Approval? ☐

Funding Sources:

Taxation	80,752	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

2021 Financial Plan - Proposed Capital List

Project Name	<u>Gear Grid</u>				
Description	Fire Bunker Gear Storage Rack				
Purpose	To replace the aging cramped (home made) gear storage racks in the hall, providing separate spaces for each firefighter to store their turnout gear, coveralls, etc.				
Consequence of not funding	Continue with inadequate storage of bunker gear, coveralls, helmets, boots. The gear is heavier than the current racks were designed for resulting in gear overlap.				
Department	Protective Services	Area	Fire	YEAR	2021
Priority	Optional			Risk Level	Low Risk
Aligns with Strategic Priority	Infrastructure			Asset Mgmt	Replacement
	Amount		\$15,000	<i>Requires Early Budget Approval?</i> <input type="checkbox"/>	
		<u>Funding Sources:</u>			
Taxation	15,000	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	0	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

2021 Financial Plan - Proposed Capital List

Waterfront	
Waterfront	

Project Name **Comprehensive development Agreements**

Description

Purpose Part of the Waterfront Area Plan

Consequence
of not funding

Department **Waterfront** Area **Waterfront** YEAR **2021**

Priority **Critical** Risk Level **Medium Risk**

Aligns with Strategic Priority **Waterfront** Asset Mgmt

Amount **\$25,927**

Requires Early Budget Approval? ☐

Funding Sources:

Taxation	0	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	25,927	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

Project Name **Waterfront projects**

Description Annual allotment of waterfront projects

Purpose To implement the Waterfront Area Plan

Consequence
of not funding Inconsistent with WAP

Department **Waterfront** Area **Waterfront** YEAR **2021**

Priority **Critical** Risk Level **Low Risk**

Aligns with Strategic Priority **Waterfront** Asset Mgmt **New Asset**

Amount **\$250,000**

Requires Early Budget Approval? ☐

Funding Sources:

Taxation	0	DCC	0	Grant - TBD	0
Water Utility	0	Reserve	250,000	Borrow	0
Sewer Utility	0	Gas Tax	0	Donation/Other	0
C/F	0	Grant-confirmed	0		

2021 Financial Plan - Proposed Capital List

		ANNUAL TOTAL	\$2,668,989		
Taxation	740,042	DCC	63,145	Grant - TBD	11,500
Water Utility	488,000	Reserve	425,927	Borrow	0
Sewer Utility	575,375	Gas Tax	365,000	Donation/Other	0
C/F	0	Grant-confirme	0		

STAFF REPORT TO COUNCIL

Report Prepared By: Julie Thompson, Acting Senior Planner
Meeting Date: November 17, 2020
File No: 3060-20-09 & 3090-20-04
RE: **DEVELOPMENT PERMIT & DEVELOPMENT VARIANCE
PERMIT FOR MULTI-FAMILY DEVELOPMENT AT 107
ROLLIE ROSE DRIVE (LOT 13)**

RECOMMENDATION:

That Council:

1. Issue Development Variance Permit 3090-20-04 to vary the maximum height of a principal building from 10m to 14.9m, and to reduce the number of parking stalls from 2.0 to 1.5 per dwelling unit with two or more bedrooms, for a multi-family residential use located on Lot 13 District Lot 103 Oyster District Plan EPP75579 (107 Rollie Rose Drive).
2. Issue Development Permit 3060-20-09 for a multi-family residential development on Lot 13 District Lot 103 Oyster District Plan EPP75579 (107 Rollie Rose Drive) on the condition that:
 - a) the permittee provide security in the amount of \$5,000 to be used in the event of damage to the Streamside Protection and Enhancement Area (SPEA) resulting from a contravention of Development Permit 3060-20-09; and
 - b) the permittee provide security in the amount of \$180,547 in the event that conditions respecting landscaping in Development Permit 3060-20-09 are not satisfied.
3. Authorize the Mayor and Corporate Office to sign Development Variance Permit 3090-20-04 and Development Permit 3060-20-09.

EXECUTIVE SUMMARY:

An application for a Development Permit (DP) and Development Variance Permit (DVP) to permit the construction of a multi-family residential development on the subject property, located at 107 Rollie Rose Drive has been received. It is recommended that DVP 3090-20-04 and DP 3060-20-09 be approved as the proposal is generally consistent with the applicable Development Permit Area guidelines, and the variance proposal to increase the building's height and reduce the number of parking stalls is considered reasonable based on the analysis provided in this report.

**PREVIOUS COUNCIL
DIRECTION:**

None.

INTRODUCTION/BACKGROUND

The 2.7ha subject property is located off Rollie Rose Drive, near the intersection between Rollie Rose and Dogwood Drive. The property is covered by mature second growth and regenerating riparian area which is approximately 20 to 80 years old. The property is bounded on the west by a hydro corridor (a smaller hydro corridor also runs through the property near the eastern boundary). To the north is the Holland Creek trail network, and to the south single detached housing runs along Rollie Rose Drive.



Figure 1: Aerial photo of subject property (outlined in red). Parcel boundaries in the subdivision are not shown as mapping has not been updated to include this new subdivision.

There are two unnamed tributaries which run through the property and converge near the middle of the property, draining into Holland Creek. The property slopes from a crest above Heart Creek. The crest approximately follows the northern property boundary.

The applicant is proposing to construct an “L” shaped 96-unit four storey apartment building, with stepping of the foundation to match the existing grade. An accessory storage building, picnic shelter, garbage and recycling building and 153 surface parking stalls are also proposed. A driveway with a culvert crosses the tributary on the eastern side of the property, and connects Rollie Rose Drive to the development. The crossing has been approved by the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (MFLNRORD) under section 11 of the *Water Sustainability Act*. A public footpath is proposed which is required by a Statutory Right of Way registered in favor of the Town. The path will use the same crossing to connect Rollie Rose Drive to the Holland Creek Trail system, north of the property. The property falls within Development Permit Area 8 – Multi-Unit Residential

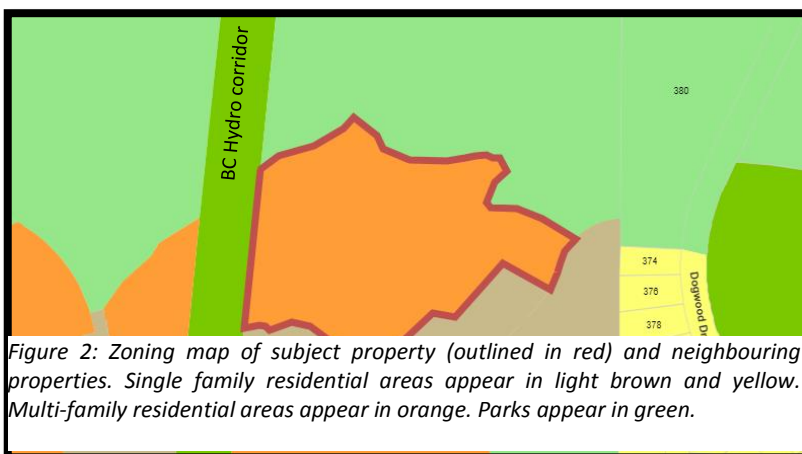


Figure 2: Zoning map of subject property (outlined in red) and neighbouring properties. Single family residential areas appear in light brown and yellow. Multi-family residential areas appear in orange. Parks appear in green.

Environmentally Sensitive Area (ESA), Development Permit Area 7 – Hazard Lands, and Development Permit Area 6 – Riparian.

The applicant is requesting a variance to increase the height of the apartment building from 10m to 14.9m to accommodate a fourth storey, and to reduce the required parking from a total of 178 spaces to 153 spaces. The applicant has also requested a variance to reduce the setback of the apartment building from the watercourse. This can be varied through the DP under section 490 of the *Local Government Act* and Development Permit Area 6 guideline i)h), which allows a watercourse setback to be varied where the setback is consistent with the Streamside Protection and Enhancement Area as indicated in the report from the Qualified Environmental Professional (QEP). The reduced setback is supported by the QEP's Riparian Areas Protection Regulation Assessment Report, as well as the Geotechnical Engineer's Geotechnical Assessment (both reports attached under Schedule H of DP 20-09).

DISCUSSION/ANALYSIS:

Variance Proposal:

The subject property is designated Multi-Family Residential in the Holland Creek Local Area Plan (HCLAP), attached as Schedule C to Official Community Plan Bylaw No. 1148, and is zoned Low Density Residential (R-3-A) in Zoning Bylaw No. 1860. The proposal is consistent with the HCLAP designation and the Zoning Bylaw, with the exception of the proposed variances:

Table 1: Summary of Proposed Variances

Zoning Bylaw Regulation	Permitted/Required	Proposed	Variance
Maximum height of a principal building	10.0m	14.9m	4.9m
Minimum number of parking spaces per 2+ bedroom dwelling unit in a multi-family residential building	2.0 spaces per 2+ bedroom unit 2.0 spaces x 57 units = 114 spaces	1.5 spaces per 2+ bedroom unit 1.5 spaces x 57 units = 86 spaces	0.5 spaces per 2+ bedroom unit 28 spaces
Watercourse setback	For parcels with a slope greater than 5%: 9.0m to the natural boundary or 21.0m from the centre line of the watercourse, whichever is greater. For parcels with a slope less than 5%: 15m from the natural boundary or 18m from the centre line of the watercourse, whichever is greater.	10.5m from the high water mark	-

DVP 20-04 - Height & Parking:

The applicant is proposing to vary the height of the proposed 96 unit apartment building from 10.0m to 14.9m in order to accommodate a fourth storey on the building. The

increase in height would accommodate additional units in the building without needing to expand the footprint of the building. The density of the proposed development is 35.5 units per hectare, which is compliant with the 37 units per hectare maximum in the R-3-A zone.

The applicant is also proposing to vary the minimum number of required parking spaces. The proposed apartment building contains 39 one-bedroom units and 57 two-bedroom units. The Zoning Bylaw requires a minimum of one parking space per one-bedroom unit and two parking spaces per two-bedroom unit. When visitor and accessible parking requirements are also included, the total number of required parking spaces for the proposed development is 178. The proposed variance would reduce the number of required parking spaces to 150, however, the applicant is proposing 153 spaces.

The applicant's rationale for the increase in height and reduced parking is based on achieving minimal site disturbance by reducing the footprint of the development. Under the proposed design, only about 50% of the subject property would be developed; the remainder would be the Streamside Protection and Enhancement Area (SPEA) and a large forested area between the SPEA boundaries (see figures 3 and 4). The applicant has provided a rationale letter which is attached to this report.

Watercourse Setback:

The Zoning Bylaw requires a minimum setback from watercourses depending on the slope of the property and the width of the watercourse. According to staff's calculations, the proposed apartment building would

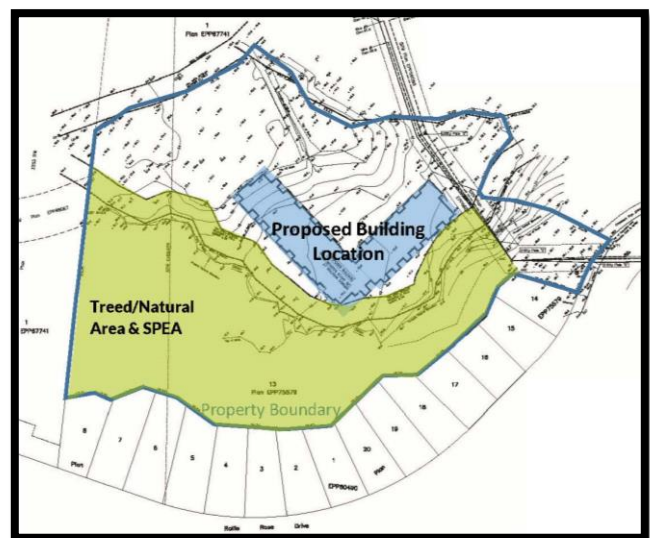


Figure 3: Subject property showing combined SPEA and natural area, to remain free from development.

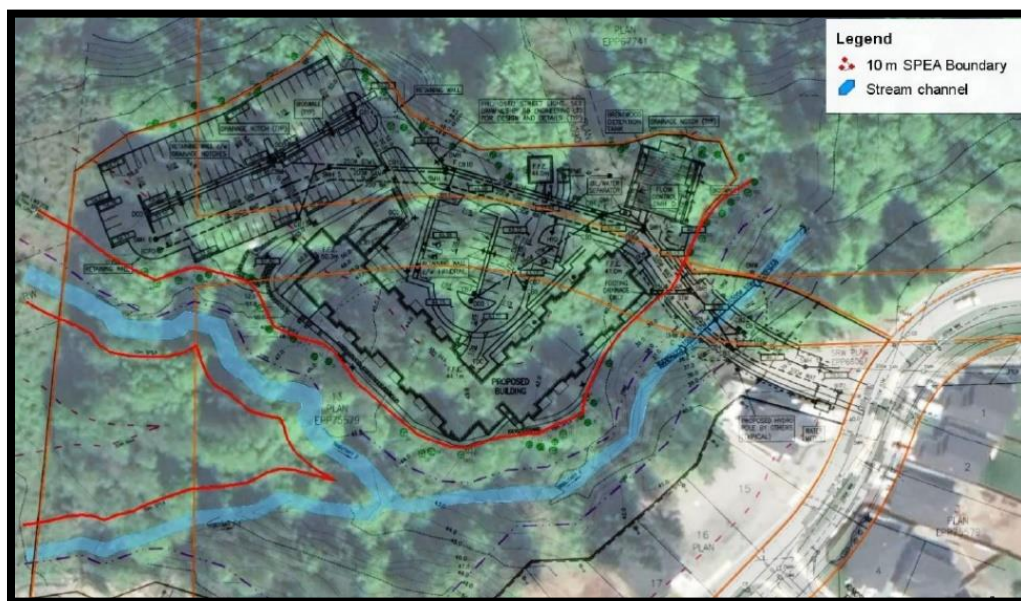


Figure 4: Subject property showing location of proposed development, SPEA boundary and stream channel.

not meet the required setback. At its closest, the proposed apartment building is located approximately 10.5-11m from the natural boundary of the watercourse, just outside the SPEA. As such, it is proposed that the watercourse setback be reduced to 10.5m to accommodate the location of the proposed apartment building. The subject property falls within Development Permit Area 6 – Riparian (DPA 6) which allows variances to the watercourse setback where the setback is consistent with the SPEA as indicated in the QEP report. As such, this variance would be granted under DP 20-09.

Public Feedback:

Through the DVP process, the Town has received five submissions from the public regarding the proposed height and parking variances, one of which is a letter signed by 33 people. The views expressed, with staff comments, are summarized in Table 2.

Table 2: Summary of Public Concerns & Staff Comments – DVP 20-04

Public Concerns/Comments	Staff Comments
Increase in height will cause an increase in noise	Noise levels are not expected to increase beyond what would otherwise be expected from a shorter apartment building containing the same number of units. Noise levels are regulated by the Town's Noise Suppression Bylaw No. 1478 and the Nuisance Abatement Bylaw No. 1893.
Increase in height will cause a decrease in privacy for neighbouring single family parcels	The proposed apartment building is situated approximately 37m from the rear parcel lines of the nearest single-family parcels. The area in between consists of a vegetated SPEA and treed area which will remain intact. The trees within this area average 36.5m in height (see figures 3 and 4) and overlook from the balconies of the apartment building into neighbouring yards is not expected.
Light shining into neighbouring yards	Lighting is required to be cast downward, following "dark-sky principles" in accordance with DPA 8. The tree buffer between the single family and multi-family area also screens light.
Concerns about building rising above the tree line	The trees in the SPEA and the natural area are approximately twice the height of the proposed apartment building (and will continue to grow). A rendering showing the height of the trees compared to the height of the building submitted by the applicant is attached.
Overflow of parking onto Rollie Rose Drive/not enough parking	The proposed reduction in parking is considered reasonable and necessary to protect existing natural areas. An average of 1.6 parking spaces is provided per dwelling unit.
Property not qualifying for proposed density; parcel not large enough due to SPEA area	SPEAs are included in the total parcel area used to calculate density. The proposed density is compliant with the R-3-A zone and OCP.

Development Permit Areas:

The subject property is subject to the following three Development Permit Areas (DPAs):

- DPA 6 – Riparian
- DPA 7 – Hazard Lands
- DPA 8 – Multi-Unit Residential Environmentally Sensitive Area (ESA)

The proposed development has been reviewed for consistency with the DPA 6, DPA 7 and DPA 8 guidelines. Tables 2 to 4 provide observations about the proposal's

consistency with the DPA guidelines. The ability to issue development permits within DPA 6 and DPA 7 is delegated to the Director of Development Services. In this case, since DPA 8 is applicable and because the applicant has also submitted a DVP application, the development proposal is being presented to Council for consideration as one package.

Development Permit Area 6 – Riparian:

The purpose of DPA 6 is to protect the natural environment, ecosystems and biological diversity of fish bearing and non-fish bearing riparian areas. It is noted that the subject property is subject to the Provincial Riparian Areas Protection Regulation (RAPR) and as such, the applicant is required to submit to the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (MFLNRORD) a RAPR assessment report by a qualified environmental professional (QEP). The QEP submitted two previous RAPR reports to MFLNRORD which were rejected for failing to meet the assessment and reporting criteria. The QEP submitted a third RAPR report with revisions, which was approved by MFLNRORD on October 15, 2020. The Town may not approve a riparian DP until Provincial approval has been received.

Table 3: Summary of Proposal's Consistency with DPA 6 – Riparian Guidelines

Guidelines	Observations
A riparian assessment report must be prepared by a Qualified Environmental Professional (QEP).	<ul style="list-style-type: none"> • A revised Riparian Areas Protection Regulation (RAPR) assessment report was submitted to MFLNRORD by QEP Dave Clough in September 2020. • On October 15, 2020 the Town received notification from MLNRORD that the RAPR report has been accepted. • The proposed development will not result in harmful alteration, disruption or destruction (HADD) to fish habitat. • A 10m wide Streamside Protection and Enhancement Area (SPEA) has been identified by the QEP and is mapped in the RAPR report, attached to DP 20-09 as Schedule F. • The RAPR report and DP 20-09 provides conditions for protecting the SPEA before, during and after construction, including regular monitoring by the QEP and a post-construction monitoring report. • Native and drought tolerant plants are proposed within the Riparian Assessment Area (RAA). • Native plants are proposed within the SPEA to enhance the understory. • A sediment and erosion control plan has been prepared and is attached to the RAPR report (Schedule H of DP 20-09) • A stormwater management plan has been prepared and is attached to the RAPR report and DP 20-09.

Development Permit Area 7 – Hazard Lands:

DPA 7 applies to areas of the Town with steep slope conditions. The purposes of DPA 7 are to prevent land slippage and sloughing, safeguard private property from potential damage, minimize disruption to slope stability and prevent development in areas where slope instability hazards exist. The proposed development has been reviewed for consistency with DPA 7 and is generally consistent with the DPA 7 guidelines. It is noted that the applicant has submitted a geotechnical assessment to support the application. Table 4 provides observations about the proposal's consistency with the DPA 7 guidelines.

Table 4: Summary of Proposal's Consistency with DPA 7 – Hazard Lands Guidelines

Guidelines	Observations
No significant excavation or filling; and no buildings on areas subject to bank instability or to potential damage from bank instability	<ul style="list-style-type: none"> • The proposed building location is mainly flat, with a portion of the structure located into a slope inclined 25 degrees to the south. • Some excavation of a few metres of unsuitable overburden materials is required to provide a suitable base of support. Overburden materials are generally considered near the surface and shallow, according to the geotechnical assessment.
Avoid areas subject to unstable slopes and site buildings in accordance with setbacks and other requirements determined by a geotechnical engineer	<ul style="list-style-type: none"> • The geotechnical assessment indicates a low risk of slope instability at the building location. • The geotechnical assessment indicates that steeply dipping slopes to the north represent a moderate to high probability of slope instability in the form of seismic stability and thus recommends that all civil works be located behind a 30 degree reference line. The geotechnical engineer has confirmed that the proposal is consistent with this recommendation.
Provide for disposal of surface run off and storm water; divert drainage away from areas subject to sloughing	<ul style="list-style-type: none"> • The geotechnical assessment has evaluated a proposed stormwater management plan, which is attached to DP 20-09.
Avoid disturbance of steep slopes	<ul style="list-style-type: none"> • The proposed building sites and parking areas are not located on the steep slopes observed at the north end of the site.
Retaining walls should be terraced. Plant material should be incorporated into the retaining wall design	<ul style="list-style-type: none"> • Proposed retaining walls will have plant material incorporated into their design.
Maintain existing trees and vegetation to control erosion and protect banks	<ul style="list-style-type: none"> • The SPEA and additional areas will be maintained in their natural state, as shown in figures 3 and 4. • A vegetative buffer will be maintained surrounding the development area.
Access/Pathways	<ul style="list-style-type: none"> • Footpaths work with the topography.
Provide a geotechnical report	<ul style="list-style-type: none"> • A geotechnical assessment has been prepared by Lewkowich Engineering Associates Ltd.
Sequence/time development to reduce impacts of development	<ul style="list-style-type: none"> • Sequencing and timing of development is not specified.

Development Permit Area 8 – Multi-Unit Residential ESA:

The lands included in DPA 8 include the following forest ecosystems: Douglas Fir, Arbutus, Western Red Cedar, and Bigleaf Maple. The ecosystems contain intact contiguous forest stands; dry, rocky outcrops; and sensitive riparian areas with tributaries to Holland Creek and Rocky Creek. Integration of the site's natural topography, the protection of its natural environment and sensitive ecosystems are all important objectives of DPA 8. The proposed development has been reviewed for consistency with DPA 8 and is generally consistent with the DPA 8 guidelines.

Table 5: Summary of Proposal's Consistency with DPA 8 – Multi-Unit Residential ESA Guidelines

Guidelines	Observations
Form, Character and Exterior Design	
Contemporary west coast design, reflective of Ladysmith's built heritage	<ul style="list-style-type: none"> The proposed design is contemporary, albeit heritage elements are not reflected in the design.
Scale/neighbourhood identity	<ul style="list-style-type: none"> The proposed buildings are of a human scale and the architectural theme and massing are consistent throughout the building's design.
Response to site topography	<ul style="list-style-type: none"> Buildings are stepped with the site topography.
Façade	<ul style="list-style-type: none"> Building facades are articulated through the use of varying colours, finishes, projections and rooflines.
Exterior materials	<ul style="list-style-type: none"> Exterior cladding consists of high quality, fibre cement ("hardie-board") horizontal plank and panel siding. Natural elements such as rock and wood are not used on the apartment building's exterior; however, the proposed picnic shelter consists of timber frame, and boulders are used as retaining walls in prominent locations on the site.
Private outdoor space	<ul style="list-style-type: none"> All residential units contain a private balcony. Balconies are screened from each other with vertical walls.
Underground/underbuilding parking areas	<ul style="list-style-type: none"> No underground parking is proposed. However, the surface parking is proposed to be reduced through a variance (DVP 20-04), reducing the overall area used for parking.
Parking garage entries	Not applicable
Building Siting and Conservation	
Building & Window placement	<ul style="list-style-type: none"> The proposed buildings are placed close to the forested SPEA. Units on the south side of the building will have views of the forested SPEA. Windows are large and plentiful, maximizing views to the outside and allowing for natural ventilation. The building is proposed to utilize low flow plumbing fixtures and LED lighting.
Building orientation	<ul style="list-style-type: none"> More than half the units are south facing; however, presence of the nearby SPEA, which contains tall trees, may cause some shading for south facing units.
Site Design & Circulation	
Views from Arbutus Hump	<ul style="list-style-type: none"> Not applicable.
Orientation towards street & semi-public space	<ul style="list-style-type: none"> A SPEA and single family parcels separate the property from the street (Rollie Rose Drive), therefore the building cannot be oriented to the street. A street oriented semi-public space between the building and the street is also not possible.
Outdoor common space	<ul style="list-style-type: none"> An outdoor common space for residents is provided and includes a shelter with picnic tables.
Surface parking	<ul style="list-style-type: none"> Surface parking is located in three distinct areas or "clusters", one of which is located in the front of the building. The three surface parking areas work with the existing topography. Landscaping surrounding each of the parking areas is proposed.

Guidelines	Observations
Pedestrian circulation & linkages	<ul style="list-style-type: none"> • Pedestrian pathways linking Rollie Rose Drive to the interior of the site are proposed. • Pedestrian pathways in front of the building and connecting to the parking areas consist of concrete. • Pedestrian pathways at the rear of the building, between the building and the SPEA, consist of crushed aggregate. • A public pedestrian pathway is proposed along the driveway into the site from Rollie Rose drive. The pathway is intended to provide a connection from Rollie Rose Drive to the Holland Creek Trail by utilizing the culvert crossing over the watercourse. The pathway is required under a Town statutory right-of-way registered to the property title.
Strata roads	<ul style="list-style-type: none"> • The driveway within the site incorporates pedestrian pathways.
Bicycle Parking	<ul style="list-style-type: none"> • Outdoor and indoor bicycle parking will be provided. • Outdoor bicycle parking is provided near the building's main front entrance. • Indoor storage areas are provided near the stairs/elevator on each floor.
Natural Environment and Sensitive Ecosystems	
Land clearing	<ul style="list-style-type: none"> • Land clearing is not proposed prior to issuance of DP 20-09. • Danger trees inside and outside of the SPEA will be treated in accordance with the approved RAPR Report, attached as Schedule H to DP 20-09. • The applicant is proposing to clear only one section of the subject property, the rest of which will remain intact forest.
Identification of green space to be protected	<ul style="list-style-type: none"> • Additional forested areas located outside of the SPEA on the subject property will be retained, as shown in figure 3. Any future land clearing would require another DP.
Protection of SPEA	<ul style="list-style-type: none"> • The large SPEA located on the site (see figure 4) will be protected in accordance with DP 20-09 and the Provincial Riparian Areas Protection Regulation. • No development activities are permitted within the SPEA.
Riparian Assessment Area	<ul style="list-style-type: none"> • See table 3.
Identify SPEA during construction	<ul style="list-style-type: none"> • Identifying the SPEA boundary with stakes, flagging, rope line and snow fencing is required before construction, in accordance with DP 20-09 and the RAPR report.
Construction environmental management plan	<ul style="list-style-type: none"> • A construction environmental management plan is included in the RAPR report and forms part of DP 20-09.
Sediment and erosion control plan	<ul style="list-style-type: none"> • A sediment and erosion control plan is included in the RAPR report, which forms part of DP 20-09.
Bird breeding surveys	<ul style="list-style-type: none"> • Nest sites are protected under the Provincial and Federal legislation.
Steep slopes	<ul style="list-style-type: none"> • See Table 3.
Fire smart (landscaping)	<ul style="list-style-type: none"> • Most plantings will be native, drought tolerant species. Some conifers are proposed including yew and red cedar.
Tree preservation plan	<ul style="list-style-type: none"> • The applicant has submitted a Windthrow and Hazard Tree Assessment prepared by a Registered Professional Forester, which is attached to the RAPR report and DP 20-09. The assessment identifies protection measures for SPEA trees with root zones that fall within the construction area, as well as including recommendations such as retaining trees that require removal as coarse woody debris within the SPEA, and treatment of hazard trees.

Guidelines	Observations
Landscaping, Energy & Water Conservation, and GHG Emission Reduction	
Landscape plan	<ul style="list-style-type: none"> A landscape plan for the site has been prepared by a Landscape Architect and is attached to DP 20-09.
6.0 m landscape buffer along hydro corridor	<ul style="list-style-type: none"> Four western red cedar trees are proposed in a small section of land adjacent to the BC Hydro right-of-way on the western property boundary to act as a buffer. Other sections of the property adjacent to the BC Hydro right-of-way along the western property boundary are to remain in their natural forested state.
Native and drought tolerant plants	<ul style="list-style-type: none"> New landscaping plantings consist of native and drought tolerant species.
Stormwater management	<ul style="list-style-type: none"> The proposed stormwater management infrastructure includes bio-swales.
Rainwater collection	<ul style="list-style-type: none"> The geotechnical assessment identifies that site conditions are not conducive to the installation of an on-site stormwater infiltration medium (other than those identified on the stormwater management plan, such as bio-swales) but may be conducive to the installation of stormwater detention features. An oil-water separator is proposed and is required by the Zoning Bylaw.
Refuse, recycling and organics areas	<ul style="list-style-type: none"> Waste collection areas are located within an enclosed building on the site, the form and character of which is consistent with the design of the multi-family buildings.
Exterior lighting	<ul style="list-style-type: none"> Exterior lighting will be downcast, following “dark sky” principles.
Retaining walls	<ul style="list-style-type: none"> Retaining walls are proposed to be cast-in-place concrete and/or made from large boulders. Vegetation will be incorporated into the retaining wall design.
Monetary security	<ul style="list-style-type: none"> DP 20-09 requires a bond of \$180,547 to ensure landscaping is carried out in accordance with the landscape plan and RAPR report recommendations.
Landscaping standards	<ul style="list-style-type: none"> The proposed landscaping conforms to the BC Landscape Standard.
Monitoring	
Conditions included in DP	<ul style="list-style-type: none"> DP 20-09 requires a post-construction monitoring report prior to issuance of an occupancy permit to ensure that SPEA protection measures are followed.
Monitoring by a QEP during site clearing and construction	<ul style="list-style-type: none"> DP 20-09 and the RAPR assessment require the QEP to undertake regular monitoring during construction.
Release of landscaping security to be accompanied by a report	<ul style="list-style-type: none"> A report from the Landscape Architect is required prior to release of the required landscape security.

Development Permit Security Conditions:

[Section 502 of the Local Government Act](#) allows the local government to require the applicant to provide security to ensure that landscaping and environmental protection measures are met. The local government can use the security to correct landscaping conditions that have not been met, or to correct damage to the natural environment resulting from a contravention of the DP.

As a condition of DP 20-09, staff recommend that the permittee provide security to the Town for the following:

- security in the amount of \$5,000 to correct damage to the SPEA ; and
- security in the amount of \$180,547 for landscaping. \$172,795 for landscaping outside the SPEA and \$7,752 for revegetation within the SPEA.

Under DP 20-09 releasing the above-noted security is conditional on:

- receipt of a post-construction monitoring report from the QEP that verifies that measures in place to protect the SPEA were followed and that the SPEA has not been damaged;
- receipt of a post-planting report from the Landscape Architect for non-SPEA landscaping; and
- receipt of a post-planting report from the QEP for SPEA plantings.

Summary:

As the proposed development is generally compliant with the DPA 8, DPA 7 and DPA 6 guidelines, staff recommend issuance of DP 20-09. Monetary security conditions are in place to ensure that landscaping and environmental protection requirements are followed.

Concerns about the building's height, namely, overlook, and lighting will be mitigated by the substantial treed buffer between the proposed apartment building and the single-family residential area. The proposed number of parking spaces, 153, is considered by staff to be reasonable for the 96 unit residential building. As such, it is recommended that DVP 20-04 also be issued.

ALTERNATIVES:

Council can choose to:

- 1) Refuse the parking variance component of DVP 3090-20-04.
 - Changes to DP 20-09 would be required and issuance of DP 20-09 would not be possible.
- 2) Refuse the height variance component of DVP 3090-20-04.
 - Changes to DP 20-09 would be required and issuance of DP 20-09 would not be possible.
- 3) Refuse DVP 3090-20-04 in its entirety.
 - Changes to DP 20-09 would be required and issuance of DP 20-09 would not be possible.
- 4) Refuse issuance of DP 3060-20-09 based on non-compliance with the DPA guidelines
 - Reasons must be provided based on non-compliance with the DPA guidelines.
- 5) Refer the application back to staff for further review

FINANCIAL IMPLICATIONS:

None.

LEGAL IMPLICATIONS:

The *Local Government Act* allows Council to vary zoning regulations excluding regulations of use, density and rental tenure through issuance of a DVP. Subsequently, Council can vary the parking and height provisions as proposed in DVP 3090-20-04.

If DP 3060-20-09 is refused, reasons must be given based on the DPA 8, DPA 7 or DPA 6 guidelines because issuing a DP is not a completely discretionary decision of Council. Additionally, DP 3060-20-09 cannot be approved unless DVP 3090-20-04 is approved first since a DP cannot authorize a development that does not comply with the Zoning Bylaw. If Council rejects DVP 3090-20-04 it must also reject DP 3060-20-09

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

Notice of the proposed height and parking variances under DVP 3090-20-04 was issued in accordance with the requirements of the *Local Government Act* and Development Procedures Bylaw No. 1667. On August 6, 2020 a notice was delivered to the property owners/residents within 60m of the subject property. At time of writing, five submissions have been received (attached). Concerns stated in the submissions are summarized in table 2 (see 'Public Feedback'). Staff received inquiries regarding issuance of a second notice, however renotification is not required unless the proposed variances change.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

The application was referred to Infrastructure Services (Engineering), the Building Inspector, the Fire Chief and the Town's Arborist. Their comments have been addressed in the draft permits and/or will be addressed through the building permit stage.

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Complete Community Land Use | <input type="checkbox"/> Low Impact Transportation |
| <input type="checkbox"/> Green Buildings | <input type="checkbox"/> Multi-Use Landscapes |
| <input type="checkbox"/> Innovative Infrastructure | <input type="checkbox"/> Local Food Systems |
| <input type="checkbox"/> Healthy Community | <input type="checkbox"/> Local, Diverse Economy |
| <input type="checkbox"/> Not Applicable | |

ALIGNMENT WITH STRATEGIC PRIORITIES:

- | | |
|---|---|
| <input type="checkbox"/> Infrastructure | <input type="checkbox"/> Economy |
| <input checked="" type="checkbox"/> Community | <input type="checkbox"/> Not Applicable |
| <input type="checkbox"/> Waterfront | |

I approve the report and recommendation(s).

Allison McCarrick, Chief Administrative Officer

ATTACHMENT(S):

- DP 3060-20-09
- DVP 3090-20-04

- Public Submissions
- Applicant Letter of Rationale (November 6, 2020)
- Applicant Submission – Height Rendering (August 26, 2020)



TOWN OF LADYSMITH DEVELOPMENT PERMIT

(Section 489 *Local Government Act*)

FILE NO: 3060-20-09

DATE: November 17, 2020

Name of Owner(s) of Land (Permittee): 1223434 B.C. Ltd., Inc. No. BC1223434

Applicant: Jacquie Kinnersley (Westmark Construction Ltd.)

Subject Property (Civic Address): 107 Rollie Rose Drive

1. This Development Permit is subject to compliance with all of the bylaws of the Town of Ladysmith applicable thereto, except as specifically varied by this Permit.
2. This Permit applies to and only to those lands within the Town of Ladysmith described below, and any and all buildings structures and other development thereon:

LOT 13 DISTRICT LOT 103 OYSTER DISTRICT PLAN EPP75579

PID: 030-477-638

(referred to as the "Land")

3. This Permit has the effect of authorizing the alteration of land and construction of a multi-unit residential building and accessory buildings on the Land, located within:
 - (a) Development Permit Area 8 – Multi-Unit Residential ESA,
 - (b) Development Permit Area 7 – Hazard Lands, and
 - (c) Development Permit Area 6 – Riparianas designated within the Official Community Plan Bylaw 2003, No. 1488 under sections 488(1) (a), (b), (f), (h), (i) and (j) of the *Local Government Act*, in accordance with the plans and specifications attached to this Permit, and subject to the conditions, requirements and standards imposed and agreed to in this Permit and all applicable laws.
4. With respect to the Land, section 5.2.e) of Town of Ladysmith Zoning Bylaw 2014, No. 1860 are hereby varied to reduce the setback of a multi-unit residential building to a minimum of 10.5m from the high water mark of a watercourse, as shown in **Schedule B – SPEA Site Plan**.

5. This Permit does not have the effect of varying the use or density of the Land specified in Zoning Bylaw 2014, No. 1860.
6. The Permittee, as a condition of the issuance of this Permit, agrees:
 - (a) To develop the Land in accordance with **Schedule A – Site & Parking Plan, Schedule B – SPEA Site Plan, Schedule C – Landscape Plan, Schedule D – Multi-Unit Building Elevations, Schedule E – Accessory Building Design, Schedule F – Conceptual Design Renderings, and Schedule G – Building Materials & Colours** including the following:
 - i. All exterior lighting on the site, including parking lot lighting, shall be cast downward, away from neighbouring residential and park areas.
 - ii. The bicycle parking provided shall be in accordance with section 8.3 of Zoning Bylaw No. 1860, ‘Calculation and Design of Off-Street Bicycle Parking Spaces’.
 - iii. A minimum of one electric-bike charging stations per storey shall be provided.
 - iv. A minimum of four electric-vehicle charging stations shall be provided within the central parking area, as shown on **Schedule A – Site & Parking Plan**.
 - (b) To protect the 10m Streamside Protection and Enhancement Area (SPEA) shown in **Schedule B – SPEA Site Plan** by adhering to all the measures and recommendations in **Schedule H – Riparian Areas Protection Regulation Assessment Report** and its appendices, including the following:

PRIOR TO CONSTRUCTION AND CLEARING

- i. The SPEA boundary is to be located with stakes, flagging, rope line and snow fencing, identified with signage, and noted on all construction plans.
- ii. The building construction envelope will be marked and isolated from the SPEA by surveyed stakes.
- iii. The Qualified Environmental Professional (QEP) will hold a pre-construction meeting with workers prior to any construction or land clearing, and will review the SPEA area, work boundaries and protection measures contained in **Schedule H** with workers and supervisors.

DURING CONSTRUCTION

- i. The SPEA must not be encroached, altered, or impacted by construction in any way.
- ii. Wet weather shutdown must occur during earthworks and other activities that could result in erosion or sediment runoff. The activity must be stopped and protective actions taken.
- iii. Disturbance of roots of trees within and on the edge of the SPEA must be minimized. A setback of at least 3m from the tree root bole is

- required. Setbacks will be marked and identified with fencing during construction, and mulch afterwards.
- iv. All works will be monitored by the QEP during land clearing and construction in accordance with the recommendations of **Schedule H**.
 - v. All stormwater management works will be inspected by a qualified Engineer and QEP to ensure they are installed and function to protect the SPEA.
 - vi. Exposed soils will require erosion control measures at all times, as identified in **Schedule H**. All erosion and sediment control measures are identified in **Schedule H**.
 - vii. The contractor will have the following items on site at all times:
 - a. 50m of 20cm diameter oil containment boom
 - b. 200 x 2L absorbent pads
 - c. Straw bales and/or truck load bark mulch or clean gravel
 - d. 1000 ft² tarps or rolls of poly sheeting
 - e. One industrial spill kit on each piece of heavy equipment
 - f. Water pumps/hoses for water bypass and sump removal
 - g. Water turbidity will be measured routinely with environmental inspections by the QEP
 - h. All areas disturbed during construction will be covered with hydroseed.
 - viii. Machinery must be stored and fueled away from the SPEA.

POST CONSTRUCTION & LONG TERM PROTECTION

- i. Prior to building permit occupancy, a 6 foot tall, permanent, solid, wood panel fence shall be constructed along the SPEA boundary for long term protection of the SPEA. Signage shall be affixed to the fence, facing the building, at 10m intervals, which reads "Riparian Preserve Area – Do Not Enter".
- ii. Infill planting of native species within the SPEA is required in accordance with the recommendations in **Schedule H**.
- iii. Prior to building permit occupancy, the QEP shall submit to the Town a post-construction monitoring report which confirms that the requirements and measures to protect the SPEA were completed and that the SPEA was adequately protected.
- iv. All temporary works required to install the culvert over the watercourse on the Land will be removed and exposed soils revegetated along the stream banks to avoid sedimentation of the watercourse.
- v. The SPEA must be kept in its natural state with the exception of the following:
 - a. Removal or treatment of danger trees is permitted in accordance with the recommendations of **Schedule H**; however, trees to be felled shall be retained in the SPEA as coarse woody debris. Trees that require removal should be cut at a high stump/trunk (5-10m) to remove the danger but preserve the tree. A qualified arborist is required for danger tree treatment or removal.
 - b. Infill planting of native species.

c. Removal of invasive species.

- (c) To protect the Land from hazards, in accordance with the recommendations in Appendix 3 – Geotechnical Assessment in **Schedule H**, including the following:
- a. All civil works must be located behind a 30 degree reference line as depicted on the drawing cross sections in Appendix 3, and/or include mitigative works with direction from the Geotechnical Engineer.
 - b. A minimum flood construction level of 1.5m above the crown of road at the stream crossing, or a minimum of 1.5m above the high water mark as measured perpendicularly to the watercourse, whichever is greater, is required.
 - c. The FCL is defined as the minimum elevation to the top of concrete slab for habitable buildings. The building design incorporates habitable areas below the FCL that range from 2.5m to 4.5m, which is allowable considering the building is at least 12m from the high water mark, incised into an impermeable stratum, and will include impermeable earthen berms and/or concrete walls up to FCL to prevent the ingress of water during a maximum 1 in 200 year storm event.
 - d. A watercourse setback of 10.0m, measured from the high water mark, is recommended.
 - e. Site conditions may be conducive to the installation of stormwater detention measures. The locations of any proposed detention measures shall be reviewed by the Geotechnical Engineer to determine if the design methods and/or locations pose a hazard to the Land or any adjacent or adjoining properties.
7. This Permit is issued on the condition that the Permittee has provided to the Town of Ladysmith security in the form of an irrevocable Letter of Credit to guarantee the performance of the conditions in section 6(a) of this Permit respecting landscaping, and conditions in section 6(b) of this Permit respecting infill planting within the SPEA. The Letter of Credit shall be for a period of two years, shall be automatically extended, and shall be in the amount of \$180,547. Request for release of the security shall be accompanied by a report from a Landscape Architect and a QEP, confirming that the landscaping and infill plantings in the SPEA have been planted in accordance with **Schedule H**.
8. This Permit is issued on the condition that the Permittee has provided to the Town of Ladysmith security in the form of an irrevocable Letter of Credit to guarantee the performance of the conditions in section 6(b) of this Permit respecting measures to protect the SPEA from damage. The Letter of Credit shall be for a period of two years, shall be automatically extended, and shall be in the amount of \$5000. Request for release of the security shall be accompanied by a report from a QEP, confirming that the requirements and

measures to protect the SPEA were completed and that the SPEA was adequately protected, in accordance with **Schedule H**.

9. Should the Permittee fail to satisfy the conditions referred to in this Permit, the Town of Ladysmith may undertake and complete the works required to satisfy the landscaping conditions and reclamation of the SPEA, at the cost of the Permittee, and may apply the security in payment of the cost of the work, with any excess to be returned to the Permittee.
10. The Permittee may, in lieu of a Letter of Credit, deposit with the Treasurer of the Town of Ladysmith the sum of the security in cash.
11. Should there be no default as herein provided, or where a Permit lapses, the Town of Ladysmith shall return any security provided to the Permittee.
12. If the Permittee does not substantially start any construction permitted by this Permit within **two years** of the date of this Permit as established by the authorizing resolution date, this Permit shall lapse.
13. The plans and specifications attached to this Permit are an integral part of this Permit.
14. Notice of this Permit shall be filed in the Land Title Office at Victoria under s.503 of the *Local Government Act*, and upon such filing, the terms of this Permit **(3060-20-09)** or any amendment hereto shall be binding upon all persons who acquire an interest in the land affected by this Permit.
15. This Permit prevails over the provisions of the Bylaw in the event of conflict.
16. Despite issuance of this Permit, construction may not start without a Building Permit or other necessary permits.

**AUTHORIZING RESOLUTION PASSED BY THE COUNCIL OF THE TOWN OF LADYSMITH
ON THE ____ DAY OF _____ 202__.**

Mayor (A. Stone)

Corporate Officer (D. Smith)

I **HEREBY CERTIFY** that I have read the terms and conditions of the Development Permit contained herein. I understand and agree that the Town of Ladysmith has made no representations, covenants, warranties, guarantees, promises or agreements (verbal or otherwise) with **1223434 B.C. Ltd., Inc. No. BC1223434** other than those contained in this Permit.

Signed

Witness

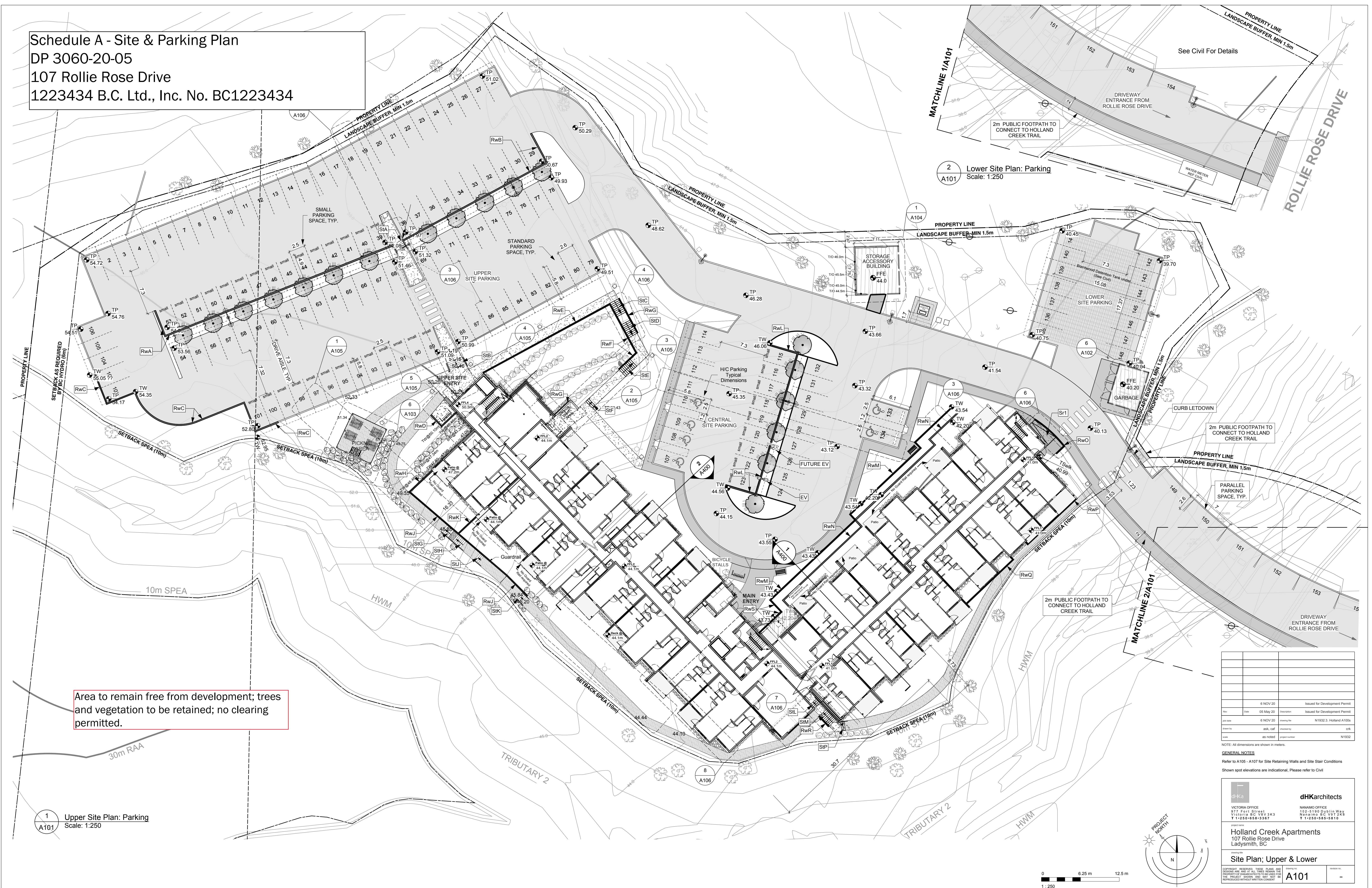
Title

Occupation

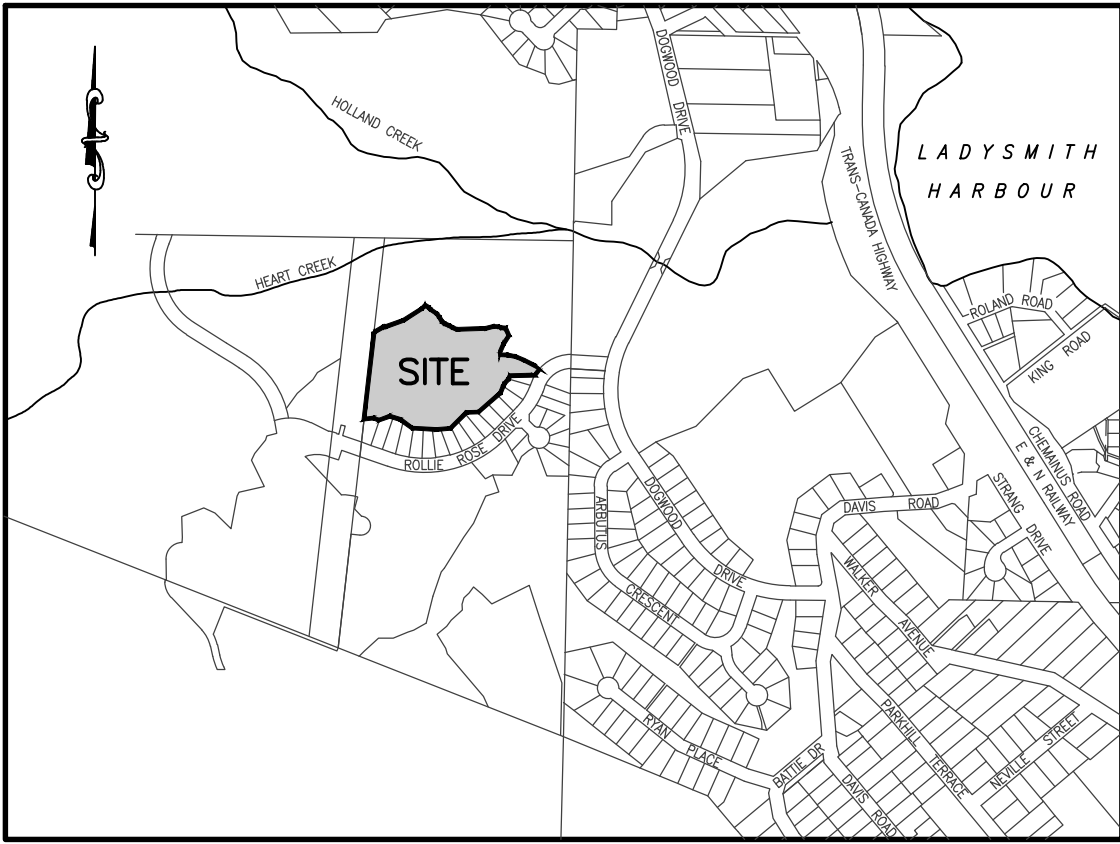
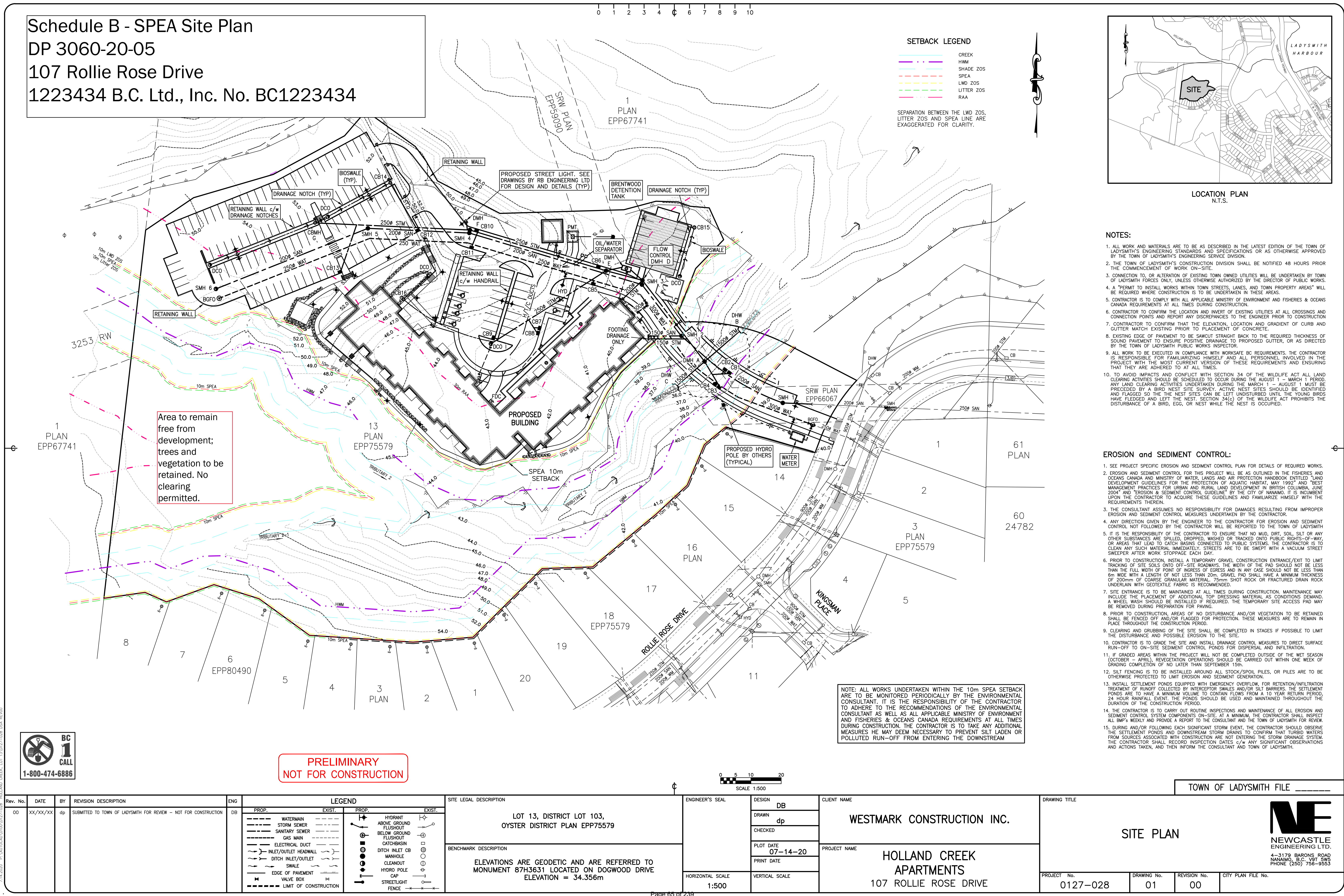
Date

Date

Schedule A - Site & Parking Plan
DP 3060-20-05
107 Rollie Rose Drive
1223434 B.C. Ltd., Inc. No. BC1223434



Schedule B - SPEA Site Plan
DP 3060-20-05
107 Rollie Rose Drive
1223434 B.C. Ltd., Inc. No. BC1223434



LOCATION PLAN
N.T.S.

- NOTES:
- ALL WORK AND MATERIALS ARE TO BE AS DESCRIBED IN THE LATEST EDITION OF THE TOWN OF LADYSMITH'S ENGINEERING STANDARDS AND SPECIFICATIONS OR AS OTHERWISE APPROVED BY THE TOWN OF LADYSMITH'S ENGINEERING SERVICE DIVISION.
 - THE TOWN OF LADYSMITH'S CONSTRUCTION DIVISION SHALL BE NOTIFIED 48 HOURS PRIOR TO THE COMMENCEMENT OF WORK ON-SITE.
 - CONNECTION TO, OR ALTERATION OF EXISTING TOWN OWNED UTILITIES WILL BE UNDERTAKEN BY TOWN OF LADYSMITH FORCES ONLY, UNLESS OTHERWISE AUTHORIZED BY THE DIRECTOR OF PUBLIC WORKS.
 - A "PERMIT TO INSTALL WORKS WITHIN TOWN STREETS, LANES, AND TOWN PROPERTY AREAS" WILL BE REQUIRED WHERE CONSTRUCTION IS TO BE UNDERTAKEN IN THESE AREAS.
 - CONTRACTOR IS TO COMPLY WITH ALL APPLICABLE MINISTRY OF ENVIRONMENT AND FISHERIES & OCEANS CANADA REQUIREMENTS AT ALL TIMES DURING CONSTRUCTION.
 - CONTRACTOR TO CONFIRM THE LOCATION AND INVERT OF EXISTING UTILITIES AT ALL CROSSINGS AND CONNECTION POINTS AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
 - CONTRACTOR TO CONFIRM THAT THE ELEVATION, LOCATION AND GRADIENT OF CURB AND GUTTER MATCH EXISTING PRIOR TO PLACEMENT OF CONCRETE.
 - EXISTING EDGE OF PAVEMENT TO BE SAWCUT STRAIGHT BACK TO THE REQUIRED THICKNESS OF SOUND PAVEMENT TO ENSURE POSITIVE DRAINAGE TO PROPOSED GUTTER, OR AS DIRECTED BY THE TOWN OF LADYSMITH PUBLIC WORKS INSPECTOR.
 - ALL WORK TO BE EXECUTED IN COMPLIANCE WITH WORKSAFE BC REQUIREMENTS, THE CONTRACTOR IS RESPONSIBLE FOR FAMILIARIZING HIMSELF AND ALL PERSONNEL INVOLVED IN THE PROJECT WITH THE MOST CURRENT VERSION OF THESE REQUIREMENTS AND ENSURING THAT THEY ARE ADHERED TO AT ALL TIMES.
 - TO AVOID IMPACTS AND CONFLICT WITH SECTION 34 OF THE WILDLIFE ACT ALL LAND CLEARING ACTIVITIES SHOULD BE SCHEDULED TO OCCUR DURING THE AUGUST 1 - MARCH 1 PERIOD. ANY LAND CLEARING ACTIVITIES UNDERTAKEN DURING THE MARCH 1 - AUGUST 1 MUST BE PRECEDED BY A BIRD NEST SITE SURVEY. ACTIVE NEST SITES SHOULD BE IDENTIFIED AND FLAGGED SO THE THE NEST SITES CAN BE LEFT UNDISTURBED UNTIL THE YOUNG BIRDS HAVE FLEDGED AND LEFT THE NEST. SECTION 34(c) OF THE WILDLIFE ACT PROHIBITS THE DISTURBANCE OF A BIRD, EGG, OR NEST WHILE THE NEST IS OCCUPIED.

EROSION and SEDIMENT CONTROL:

- SEE PROJECT SPECIFIC EROSION AND SEDIMENT CONTROL PLAN FOR DETAILS OF REQUIRED WORKS.
- EROSION AND SEDIMENT CONTROL FOR THIS PROJECT WILL BE AS OUTLINED IN THE FISHERIES AND OCEANS CANADA, MINISTRY OF WATER, LANDS AND AIR PROTECTION HANDBOOK ENTITLED "LAND DEVELOPMENT GUIDELINES FOR THE PROTECTION OF AQUATIC HABITAT" AND "BEST MANAGEMENT PRACTICES FOR URBAN AND RURAL LAND DEVELOPMENT IN BRITISH COLUMBIA, JUNE 2004" AND "EROSION & SEDIMENT CONTROL GUIDELINE" BY THE CITY OF NANAIMO. IT IS INCUMBENT UPON THE CONTRACTOR TO ACQUIRE THESE GUIDELINES AND FAMILIARIZE HIMSELF WITH THE REQUIREMENTS THEREIN.
- THE CONSULTANT ASSUMES NO RESPONSIBILITY FOR DAMAGES RESULTING FROM IMPROPER EROSION AND SEDIMENT CONTROL MEASURES UNDERTAKEN BY THE CONTRACTOR.
- ANY DIRECTION GIVEN BY THE ENGINEER TO THE CONTRACTOR FOR EROSION AND SEDIMENT CONTROL NOT FOLLOWED BY THE CONTRACTOR WILL BE REPORTED TO THE TOWN OF LADYSMITH.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT NO MUD, DIRT, SOIL, SILT OR ANY OTHER SUBSTANCES ARE SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY, OR AREAS THAT LEAD TO CATCH BASINS CONNECTED TO PUBLIC SYSTEMS. THE CONTRACTOR IS TO CLEAN ANY SUCH MATERIAL IMMEDIATELY. STREETS ARE TO BE SWEEPED WITH A VACUUM STREET SWEEPER AFTER WORK STOPPAGE EACH DAY.
- PRIOR TO CONSTRUCTION, INSTALL A TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT TO LIMIT TRACKING OF SITE SOILS ONTO OFF-SITE ROADWAYS. THE WIDTH OF THE PAD SHOULD NOT BE LESS THAN THE FULL WIDTH OF POINT OF INGRESS OF EGRESS AND IN ANY CASE SHOULD NOT BE LESS THAN 6m WIDE WITH A LENGTH OF NOT LESS THAN 20m. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 200mm OF COARSE GRANULAR MATERIAL, 75mm SHOT ROCK OR FRACTURED DRAIN ROCK UNDERLAIN WITH GEOTEXTILE FABRIC IS RECOMMENDED.
- SITE ENTRANCE IS TO BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. MAINTENANCE MAY INCLUDE THE PLACEMENT OF ADDITIONAL TOP DRESSING MATERIAL AS CONDITIONS DEMAND. A WHEEL WASH SHOULD BE INSTALLED IF REQUIRED. THE TEMPORARY SITE ACCESS PAD MAY BE REMOVED DURING PREPARATION FOR PAVING.
- PRIOR TO CONSTRUCTION, AREAS OF NO DISTURBANCE AND/OR VEGETATION TO BE RETAINED SHALL BE FENCED OFF AND/OR FLAGGED FOR PROTECTION. THESE MEASURES ARE TO REMAIN IN PLACE THROUGHOUT THE CONSTRUCTION PERIOD.
- CLEARING AND GRUBBING OF THE SITE SHALL BE COMPLETED IN STAGES IF POSSIBLE TO LIMIT THE DISTURBANCE AND POSSIBLE EROSION TO THE SITE.
- CONTRACTOR IS TO GRADE THE SITE AND INSTALL DRAINAGE CONTROL MEASURES TO DIRECT SURFACE RUN-OFF TO ON-SITE SEDIMENT CONTROL PONDS FOR DISPERSAL AND INFILTRATION.
- IF GRADED AREAS WITHIN THE PROJECT WILL NOT BE COMPLETED OUTSIDE OF THE WET SEASON (OCTOBER - APRIL), REVEGETATION OPERATIONS SHOULD BE CARRIED OUT WITHIN ONE WEEK OF GRADING COMPLETION OF NO LATER THAN SEPTEMBER 15th.
- SILT FENCING IS TO BE INSTALLED AROUND ALL STOCK/SPOIL PILES, OR PILES ARE TO BE OTHERWISE PROTECTED TO LIMIT EROSION AND SEDIMENT GENERATION.
- INSTALL SETTLEMENT PONDS EQUIPPED WITH EMERGENCY OVERFLOW, FOR RETENTION/INFILTRATION TREATMENT OF RUNOFF COLLECTED BY INTERCEPT SWALES AND/OR SILT BARRIERS. THE SETTLEMENT PONDS ARE TO HAVE A MINIMUM VOLUME TO CONTAIN FLOWS FROM A 10 YEAR RETURN PERIOD 24 HOUR RAINFALL EVENT. THE PONDS SHOULD BE USED AND MAINTAINED THROUGHOUT THE DURATION OF THE CONSTRUCTION PERIOD.
- THE CONTRACTOR IS TO CARRY OUT ROUTINE INSPECTIONS AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL SYSTEM COMPONENTS ON-SITE. AT A MINIMUM, THE CONTRACTOR SHALL INSPECT ALL BMP'S WEEKLY AND PROVIDE A REPORT TO THE CONSULTANT AND THE TOWN OF LADYSMITH FOR REVIEW.
- DURING AND/OR FOLLOWING EACH SIGNIFICANT STORM EVENT, THE CONTRACTOR SHOULD OBSERVE THE SETTLEMENT PONDS AND DOWNSTREAM STORM DRAINS TO CONFIRM THAT TURBID WATERS FROM SOURCES ASSOCIATED WITH CONSTRUCTION ARE NOT ENTERING THE STORM DRAINAGE SYSTEM. THE CONTRACTOR SHALL RECORD INSPECTION DATES c/w ANY SIGNIFICANT OBSERVATIONS AND ACTIONS TAKEN, AND THEN INFORM THE CONSULTANT AND TOWN OF LADYSMITH.

NOTE: ALL WORKS UNDERTAKEN WITHIN THE 10m SPEA SETBACK ARE TO BE MONITORED PERIODICALLY BY THE ENVIRONMENTAL CONSULTANT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ADHERE TO THE RECOMMENDATIONS OF THE ENVIRONMENTAL CONSULTANT AS WELL AS ALL APPLICABLE MINISTRY OF ENVIRONMENT AND FISHERIES & OCEANS CANADA REQUIREMENTS AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS TO TAKE ANY ADDITIONAL MEASURES HE MAY DEEM NECESSARY TO PREVENT SILT LADEN OR POLLUTED RUN-OFF FROM ENTERING THE DOWNSTREAM



PRELIMINARY
NOT FOR CONSTRUCTION

Rev. No.	DATE	BY	REVISION DESCRIPTION	ENG	LEGEND		SITE LEGAL DESCRIPTION	ENGINEER'S SEAL	DESIGN	CLIENT NAME	DRAWING TITLE			
00	XX/XX/XX	dp	SUBMITTED TO TOWN OF LADYSMITH FOR REVIEW - NOT FOR CONSTRUCTION	DB	PROP.	EXIST.	PROP.	EXIST.		DB	WESTMARK CONSTRUCTION INC.	SITE PLAN	NEWCASTLE ENGINEERING LTD. 4-3179 BARONS ROAD NANAIMO, B.C. V9T 5W5 PHONE (250) 758-9553	
					WATERMAIN		HYDRANT		DRAWN	dp				
					STORM SEWER		ABOVE GROUND FLUSHOUT		CHECKED					
					SANITARY SEWER		BELOW GROUND FLUSHOUT		PLOT DATE	07-14-20	PROJECT NAME			HOLLAND CREEK APARTMENTS
					GAS MAIN		CATCHBASIN		PRINT DATE		107 ROLLIE ROSE DRIVE	PROJECT No.	0127-028	
					ELECTRICAL DUCT		DITCH INLET CB					DRAWING No.	01	
					INLET/OUTLET HEADWALL		MANHOLE					REVISION No.	00	
					DITCH INLET/OUTLET		CLEANOUT					CITY PLAN FILE No.		
					SWALE		HYDRO POLE							
					EDGE OF PAVEMENT		CAP							
					VALVE BOX		STREETLIGHT		HORIZONTAL SCALE	1:500				
					LIMIT OF CONSTRUCTION		FENCE		VERTICAL SCALE					
									</					

GENERAL NOTES

1.

ALL CONSTRUCTION SHALL CONFORM TO LOCAL, PROVINCIAL AND FEDERAL CODES AND ORDINANCES.
2.

REFER TO ARCHITECTURAL PLANS PREPARED BY dHk ARCHITECTS INC. FOR SITE PLAN LAYOUT, PROPOSED FINISHED FLOOR ELEVATIONS AND SITE GRADING AND OTHER ARCHITECTURAL INFORMATION.
3.

REFER TO STRUCTURAL PLANS PREPARED BY HEROLD ENGINEERING LIMITED FOR ALL SITE RETAINING WALL DESIGN.
4.

EXISTING HAZARD TREE ASSESSMENT, TREE RETENTION FEASIBILITY, TREE REMOVAL AND PROTECTION SHALL BE AS RECOMMENDED BY THE PROJECT ARBORIST PRIOR TO ANY SITE DISTURBANCE.
5.

REFER TO THE ENVIRONMENTAL REPORT PREPARED BY D.R. CLOUGH CONSULTING FOR ALL ENVIRONMENTAL PROTECTION AND MONITORING REQUIREMENTS.
6.

REFER TO CIVIL PLANS PREPARED BY NEWCASTLE ENGINEERING LTD. FOR ALL SITE SERVICING, GRADING, DRAINAGE AND STORM WATER MANAGEMENT INFORMATION.
7.

REFER TO ELECTRICAL PLANS PREPARED BY RB ENGINEERING LTD. FOR SITE LIGHTING AND LOCATIONS.
8.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, INSTALLING AND MAINTAINING ALL WARNING SIGNS AND DEVICES NECESSARY TO SAFEGUARD THE GENERAL PUBLIC AND THE WORK AND TO PROVIDE FOR THE PROPER AND SAFE ROUTING OF VEHICULAR AND PEDESTRIAN CIRCULATION DURING THE PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
9.

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND THE PROTECTION OF ALL EXISTING UTILITIES. DAMAGE CAUSED BY THE CONTRACTORS INSTALLATION SHALL BE REPAIRED TO THE SATISFACTION OF THE GOVERNING AGENCY AND/OR OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS OF SUCH REPAIRS.
10.

VERIFY CONDITIONS PRIOR TO COMMENCING WORK AND NOTIFY THE LANDSCAPE ARCHITECT OF ANY SUBSTANTIAL DISCREPANCIES.

LANDSCAPE ARCHITECTURE SITE PLAN NOTES

1.

ALL HARD AND SOFT LANDSCAPE MAINTENANCE SHALL MEET OR EXCEED THE MOST RECENT STANDARDS SET OUT BY THE CANADIAN NURSERY LANDSCAPE ASSOCIATION (CNLA) / CANADIAN SOCIETY OF LANDSCAPE ARCHITECTS (CSLA) CANADIAN LANDSCAPE STANDARD SECTION 1.4, TABLE T-1/4.2. MAINTENANCE LEVELS - LEVEL 2 GROOMED, REFER TO SPECIFICATIONS.
2.

WRITTEN DIMENSIONS SHALL TAKE PRECEDENT OVER SCALED DIMENSIONS. ALL FIELD ADJUSTMENTS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
3.

ALL TRADES SHALL COORDINATE WORK SO PROGRESS OF WORK IS NOT INTERRUPTED AND CAN BE COMPLETED IN A TIMELY MANNER.
4.

NEW HARDSCAPE INSTALLATIONS SHALL MEET GRADE OF EXISTING SURFACES.
5.

IRRIGATION SLEEVING SHALL BE INSTALLED PRIOR TO PLACING HARDSCAPE SURFACING AND POURING CONCRETE WALLS, REFER TO IRRIGATION AND CIVIL PLANS.
6.

REFER TO PROJECT DETAILS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
7.

ALL MATERIALS AND FINISHES SHALL PER PER THE DRAWINGS, DETAILS AND SPECIFICATIONS. SOME MATERIALS MAY REQUIRE WEEKS FOR ORDER LEAD TIME. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING ALL ORDERING LEAD TIMES AND PROVIDING REQUIRED MATERIALS AT THE PROJECT SITE IN A TIMELY MANNER. NO UNAPPROVED SUBSTITUTIONS WILL BE ACCEPTED.
8.

THE LANDSCAPE ARCHITECT CANNOT PROVIDE ASSURANCES FOR WORK WITHOUT THE FOLLOWING FIELD REVIEW ATTENDANCE:

A.

CONSTRUCTION START-UP MEETING.

B.

REVIEW OF ROUGH GRADES AND SUB BASE PREPARATION FOR EXTERIOR SURFACES AND PLANTING AREAS.

C.

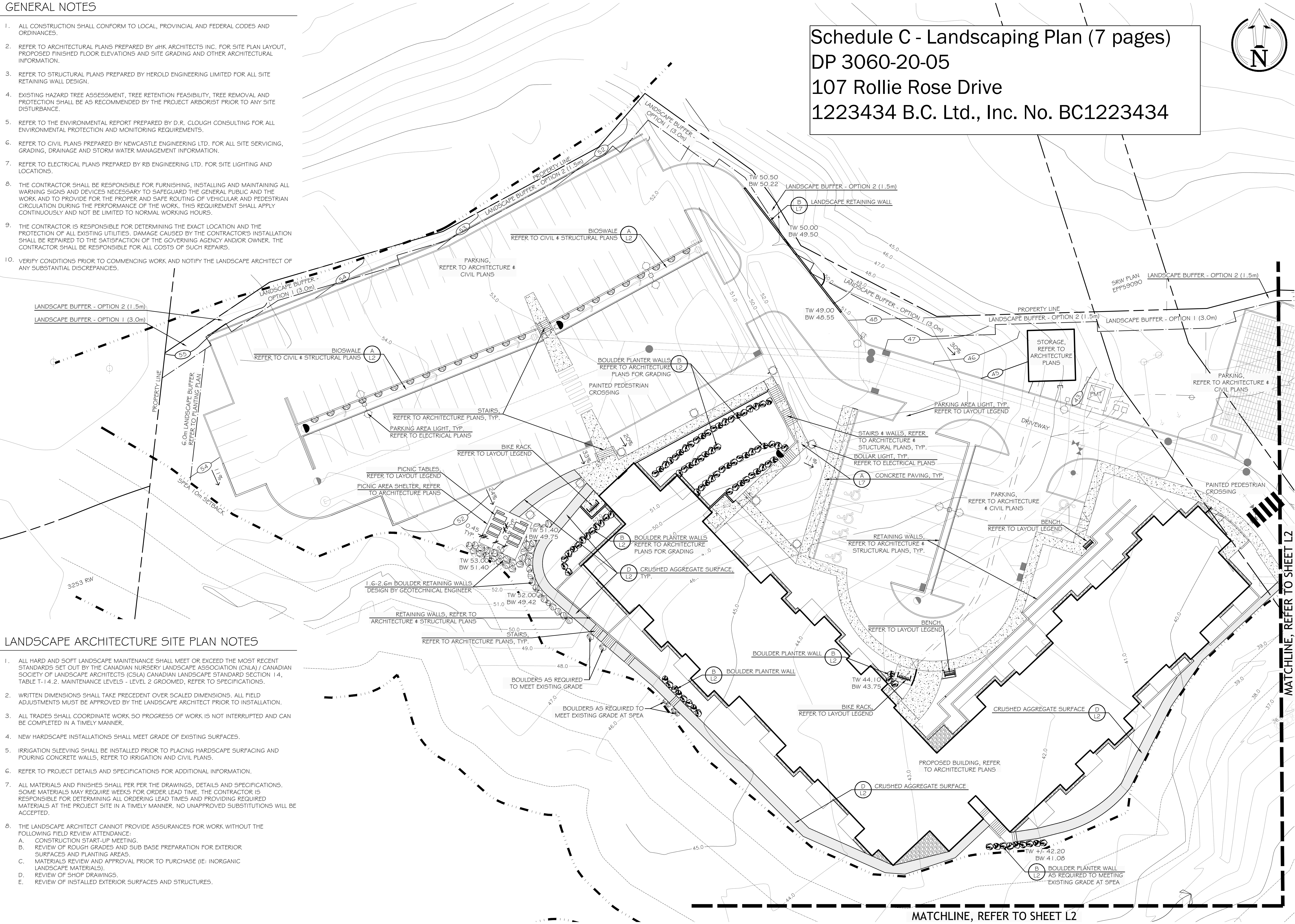
MATERIALS REVIEW AND APPROVAL PRIOR TO PURCHASE (IE: INORGANIC LANDSCAPE MATERIALS).

D.

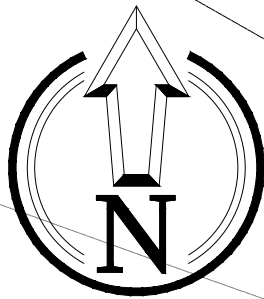
REVIEW OF SHOP DRAWINGS.

E.

REVIEW OF INSTALLED EXTERIOR SURFACES AND STRUCTURES.



Schedule C - Landscaping Plan (7 pages)
DP 3060-20-05
107 Rollie Rose Drive
1223434 B.C. Ltd., Inc. No. BC1223434



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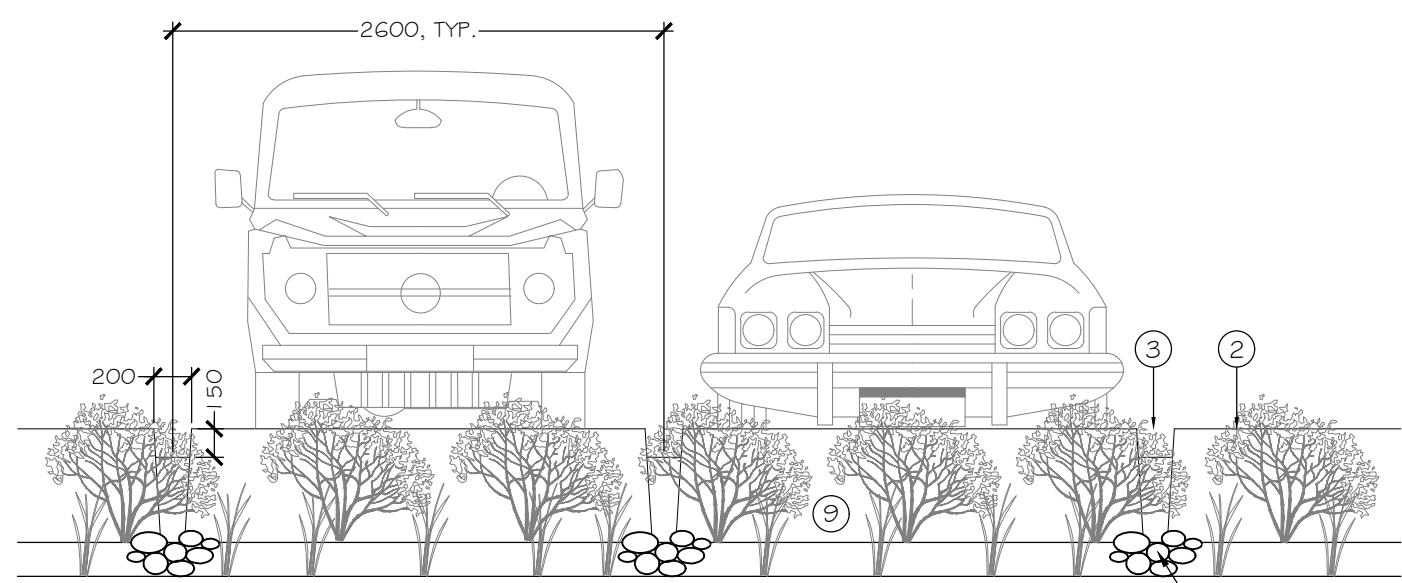
814 Shorewood Drive, Parksville, BC V9P 1S1
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Westmark Construction Inc.
107 Rollie Rose Drive, Ladysmith, BC

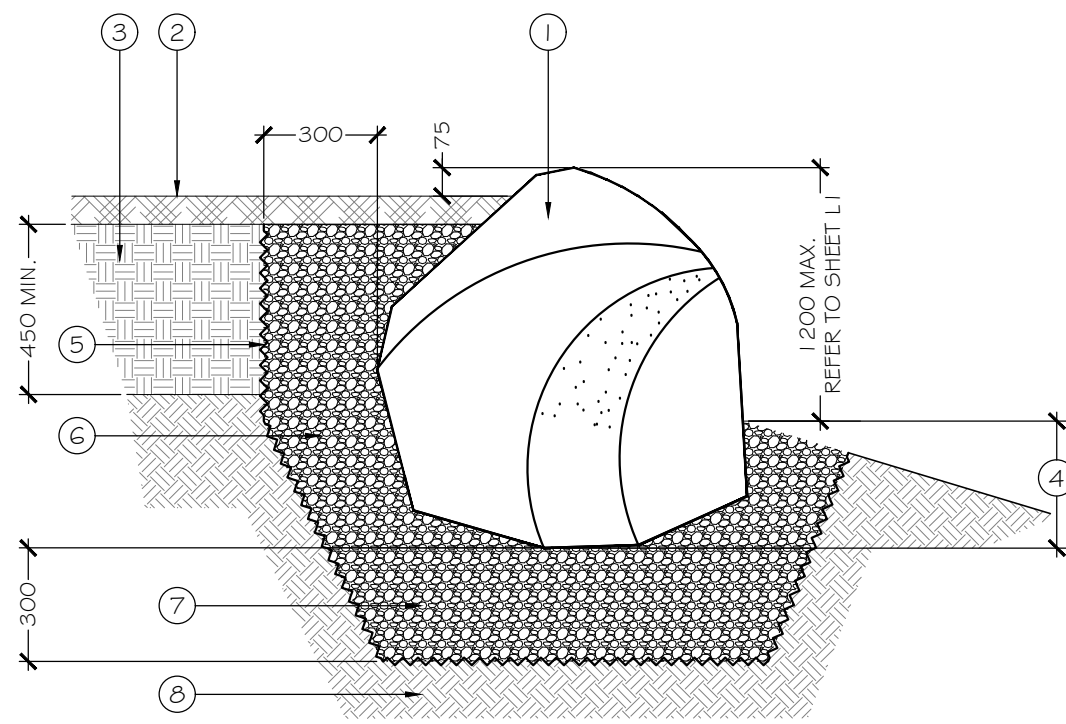
LANDSCAPE ARCHITECTURE SITE PLAN		Date:		Drawn:		Checked:		Scale:		Project Number:		DRAWING NUMBER:	
		August 27, 2020		CM		NG		1:250 metric		20-0259		L1 of 7	

REVISION SCHEDULE		NOTES	
#	Date	Site Plan/Grading Coordination	DP Review
0	22APR2020		
1	01MAY2020		
2	14JUL2020		
3	28JUL2020		
4	27AUG2020		



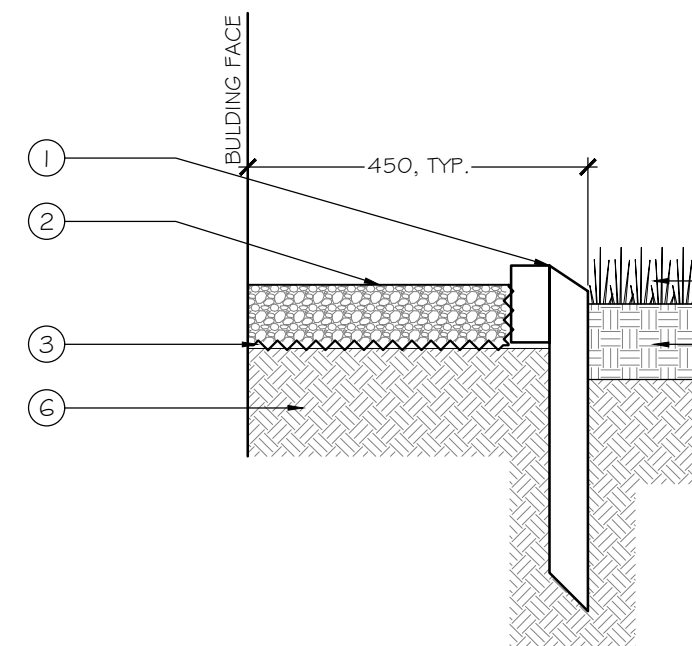
- 1 ASPHALT PARKING LOT
 - 2 RETAINING WALL (STRUCTURAL DESIGN BY OTHERS)
 - 3 FORMED CURB CUT-OUTS AND 'SCUPPERS' TO DIRECT DOWNWARD FLOW OF WATER TO RAIN GARDEN
 - 4 450mm GROWING MEDIUM (ABSORBENT SOIL). REFER TO PLANTING NOTES.
 - 5 100mm DEPTH OF SAND FILTER.
 - 6 DRAIN ROCK RESERVOIR WRAPPED IN FILTER FABRIC. REFER TO CIVIL PLANS FOR RESERVOIR DESIGN.
 - 7 PERFORATED PVC DRAIN PIPE. REFER TO CIVIL PLANS.
 - 8 CURB. REFER TO CIVIL PLANS.
 - 9 RAIN GARDEN PLANTING. REFER TO PLANTING PLAN.
 - 10 ARMOUR THE SPLASH ZONE OF 'SCUPPERS' WITH ROUND, WASHED RIVER ROCK
- NOTES:
1. THIS DETAIL IS CONCEPTUAL IN NATURE AND SHALL BE REFERENCED IN CONJUNCTION WITH APPROPRIATE STRUCTURAL, CIVIL AND ARCHITECTURAL SCOPES OF WORK DURING CONSTRUCTION.

A Bioswale
Section/Elevation
1:40 metric



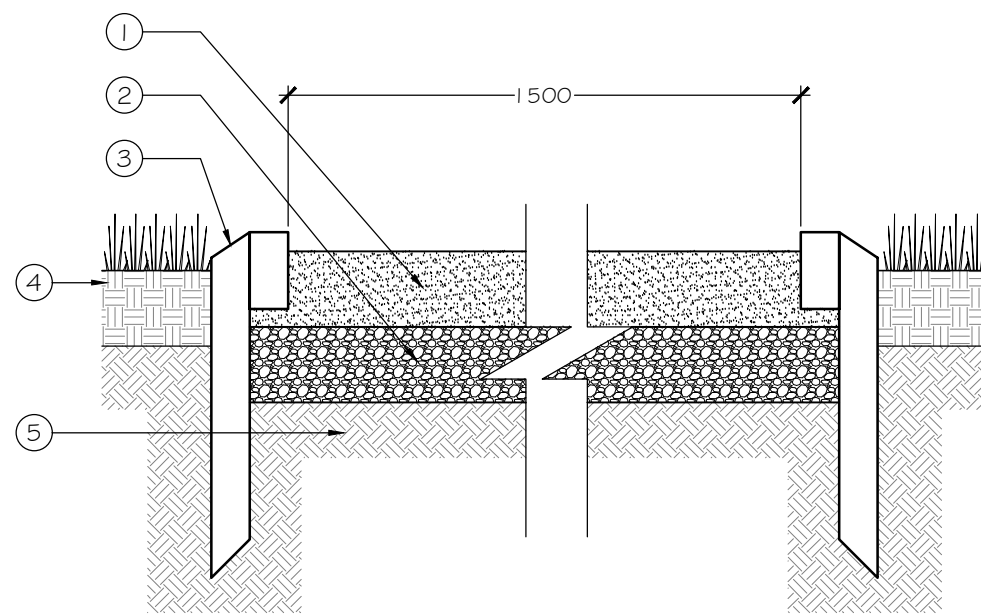
- 1 1.2m +/- DIA. LANDSCAPE BOULDER WALL
 - 2 MULCH. REFER TO PLANTING NOTES
 - 3 GROWING MEDIUM. REFER TO PLANTING NOTES
 - 4 BURY 1/3 OF BOULDER DIAMETER
 - 5 WRAP BACKFILL AND BASE IN GEOTEXTILE FILTER FABRIC
 - 6 3/4" MINUS CLEAR CRUSHED STONE BACKFILL
 - 7 3/4" MINUS COMPACTED CLEAR CRUSHED STONE BASE
 - 8 COMPACTED NATIVE SOIL SUBGRADE
- NOTES:
1. BOULDER WALLS EXCEEDING 1.2m IN HEIGHT REQUIRE GEOTECHNICAL ENGINEERING DESIGN.
 2. CONTRACTOR TO VERIFY SUITABILITY OF SUBGRADE PRIOR TO CONSTRUCTION
 3. DO NOT LEAN, TILT OR FILE BOULDERS

B Boulder Planter Wall
Section
1:20 metric



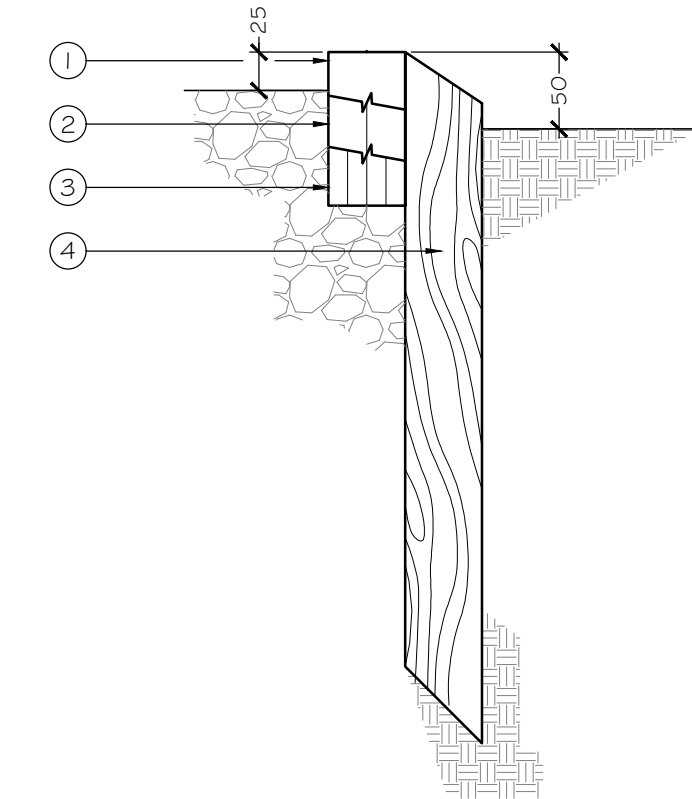
- 1 TIMBER EDGE. REFER TO DETAIL EL2
- 2 100mm DEPTH OF 75mm MINUS ROUND WASHED DRAIN ROCK. SUBMIT A SAMPLE OF MATERIAL FOR APPROVAL PRIOR TO PURCHASE
- 3 LANDSCAPE FILTER FABRIC, NON-WOVEN
- 4 ADJACENT PLANTING AREA
- 5 GROWING MEDIUM
- 6 NATIVE SOIL. TAMP UNDER DRAIN ROCK TO PROVIDE LEVEL SURFACE

C Leave Area
Section
1:10 metric



- 1 100mm DEPTH OF 9.5mm (3/8\") MINUS COMPACTED CRUSHER FINES
 - 2 100mm DEPTH MIN. OF 19mm (3/4\") AGGREGATE BASE
 - 3 TIMBER EDGE. REFER TO DETAIL EL2
 - 4 ADJACENT PLANTING AREA OR BOULDER WALL. REFER TO SITE PLAN
 - 5 COMPACTED SUBGRADE
- NOTES:
1. CROSS SLOPE PATH AT 2% TO DRAINAGE FACILITIES

D Crushed Aggregate Surface
Section
1:10 metric

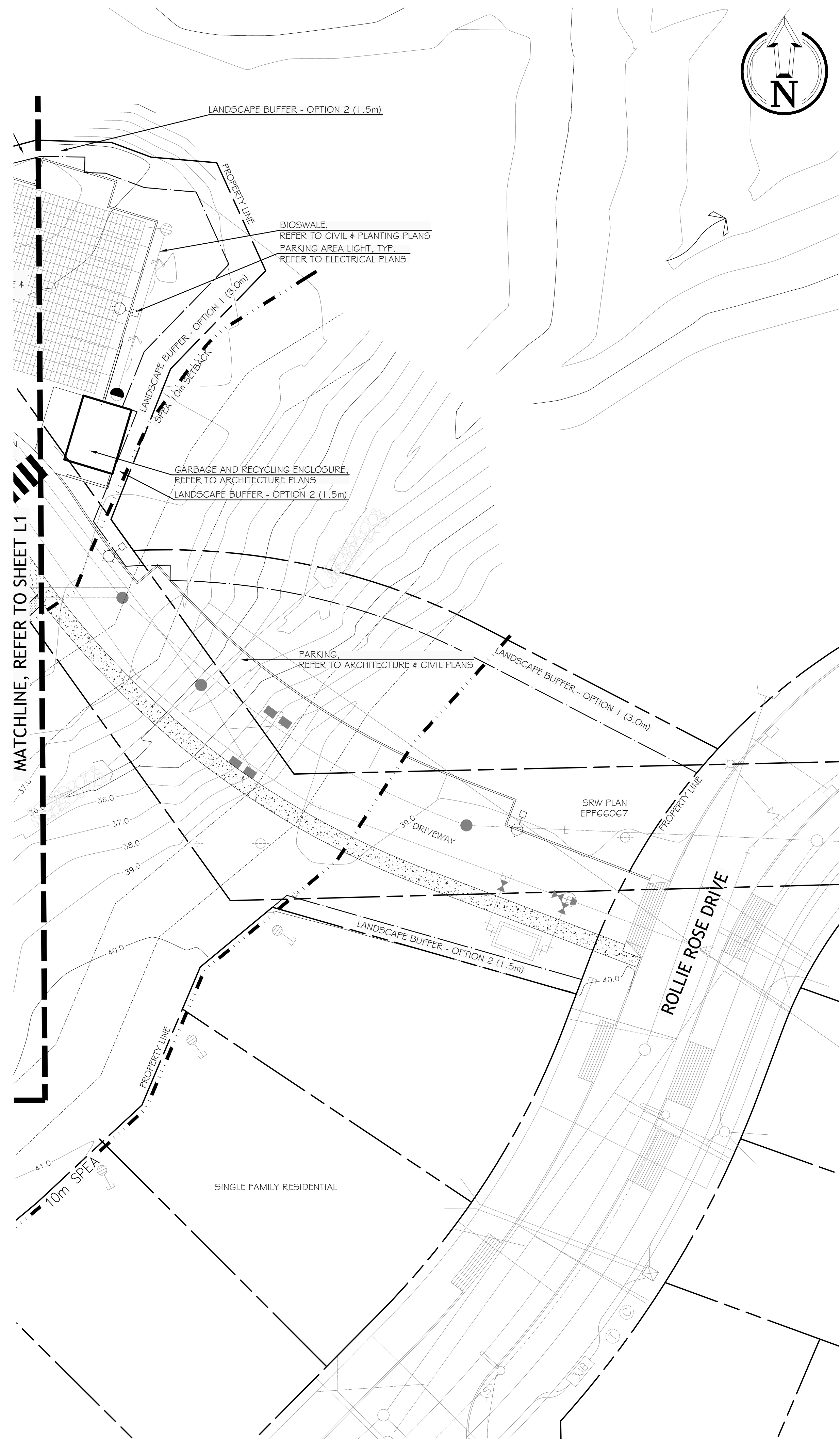


- 1 50mm X 100mm (2\"/>
 - 2 (2) 25mm X 100mm (1\"/>
 - 3 (4) 13mm X 100mm (1/2\"/>
 - 4 50mm X 75mm X 450mm (2\"/>
- NOTES:
1. NAILS AT STAKES SHALL BE 88.9mm (1 6D) GALV. COMMON, (2) PER STAKE MIN.
 2. NAILS AT SPLICES SHALL BE 63.5mm (8D) GALV. COMMON, (2) PER STAKE MIN.

E Timber Edge
Section
1:5 metric

LAYOUT & GRADING LEGEND

ABBREVIATIONS	DESCRIPTION
(E)	EXISTING
TYP.	TYPICAL
PL	PROPERTY LINE
51.0	EXISTING 1.0m CONTOURS, REFER TO CIVIL PLANS
+ TW 10.00	TOP OF WALL
+ BW 10.00	BOTTOM OF WALL
1.2% MAX.	DRAINAGE DIRECTION & SLOPE
SYMBOL	DESCRIPTION
	BOULDER/ STACKED ROCK RETAINING WALL, 1.2m HEIGHT MAX. WALLS EXCEEDING 1.2m IN HEIGHT REQUIRE GEOTECHNICAL DESIGN.
	9.5mm (3/8") MINUS COMPACTED CRUSHED AGGREGATE SURFACE OVER LANDSCAPE FABRIC
	0.45m LEAVE STRIP: 75mm MINUS ROUND WASHED DRAIN ROCK OVER LANDSCAPE FABRIC
	PICNIC TABLES QTY: (2) REGULAR, (2) WHEELCHAIR ACCESSIBLE MANUFACTURER: WISHBONE SITE FURNISHINGS (PH: 800-626-0476) STYLE: RUTHERFORD PICNIC TABLE MODEL: RPT-6 & RPTWC-6 SLAT COLOUR: GREY FRAME COLOUR: VICTOR RIDGE II SURFACE MOUNT PER MANUFACTURER'S RECOMMENDATIONS
	BENCH QTY: 2 MANUFACTURER: WISHBONE SITE FURNISHINGS (PH: 800-626-0476) STYLE: RUTHERFORD PARK BENCH MODEL: RAL-5 SLAT COLOUR: GREY FRAME COLOUR: VICTOR RIDGE II SURFACE MOUNT PER MANUFACTURER'S RECOMMENDATIONS. MINIMUM PAD SIZE 1.8m X 1.2m.
	BIKE RACK QTY: 2 MANUFACTURER: CORA CANADA BIKE RACKS (PH: 800-739-4609) STYLE: EXPO SERIES MODEL: W75 I O COLOUR: MOON LIGHT SILVER SURFACE MOUNT ON 2.4m X 3.0m CONCRETE PAD PER MANUFACTURER'S RECOMMENDATIONS



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814 Shorewood Drive, Parksville, BC V9P 1S1
TEL: 250 248-3089 EMAIL: info@macdonaldgray.ca
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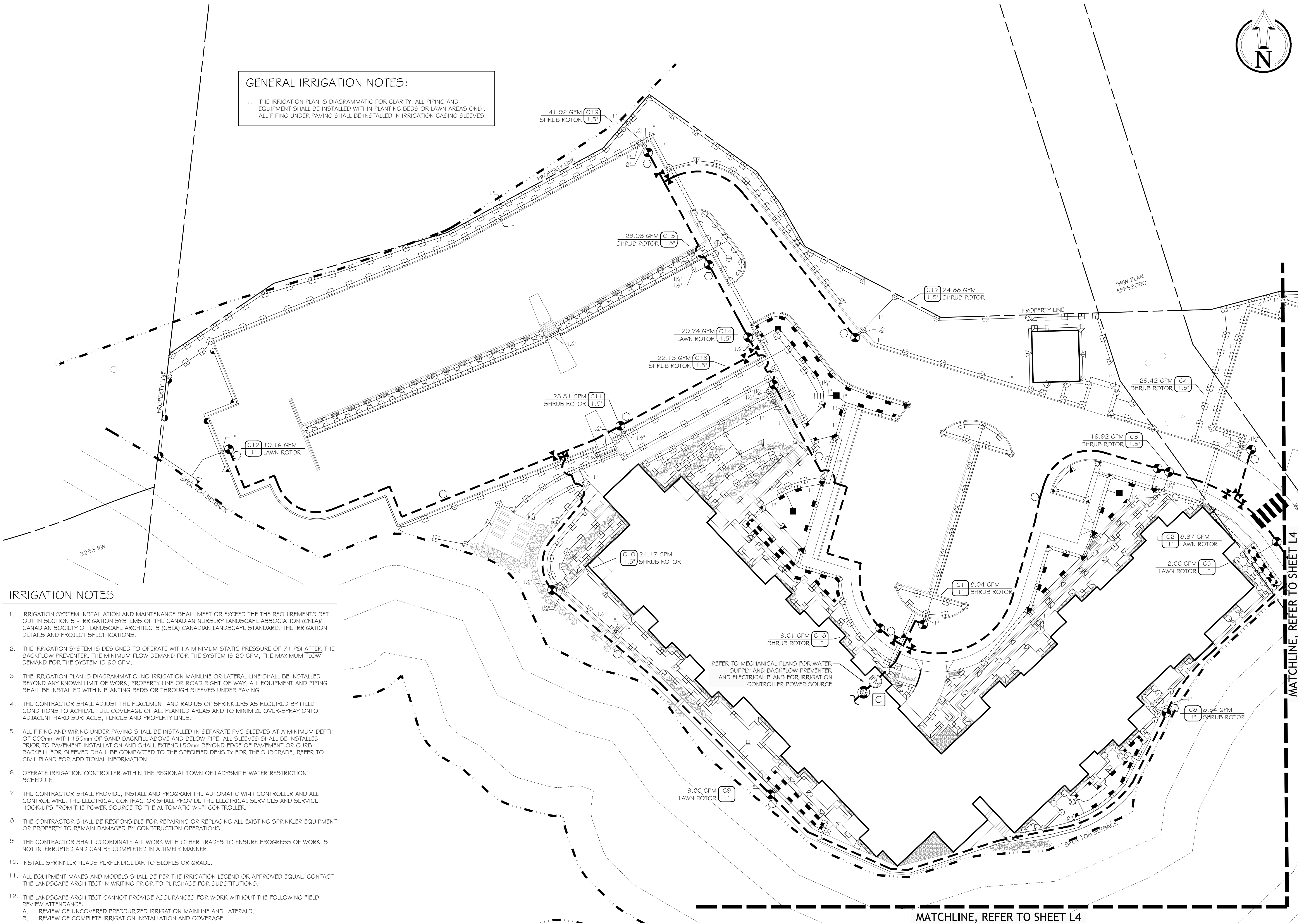
Holland Creek Apartments

Westmark Construction Inc.

107 Rollie Rose Drive, Ladysmith, BC

LANDSCAPE ARCHITECTURE SITE PLAN	
Date:	August 27, 2020
Drawn:	CM
Checked:	NG
Scale:	1:250 metric
Project Number:	20-0259
DRAWING NUMBER:	L2 of 7

REVISION SCHEDULE	NOTES
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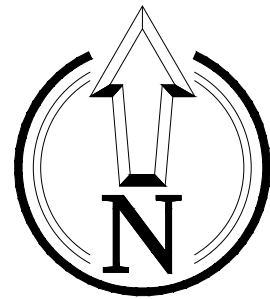


GENERAL IRRIGATION NOTES:

1. THE IRRIGATION PLAN IS DIAGRAMMATIC FOR CLARITY. ALL PIPING AND EQUIPMENT SHALL BE INSTALLED WITHIN PLANTING BEDS OR LAWN AREAS ONLY. ALL PIPING UNDER PAVING SHALL BE INSTALLED IN IRRIGATION CASING SLEEVES.

IRRIGATION NOTES

1. IRRIGATION SYSTEM INSTALLATION AND MAINTENANCE SHALL MEET OR EXCEED THE THE REQUIREMENTS SET OUT IN SECTION 5 - IRRIGATION SYSTEMS OF THE CANADIAN NURSERY LANDSCAPE ASSOCIATION (CNLA) CANADIAN SOCIETY OF LANDSCAPE ARCHITECTS (CSLA) CANADIAN LANDSCAPE STANDARD, THE IRRIGATION DETAILS AND PROJECT SPECIFICATIONS.
2. THE IRRIGATION SYSTEM IS DESIGNED TO OPERATE WITH A MINIMUM STATIC PRESSURE OF 7.1 PSI AFTER THE BACKFLOW PREVENTER. THE MINIMUM FLOW DEMAND FOR THE SYSTEM IS 20 GPM, THE MAXIMUM FLOW DEMAND FOR THE SYSTEM IS 90 GPM.
3. THE IRRIGATION PLAN IS DIAGRAMMATIC. NO IRRIGATION MAINLINE OR LATERAL LINE SHALL BE INSTALLED BEYOND ANY KNOWN LIMIT OF WORK, PROPERTY LINE OR ROAD RIGHT-OF-WAY. ALL EQUIPMENT AND PIPING SHALL BE INSTALLED WITHIN PLANTING BEDS OR THROUGH SLEEVES UNDER PAVING.
4. THE CONTRACTOR SHALL ADJUST THE PLACEMENT AND RADIUS OF SPRINKLERS AS REQUIRED BY FIELD CONDITIONS TO ACHIEVE FULL COVERAGE OF ALL PLANTED AREAS AND TO MINIMIZE OVER-SPRAY ONTO ADJACENT HARD SURFACES, FENCES AND PROPERTY LINES.
5. ALL PIPING AND WIRING UNDER PAVING SHALL BE INSTALLED IN SEPARATE PVC SLEEVES AT A MINIMUM DEPTH OF 600mm WITH 150mm OF SAND BACKFILL ABOVE AND BELOW PIPE. ALL SLEEVES SHALL BE INSTALLED PRIOR TO PAVEMENT INSTALLATION AND SHALL EXTEND 150mm BEYOND EDGE OF PAVEMENT OR CURB. BACKFILL FOR SLEEVES SHALL BE COMPACTED TO THE SPECIFIED DENSITY FOR THE SUBGRADE. REFER TO CIVIL PLANS FOR ADDITIONAL INFORMATION.
6. OPERATE IRRIGATION CONTROLLER WITHIN THE REGIONAL TOWN OF LADYSMITH WATER RESTRICTION SCHEDULE.
7. THE CONTRACTOR SHALL PROVIDE, INSTALL AND PROGRAM THE AUTOMATIC WI-FI CONTROLLER AND ALL CONTROL WIRE. THE ELECTRICAL CONTRACTOR SHALL PROVIDE THE ELECTRICAL SERVICES AND SERVICE HOOK-UPS FROM THE POWER SOURCE TO THE AUTOMATIC WI-FI CONTROLLER.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ALL EXISTING SPRINKLER EQUIPMENT OR PROPERTY TO REMAIN DAMAGED BY CONSTRUCTION OPERATIONS.
9. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES TO ENSURE PROGRESS OF WORK IS NOT INTERRUPTED AND CAN BE COMPLETED IN A TIMELY MANNER.
10. INSTALL SPRINKLER HEADS PERPENDICULAR TO SLOPES OR GRADE.
11. ALL EQUIPMENT MAKES AND MODELS SHALL BE PER THE IRRIGATION LEGEND OR APPROVED EQUAL. CONTACT THE LANDSCAPE ARCHITECT IN WRITING PRIOR TO PURCHASE FOR SUBSTITUTIONS.
12. THE LANDSCAPE ARCHITECT CANNOT PROVIDE ASSURANCES FOR WORK WITHOUT THE FOLLOWING FIELD REVIEW ATTENDANCE:
 - A. REVIEW OF UNCOVERED PRESSURIZED IRRIGATION MAINLINE AND LATERALS.
 - B. REVIEW OF COMPLETE IRRIGATION INSTALLATION AND COVERAGE.





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814 Shorewood Drive, Parksville, BC V9P 1S1
TEL: 250.248.3089 EMAIL: info@macdonaldgray.ca
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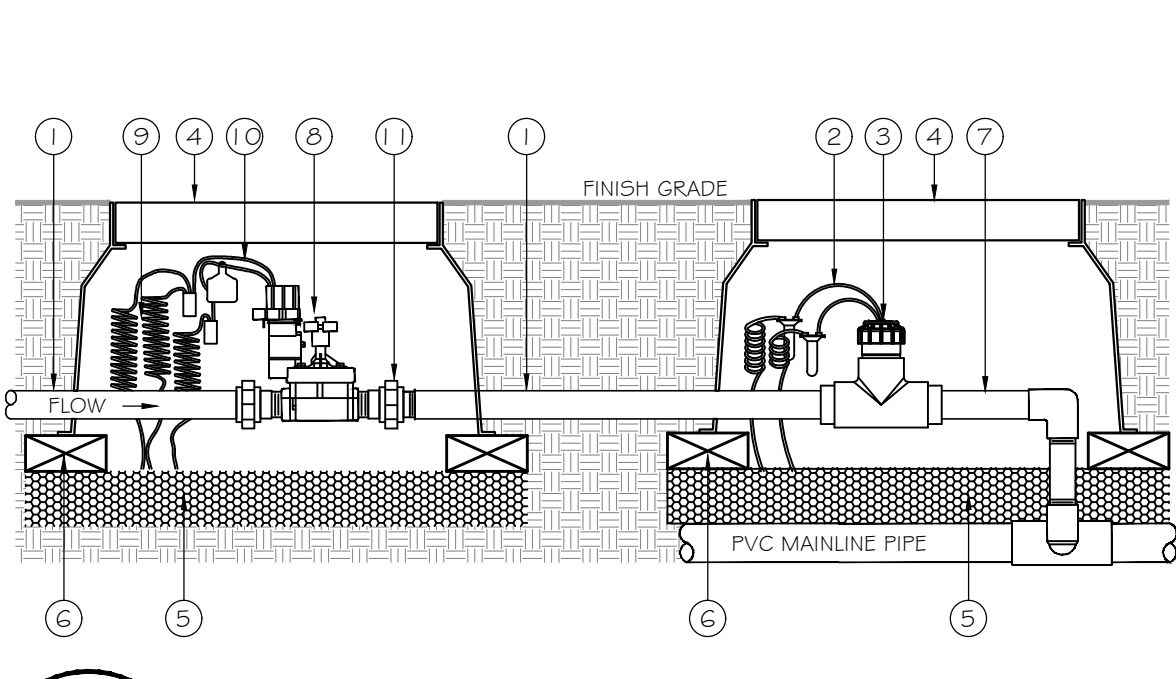
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Westmark Construction Inc.
107 Rollie Rose Drive, Ladysmith, BC

IRRIGATION PLAN

Date:	August 27, 2020
Drawn:	CM
Checked:	NG
Scale:	1:250 metric
Project Number:	20-0259

DRAWING NUMBER: L3 of 7

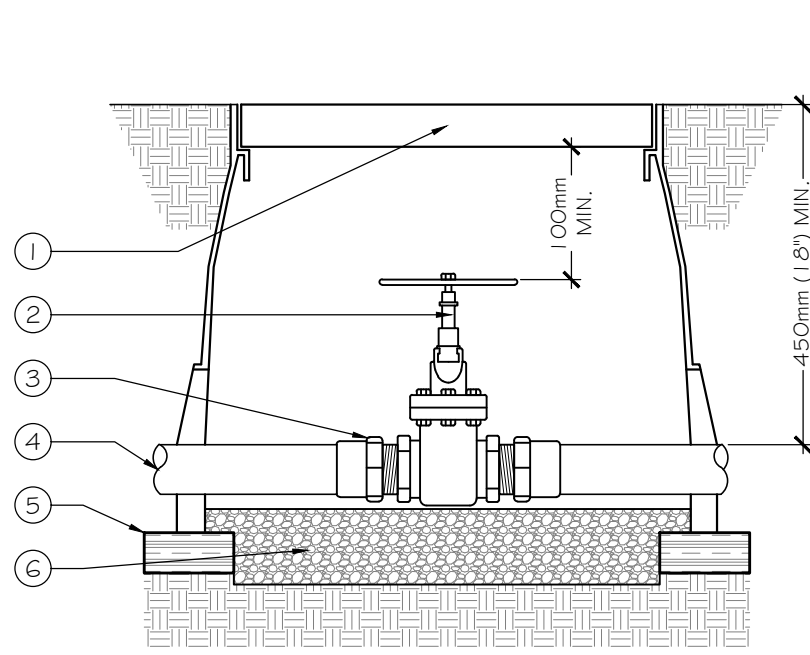
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A Master Valve & Flow Meter

Section

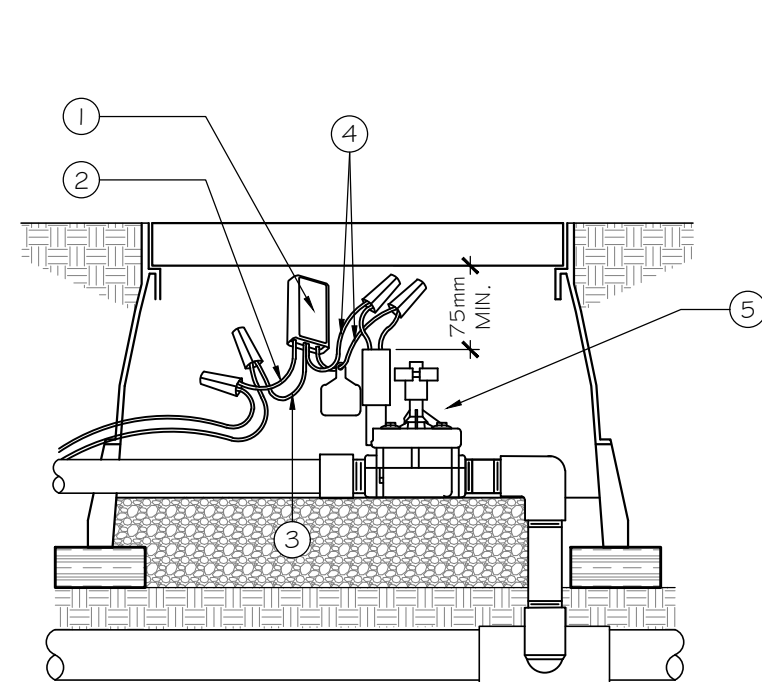
Not To Scale



B Gate Valve

Section

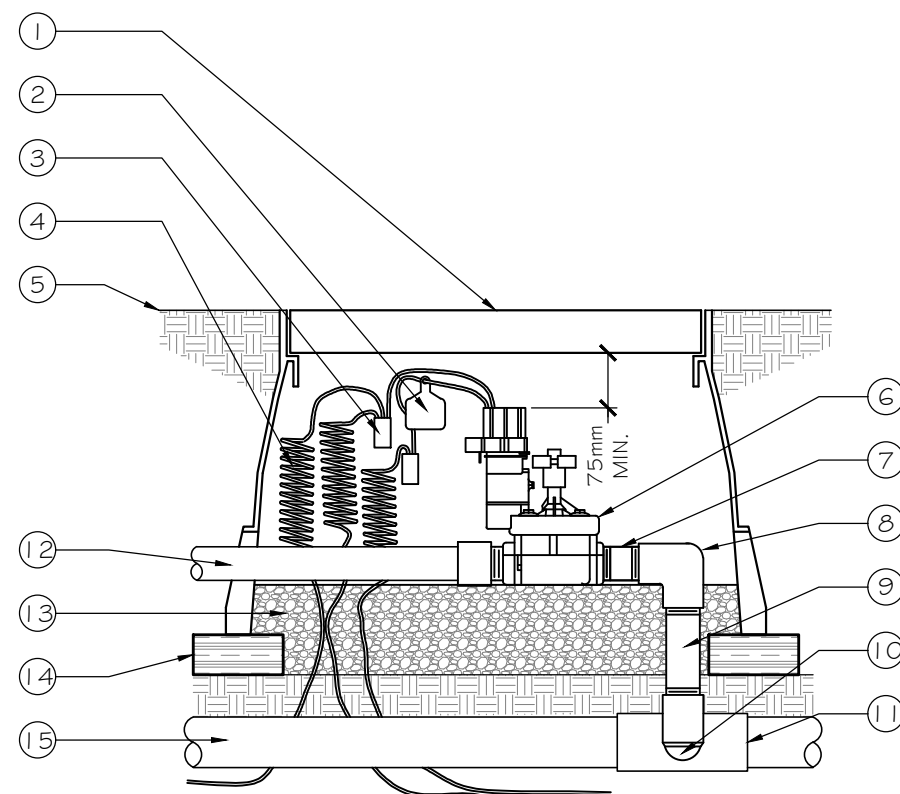
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C Decoder at Electric Remote Control Valve

Section

Not to Scale



D Electric Remote Control Valve

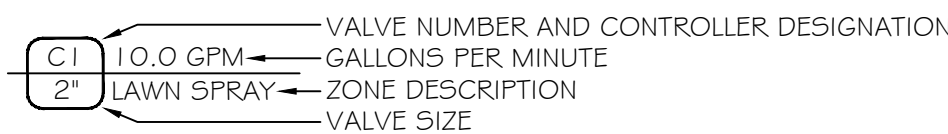
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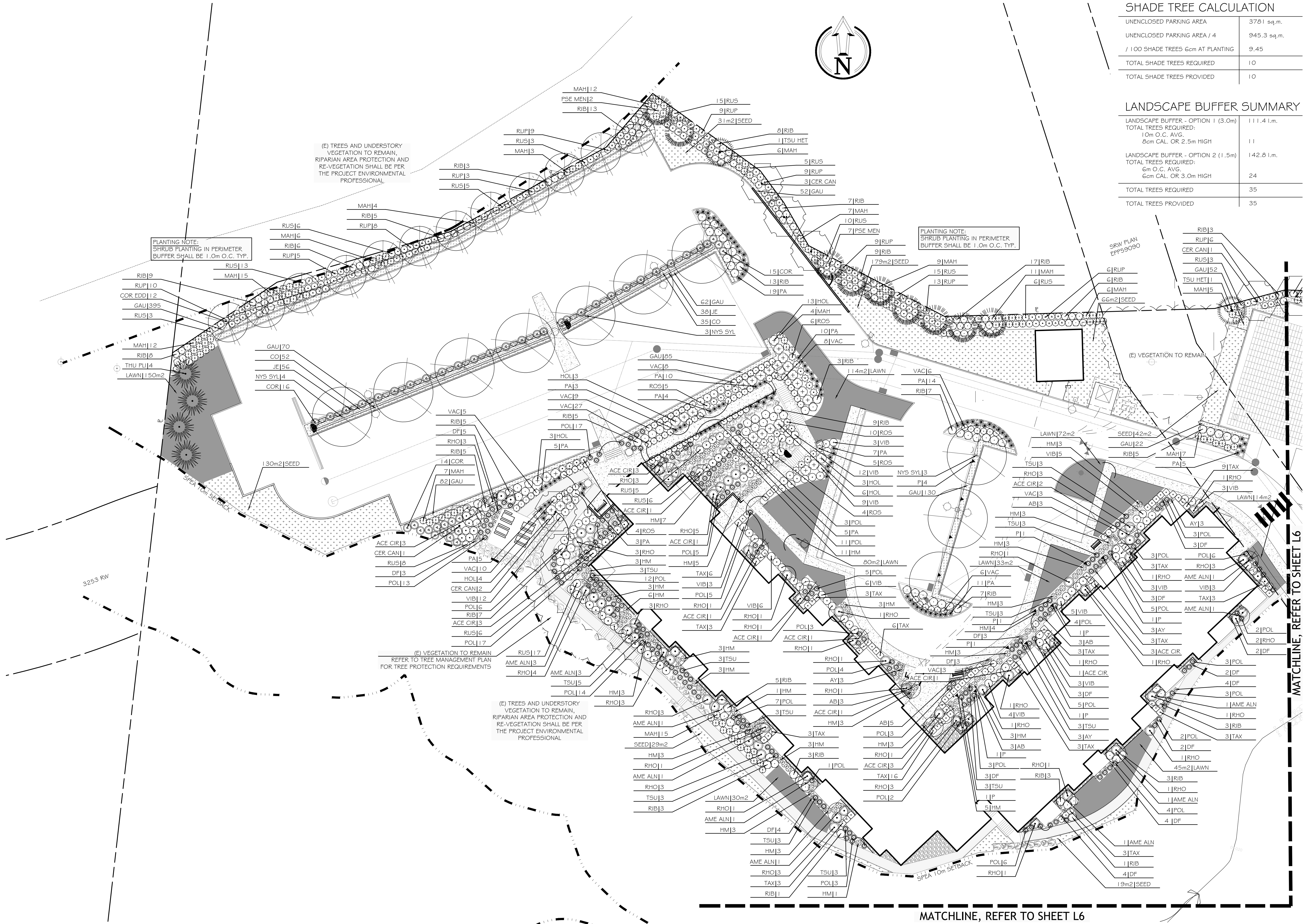
Not to Scale

- 1 MINIMUM 1/2\"
- 2 SENSOR AND COMMON WIRE TO INTERFACE PANEL. MAX. WIRE DISTANCE: 20 GAUGE - 75m (240') 18 GAUGE - 330m (1,000')
- 3 IRRIGATION FLOW METER. REFER TO IRRIGATION LEGEND. INSTALL PER MANUFACTURER'S SPECIFICATIONS
- 4 PLASTIC VALVE BOX WITH BOLT DOWN COVER
- 5 19mm (3/4\") MINUS DRAIN ROCK.
- 6 BRICK BLOCK, TYP. (2) PLACES PER VALVE BOX
- 7 OUTLET PIPE. MINIMUM 5/8\"
- 8 MASTER VALVE, REFER TO IRRIGATION LEGEND
- 9 PIG TAIL EXPANSION LOOP, 1/8\"
- 10 CONTROL AND COMMON WIRES
- 11 SCH. 80 PVC FLANGES, TYP. OF (2) PLACES

IRRIGATION EQUIPMENT LEGEND

SYMBOL	MANUFACTURER	MODEL	DESCRIPTION
	HUNTER	ICV-101G # 151G	ELECTRIC REMOTE CONTROL VALVE C/W SINGLE STATION DECODERS TO BE INSTALLED IN A MOULDED STRUCTURAL FOAM VALVE BOX WITH BOLT DOWN COVER PER DETAIL C & D/L4 AND MANUFACTURER'S RECOMMENDATIONS. SIZE PER PLAN.
	NIBCO	T113	LINE-SIZE BRONZE GATE VALVE IN VALVE BOX WITH WITH BOLT DOWN COVER, REFER TO DETAIL B/L4
	HUNTER	HQ5-RC	1\"
	HUNTER	HCC-800-PL-1CM-400-800 EZ-DM	20-STATION WI-FI CONTROLLER WITH DECODER OUTPUT MODULE IN STAINLESS STEEL WALL-MOUNTED CABINET. MOUNT IN ELECTRICAL /MECHANICAL ROOM PER MANUFACTURER'S RECOMMENDATIONS.
	HUNTER	ICV-151G	1.5\"
	HUNTER	HC-150-FLOW	1.5\"
	HUNTER	CLASS 200	PVC LATERAL LINE, 3/4\"
	HUNTER	SCHEDULE 40	3\"
	HUNTER	SCHEDULE 40	PVC SLEEVES UNDER ALL PAVING MIN., TYP. MAINLINE & CONTROL WIRE: 150mm (6\") LATERALS: 150mm (6\") BURIAL DEPTH TO MATCH DEPTH OF CARRIED PIPE, REFER TO DETAIL C/L7





SHADE TREE CALCULATION	
UNENCLOSED PARKING AREA	3781 sq.m.
UNENCLOSED PARKING AREA / 4	945.3 sq.m.
/ 100 SHADE TREES 6cm AT PLANTING	9.45
TOTAL SHADE TREES REQUIRED	10
TOTAL SHADE TREES PROVIDED	10

LANDSCAPE BUFFER SUMMARY	
LANDSCAPE BUFFER - OPTION 1 (3.0m)	111.41m.
TOTAL TREES REQUIRED:	
10m O.C. AVG.	11
8cm CAL. OR 2.5m HIGH	
LANDSCAPE BUFFER - OPTION 2 (1.5m)	142.81m.
TOTAL TREES REQUIRED:	
6m O.C. AVG.	24
6cm CAL. OR 3.0m HIGH	
TOTAL TREES REQUIRED	35
TOTAL TREES PROVIDED	35



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Holland Creek Apartments

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107 Rollie Rose Drive, Ladysmith, BC

PLANTING PLAN

Date: August 27, 2020
Drawn: CM
Checked: NG
Scale: 1:250 metric
Project Number: 20-0259
DRAWING NUMBER: L5 of 7

#	REVISION SCHEDULE	NOTES
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PLANTING NOTES

- ALL LANDSCAPE INSTALLATION AND MAINTENANCE SHALL MEET OR EXCEED THE MOST RECENT STANDARDS SET OUT BY THE CANADIAN NURSERY LANDSCAPE ASSOCIATION (CNLA) CANADIAN SOCIETY OF LANDSCAPE ARCHITECTS (CSLA) CANADIAN LANDSCAPE STANDARD AND PROJECT SPECIFICATIONS.
- LANDSCAPE MAINTENANCE SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS SET OUT IN TABLE T-1 4.2. MAINTENANCE LEVELS - LEVEL 2 GROOMED OF THE CANADIAN LANDSCAPE STANDARD, REFER TO SPECIFICATIONS.
- ESTABLISHMENT MAINTENANCE SHALL MEET THE REQUIREMENTS SET OUT IN SECTION 1.3 ESTABLISHMENT MAINTENANCE OF THE CANADIAN LANDSCAPE STANDARD. ALL PROPOSED PLANT MATERIAL SHALL BE MAINTAINED BY THE CONTRACTOR FOR THE ONE YEAR MAINTENANCE PERIOD FROM THE TIME OF SUBSTANTIAL COMPLETION TO ENSURE PLANT ESTABLISHMENT AND TO MAINTAIN PLANT VIGOR, REFER TO SPECIFICATIONS.
- THE IRRIGATION SYSTEM SHALL BE OPERATIONAL AND COVERAGE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO THE INSTALLATION OF PLANT MATERIAL.
- PLANT QUANTITIES ARE FOR INFORMATION ONLY. IN CASE OF ANY DISCREPANCY THE PLAN SHALL GOVERN.
- PROVIDE MINIMUM SLOPE OF 2% FOR DRAINAGE IN ALL PLANTED AREAS.
- THE FINISHED GRADE OF ALL PLANTERS SHALL BE 75mm BELOW THE TOP OF CURB OR ADJACENT HARDSCAPE.
- ALL PLANT MATERIAL SHALL MATCH SPECIES AS INDICATED ON THE PLANT LEGEND. PLANT MATERIAL QUALITY, TRANSPORT AND HANDLING SHALL COMPLY WITH CANADIAN STANDARDS FOR NURSERY STOCK.
- THE CONTRACTOR SHALL SECURE PLANT MATERIAL AS SPECIFIED AT LEAST 2 WEEKS PRIOR TO ANTICIPATED PLANTING TIME. CONTACT THE LANDSCAPE ARCHITECT FOR APPROVAL OF ANY SUBSTITUTIONS. NO SUBSTITUTIONS WILL BE ACCEPTED WITHOUT PRIOR WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.
- TREE LOCATIONS SHALL BE FIELD STAKED AND LOCATIONS APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO PLANTING. TREE LOCATIONS MAY BE ADJUSTED IN THE FIELD TO SUIT THE SITE REQUIREMENTS AS DIRECTED BY THE LANDSCAPE ARCHITECT.
- CHECK FOR LOCATIONS OF WATER LINES AND OTHER UNDERGROUND SERVICES PRIOR TO DIGGING PLANTING PITS. EXCAVATED PLANT PITS SHALL HAVE POSITIVE DRAINAGE. PLANT PITS WHEN FULLY FLOODED WITH WATER SHALL DRAIN WITHIN ONE HOUR AFTER FILLING.
- INSPECT ALL ASSEMBLED PLANT MATERIAL AT THE NURSERY PRIOR TO SHIPPING. PLANT MATERIAL SHALL BE INSPECTED BY THE LANDSCAPE ARCHITECT ON-SITE PRIOR TO PLANTING. NO PLANTS REQUIRING PRUNING OF MAJOR BRANCHES DUE TO DISEASE, DAMAGE OR POOR FORM WILL BE ACCEPTED.
- ALL CALIFRE-STOCK TREES SHALL BE B & B IN WIRE BASKETS.
- REFER TO PLANT LEGEND, SPECIFICATIONS AND DETAILS FOR ADDITIONAL INFORMATION.
- THE LANDSCAPE ARCHITECT CANNOT PROVIDE ASSURANCES FOR WORK WITHOUT THE FOLLOWING FIELD REVIEW ATTENDANCE:
 - REVIEW OF SUBGRADE PRIOR TO GROWING MEDIUM INSTALLATION.
 - REVIEW OF TREE LOCATIONS (STAKED).
 - REVIEW OF PLANT MATERIAL PRIOR TO INSTALLATION.
 - REVIEW OF SOIL SAMPLE ANALYSIS.
 - REVIEW OF INSTALLED PLANT MATERIAL.

GROWING MEDIUM AND MULCH

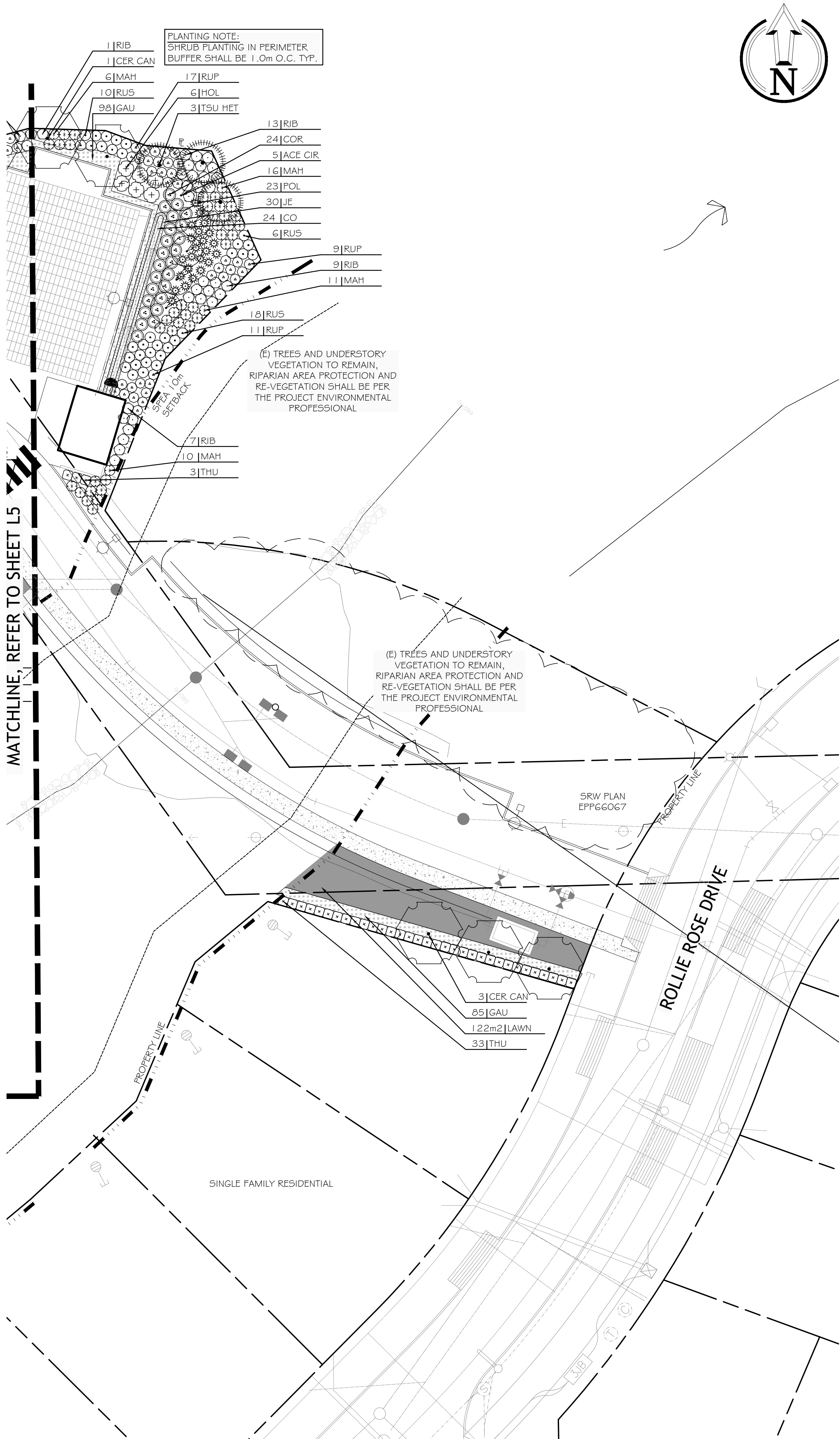
- PROPERTIES FOR GROWING MEDIUM SHALL MEET OR EXCEED SPECIFICATION SECTION 329 I 1.3 SOIL PREPARATION FOR:
 - LEVEL 2 'GROOMED' AREAS:
 - GROWING MEDIUM TYPES:
 - SOIL DEPTHS:
 - 2P (PLANTING AREAS)
 - TERRASEED - 50mm (2")
 - LAWN (SOD) - 100mm (4")
 - GROUND COVER - 300mm (12")
 - SHRUBS - 450mm (18")
 - TREES - 300mm (12") BELOW AND AROUND ROOTBALL
 - (G cu.m. AVAILABLE PER TREE)
- ON-SITE TOPSOIL MAY BE STRIPPED, STOCKPILED AND AMENDED TO MEET THE STANDARDS ABOVE.
- SUBMIT A (4) LITRE SAMPLE OF SCREENED TOPSOIL PROPOSED FOR USE AS A BASIS FOR GROWING MEDIUM TO A SOIL ANALYSIS LAB APPROVED BY THE LANDSCAPE ARCHITECT. REFER TO SPECIFICATION SECTION 329 I 1.3. SOIL TESTING SHALL BE AT THE CONTRACTORS EXPENSE.
- INDICATE TO THE SOIL LAB THAT THE PURPOSE OF THE ANALYSIS AND AMENDMENT RECOMMENDATIONS IS FOR LEVEL 2P - PLANTING AREAS.
- AMENDMENT RECOMMENDATIONS BY THE SOIL ANALYSIS LAB SHALL BE THE BASIS FOR ACCEPTANCE OF THE GROWING MEDIUM. RETAIN EVIDENCE OF ALL AMENDMENTS ADDED TO THE TOPSOIL.
- MULCH SHALL BE COMPOST, REFER TO SPECIFICATIONS.
- MULCH DEPTH SHALL BE 75mm MINIMUM.

DEER BROWSE PROTECTION

- USE AN ENVIRONMENTALLY SAFE SPRAY-ON REPELLENT SUCH AS PLANTSKYDD ® OR EQUAL.
<http://www.plantskydd.com/application.html#professional>
- MIX AND APPLY PER THE MANUFACTURER'S RECOMMENDATIONS.
- EQUIVALENT PRODUCTS MUST BE LISTED BY THE ORGANIC MATERIALS REVIEW INSTITUTE (OMRI) AS SUITABLE FOR THE PRODUCTION OF ORGANIC FOOD AND FIBRE.
- APPLY AT TIME OF PLANTING AND REAPPLY EVERY (6) MONTHS IN THE WINTER AND (4) MONTHS DURING THE GROWING SEASON.
- DIP OR SPRAY THE PLANT FOLIAGE AND STEMS UNTIL WET BUT NOT DRIPPING.
- ALWAYS TREAT NEW GROWTH.
- APPLY AT ABOVE FREEZING TEMPERATURE.
- AVOID APPLICATION IN DIRECT SUNLIGHT. APPLY IN EARLY MORNING OR LATE AFTERNOON.
- ALLOW TO DRY 24 HOURS BEFORE FORECASTED RAINFALL.
- MIXED PRODUCT MUST BE USED WITHIN (3) DAYS.
- INSTALL CIRCULAR ENCLOSURE AROUND DRIP LINE OF ALL TREES.
- ENCLOSURE SHALL BE CONSTRUCTED OF 50mm X 100mm (2" X 4") PAGE WIRE AT A MINIMUM HEIGHT OF 1.5m (5').
- SUPPORT WIRE ENCLOSURE WITH (2) 75mm X 2.4m (3" x 8') ROUND MACHINE POINTED PRESSURE TREATED LANDSCAPE STAKES PER TREE. EMBED STAKES 765mm (30") MINIMUM.
- PRESSURE TREATMENT SHALL BE PER CSA STANDARD O80.5, URINS A WOOD PRESERVATIVE NON TOXIC TO SURROUNDING PLANT MATERIAL AND WILDLIFE.
- SECURE WIRE TO STAKES WITH (3) GALVANIZED STAPLES PER STAKE
- REMOVE ENCLOSURES IN (3) YEARS OR WHEN TREES HAVE REACHED 2.4m (8') IN HEIGHT.

PLANT LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SIZE	SPACING	QTY.	NOTES
TREES					
ACE CIR	ACER CIRCINATUM VINE MAPLE	2.0m	SEE PLAN	29	NATIVE SPECIES
AME ALN	AMELANCHIER ALNIFOLIA SASKATOON	2.0m	SEE PLAN	14	NATIVE SPECIES
CER CAN	CERCIS CANADENSIS EASTERN REDBUD	8cm CAL.	SEE PLAN	12	NATIVE CANADIAN SPECIES
COR EDD	CORNUS 'EDDIE'S WHITE WONDER' WHITE WONDER DOGWOOD	8cm CAL.	SEE PLAN	12	NATIVE CULTIVAR
NYS SYL	NYSSA SYLVATICA 'WILDFIRE' WILDFIRE TUPELO	6cm CAL.	10m O.C.	10	DROUGHT /WET TOLERANT SHADE TREE
PSE MEN	PSEUDOTSUGA MENZIESII DOUGLAS FIR	2.5m	SEE PLAN	9	NATIVE SPECIES
THU PLI	THUJA PLICATA WESTERN RED CEDAR	2.0m	4.5m O.C.	4	NATIVE SPECIES
TSU HET	TSUGA HETEROPHYLLA WESTERN HEMLOCK	2.5m	SEE PLAN	5	NATIVE SPECIES
SHRUBS					
COR	CORNUS SERICEA RED OSIER DOGWOOD	#2 POT	1.2m O.C.	69	NATIVE SPECIES
HOL	HOLODISCUS DISCOLOR OCEANSPRAY	#2 POT	1.5m O.C.	38	NATIVE SPECIES
MAH	MAHONIA AQUIFOLIUM OREGON GRAPE	#2 POT	1.0m O.C.	172	NATIVE SPECIES
POL	POLYSTICHUM MUNITUM SWORD FERN	#1 POT	1.0m O.C.	199	NATIVE SPECIES
RHO	RHODODENDRON SSP. MIX COLOUR AND BLOOM TIME	#5 POT	1.5m O.C.	66	DROUGHT TOLERANT
RIB	RIBES SANGUINEUM RED FLOWERING CURRANT	#2 POT	1.0m O.C. 1.2m O.C.	124 94	NATIVE SPECIES
ROS	ROSA NUTKANA NOOTKA ROSE	#2 POT	1.2m O.C.	34	NATIVE SPECIES
RUP	RUBUS PARVIFLORUS THIMBLEBERRY	#2 POT	1.0m O.C.	124	NATIVE SPECIES
RUS	RUBUS SPECTABILIS SALMONBERRY	#2 POT	1.0m O.C. 1.2m O.C.	118 42	NATIVE SPECIES
TAX	TAXUS X MEDIA 'H.M. EDDIE' H.M. EDDIE YEW	1.2m	0.9m O.C.	70	DROUGHT TOLERANT
THU	THUJA PLICATA 'EXCELSA' EXCELSA WESTERN RED CEDAR	1.0m	0.9m O.C.	36	NATIVE CULTIVAR
TSU	TSUGA CANADENSIS 'JEDDELOH' JEDDELOH DWARF HEMLOCK	#5 POT	0.9m O.C.	38	NATIVE CULTIVAR
VAC	VACCINIUM OVATUM EVERGREEN HUCKLEBERRY	#3 POT	1.0m O.C.	86	NATIVE SPECIES
VIB	VIBURNUM DAVIDII DAVID'S VIBURNUM	#2 POT	1.2m O.C.	82	DROUGHT TOLERANT
GROUNDCOVERS & PERENNIALS					
AY AB	ASTILBE 'YONIQUE WHITE' & 'BURGUNDY RED' WHITE & RED ASTILBE	#1 POT	0.6m O.C.	14 15	DROUGHT TOLERANT
CO	CAREX OBNUPTA STIPITA SLOUGH/ SAWBEAK SEDGE	10cm POT	0.6m O.C.	111	NATIVE SPECIES
DF	DICENTRA FORMOSA WESTERN BLEEDING HEART	#1 POT	0.6m O.C.	48	NATIVE SPECIES
GS	GAULTHERIA SHALLON SALAL	10cm POT	0.45m O.C.	974	NATIVE SPECIES
HM	HAKONECHLOA MACRA JAPANESE FOREST GRASS	#2 POT	0.75m O.C.	94	SHADE TOLERANT
JE	JUNCUS EFFUSUS COMMON RUSH	10cm POT	0.6m O.C.	124	NATIVE SPECIES
PA	PENNISETUM ALOPECUROIDES 'HAEMEL' DWARF FOUNTAIN GRASS	#2 POT	0.75m O.C.	101	DROUGHT TOLERANT
VINE					
P	PARTHENOCISSUS TRICUSPIDATA BOSTON IVY	#1 POT	SEE PLAN	8	DROUGHT/SHADE TOLERANT
LAWNS & SEED					
LAWN	SOD - CANADA #2 STANDARD GRADE			660 sq.m.	
SEED	RESTORATION TERRASEED (SEED, SOIL, COMPOST) MIX SEED - COASTAL NATIVE MIX WITH FORBS & WILDFLOWERS: (SEED MIX TO BE APPROVED BY PROJECT RP, BIO.)		% BY WEIGHT	496 sq.m.	
	AGROSTIS SCABRA, TICKLEGRASS		2.25		
	DESCHAMPSIA CESPITOSA, TUFTED HAIRGRASS		7		
	FESTUCA IDAHOENSIS VAR ROEMERI, ROEMER'S FESCUE		30		
	FESTUCA OCCIDENTALIS, WESTERN FESCUE		5		
	FESTUCA RUBRA, NATIVE RED FESCUE		20		
	LOLIUM MULTIFLORUM, ANNUAL RYEGRASS (DIPLOID)		30		
	LUPINUS POLYPHYLLUS, BIG LEAF LUPINER'S FESCUE		0.5		
	POA PALUSTRIS, FOWL BLUEGRASS		4.65		
	SYMPHYOTRICHUM SUBSPICATUM, DOUGLAS ASTER		0.25		
	ANAPHALIS MARGARITACEA, PEARLY EVERLASTING		0.1		
	GRINDELIA INTEGRIFOLIA, GUMWEED		0.25		



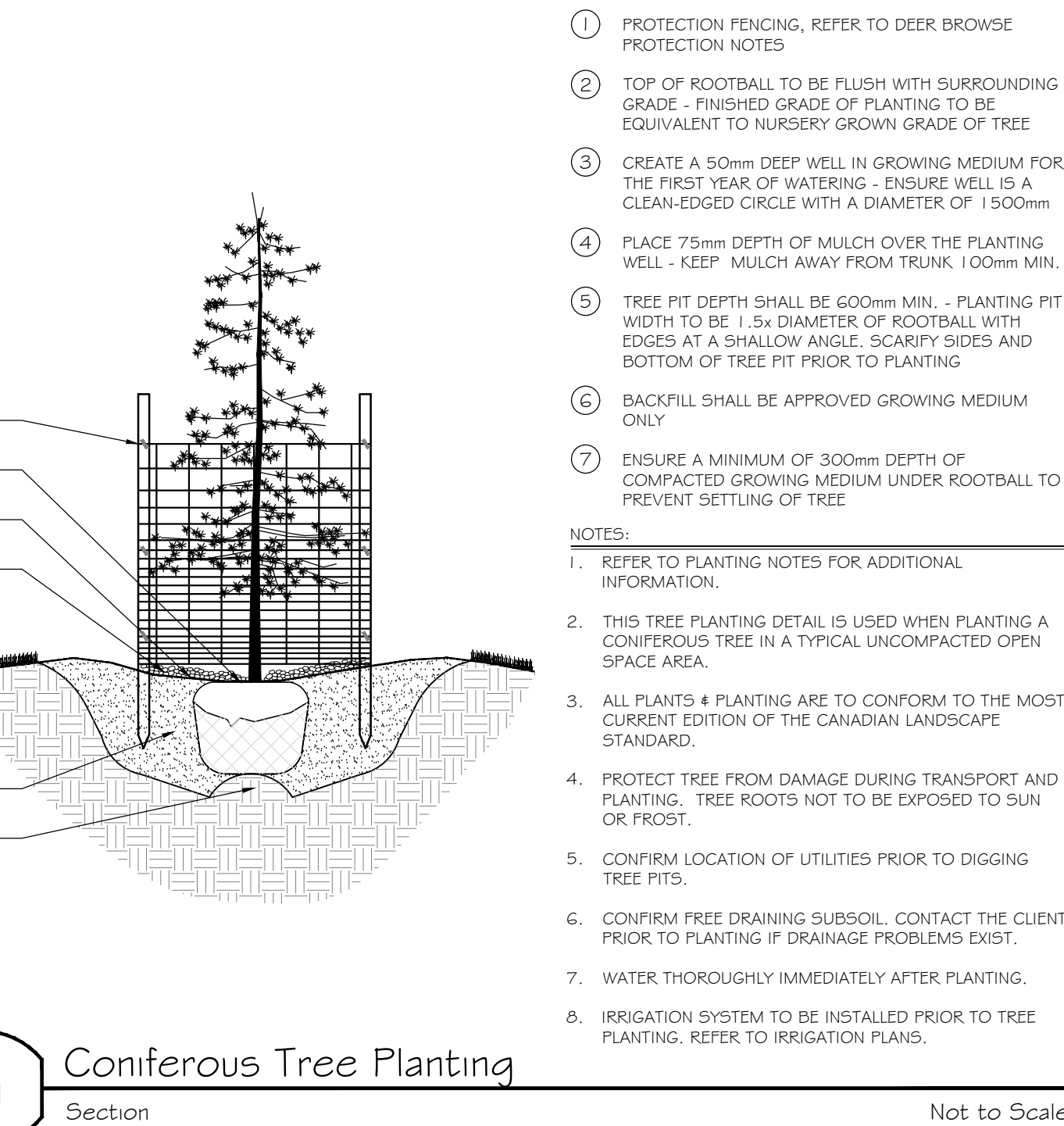
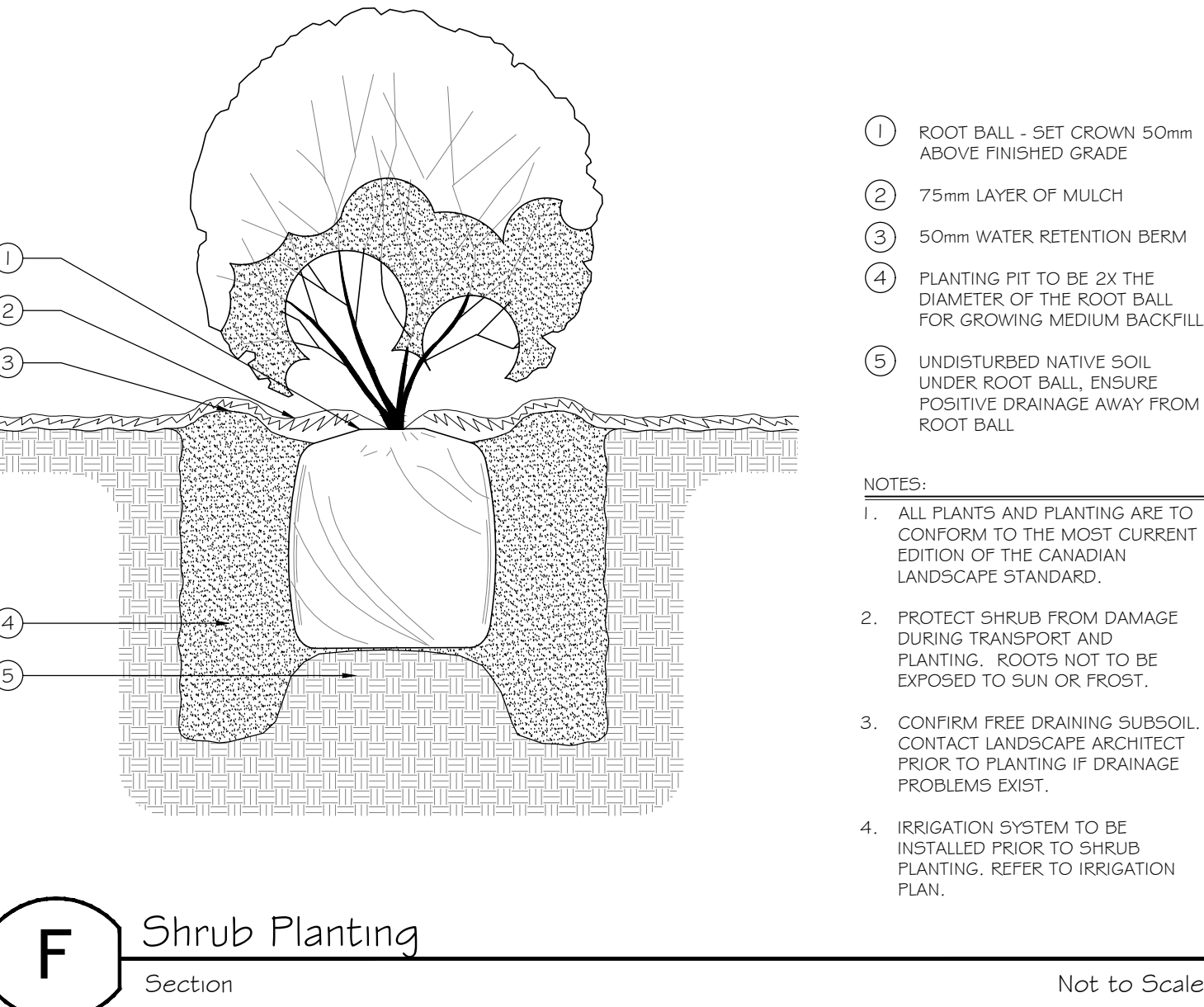
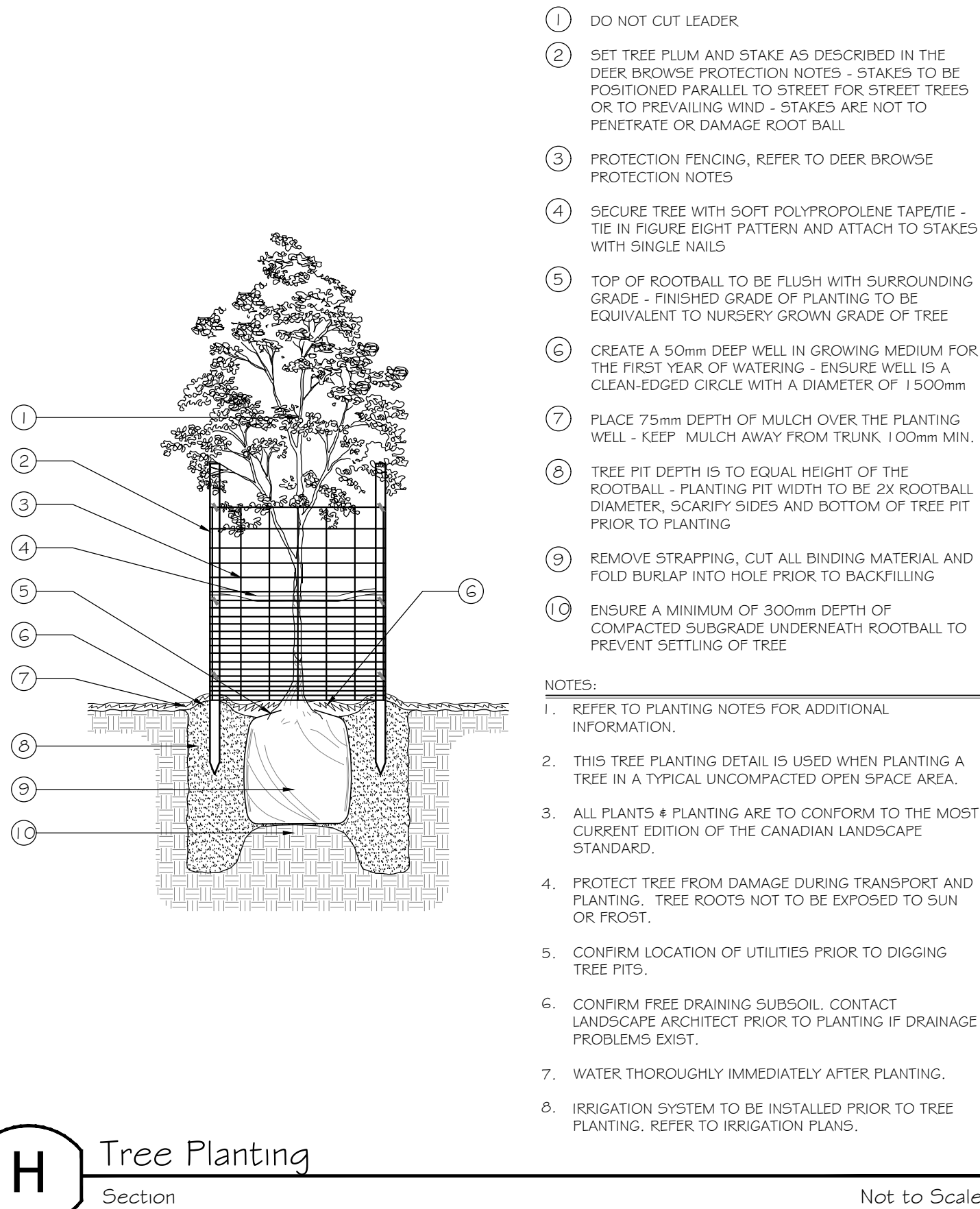
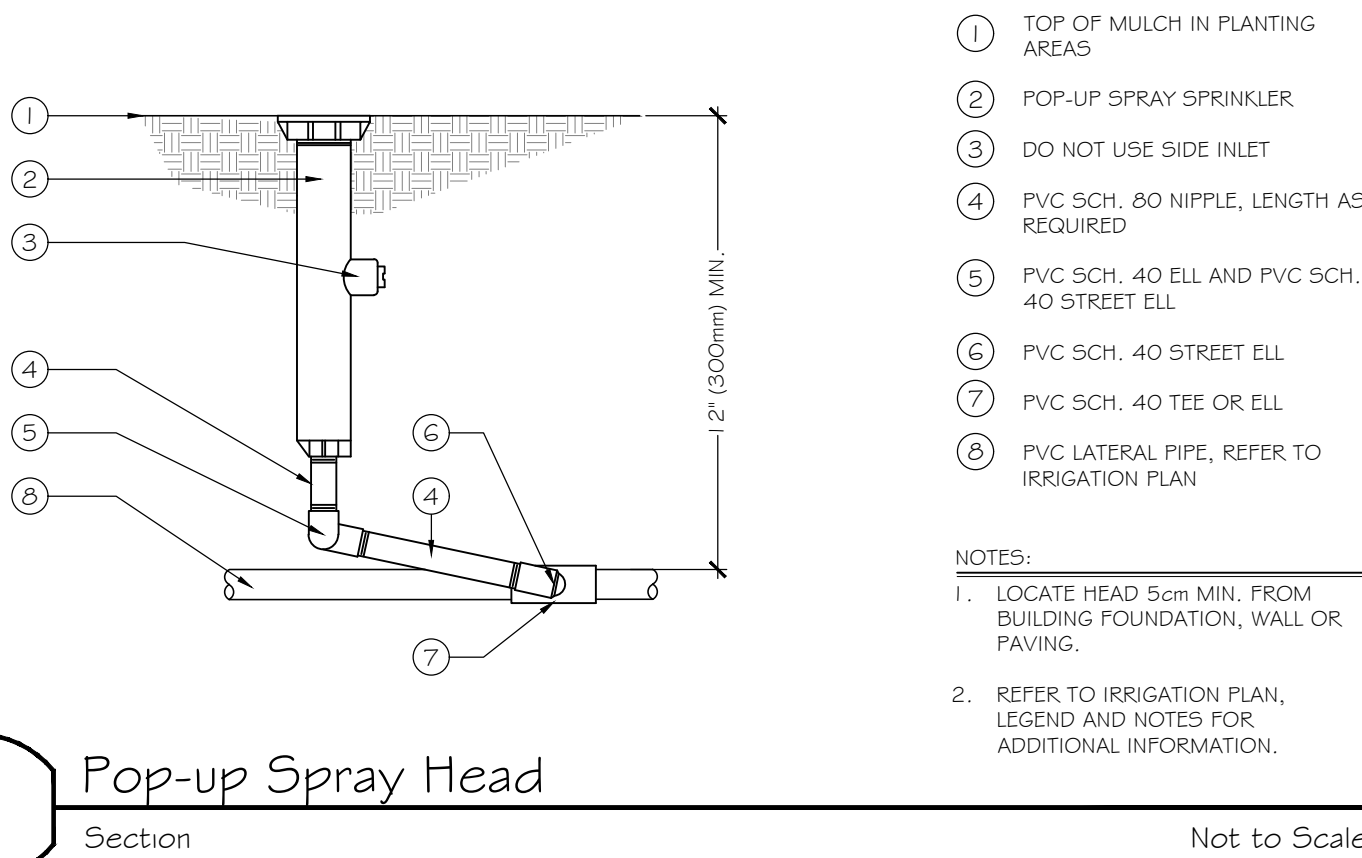
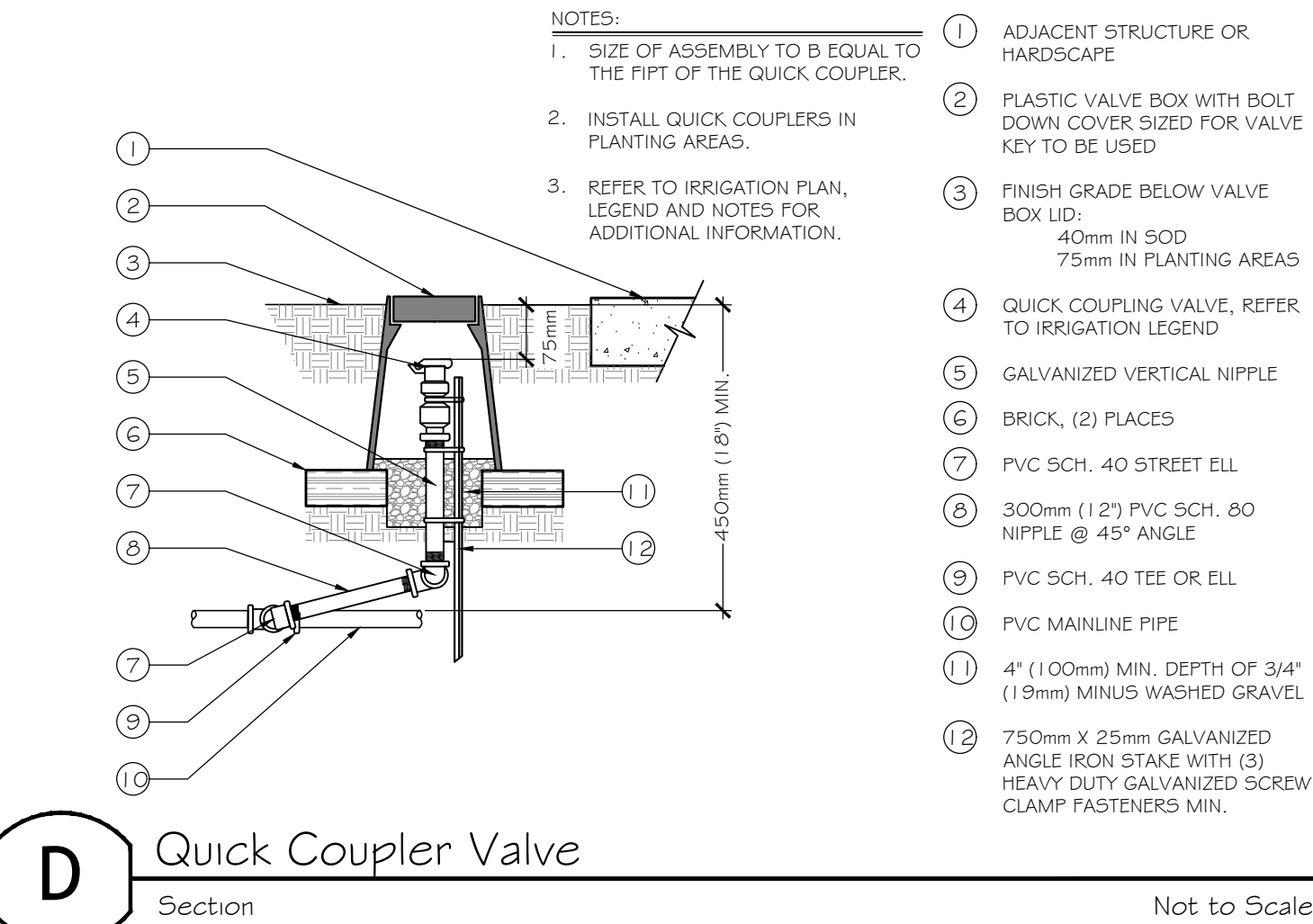
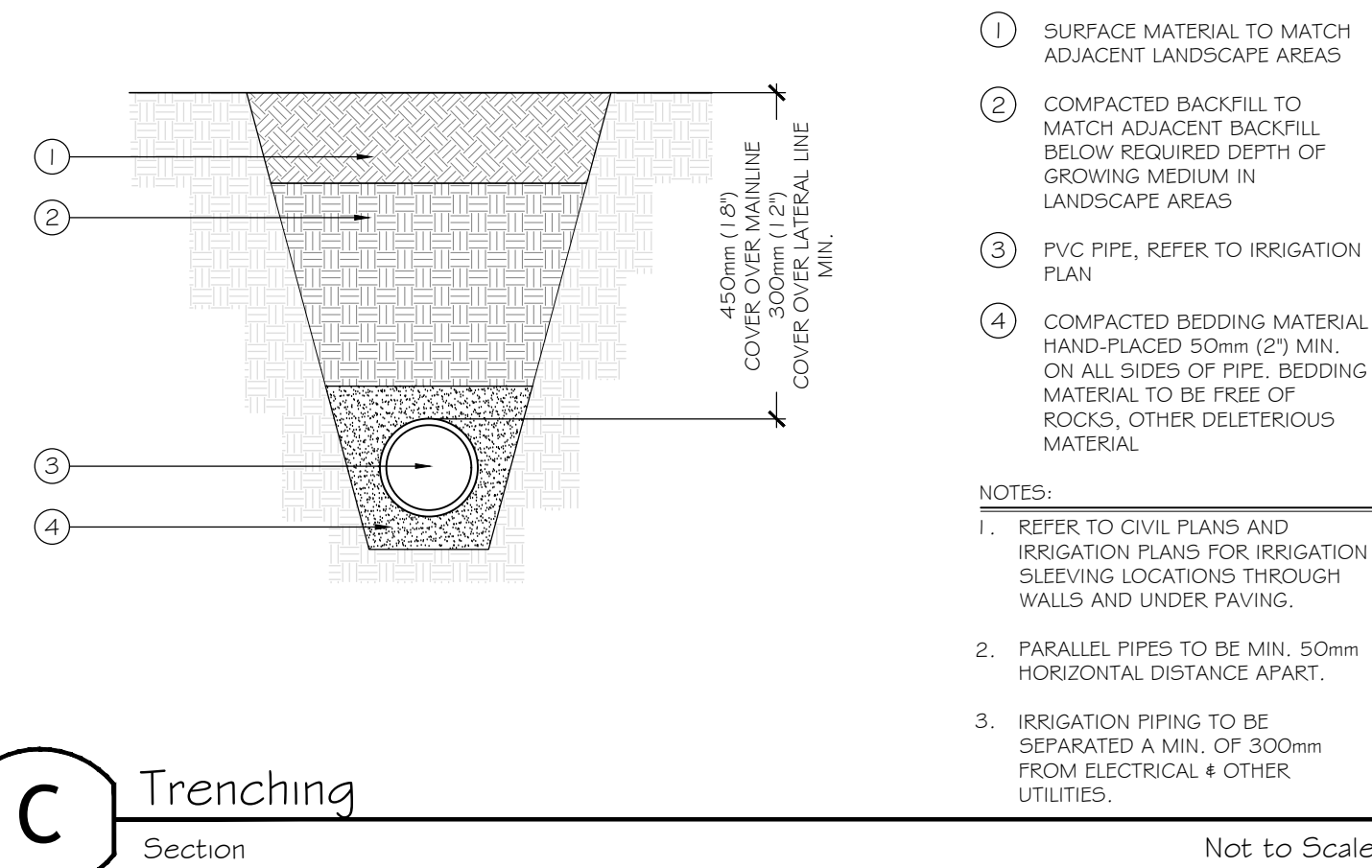
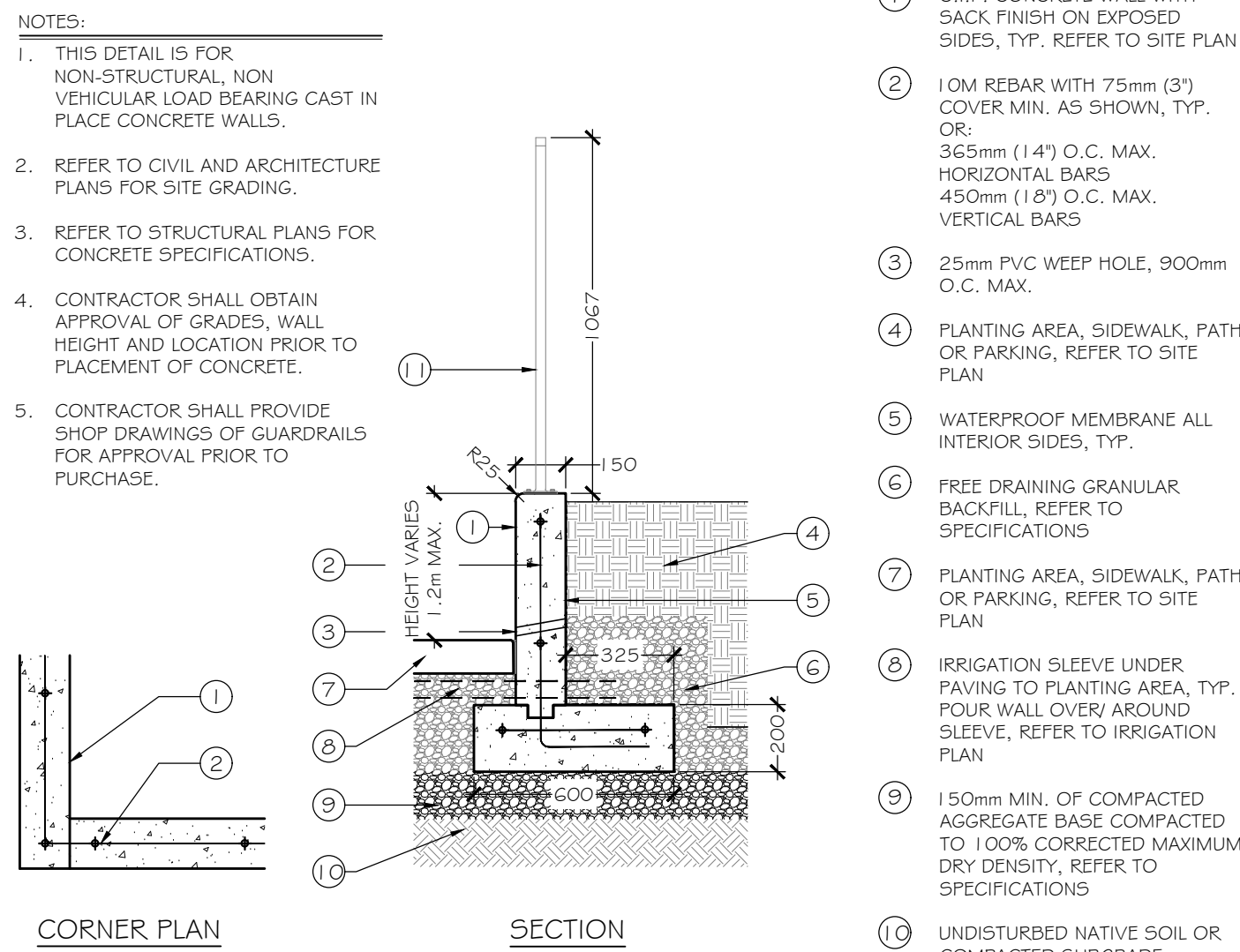
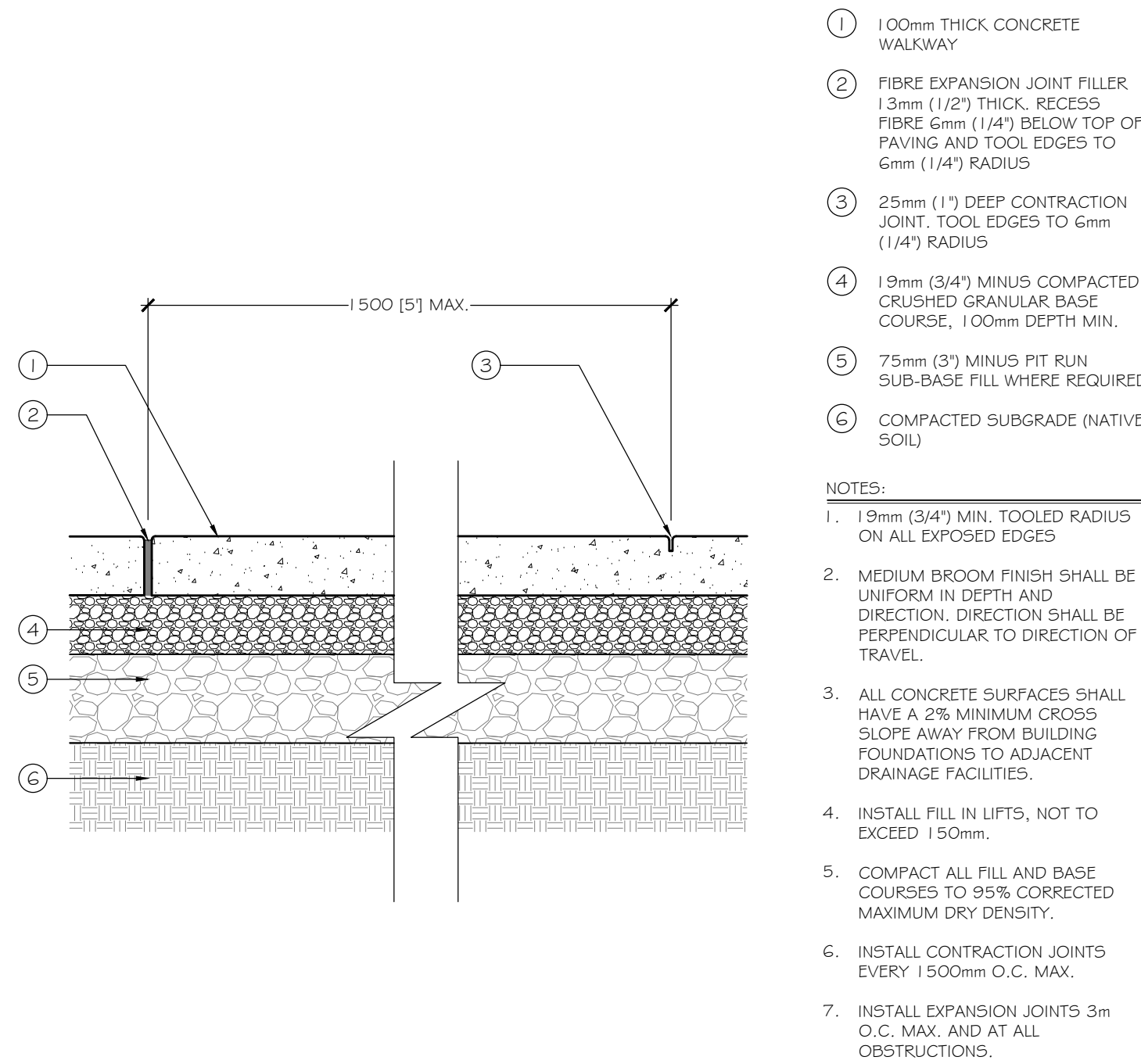
Holland Creek Apartments
Westmark Construction Inc.
107 Rollie Rose Drive, Ladysmith, BC

PLANTING PLAN, NOTES & LEGEND

#	REVISION SCHEDULE	NOTES
0	22APR2020	Site Plan/Grading Coordination
1	01MAY2020	DP Review
2	14JUL2020	Revised for DP/Issued for BP
3	28JUL2020	IFT Coordination
4	27AUG2020	IFC

macdonald gray
814 Shorewood Drive, Parksville, BC V9P 1S1
TEL: 250-248-3089 EMAIL: info@macdonaldgray.ca
www.macdonaldgray.ca

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Holland Creek Apartments

Westmark Construction Inc.

107 Rollie Rose Drive, Ladysmith, BC

DETAILS

Date:	August 27, 2020
Drawn:	CM
Checked:	NG
Scale:	AS NOTED
Project Number:	20-0259
DRAWING NUMBER:	L7 of 7

#	REVISION SCHEDULE	DATE	NOTES
0	72APR2020	Site Plan/Grading Coordination	
1	01MAY2020	DP Review	
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4	27AUG2020	IFC	

MATERIAL PALETTE

- 1

FIBRE CEMENT PLANK LAP SIDING, COLOUR PLUS, WOOD GRAIN FINISH, IN 'ARCTIC WHITE',
- 2

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FASCIA BOARD, IN 'PEARL GREY" REF. 3 & ALUMINIUM CAP AND TRIM FLASHING, IN 'CHARCOAL'
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- 14

BALCONY: VINYL DECK
- 15

PATIO AT GRADE
- 16

ALUMINIUM GUARDRAILS, TOP RAIL AND FACE MOUNTED POSTS, IN 'WEATHERED ZINC' COLOUR (COLOUR MATCH TO CASCADIA METALS)
- 17

VINYL WINDOW, IN PEARL GRAY
- 18

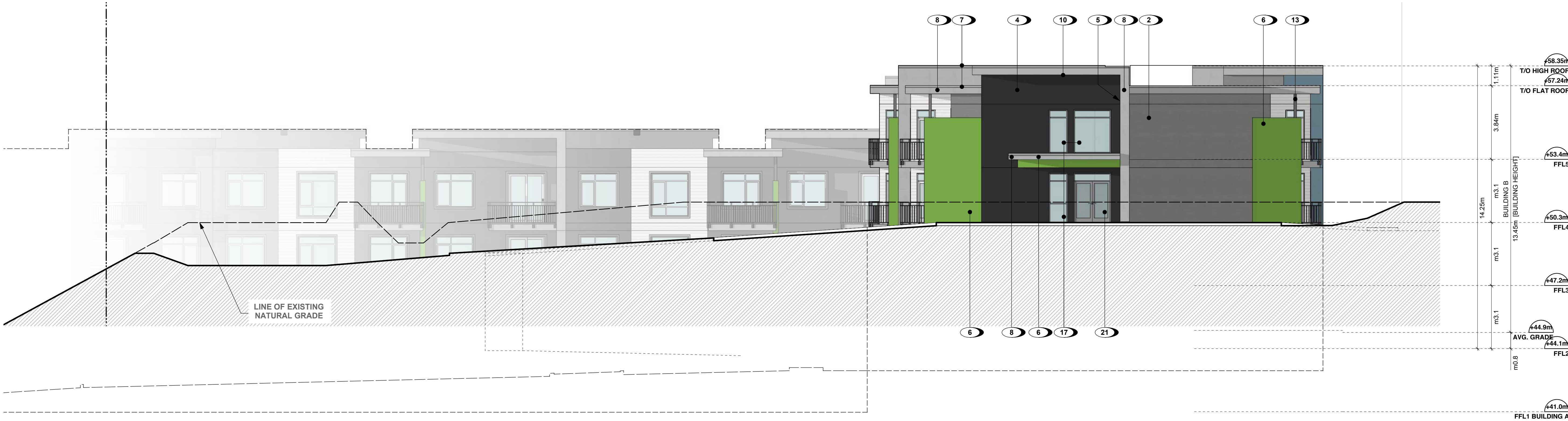
VINYL WINDOW, IN WHITE
- 19

VINYL SWING DOOR, IN WHITE, WITH CLEAR TEMPERED GLASS PANEL
- 20

VINYL SLIDING GLASS PATIO DOOR, IN WHITE, WITH CLEAR TEMPERED GLASS PANELS
- 21

ALUMINIUM ENTRY DOOR, IN PEARL GRAY, WITH CLEAR TEMPERED GLASS PANELS
- 22

STEEL DOOR, PAINTED



1 North Elevation - Upper Parking Lot Entrance
Scale: 1:100



2 North Courtyard Elevation
Scale: 1:100

Schedule D - Multi-Family Building Elevations (3 pages)
DP 3060-20-05
107 Rollie Rose Drive
1223434 B.C. Ltd., Inc. No. BC1223434

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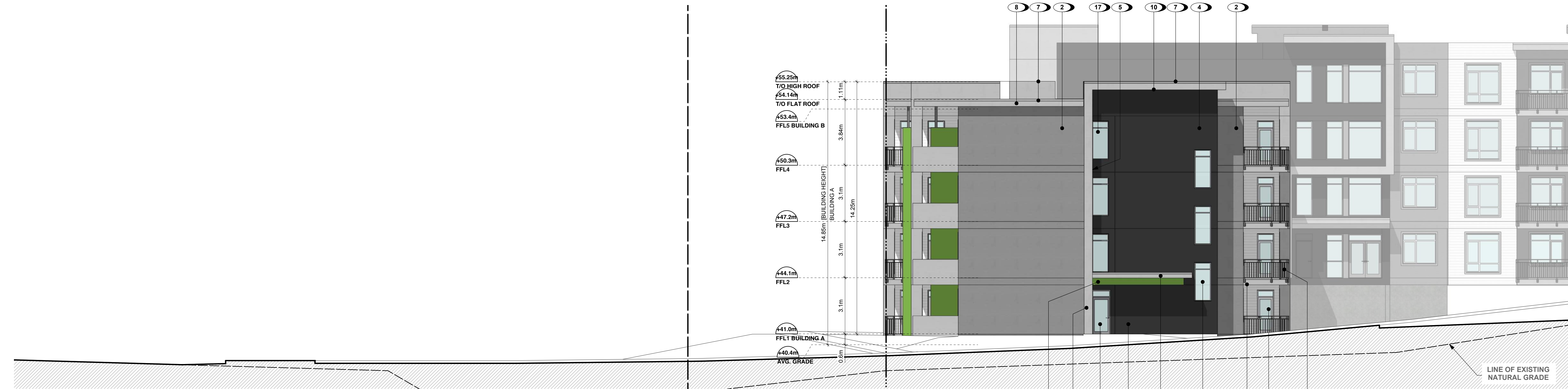


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1 East Elevation
Scale: 1:100



2 East Courtyard Elevation
Scale: 1:100

0 2500 5000mm
1:100

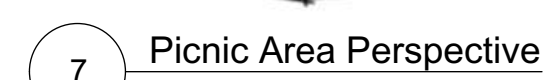
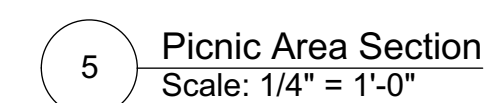
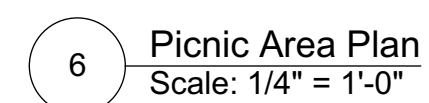
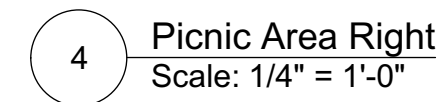
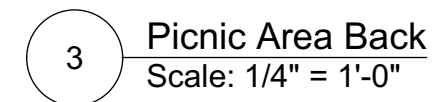
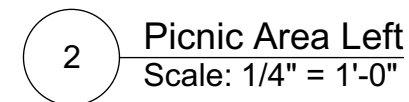
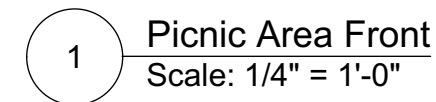
Ladysmith, BC
5 MAY 2020

Holland Creek Lot 13
ISSUED FOR DEVELOPMENT PERMIT

East Elevations
A303
Scale 1:100

dHKarchitects





Rev.	Date	14 JUL 20	Description	Issued for Building Permit
John Doe	14 JUL 20	Issuing By	N792-3, Holland A100a	
drawn by	ask	approved by		OK
notes	as noted	project name		

NOTE: All dimensions are shown in feet and inches

VICTORIA OFFICE
977 Fort Street
Victoria BC V8V 3K3
T 1-250-665-3367

NANAIMO OFFICE
102-5190 Duplin Way
Nanaimo BC V7Y 2K5
T 1-250-585-5810

project name

Holland Creek Apartments

107 Rollie Rose Drive
Ladysmith, BC

working title

Picnic Area Accessory Building

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A103

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Ladysmith, BC
5 MAY 2020

Holland Creek Lot 13

ISSUED FOR DEVELOPMENT *Page 84 of 239* Vignette Views

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Ladysmith, BC
5 MAY 2020

Holland Creek Lot 13

ISSUED FOR DEVELOPMENT Page 92 of 239

Vignette Views

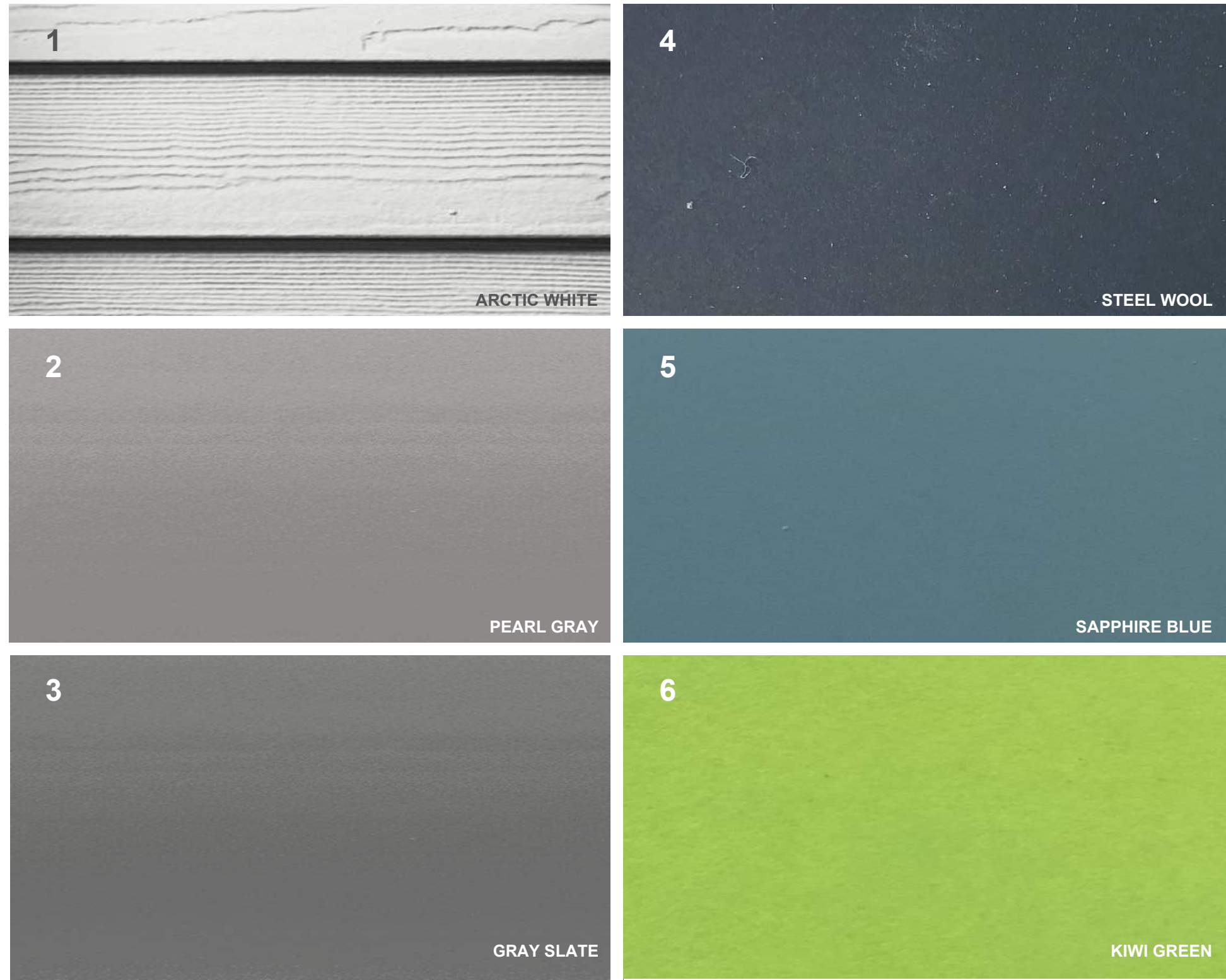
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- 5 FIBRE CEMENT PANEL, SMOOTH FINISH, IN 'SAPPHIRE BLUE' (COLOUR MATCH TO CASCADIA)
- 6 FIBRE CEMENT PANEL, SMOOTH FINISH, IN 'KIWI GREEN' (COLOUR MATCH TO GENERAL PAINT)



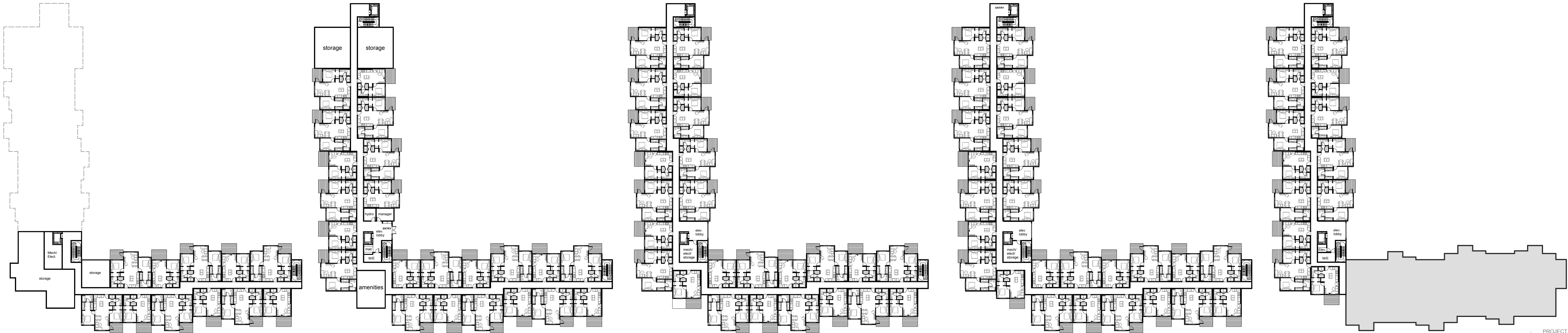
- 7 FLAT AND LOW SLOPE ROOF, TORCHED DOWN MEMBRANE, SLOPED TO DRAIN, GREY TONES
- 8 FASCIA BOARD, IN 'PEARL GREY' REF. 3 & ALUMINIUM CAP AND TRIM FLASHING, IN 'CHARCOAL'
- 9 VENTED VINYL SOFFIT, IN 'MEDIUM GRAY', KAYCAN
- 10 PERFORATED HARDIE FIBRE CEMENT SOFFIT, IN 'SAPPHIRE BLUE' (COLOUR MATCH TO CASCADIA)
- 11 PERFORATED HARDIE FIBRE CEMENT SOFFIT, IN 'KIWI GREEN' (COLOUR MATCH TO GENERAL PAINT)
- 12 FIBRE CEMENT TRIM, COLOUR PLUS, SMOOTH FINISH, IN 'PEARL GRAY', JAMES HARDIE
- 13 STEEL HSS COLUMN, COLOUR TO MATCH GUARDRAILS



- 14 BALCONY: VINYL DECK
- 15 PATIO AT GRADE
- 16 ALUMINIUM GUARDRAILS, TOP RAIL AND FACE MOUNTED POSTS, IN 'WEATHERED ZINC' COLOUR (COLOUR MATCH TO CASCADIA METALS)
- 17 VINYL WINDOW, IN PEARL GRAY
- 18 VINYL WINDOW, IN WHITE
- 19 VINYL SWING DOOR, IN WHITE, WITH CLEAR TEMPERED GLASS PANEL
- 20 VINYL SLIDING GLASS PATIO DOOR, IN WHITE, WITH CLEAR TEMPERED GLASS PANELS
- 21 ALUMINIUM ENTRY DOOR, IN PEARL GRAY, WITH CLEAR TEMPERED GLASS PANELS
- 22 STEEL DOOR, PAINTED



KEYPLANS



1 Floor Plan: Level 1
Scale: 1:450

NUMBER OF UNITS:	BUILDING A	BUILDING B	TOTAL
1 BEDROOM	5	-	5
1 BEDROOM +	-	-	-
2 BEDROOM	6	-	6
TOTAL	11	-	11

2 Floor Plan: Level 2
Scale: 1:450

NUMBER OF UNITS:	BUILDING A	BUILDING B	TOTAL
1 BEDROOM	6	3	9
1 BEDROOM +	-	1	1
2 BEDROOM	6	6	12
TOTAL	12	10	22

5 Floor Plan: Level 3
Scale: 1:450

NUMBER OF UNITS:	BUILDING A	BUILDING B	TOTAL
1 BEDROOM	6	4	10
1 BEDROOM +	-	-	-
2 BEDROOM	6	9	15
TOTAL	12	13	25

6 Floor Plan: Level 4
Scale: 1:450

NUMBER OF UNITS:	BUILDING A	BUILDING B	TOTAL
1 BEDROOM	6	-	6
1 BEDROOM +	-	-	-
2 BEDROOM	6	-	6
TOTAL	12	-	12

7 Floor Plan: Level 5
Scale: 1:450

NUMBER OF UNITS:	BUILDING A	BUILDING B	TOTAL
1 BEDROOM	6	-	6
1 BEDROOM +	-	-	-
2 BEDROOM	6	-	6
TOTAL	12	-	12

Holland Creek Lot 13
ISSUED FOR DEVELOPMENT PERMIT

Material Palette

Schedule G - Building Materials and Colours
DP 3060-20-05
107 Rollie Rose Drive 1
223434 B.C. Ltd., Inc. No. BC1223434

FORM 1

Riparian Areas Protection Regulation - Qualified Environmental Professional - Assessment Report

Riparian Areas Protection Regulation: Assessment Report

Please refer to submission instructions and assessment report guidelines when completing this report.

Amended Date Sep. 7 2020

I. Primary QEP Information

First Name	David	Middle Name	R
Last Name	Clough		
Designation	RPBio	Company	D.R. Clough Consulting
Registration #	815	Email	drclough@shaw.ca
Address	6966 Leland Road		
City	Lantzville	Postal/Zip	V0R2H0
Prov/state	BC	Country	Canada
		Phone #	250-714-5416 cell
		Ph/Fax:	250-390-2901 desk

II. Secondary QEP Information (see Form 2 below for other QEPs)

First Name	Drew	Middle Name	
Last Name	Beiderwieden		
Designation	P.Eng.	Company	Newcastle Engineering Ltd
Registration #	42351	Email	drew.beiderwieden@newcastleengineering.com
Address	Suite 4-3179 Barons Road,		
City	Nanaimo,	Postal/Zip	V9T 5W5
Prov/state	B.C.	Country	Canada
		Phone #	250-756-9553

III. Developer Information

First Name	Chris	Middle Name	
Last Name	Lundy (Company Director)		
Company	1223434 BC Ltd.		
Phone #	250-729-7540	Email	Chris@westmarkconstruction.ca
Address	1-2535 McCullough Road		
City	Nanaimo	Postal/Zip	V9S 4M8
Prov/state	BC	Country	Canada

IV. Development Information

Development Type	Construction; medium density 16-35 units/ha		
Area of Development (ha)	2.1	Riparian Length (m)	475
Lot Area (ha)	2.7	Nature of Development	New
Proposed Start Date	2020-05-25	Proposed End Date	2021-10-31

V. Location of Proposed Development

Street Address (or nearest town)	Lot 13 Rollie Rose Drive Ladysmith BC		
Local Government	Town of Ladysmith	City	Ladysmith
Stream Name	Un-named tributary to Holland Creek		
Legal Description (PID)	009474251	Region	Lot 13 District Lot 103, Oyster District,
Stream/River Type	Stream	DFO Area	17-7
Watershed Code	920-321500		
Latitude	48	58	49
Longitude	123	48	53

Completion of Database Information includes the Form 2 for the Additional QEPs, if needed. Insert that form immediately after this page.

FORM 1

Riparian Areas Protection Regulation - Qualified Environmental Professional - Assessment Report

II. Additional QEP Information						
First Name	Louis		Middle Name			
Last Name	Chapdelaine					
Designation	P.Geo		Company Lewkowich Engineering Associates Ltd			
Registration #	48335		Email lchapdelaine@lewkowich.com			
Address	1900 Boxwood Road					
City	Nanaimo	Postal	V9S 5Y2	Phone #	250-741-7662	
Prov/state	BC	Country	Canada			

II. Additional QEP Information						
First Name	Stuart		Middle Name			
Last Name	Crossfield					
Designation	P.Geo		Company Lewkowich Engineering Associates Ltd			
Registration #	39632		Email scrossfield@lewkowich.com			
Address	1900 Boxwood Road					
City	Nanaimo	Postal		Phone #	250-756-0355	
Prov/state	BC	Country	Canada			

II. Additional QEP Information						
First Name	Margaret		Middle Name			
Last Name	Symon					
Designation	RPF		Company Strathcona Forestry Consulting			
Registration #	1485		Email strathcona.fc@shaw.ca			
Address	PO Box 387 Stn. Mn.					
City	Duncan	Postal	V9L 3X5	Phone #	250-715-6983	
Prov/state	BC	Country	Canada			

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Section 1. Description of Fisheries Resources Values and a Description of the Development proposal

(Provide as a minimum: Species present, type of fish habitat present, description of current riparian vegetation condition, connectivity to downstream habitats, nature of development, specific activities proposed, timelines)

Description of the Development Proposal.

This is a multifamily residential development for two four storey buildings with a total of 95 units. It is being built on 2.7 ha of property on Lot 13, Rollie Rose Drive in Ladysmith. The riparian assessment area (Section 3 ,Fig1.) is situated along the south and east side of this development. The south and east sides of the building are in the Riparian Assessment Area. The adjacent stream (Tributary 2) has a 10m SPEA from the HWM.

The proposed development will not result in any intrusion within the SPEAs or HADD of fish habitat.

Below is the description of the developments on the property;

Holland Creek Apartments, located at 107 Rollie Rose Drive, in Ladysmith, is a multifamily residential building providing 39 one-bedroom suites and 57 two-bedroom suites for a total of 96 residential units. The multifamily building is accompanied on the site by three accessory buildings that aid in the function of the site and apartments. The property is a 6.67 acre parcel (26,987.8 sq.m.), of which the principal building is situated on 0.52 acres (2,109.3 sq.m.) providing a parcel coverage of 7.8% and a ratio of 0.32:1. The three accessory buildings are collectively situated on 0.04 acres (161 sq.m.) of the site, creating a total parcel coverage for all buildings on the property of 8.4% and a ratio of 0.326:1. The permitted coverage of this site is 33% and permitted floor space ratio is 0.66:1.

The BCBC 2018 classifies Holland Creek Apartments as being a building that is divided by a firewall into two portions, where each portion is considered as a separate building. Thus the proposal demonstrates two four-storey residential buildings functioning side by side, that work with the site grading. To collaborate with the beautiful nature of the site, the building has been recessed into the stepping contours and integrated into its surroundings. Likewise, the resident parking has been distributed into three areas: lower, central, and upper parking with vegetation interspersed into the layout. To reflect the distribution of the resident parking, the principal entry is located centrally at Level 2. Additional entry doors are also located at levels 1 and 4 to accommodate parking at the lower and upper sections of the site. These access doors also permit connection to the three accessory buildings that rest on the site. A recycling and garbage enclosure (31.5 sq.m.) is located across the drive aisle from the level 1 entry door and has been positioned to be easily accessible to residents. Just up the driveway, is an accessory storage building (53.8 sq.m.). This building has been created to provide individual storage space for the residents with larger outdoor items (other unit storage lockers are located within the main building). The third accessory building, located next to the level 4 entry, is a picnic shelter (37.2 sq.m.) which has been designed to provide the residents with an outdoor gathering space for family functions and visits.

Holland Creek Apartment building, accessory buildings and site landscaping components have been located on the site so as not to impose the resulting SPEA setback of 10 meters. A 1.5m minimum landscape buffer has also been provided along the sections of the site abutting on the property lines and SPEA.

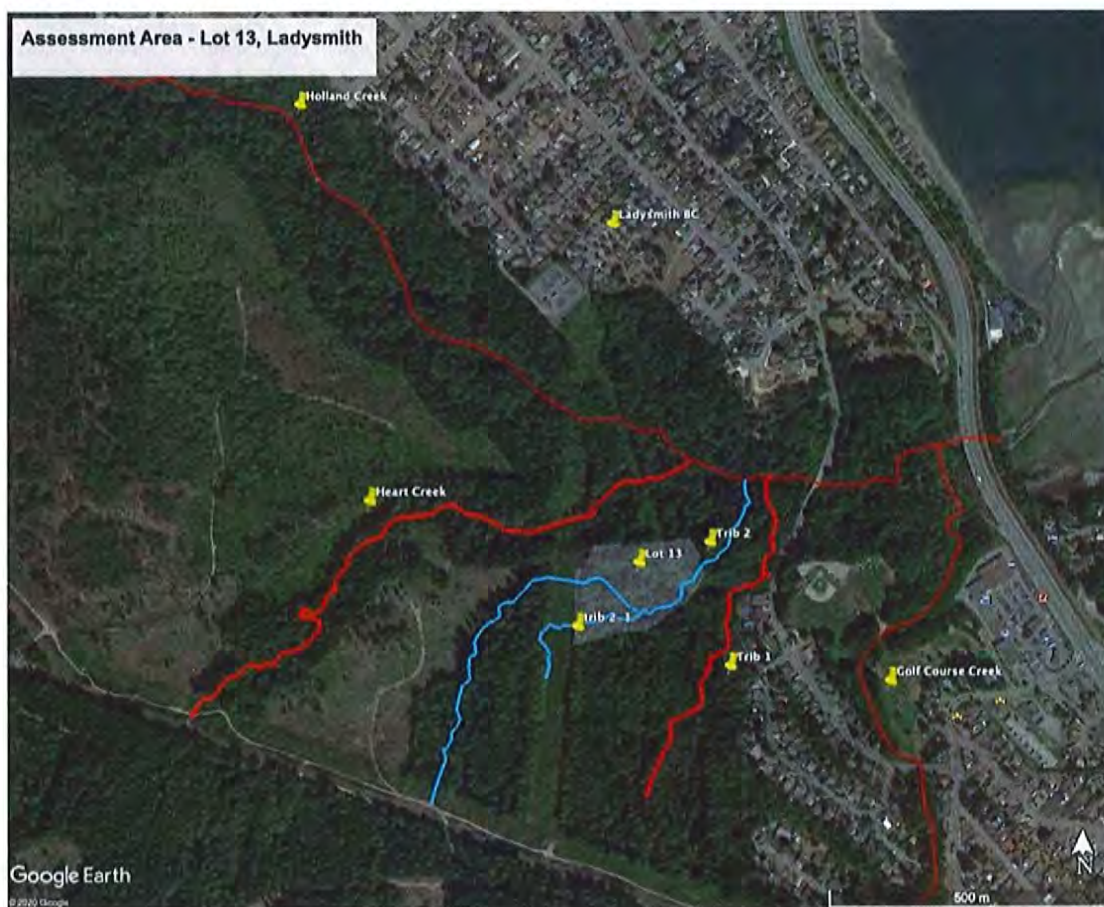
The development was designed by DHK Architects. The building services including stormwater designed by Newcastle Engineering and its geotechnical assessment and ESC developed by Lewkowich Engineering Associates. The Blowdown and Hazard Tree Management plan was provided by Strathcona Forestry Consulting. The RAPR report and environmental monitoring is being undertaken by D.R. Clough Consulting.

The development includes installation of a 1.5m diameter culvert over the Tributary 2 driveway access to the property. This culvert has been approved under the BC Water Act; Tracking Number 100317923 (Appendix 6).

Description of Fisheries Resources Value/Fish Assessment

Watershed:

The property is in the Holland Creek watershed. Holland Creek is located 250m north property and is the receiving body for drainages from Lot 13. The property is situated on the south sidewall of the Holland Creek valley. Within the Town of Ladysmith there are several tributaries that flow down the steep south valley sidewall into the Holland Mainstem. In Lot 13 there is one main Tributary 2 (T2) along the building south boundary. Tributary 2 has a fork; Tributary 2-1 (T2-1) draining from further south along the Rollie Rose Drive residences. Other nearby stream channels not in the RAA of the site but include Heart Creek to the northwest, Golf Course Creek and Tributary 1 on Rollie Rose Drive to the east. Holland Creek is the receiving waters of the property drainages. Holland Creek has a salmon and trout population. The property drainages (Tributary 2 and 2-1) do not have fish populations (as described below).



Historic Development

There is considerable historic disturbance and alteration of the channels. In the lower reaches where the road right of way is located, the channels were historically redirected for logging, service of the Hydro lines, abandoned water line corridor and garbage dump. The entire area has been historically logged. The regenerating riparian areas are approximately 20 to 80 years old. There are abandoned service and logging roads crossing the property and the stream channels. There are two BC Hydro transmission line corridors running through the centre of the property. A hydro line easement passes over the main stream (Tributary 2) at the location of the historic service road entrance. The lot 13 entrance route over Tributary 2 has been historically cleared of trees and has low growing shrubbery.

Plant Community

The property is located within the Coastal Douglas Fir Biogeoclimatic Zone, a Red Listed Plant Community. No specific Red or Blue listed plants other than the CDF Community are found in the B.C. Government Ecosystem Explorer for this site.

No old growth trees were observed in the riparian areas due to the historic logging and hydro line clearing. The riparian assessment area tree species are primarily Douglas Fir and Red Cedar with some Grand Fir, Broadleaf Maple and Red Alder. Where the Hydro Line crosses Tributary 2 at the lot entrance, the riparian area is cleared of trees to protect the power lines. The plants under the hydro line are a mix of invasive shrubs (patchy areas of Himalayan Blackberry, English Holly, Spurge Laurel), sapling trees (Red Alder, Broadleaf Maple).

Tributary 1 and 2 Riparian plant community is composed of the taller trees on the property; primarily Douglas Fir and Red Cedar with some Grand Fir, Broadleaf Maple and Red Alder. There are few understory shrubbery species and density from historic alteration. The attached Tree Windthrow and Hazard Tree assessment recommends understory fill planting in this south side of Tributary 2 along a 50m length. The plan recommends native planting of Indian Plum, Red Osier Dogwood, Red Huckleberry, Ninebark and western Red Cedar

Photo below: Looking from SPEA north to building site (beyond rope line)

**Fish populations and Habitat Description****Holland Creek;**

Holland Creek is the receiving waters of the property drainages. Holland Creek is located 250m to the north, of the property. Holland Creek has Coho, Chum and Cutthroat as the most common fish species. It is located in a confined valley with steep stable sidewalls. Salmon have access up the mainstem to Crystal Falls approximately 2.0 km upstream from the ocean and 1.5 km past the property outlet. This is a 10m wide perennial stream. Holland Creek is fed by a reservoir and small lake.

Property Drainages

The streams on the property are not fish bearing streams as there is a lack of perennial wetted habitat and permanent natural barriers from Holland Creek. Tributary 2 and 2-1 are described on the development property below.

Tributary 2:

This stream channel is located on the south side of the property (see map above) adjacent the building area. It has an average of 1.75m wide channel. The stream substrates are cobble, gravel and fines. On the property it is on a lower gradient 12% gradient bench of approximately 320m length. There are steep sections of more than 20% gradient above and below this middle reach. The channel is confined except in a few areas of old logging and hydro road disturbance where the floodplain was 2-3 m wide (but flooding over stable vegetated ground). The riparian area has been disturbed by three historic road crossings on the property.

There were no significant bank sloughs or erosion areas along the channel. The channel is in a stand of second growth trees that are stable with very few down trees from blowdown or rot. The adjacent riparian area lacks coarse woody debris (CWD). The stream lacks large woody debris (LWD) and deep pools. The historic logging and burning have removed the CWD and LWD. The lack of channel and bank erosion combined with healthy trees are all indicators the riparian area is recovering from historic logging.

The stream south bank has an existing 10m fenced SPEA from houses in the adjacent subdivision on Rollie Rose Drive. The subject development is along the north bank of Tributary 2.

Fish Habitat

There is no fish access or resident fish habitat on the property. Tributary 2 leaves the Lot 13 property and flows over barriers; including a steep drop reach (25% gradient) to a 6.0 m bedrock falls before entering Holland Creek. Observations in summer found the stream to have very shallow wetted areas with a lack of pools. No resident or migratory fish were observed or expected in Tributary 2. It lacks resident fish habitat with a short shallow and steep channel. There is no migratory fish access with its series of steep gradients and falls at the entrance to Holland Creek. In 2010 an electroshock survey was conducted by the author which confirmed the lack of fish. No fish were expected given the lack of habitat and barriers.

Tributary 2-1

Tributary 2-1 is a first order 1.0m wide channel on 13% gradient on the property. The substrates are an even mix of cobble, gravel and fines. The riparian canopy was historically logged and burned. The second growth trees have become well established along the channel. Tributary 2-1 originates upstream from hydro line service road ditches 75m west of the property. Its total length is approximately 200m. Tributary 2-1 enters at the south bank of Tributary 2 opposite of the development. There are no significant erosion areas; the channel has tree roots and vegetation growing along the bank. There were no observed bank failures along the channel. This channel is a shallow seepage in summer with no resident fish habitat and no access from below. It is connected to Tributary 2 which is also non fish accessible habitat. Tributary 2-1 has the Rollie Rose residential houses alongside its south bank with a permanent wooden fence along the 10m SPEA from that recent (2014) development. For this development a 10m SPEA will apply to the north bank of Trib 2-1.

Section 2. Results of Riparian Assessment (SPEA width)

2.1 Results of Detailed Riparian Assessment

Refer to Section 3 of Technical Manual		Date: Sep. 7 2020
Description of Water bodies involved (number, type)		Tributary 2 and 2-1, (2 Streams)
Stream	2	
Wetland		
Lake		
Ditch		
Number of reaches	1	
Reach #	1	

Channel width and slope and Channel Type (use only if water body is a stream or a ditch, and only provide widths if a ditch)

	Channel Width(m)	Gradient (%)		
starting point	1.60		I, <u>David Clough, RP Bio</u> (<i>name of qualified environmental professional</i>), hereby certify that: a) I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i> ; b) I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>1223434 BC Ltd</u> (<i>name of developer</i>); c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and d) In carrying out my assessment of the development proposal, I have followed the technical manual to the Riparian Areas Protection Regulation.	
upstream	2.10	9		
	1.85			
	1.45			
	1.50			
downstream	1.70	15		
	1.20			
	1.90			
	2.00			
	2.4			
	2.0			
Total: minus high /low	13.85			
mean	1.73	12		
	R/P	C/P		S/P
Channel Type				x

Site Potential Vegetation Type (SPVT)

	Yes	No	
SPVT Polygons		x	Tick yes only if multiple polygons, if No then fill in one set of SPVT data boxes I, <u>David Clough, RP Bio</u> (<i>name of qualified environmental professional</i>), hereby certify that: a) I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i> ; b) I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>1223434 BC Ltd</u> (<i>name of developer</i>); c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and d) In carrying out my assessment of the development proposal, I have followed the technical manual to the Riparian Areas Protection Regulation.
Polygon No:			
SPVT Type	LC	SH	TR
			x
			Method employed if other than TR

Zone of Sensitivity (ZOS) and resultant SPEA

Segment No:	1	North side segment
-------------	---	--------------------

FORM 1

Riparian Areas Protection Regulation - Qualified Environmental Professional - Assessment Report

	If two sides of a stream involved, each side is a separate segment. For all water bodies multiple segments occur where there are multiple SPVT polygons					
LWD, Bank and Channel Stability ZOS (m)	10					
Litter fall and insect drop ZOS (m)	10					
Shade ZOS (m) max	5.2	South bank	Yes		No	X
Ditch	Justification description for classifying as a ditch (manmade, no significant headwaters or springs, seasonal flow)					
Ditch Fish Bearing	Yes		No		If non-fish bearing insert no fish bearing status report	
SPEA maximum	10	(For ditch use table3-7)				

Segment No:	2	South Side segment If two sides of a stream involved, each side is a separate segment. For all water bodies multiple segments occur where there are multiple SPVT polygons				
LWD, Bank and Channel Stability ZOS (m)	10					
Litter fall and insect drop ZOS (m)	10					
Shade ZOS (m) max	5.2	South bank	Yes	X	No	
SPEA maximum	10	(For ditch use table3-7)				

I, <u>David Clough, RP Bio</u> (<i>name of qualified environmental professional</i>), hereby certify that:	
a)	I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i> ;
b)	I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>1223434 BC Ltd</u> (<i>name of developer</i>);
c)	I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and
d)	In carrying out my assessment of the development proposal, I have followed the technical manual to the Riparian Areas Protection Regulation.

Comments

Tributary 2 is primarily a confined non fish bearing 320m long channel that is a summer water supply to Holland Creek. It does not have resident fish habitat or fish access due to a barrier (6m) falls at the mouth. The 1.73m wide channel falls on an average gradient of 12% through the property. The SPEA is 10m either side of the High Water Mark.

2.2 Results of Detailed Riparian Assessment

Refer to Section 3 of Technical Manual

Date: Sep. 7 2020

Description of Water bodies involved (number, type)	
Stream	X -2-1
Wetland	
Lake	
Ditch	
Number of reaches	1
Reach #	1

Tributary 2-1

Channel width and slope and Channel Type (use only if water body is a stream or a ditch, and only provide widths if a ditch)

	Channel Width(m)	Gradient (%)		
starting point	1.20		I, David Clough, RP Bio (name of qualified environmental professional), hereby certify that: e) I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i> ; f) I am qualified to carry out this part of the assessment of the development proposal made by the developer 1223434 BC Ltd (name of developer) ; g) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and h) In carrying out my assessment of the development proposal, I have followed the technical manual to the Riparian Areas Protection Regulation.	
upstream	1.60	12		
	0.90			
	0.90			
downstream	0.90			
	1.40	14		
	0.80			
	1.00			
	0.70			
	1.00			
	1.10			
Total: minus high /low	7.9			
mean	1.01	13		
	R/P	C/P		S/P
Channel Type				x

Site Potential Vegetation Type (SPVT)

	Yes	No	
SPVT Polygons		x	Tick yes only if multiple polygons, if No then fill in one set of SPVT data boxes I, David Clough, RP Bio (name of qualified environmental professional), hereby certify that: e) I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i> ; f) I am qualified to carry out this part of the assessment of the development proposal made by the developer (name of developer) ; g) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and h) In carrying out my assessment of the development proposal, I have followed the technical manual to the Riparian Areas Protection Regulation.
Polygon No:			Method employed if other than TR
	LC	SH	
SPVT Type			x

Zone of Sensitivity (ZOS) and resultant SPEA

Segment No:	1	North side Tributary 2-1 If two sides of a stream involved, each side is a separate segment. For all water bodies multiple segments occur where there are multiple SPVT polygons
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FORM 1

Riparian Areas Protection Regulation - Qualified Environmental Professional - Assessment Report

LWD, Bank and Channel Stability ZOS (m)	10					
Litter fall and insect drop ZOS (m)	10					
Shade ZOS (m) max	3.03	South bank	Yes		No	X
Ditch	Justification description for classifying as a ditch (manmade, no significant headwaters or springs, seasonal flow)					
Ditch Fish Bearing	Yes		No		If non-fish bearing insert no fish bearing status report	
SPEA maximum	10	(For ditch use table3-7)				

Segment No:	2	South Side Tributary 2-1 If two sides of a stream involved, each side is a separate segment. For all water bodies multiple segments occur where there are multiple SPVT polygons				
LWD, Bank and Channel Stability ZOS (m)	10					
Litter fall and insect drop ZOS (m)	10					
Shade ZOS (m) max	3.03	South bank	Yes	X	No	
SPEA maximum	10	(For ditch use table3-7)				

I, <u>David Clough, RP Bio</u> (<i>name of qualified environmental professional</i>), hereby certify that:	
e)	I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i> ;
f)	I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>1223434 BC Ltd</u> (<i>name of developer</i>);
g)	I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and
h)	In carrying out my assessment of the development proposal, I have followed the technical manual to the Riparian Areas Protection Regulation.

Comments

The 1.0 m wide channel falls on the property for an average gradient of 13% for 175m to enter Trib. 2. It is confined and collects water from weeping seepages on the sidewalls. The top end is fed by runoff from the Hydro line service road. It is a water supply to Holland Creek. This tributary has no fish. The SPEA is established at 10m on either side of the High Water Mark.



Section 4. Measures to Protect and Maintain the SPEA

This section is required for detailed assessments. Attach text or document files, as need, for each element discussed in Part 4 of the RAPR. It is suggested that documents be converted to PDF *before* inserting into the assessment report. Use your "return" button on your keyboard after each line. You must address and sign off each measure. If a specific measure is not being recommended a justification must be provided.

1. Danger Trees	
<p>I Margaret Symon RPF, hereby certify that:</p> <p>a) I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i>;</p> <p>b) I am qualified to carry out this part of the assessment of the development proposal made by the developer 1223434 BC Ltd ;</p> <p>c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.</p>	
<p>The RAPR Guidebook section 3.7.1 on Danger Trees noted that the SPEA should be assessed by a QEP with appropriate training to determine if danger trees pose a risk to the adjacent development. As noted in the guidebook, these trees may include standing dead vertical trees or lean towards the work area, as well as some live trees with large dead branches or tops. The QEP will manage the Danger trees for retention as wildlife stumps or retain in the SPEA as coarse woody debris (CWD). The trees felled or replaced in the SPEA are to be replaced with tree planting that exceeds the BC Tree replacement criteria.</p> <p>The property was assessed for Danger Trees by Margaret Symon RPF (a qualified Danger Tree Assessor Certification W8668) in the attached report Lot 13 Rollie Rose Place, Ladysmith; Windthrow and Hazard Tree Assessment (Appendix 2). The assessment divided the development into a north non SPEA and south area adjacent a SPEA. This report included an assessment of all trees for hazards on the property not just including the SPEA.</p> <p>As part of the tree assessment, trees along the SPEA line and other significant areas along the property lines were located on the plan by land survey and numbered for reference. All trees close to the SPEA line and building areas were surveyed The tree map was used as part of the RPF report below.</p> <p>The assessment identifies measures to protect the integrity of the SPEA while protecting people from hazards. The protective measures include retaining coarse woody debris, removing invasive species, removing dead overhead limbs and restoration of the poor condition of the understory shrubbery with infill planting of native species.</p> <p>The RPF report found 8 trees amongst the SPEA areas that require treatment. These treatments follow the guidebook recommendations to treat to reduce the hazard but retain as best for the SPEA health. Trees to be felled will be retained as CWD. Some trees with dead branches will be recommended for spiral pruning. Several will be cut at a high stump/trunk (5-10m ht) to remove the danger but preserve the tree.</p> <p>This work will all be done by a qualified tree service company under the direction of the RPF.</p> <p>The RPF report identified measures to protect the SPEA trees during land clearing and falling outside the SPEA. It recommended a pre work meeting with the crews to identify the clearing boundaries, protection of root boles SPEA trees, supervision and monitoring during works with respect to tree protection.</p> <p>A pre-work inspection by the assessor will also be used to identify any changes that may have to be addressed in the hazards since the July 2020 hazard assessment.</p>	

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2. Windthrow	
I, <u>Margaret Symon, RPF</u> (<i>name of qualified environmental professional</i>), hereby certify that:	
a.	I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i> ;
b.	I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>1223434 BC Ltd</u> (<i>name of developer</i>);
c.	I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.
<p>Windthrow assessment in this area was conducted as it was a treed site with the potential for wind damage to the SPEA.</p> <p>The property was assessed for Windthrow by a qualified assessor, Margaret Symon, RPF using the RAPR Guidebook methods in section 3.7.2 including the Windthrow Handbook for BC Forests. (Appendix 2).</p> <p>The protection for wind firmness methods for protection of the SPEA considered topping, top pruning, spiral pruning, edge feathering, coppicing and falling for CWD/Wildlife habitat. These methods are all discussed and identified for the SPEA and non SPEA areas.</p> <p>The site was assessed in two segments, north non RAA area and South side with a Riparian Area with a 10m SPEA. Specific trees in the SPEA area were surveyed and numbered for identification of any management action. The trees are shown in a map in the assessment report.</p> <p>The Windthrow assessment of the SPEA found the stand to be in a sheltered bowl/lower valley and resulted in low-moderate risk (intermediate to very wind sheltered). The trees were found to be acclimated to wind loading and other characteristics in Low -moderate results.</p> <p>The RPF noted the removal of trees outside the SPEA was not likely to impact the SPEA trees. The RPF did identify in a table individual trees that need to be treated for windthrow and hazard. The assessment found no identified Windthrow protection was required outside the SPEA. The building area outside the SPEA will be cleared following the clearing guidelines in the RPF report (Appendix 2) and in the Tree Protection Measures.</p> <p>The RPF guidelines include prior to clearing the SPEA tree protection areas will be identified and fenced. The works will be monitored by the RPF or QEP during clearing. Clearing operations will be managed to fall away and yard away from the SPEA areas. The cleared material will be removed from site. Erosion and sediment control measures such as rainfall shutdown and site drainage management from machinery ruts will be managed with coverings or tarps, compacted material or rock as required.</p> <p>A native species planting plan has also been recommended by the RPF for the SPEA area too replace trees cut but also to enhance the relatively vacant understory due to past logging and burning activities. The windthrow treatments have been identified to protect and enhance the SPEA for the characteristics of wind firmness, wildlife habitat and biodiversity of the stand.</p>	

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3. Slope Stability

I, Stuart Crossfield, P.Geo Eng. L. (name of qualified environmental professional), hereby certify that:

- I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*;
- I am qualified to carry out this part of the assessment of the development proposal made by the developer 1223434 BC Ltd (name of developer);
- I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.

The RAPR Guidebook mentions the slope stability indicators that may trigger a further assessment in section 3.7.3.

See attached Geotechnical Assessment Holland Creek Apartments, Lot 13, District Lot 103 Ladysmith BC by Lewkowich Engineering Associates Ltd (attached in Appendix 3).

The site has a steep north slope in a non RAA area and a moderate slope on the southwest RAA alongside Tributary 2. The assessment found no indicators of slope failure that could threaten the SPEA or other areas. They made recommendations of setbacks (generally 10m) for all of the property as depicted in design drawing cross sections.

The geotechnical construction measures include removal of unsuitable overburden (off site) to bearing material, installation of structural fill and installation of perimeter drainage and stormwater for impacts to slopes recommend identified distances keeping the development away from loading the banks. These activities have measures to protect identified in the project ESC (Appendix 4) and include removal of waste material, coverings and filtration.

The geotechnical assessment stated if the development follows their recommendations it will result in no significant surcharge loads. The engineering assessment stated no development or disturbance is being proposed on a slope face or within any SPEA.

4. Protection of Trees

I, David Clough, RP Bio (name of qualified environmental professional), hereby certify that:

- I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*;
- I am qualified to carry out this part of the assessment of the development proposal made by the developer 1223434 BC Ltd (name of developer);
- I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.

Tree Protection

All trees in the SPEA are to be protected from damage. The Windthrow and Hazard Tree report by Strathcona Forestry identified enhancement measures to be undertaken. These protective measures for the SPEA measures follow the Riparian Areas Guidebook section 3.7.4 recommendations include;

- do not trench through the root zone of a tree,
- establish tree setbacks; a minimum of 3.0 m from a tree root bole has been identified in the Windthrow and Hazard Tree report. This protected width will exceed the SPEA and these areas are marked and will have fencing during construction and mulch afterwards.
- Do not pave around trees
- No perimeter drainage or service pipes to encroach into the SPEA or damage tree roots
- Do not change ground level around trees with fill other than mulch
- Do not permit parking under trees
- Do not allow pollutants from construction such as concrete washings to enter the soil around trees
- Tree limb pruning must be with clean cuts
- Do remove invasive plants where found and dispose according to invasive plant protocols (i.e.

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bags)

- encourage native landscaping in all outer exposed areas
- Avoid SPEA fence post holes into tree roots
- Install protective fencing and signage along the SPEA
- Review the tree protection plan with all supervisors and ensure they pass along to all construction personnel.

Invasive plants in the area will be removed during the operation. They will be bagged, marked and delivered offsite to the district Waste handling facility. No construction is permitted in the SPEA and further measures will include protection of tree roots as specified in the RPF report. The SPEA boundary trees are located with stakes, flagging, rope line with snow fencing to be installed before construction. A tree protection fence will be constructed along the SPEA, it will be a solid wood panel fence it will be marked with signage to identify the SPEA area. The developer has also been informed in the RPF report of a list of activities that must not take place near SPEA trees.

An Environmental Monitor will be performing inspections to ensure the protection measures are followed.

On the north side away from riparian areas is a cluster of two Flowering Dogwoods growing on the edge of an old waterline trench near the proposed parking area. These trees were noted to be in poor condition by the RPF. Replacement planting in other areas is planned as an ecological feature. The RPF report includes recommendation for tree restoration and enhancement summarized below.

Tree Enhancement

As noted in the Tree Windthrow and Hazard report, all SPEA trees will be protected and enhanced. In addition; the RPF has recommended infill planting of a the southern side of the SPEA. The infill planting will primarily enhance the poorly recovered understory on approximately 50m length on the south exposure of the SPEA. This area was historically logged and burned. Restoration calls for approximately 170 native plants (including Flowering Dogwood, Indian Plum, Huckleberry, Red Osier Dogwood, Red Cedar) in the SPEA. The plant stocking will follow the BC tree replacement criteria. The planting will be monitored by the QEP to ensure they trees are selected and located in appropriate sites.

5. Encroachment

I, David Clough, RP Bio (*name of qualified environmental professional*), hereby certify that:

- a. I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*;
- b. I am qualified to carry out this part of the assessment of the development proposal made by the developer 1223434 BC Ltd (*name of developer*);
- c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.

During construction and after development will be designs to ensure encroachment in the SPEA does not occur. The SPEA area and waterway must have protective measures that last in perpetuity. As noted above, tree root bole protection during construction will extend at least 3m beyond the SPEA.

The building site is adjacent Tributary 2 and the SPEA around it are the sensitive areas that the Measures to protect are required. This includes the building construction envelope will be marked and isolated from the SPEA by surveyed stakes and survey posts. Construction snow fencing will be installed along the SPEA and before any work begins.

The snow fences and signage will be done prior to any work. At the beginning of construction, the QEP/Environmental Monitor will review the SPEA area and work boundaries with the workers and supervisors. The SPEA and drainages are marked on construction diagrams as well. During construction the building site will be identified and protected from encroachment with signage, site plans, snow fencing. The Erosion Sediment Control plan by LEA Ltd (Appendix 4) and Construction Environmental Protection Plan by D.R. Clough Consulting (Appendix 1) describe the above measures to protect from encroachment.

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These measures are discussed in Section 6 as well.

The RAPR guidebook section 3.7.5, the major cause of loss of riparian areas is encroachment by adjacent land owners. As the construction closes, the final landscaping (mulching, native plants) will be done on the property side of the SPEA edge. The RPF Windthrow and Hazard tree treatments to encourage retention of coarse woody debris in the SPEA that will form an additional line of protection if people get past the fence. A permanent solid wood 6 foot fence will be installed along the SPEA boundary. The fence panels will be affixed with a riparian area protection sign at 10 m intervals and at property corners where access from off property could occur. Signs will face the frontage of each building.

The fencing/encroachment plan is similar to that of the adjacent development over the last 2 years. An inspection of the riparian area along the SPEA side of that fence line shows how effective the measures are with no garbage, foot trails or damage to the SPEA.

6. Sediment and Erosion Control

I, Loius Chapdelaine P. Eng. GeoScientist (name of qualified environmental professional), hereby certify that:

- I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*;
- I am qualified to carry out this part of the assessment of the development proposal made by the developer 1223434 BC Ltd (name of developer) ;
- I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.

Sediment and erosion control are key factors to environmental protection on this project which will likely take a year to build. The site development will involve clearing trees, land to grade, building footing excavation, building construction, service installations and paving. The access involves installation of a culvert over Tributary 2. These are all activities that may harm the SPEA if measures are not taken to protect. This project has two key documents, a diagrammatic ESC as well as a listed Construction checklist

Lewkowich Engineering Associates Ltd has provided an Erosion Sediment Erosion Control Plan for this project in the Appendix. This is a construction diagram of the site with locations of the erosion and sediment control structures.

The Construction Environmental Protection Plan by D. R. Clough Consulting is a checklist of activities and materials required to be in compliance of the sediment and erosion plans. Both documents will be introduced to workers and supervisors prior to start up and used as reference documents

be reviewed with the builders and contractors (Appendix). Both documents will be used for construction Sediment and Erosion Control.

Starting off the project is the 1.5m diameter culvert being installed under an approved Water Act Notification BC Water Act; Tracking Number 100317923. The culvert was designed by Newcastle Engineering Ltd (Appendix 6). A construction environmental plan (Appendix 6 – Westmark Culvert CEMP) identified the measures to protect the waterway during construction. The measures to protect the stream include following timing windows, sediment control and supervision and monitoring.

Construction of the building, parking and driveway have measures to protect the SPEA and stream water quality. The plans cover the phases of construction from start up to final landscaping.

The measures to protect in the ESC show the location of sediment settling areas, heavy equipment access pads, spoil piles and their coverings, vegetation retention areas and sediment control fence designs. No portion of the ESC work will involve the SPEA areas. LEA Ltd. Engineers will be monitoring the site for compliance.

The RPBio QEP will monitor project for delivery of the ESC and CEMP. The monitor will review the operations with the construction personnel and supervisory staff and routinely be on site to inspect for

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compliance as well as during all milestones as noted in environmental monitoring section below.

The monitor will be on site routinely and will identify any deficiencies in operation of the ESC and CEMP and be empowered to stop work if necessary to address exceedances or deficiencies. The This project includes reporting milestones on the environmental protection on a monthly basis.

7. Stormwater Management

I, Drew Beiderwieden P.Eng. (*name of qualified environmental professional*), hereby certify that:

- I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*;
- I am qualified to carry out this part of the assessment of the development proposal made by the developer 1223434 BC Ltd (*name of developer*);
- I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.

Stormwater runoff from the site has potential to impact the downstream watershed with increased runoff and poor water quality from the roof tops, parking lots and developed areas if not mitigated.

This development includes a stormwater management system as well as a 1.5m culvert installation over Tributary 2.

Newcastle Engineering provided the Stormwater Management and Grading Plan (Appendix 5). The property is a 6.67 acre parcel (26,987.8 sq.m.), of which the development area is 12,520m² (includes all buildings and pavement). The RAR Guidebook 3.7.7. states that capturing the small storm runoff (less than 50% of the rainfall event that occurs once per year, on average). Using this target, the Stormwater plan meets the design for 50% annual rainfall retention as well as maintain pre-development flows up to the 10 year return period.

The measures to protect shown in the plan include; oil water separators, landscape soils, rock filled detention reservoirs below a detention tank, bioswales and infiltration.

These stormwater management areas are all located outside the SPEA areas.

All works will be inspected by the engineer and QEP monitor to ensure they are installed to function and protect the SPEA.

The Tributary 2 Culvert is being installed under an Environmental Protection Plan Lot 13 Permanent Access with the attached approved water act notification File1004801 Tracking Number 100317923 (Appendix 6.) As described in the report, the work will be done in the period of least risk June 15-Sep 15 following an environmental plan that will include removal of all temporary works and revegetate exposed soils along the stream banks to avoid sedimentation.

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8. Floodplain Concerns (highly mobile channel)	
<p>I, <u>Stuart Crossfield P.Geo. (name of qualified environmental professional)</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the <i>Riparian Areas Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>1223434 BC Ltd (name of developer)</u> ;</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.</p>	
<p>The assessment considers the flooding concerns from the SPEA such mentioned in the RAR guidebook section 3.7.8 such as the result of heavy rainfall , snow melt or jam.</p> <p>A Flood hazard was assessed in the south side adjacent the riparian area including the SPEA. The assessment identified the flood construction level (FCL). The Flood Hazard remediation has been incorporated into the design. Final design requires the engineers to inspect the bearing material during construction. The engineers assessment report is incorporating all works outside the SPEA and to result in no harm to the SPEA.</p> <p>Lewkowich Engineering Associates Ltd. assessed the floodplain in their Geotechnical report by (Appendix 3). The assessment report section 3.2 determined buildings and roadways are required to be 1.5m above HWM. The engineers note this follows the B.C. Flood Hazard Area Land Use Management Guidelines, The site may require impermeable berms and increased elevation of concrete walls but these are structures built in association with the building and outside of the SPEA.</p> <p>The results of the assessment showed Tributary 2 and 2-1 are small channels of less than 1.5m width, their banks showed no indicators of recent significant erosion or flooding.</p>	

Section 5. Environmental Monitoring

Attach text or document files explaining the monitoring regimen. Use your "return" button on your keyboard after each line. It is suggested that all document be converted to PDF *before* inserting into the PDF version of the assessment report. Include actions required, monitoring schedule, communications plan, and requirement for a post development report.

The site has Tributary 2 and 2-1 along the south side. These streams have a 10m wide SPEA boundary above the 5 year HWM. The, SPEA area trees, soil and water are to be protected from construction. A QEP will be retained as project environmental monitor (EM) by the developer. The QEP will be experienced in sediment and erosion control and will have the authority to stop work if measures in the plans are not being followed.

ESC/CEMP Documents

The ESC from LEA Engineering will provide the main drainage and sediment control structural measures expected of the builders. The Construction Environmental Management Plan prepared by D.R. Clough Consulting identifies the environmental values, and expectations of the contractors in preparation of the job. These plans follow the Develop With Care Environmental Guidelines for Urban Development 2014 and the Stream Stewardship – A guide for Planners and Developers. Land Development Guidelines 2001.

The contractors will be obligated to follow the requirements of environmental protection in a written document to be reviewed by the QEP for satisfaction it accommodates the Measures to Protect in every aspect.

Monitoring

The Environmental Monitoring will be carried out to ensure:

- All development activities remain outside the SPEA;
- All Tree Protection measures are being followed;
- Protective structures (i.e. fencing and silt barriers) are in good working order;
- Stormwater management structures are working.

The monitor will inspect and ensure these measures are being followed and the water quality is unchanged. The monitor will typically be equipped with sediment wedge, thermometer, pH kit and Conductivity/TDS meter to record site conditions.

Monitoring Visits

Besides routine inspections (daily to weekly depending on activity) the Environmental Monitor will also inspect the site during any high runoff events to ensure the structures are effective. Additional visits will occur depending on weather severity, work close to SPEA, work with pumps, work with toxic materials and any spill events as described in the Construction Management Plans.

Clearing

While clearing and grubbing is taking place the monitor will follow the guidance in the ESC, CEMP reports as well as the Tree Windthrow and Hazard Report to ensure the SPEA area, trees and water quality are protected. As described in the reports; the monitor will ensure the boundary of clearing is established as well as the machine free areas, spoil areas and erosion control structures follow the designs. The EM will identify any coarse woody debris sourced from clearing that will be available for enhancement of the SPEA as per the Tree Windthrow and Hazard Report recommendations.

Culvert Installation

The Tributary 2 culvert installation is across a low flow, non fish bearing channel that leads to Holland Creek. The CEMP for the culvert installation identifies the measures to protect the water quality and flow. The pipe will be installed with a pump bypass and use sediment control pumps and filters.

Excavation of building and services

The monitor will ensure the ESC is followed and trenches and open cuts are addressed as design.

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The use of pumps, tarps, rock as covers will be inspected for compliance and effectiveness. Any areas pumped will be dealt with on site and not into SPEA area and reviewed by the EM. During this period, local drainages, spoil piles, construction access routes all have to be maintained according to the ESC and reviewed by the EM.

After the building foundations are backfilled, inspection will be timed to key construction activities (i.e. landscape grading, paving) and based on weather conditions (i.e. more often during/after periods of high rainfall).

Landscaping and Riparian Restoration

Following the ESC and Tree reports, the EM will ensure the site is landscaped as soon as possible after completion of works (weather dependent). The riparian restoration of Coarse woody debris and native plantings identified in the Tree Windthrow and Hazard report will be done. This work will be monitored and directed by the Environmental Monitor.

Post Development

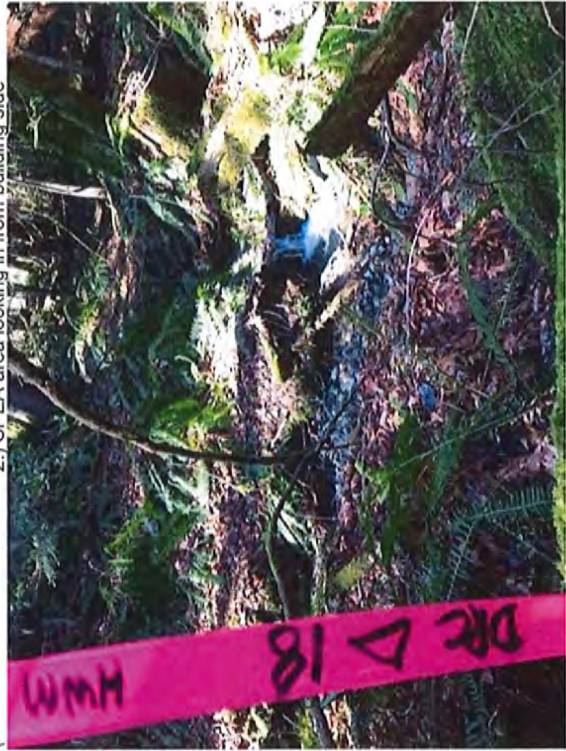
The developer has also been informed of their requirement to have a QEP complete and file a post-development report and arrangements have been made to ensure that this takes place. The post development report will report on the site whether or not the above measures were implemented, and how effective they were at protecting the integrity of the SPEA

Construction Environmental Protection Plan for Westmark Construction , Lot 13 (Appendix 1)

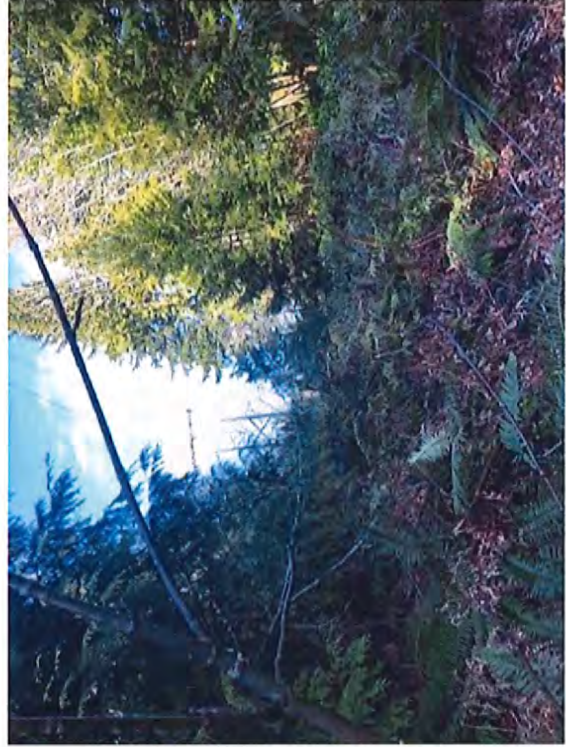
Section 6. Photos



1.) Stream 2 looking downstream along south east side of property
2.) SPEA area looking in from building side



3.) Stream 2-1 entering Stream 2 is located away from development area.



4.) Building area - has been historically logged and cleared for Hydro Line

Section 7. Professional Opinion

Qualified Environmental Professional opinion on the development proposal's riparian assessment.

Date | Sep. 7, 2020

1. I/We David Clough, RP Bio, Drew Beiderwieden P.Eng, Louis Chapdelaine, P. Geo, Margaret Symon RPF and Stuart Crossfield P. Geo

Please list name(s) of qualified environmental professional(s) and their professional designation that are involved in assessment.)

hereby certify that:

- a) I am/We are qualified environmental professional(s), as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*;
- b) I am/We are qualified to carry out the assessment of the proposal made by the developer 1223434 BC Ltd (name of developer), which proposal is described in section 3 of this Assessment Report (the "development proposal");
- c) I have/We have carried out an assessment of the development proposal and my/our assessment is set out in this Assessment Report; and
- d) In carrying out my/our assessment of the development proposal, I have/We have followed the specifications of the Riparian Areas Protection Regulation and assessment methodology set out in the minister's manual; AND

2. As qualified environmental professional(s), I/we hereby provide my/our professional opinion that:

- a) ☐ the site of the proposed development is subject to undue hardship, (if applicable, indicate N/A otherwise) and
- b) ☒ the proposed development will meet the **riparian protection standard** if the development proceeds as proposed in the report and complies with the measures, if any, recommended in the report.

[NOTE: "Qualified Environmental Professional" means an individual as described in section 21 of the Riparian Areas Protection Regulation.]

List of Appendices

- 1.) Construction Environmental Protection Plan, Westmark Construction by D.R. Clough Consulting, April 15, 2020
- 2.) Lot 13, Rollie Rose Place, Ladysmith, Windthrow and Hazard Tree Assessment, Strathcona Forestry Consulting. August 26, 2020
- 3.) Geotechnical Assessment Holland Creek Apartments, Lot 13, District Lot 103, by Lewkowich Engineering Associates Ltd. August 25, 2020.
- 4.) Lewkowich Engineering Associates Ltd Sediment and Erosion Control plan. August 25, 2020
- 5.) Stormwater Management Plan - Newcastle Engineering Ltd. Holland Creek Lot 13 Diagram 0127-028-100 DP REV07 Aug 31, 2020
- 6.) Culvert Installation - Construction Environmental Protection Plan and Water Act Notification Approval.

Appendix 1 - Construction Environmental Protection Plan, Westmark Construction by D.R. Clough Consulting, April 15, 2020

Construction Environmental Protection Plan

Prepared For:

**WESTMARK CONSTRUCTION LTD
LOT 13**

Prepared By:

D.R. Clough Consulting
6966 Leland Road
Lantzville, B.C. V0R 2H0
office 250-390-2901 mobile 250-714-5416

April 15, 2020

Westmark_Lot13_CEMP2020.docx

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Introduction:

This document is a Construction Environmental Management Plan (CEMP) to protect the Riparian Areas identified in Lot 13. The CEMP identifies the ecological values of the site and instructs the owners on the expected protection measures.

The following plan must be adhered to as required to follow the *Bylaws* of the Town of Ladysmith, the *Riparian Areas Regulation*, the *Fish Protection Act* and the *Fisheries Act*. The CEMP has been developed by a qualified environmental professional (QEP) and the developer whom share the responsibility of monitoring the protection of the environment during development. There will be different contractors on the property as the site goes through the phases of development from clearing to completion. Every contractor involved in these phases must review and follow the CEMP. Contractors will be responsible for having their own environmental protection plans for their phases of work. Guidance on sediment and erosion control was taken from the BC Government publication; *"Develop With Care – Environmental Guidelines for Urban and Rural Land Development in B.C. Best Management"*¹.

Specific Environmental concerns are:

1. Introduction of silt and other deleterious substances into the sensitive off channels and the associated impacts on water quality and fish habitat downstream of the construction site.
2. Containment of a hydrocarbon spill (e.g., oil, fuel) n oil and/or fuel spill during construction.

A construction environmental completion report to RAR BC is required and will be completed by the QEP on behalf of developer after the building has been completed and the lot landscaped, to confirm there has been no impact in the riparian areas.

Environmental Protection Areas

The property is located on the south side of Holland Creek watershed situated directly upslope of Holland Creek Trail Park. The riparian areas near or in Lot 13;

- In Lot 13: Tributary 2 flows west to east along the south side of the property. It has no fish due to a water fall entry into Holland Creek as well as seasonal flow. This is the larger channel on the property and has a 10m SPEA.
- In Lot 13: Tributary 2C: This tributary is further west along Rollie Rose Drive originating in the Hydro Right of way. It joins Tributary 2 on Lot 13. It has a 10m SPEA.
- Heart Creek lies just north and west of Lot 13 development.
- Holland Creek is north of the property, It is the catchment for these tributaries. It has a year round salmon and trout population.

¹ <https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/natural-resource-standards-and-guidance/best-management-practices/develop-with-care>

Project Contacts

Jacquie Kinnersley, Project Manager, Westmark Construction
250-713-6964 mobile, jacquie@westmarkconstruction.ca

David Clough RPBio, Environmental QEP, D.R. Clough Consulting,
mobile: 250-714-5416 drclough@shaw.ca

Drew Beiderwieden, P.Eng. Project Engineer, Newcastle Engineering Ltd.
Mobile (250) 616-8075
drew.beiderwieden@newcastleengineering.com

Construction Environmental Protection

There are legal requirements of the property owner to protect the Streamside Protection and Enhancement Area (SPEA) of the Riparian Area.

1. Boundary Signage

- 1.1 The SPEA signs will be installed as per Town of Ladysmith standards.
- 1.2 The Riparian Area boundary (SPEA) must be flagged, marked with survey stakes and noted on all construction plans. The signage will be hung at eye level along approximately 20m intervals.
- 1.3 The SPEA signs will be installed as per Town of Ladysmith standards.

2. Encroachment

- 2.1 The riparian areas (SPEA's) must not be encroached, altered or impacted by construction.
- 2.2 Construction locations within 5m of riparian areas must have snow fencing or sediment fencing installed along the riparian areas.
- 2.3 There will be no storage of materials, burning, garbage or trails in the riparian areas.

3. Construction Operations

- 3.1 The property owner must ensure that all contractors (e.g., heavy equipment operators, framers, roofers, painters, landscapers) working on the property must follow this protection plan.
- 3.2 A job safety and environmental pre-work meeting will be done to ensure that all workers understand the objectives and have clear written plans on their roles and responsibilities. Everyone will be made aware of the site environmental liabilities and rules. Environmentally sensitive areas must first be identified and flagged, fenced or noted to construction crew at each site. There will be no disturbance of fish habitat or addition of any deleterious substance into their habitat
- 3.3 Monitoring – Site environmental monitoring at the site will be conducted to ensure important habitat is not disturbed. This is critical during the dewatering process and heavy rain events. The monitors' role will be to identify sensitive areas to construction crews, advise and record procedures. They will also be empowered to stop work procedures and direct environmental protection measures to the site contractors. All sensitive work will be directed by on-site professionals and qualified personnel.
- 3.4 The property owner and contractors must contain all works to the building area. They are not to use adjacent properties, roadways or public areas for construction material storage or sediment treatment.
- 3.5 Wet weather shutdown must occur during earthworks and other activities that could result in erosion or sediment runoff. The activity must be stopped, and protective actions taken.

Westmark_Lot13_CEMP2020.docx

3

- 3.6 The property owner and contractors must keep building site clean to avoid attracting wildlife or littering other areas.
- 3.7 Wildlife attractants (e.g., food waste) must be stored in closed bins and moved offsite as soon as possible.

4. Heavy Equipment Operation

- 4.1 Spill kits must be located on each piece of heavy equipment. Spills of any kind must be reported to the environmental monitor.
- 4.2 Machinery must be stored and fueled away from the riparian areas, preferably on gravel pads to avoid rutting.
- 4.3 Trees and tree roots within the riparian areas must not be damaged. Contractors using heavy equipment within 5m of riparian areas must apply a root protection layer of mulch or fill or use membrane such as blast mats.
- 4.4 Disturbance must be minimized by grooming and compacting rutted and exposed surfaces.

5. Erosion Control

- 5.1 Erosion control will be reviewed and prescribed by a professional engineer. Their plan will follow the protection of elements in this CEMP including:
- 5.2 Runoff in the work site must be controlled and managed on site.
- 5.3 Erosion control methods for site runoff may include
 - sediment fences
 - gravel swales
 - straw bales
 - mulch
 - soil pits
 - diversion and sump pumps
- 5.4 Special covers will be needed for any spoil piles such as poly sheeting or tarps.

6. Landscaping

- 6.1 The exposed soil areas of the lot will require erosion control at all times.
- 6.2 The final landscaping prescription is open to the property owners discretion as long as there is no sediment runoff.
- 6.3 We encourage low-water use designs incorporating native plants for final surfaces.

7. Reporting – There will be routine environmental monitoring reports as well as a RAR completion report. There may also be reports as requested by agencies on Water Act, Fisheries Act or Wildlife Act protective measures.

The contractor will have on-site at all time the following items to deal with activities on sensitive areas, erosion, sediment and drainage emergency situations that may arise during the course of construction. All materials should be scaled to scope of work anticipated, below are startup recommendations for each site, to be re-supplied as used up.

- 1. 50 m of 20 cm diameter oil containment boom
- 2. 200 x 2litre absorbent pads

FORM 1

Riparian Areas Protection Regulation - Qualified Environmental Professional - Assessment Report

3. Straw bales and or truck load bark mulch or clean gravel
4. 1000 sq ft Tarps or rolls of poly sheeting
5. One industrial spill kit on each piece of heavy equipment
6. Water Pumps/hoses for water bypass and sump removal.

General:

1. Water quality adjacent and within the construction area will be maintained by installing mitigative measures identified in this document or those determined by the Environmental Monitor. Water turbidity will be measured routinely with environmental inspections by the monitor.
2. All areas disturbed during construction will be covered with hydroseed as per the contract documents.

Personnel:

All personnel (including sub-contractors) on the project will be made aware of the Sediment Control Plan and what is required with regards to compliance with the plan



David R. Clough, RPBio

Appendix 1 – Erosion and Sediment Control Procedures (BC Land development Guidelines)

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5

Erosion and Sediment Control

Refer to the Land Development Guidelines for more detail

Erosion and Sediment Control

Land development frequently creates increased soil erosion. Soil exposed during clearing, grading, and material stockpiling operations can be easily transported into streams, destroying their value as fish habitat. The objective of erosion and sediment control measures is to stabilize disturbed soils and manage surface runoff to intercept sediments before they leave the site.

Sediment Control During Site Development

During the construction process, it is necessary to plan, and implement, sediment control measures to ensure that any aquatic habitat which may be affected, onsite or downstream from development activities, is protected from sediment contamination.

Match existing site conditions.

- Design roads, utilities, and buildings to minimize site coverage.

- Restrict excavation so that only areas directly affected by development activities are disrupted.

- Consider soil conditions and topography in site design and layout.

- Limit construction activities in areas of the site with difficult soil conditions.

Schedule earthworks to minimize erosion.

- Plan construction and site clearing activities during the dry months of the year.

- Stage development to allow for revegetation to establish prior to the end of the growing season.

- Halt earthworks and heavy construction during periods of heavy rainfall.

- Restrict equipment access outside of work areas.



Revegetate disturbed slopes as soon as possible after construction to reduce soil loss and erosion.

Retain vegetation.

- Minimize clearing rights-of-way and stripping for building sites.

- Avoid clearing and grubbing on steep slopes or erosive soils.

- Consider vegetation replacement cost when setting clearing and grubbing limits.

- Provide substantial protective fencing at limits of clearing and maintain it throughout the construction process.



Impacts of Erosion on Aquatic Habitat



- Sediment settling on spawning areas smothers eggs and kills salmonid alevin.
- Sediment infills pools and riffles which reduces the availability of rearing habitat.
- Suspended sediment clogs and abrades fish gills.
- Sediment causes food shortages by smothering or displacing aquatic organisms.
- Sediment deposition results in the loss of productive habitat areas.

Revegetate disturbed soil.

- Seed and revegetate cut and fill slopes and disturbed natural slopes.

- Use mulch and organic stabilizers to minimize erosion until vegetation is established.

- Cover temporary soil stockpiles with polyethylene sheeting or tarps.

Divert runoff away from exposed soils.

- Direct overland flows away from downslope development areas.

- Isolate cleared and grubbed areas with swales to redirect runoff.

- Retain natural vegetation as much as possible to act as buffers.



Hydroseeding with mulch, tackifier and grass seed provides a quick cover to exposed soils. Plan work so that seed has time to germinate, and grow before the end of the growing season.

Erosion and Sediment Control
Refer to the Land Development Guidelines for more detail



Long slopes or swales should be broken up with intermediate breaks to slow runoff and reduce erosive energy.

Minimize steepness of slopes.

- Plan to incorporate benches and breaks into the design of very long slopes.

Minimize runoff velocity.

- Minimize the gradient for swales and ditches to limit the erosive energy.
- Construct interceptor ditches with low gradients to minimize erosive energy.
- Line steep ditches with filter fabric, rip rap, or polyethylene.

Design for increased runoff.

- Design ditch for post-development flows.
- Construct non-erodible ditches, and inlet/outlet structures.

Sediment Control Facilities

Where site conditions make it difficult to control erosion completely, and where sediment will affect sensitive fish habitat, it will be necessary to construct and maintain sediment control structures. Such structures should be considered as a last line of defense, and consideration should be given to ensure that these facilities are well maintained, and functioning properly at all times.

Sediment control structures.

- Use sediment traps and silt fences as required to control transportation of sediment.
- Construct sediment control ponds to trap settled sediments while discharging water safely off the development site.

Inspect and maintain erosion and sediment control structures.

- Develop a maintenance inspection schedule as part of the site development plan.
- Stockpile sediment control materials onsite for quick access.



Silt fences are used to slow water movement and allow suspended sediment settle.



Interceptor ditches such as the ones shown in this photo redirect runoff off of steep slopes.



Sediment ponds with raised outflows trap sediment and discharge water safely offsite. The pond provides a convenient site to allow sediment removal during dry periods.



This drain outlet is lined with rip rap to provide erosion control during periods of high flow when the potential for erosion is greatest.



This slope has been covered with plastic tarping and runoff is directed through intermediate ditches to reduce erosion during construction.



Sandbags have been placed to direct runoff into sediment ponds prior to entering the stormwater system.

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**Appendix 2.) Lot 13, Rollie Rose Place, Ladysmith, Windthrow and Hazard Tree
Assessment, Strathcona Forestry Consulting. August 26, 2020**



Strathcona Forestry Consulting



Lot 13 Rollie Rose Place, Ladysmith

Windthrow & Hazard Tree Assessment

Prepared for: Westmark Construction Ltd.
c/o Project Manager Jacquie Kinnersley
#1-2535 McCullough Rd
Nanaimo, BC V9S 4M9

Prepared by: Strathcona Forestry Consulting
PO Box 387 Stn Mn
Duncan BC V9L 3X5
strathcona.fc@shaw.ca



26 August 2020

Executive Summary

At the request of D.R. Clough Consulting, on behalf of the developer, Westmark Construction Ltd., Strathcona Forestry Consulting was retained to conduct a windthrow and hazard tree assessment at Holland Creek Lot 13 (Rollie Rose Place) in the Town of Ladysmith. The subject property, which borders the tributary system of Holland Creek, is being developed by Westmark Construction Ltd. for a multi-unit residence. A Riparian Area (RA) Assessment conducted by D.R. Clough Consulting established a 10 m SPEA at the southern portion of the lot. A Tree Management Plan in June 2020 provided an inventory of trees along the RA line and also along the lot perimeter. The purpose of this report is to determine whether there are windthrow concerns as a result of the proposed development, and, where necessary, to prescribe windthrow protection measures.

Two edge segments were assessed: the southern perimeter (including the SPEA boundary), and the northern perimeter (no SPEA on north side). Windthrow risk at both edge segments was rated LOW-MODERATE. Likelihood of windthrow was rated LOW-MODERATE at the two edge segments. Based on levels of windthrow risk, minor treatment levels are recommended, consisting of a combination of spiral pruning (to reduce heavy crowns which can increase susceptibility of trees to blowdown) and coppicing (to remove hazardous upper limbs while increasing low lateral branching) for selected trees, and felling of a small number of trees which pose a safety hazard (with options for high stumping and/or retention of coarse woody debris). High stumping retains perching and existing nesting sites, while also providing opportunities for installing nesting boxes for birds and bats.

Treatment to prevent windthrow should follow standard strategies to minimize disturbance to rooting layers during clearing and construction, including not creating windthrow, protecting trees in the SPEA (especially along the SPEA boundary), and retaining wildlife trees in the SPEA. Measures to avoid disturbance to existing trees will decrease potential for additional hazard trees, enhance biodiversity, and help to maintain a carbon sink.

If the measures identified in this report to protect the integrity of the SPEA and surrounding riparian habitat are implemented by the developer, there will be no harmful alteration, disruption or destruction of natural features, functions and conditions that support fish life processes downstream of the riparian assessment area. Recommended strategies will enhance local biodiversity of both riparian and upland areas. Additionally, if the recommendations contained in this report are followed during planning and construction, risks associated with windthrow and hazard trees can be mitigated to ensure the safety of the intended development.

Introduction

At the request D.R. Clough Consulting, on behalf of the developer, Westmark Construction Ltd., Strathcona Forestry Consulting was retained to conduct a windthrow and hazard tree assessment at Holland Creek Lot 13 (Rollie Rose Place) in the Town of Ladysmith. The subject property, which borders two tributaries of Holland Creek, is being developed by Westmark Construction Ltd. for a multi-unit residence. A Riparian Area (RA) Assessment conducted by D.R. Clough Consulting established a SPEA 10 metres (HD) Horizontal Distance from the 5 year HWM (High Water Mark) at the stream on the southern portion of the lot. This report was prepared to determine whether there are windthrow concerns as a result of the proposed development, and, where necessary, to prescribe windthrow protection measures. This report also discusses the results of tree risk assessment along the perimeter of the entire lot, and outlines an appropriate treatment plan. The intent is to maintain tree cover where safely possible in conjunction with the planned development.

Riparian Areas Regulation

The Riparian Areas Regulation (RAR) defines “stream” to encompass any watercourse – natural or human-made – that provides fish habitat, contains water on a perennial or seasonal basis, is scoured by water or contains observable deposits of mineral alluvium, and has a continuous channel bed, including a watercourse that is obscured by overhanging or bridging vegetation or soil mats. A watercourse may not itself be inhabited by fish, but may provide water, food and nutrients to streams that do support fish.

Under the Riparian Areas Regulation, a proponent must prepare a Riparian Assessment report in support of their application to local government for development approval if development is proposed within 30 m of a stream or the top of a ravine bank of a stream. The Assessment Report must be prepared by a Qualified Environmental Professional (or group of professionals) who understands the interaction of various features, functions, and conditions of riparian areas. The RAR Assessment Report prescribes the specific requirements of the SPEA (streamside protection and enhancement area) and ZOS (zone of sensitivity). The width of the SPEA, determined through appropriate methodology, outlines required measures to maintain the integrity

of the SPEA. The ZOS, determined through detailed assessment procedures under the RAR, identifies a zone of sensitivity adjacent to a waterbody within which disturbance is restricted, i.e., an undisturbed riparian buffer.

The effects of the biophysical processes through which riparian vegetation influences in stream conditions vary continuously with buffer width. Under the RAR, a fixed buffer width is generally selected in order to maintain in stream conditions similar to those found in undisturbed forests, and/or to target specific species such as salmonid fishes.

Specific experts (i.e., geotechnical advisors, windthrow specialists) may be called on to provide their relative expertise on site characteristics that may pose specific problems or concerns.

The Riparian Assessment report for the proposal must demonstrate appropriate assessment methods have been followed, and must certify:

- I. if the development is implemented as proposed there will be no harmful alteration, disruption, or destruction of natural features, functions, and conditions that support fish life processes in the riparian assessment area, or
- II. if the streamside protection and enhancement areas identified in the report are protected from the development and the measures identified in the report as necessary to protect the integrity of those areas from the effects of the development are implemented by the developer, there will be no harmful alteration, disruption or destruction of natural features, functions and conditions that support fish life processes in the riparian assessment area

Local Watercourses

Stream 2-2 flows southeast along the southern portion of Lot 13 before joining Stream 2-1, which turns northeast into a ravine below the eastern portion of the lot, draining into Holland Creek approximately 200 m to the northeast. D.R. Clough Consulting determined the watercourse does not support fish, nor does it provide domestic water use.

Description of the Site

Lot 13 is located on the west side of Rollie Rose Place, approximately 1 km south of the centre of Ladysmith town centre, and 0.5 km west of the TransCanada Highway (Highway 1). The lot is bordered by a BC Hydro right-of-way on the northwest and new single family residential development to the south and west. Wooded municipal lands on the northeast slope down to Holland Creek and the Holland Creek Trail.

Previous human activities over the last century were evidenced by a network of old skid trails, a deeply excavated channel that once housed a water pipeline for a now defunct timber mill, an old curing rack for deer observed high in a tree, and the discovery of partially buried choker cables and an old telegraph pole.

Biogeoclimatic Classification

The subject site is classified in the Coastal Douglas-fir Moist Maritime Subzone (CDFmm). The CDFmm has warm dry summers and moist mild winters. Prevailing winds in winter are generally southwesterly (to southeasterly). Ecosystems in the assessed area were classified as CDFmm_04/01.

Vegetation

The lot is forested with a mix of second- and third-growth forest cover. Older age class trees with larger girths and taller heights are found in the southern portion of the lot, although there are scattered large trees throughout the property. Forest cover is predominately coniferous - mainly Douglas-fir (*Pseudotsuga heterophylla*) and western redcedar (*Thuja plicata*), with lesser amounts of grand fir (*Abies grandis*), western hemlock (*Tsuga heterophylla*), together with a smaller deciduous component - big leaf maple (*Acer macrophyllum*) and red alder (*Alnus rubra*), with scattered Pacific dogwood (*Cornus nuttallii*) and bushy clumps of wild cherry (*Prunus emarginata*).

The understory is characterized by a fairly continuous shrub layer (salal, sword fern, red huckleberry) and a moderately continuous moss layer (*Hylocomium splendens*, *Kindbergia oregana*, *Rhytidiadelphus triquetus*).

Observations of historical blowdown indicate trees in the local area are fairly windfirm. One large, mature downed hemlock in the southwestern portion of the property likely blew down a few years ago due to shallow rooting.

As part of the new Holland Creek development, forest cover was removed along Rollie Rose Road within the last two years, exposing the northwestern portion of the property to winds. Field observation did not indicate an increase in wind damage and/or blowdown along the edges of Lot 13.

Soils in the area developed in deep, sandy gravelly fluvial, fluvioglacial and/or marine deposits. Soils are rapidly drained. Very gravelly to gravelly loamy sand is the usual texture in the upper horizons; subsoils consist of very gravelly loamy and or very gravelly sand. The coarse fragment content is at least 35% and usually exceeds 50% by volume. A weak to moderate cemented layer is generally present at depths between 50 and 90 cm; relatively unweathered parent material is encountered at depths between 1.5 and 2 m. The usual taxonomic classification is Orthic Dystric Brunisol; the lesser common soil is a Duric Dystric Brunisol (MoE Technical Report 17).



Soil Profile Lot 13. The site is characterized by well-drained gravelly sandy soils.

Proposed Development

Westmark Construction Ltd. is planning to develop the property with a multi-family L-shaped building closely aligning with the curvature of the stream systems along the southern boundary of Lot 13 (see Map Appendix1). The driveway access from Rollie Rose Place will wind around the northern portion of the lot to a parking lot on the northwestern side of the lot, adjacent to the hydro right-of-way.

A temporary bridge currently accessing the property is to be replaced during the fish window this year with a concrete culvert.

Site Visit

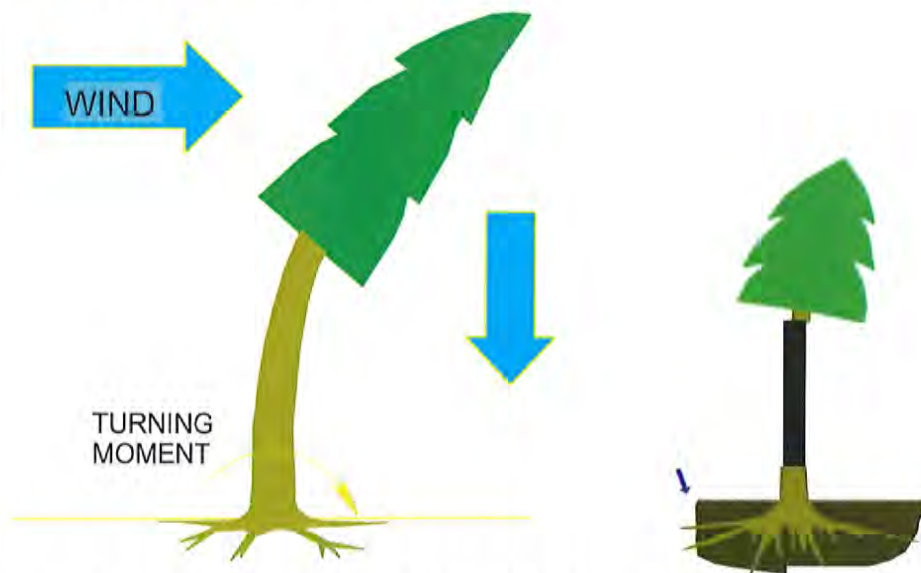
Field work took place on June 25, 2020 with Dave Clough. At the time of the assessment, the High Water Mark (HWM) of the watercourse(s) and SPEA were flagged. The building envelope of the proposed new multi-family residence was marked with survey sticks. The property boundary was marked with survey stakes and/or flagging. Assessed trees were flagged and numbered (see Site Plan map Appendix 1).

Windthrow – Background Discussion

Windthrow (Tree fall) – tree uprooting or stem breakage that results when wind loads exceed stem or anchorage strength.

The purpose of windthrow assessment is to determine whether there are windthrow concerns as a result of proposed development and prescribe windthrow protection measures outside of the SPEA.

In coastal BC, the most common cause of stand damaging winds is the western movement of extra-tropical low pressure systems from the Pacific Ocean. These storms produce counter-clockwise rotating regional-scale wind fields that interact with local geography and terrain. Pacific low pressure systems are strongest during the coolest months (i.e. October to April) when they are accompanied by gusty winds and high rainfall. The long duration of these storms and the high rainfall can be significant factors in windthrow risk because root-soil cohesion breaks down as trees rock back and forth in wet soil. In routine events, local geography and terrain produce predictable differences in local wind speeds. Catastrophic damage patterns during intense systems are less dependent on local terrain.



During strong Pacific low systems with wind and heavy rains, root-soil cohesion breaks down as trees rock back and forth in wet soil (left). Intense winds can cause boles to “snap” (right).

The other large scale weather systems which can cause stand damaging winds are arctic ridges of high pressure. These cold, dry systems occasionally move south over the interior of BC and outward toward the coast. Strong outflow winds through major valleys are associated with these winter systems, particularly when there is an offshore low pressure system and therefore a steep differential gradient in surface air pressure (high to low).

In the summer, local wind effects are created where strong differences in air temperature develop. On-shore winds develop in the afternoon as the land heats up relative to the ocean.

Windthrow Assessment

Windthrow hazard and likelihood assessment is conducted on those areas in the stand (edge segments) that have a risk to values or objectives as a result of windthrow.

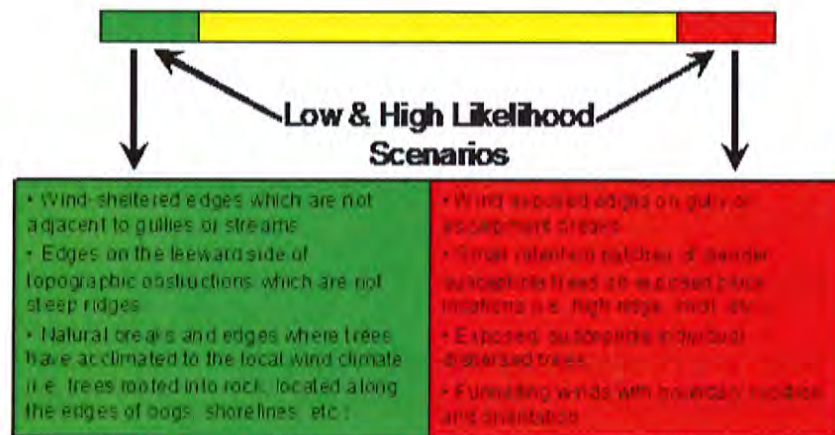
1. A set of diagnostic questions is used to assess various hazards for windthrow.
2. Three hazard components (topographic, stand and soil) are assessed and then brought together in a ranking table to provide an overall biophysical hazard for windthrow. The three components take into account location, and characteristics of the stand and soil median - all factors critical to assess the inherent hazard of the area for windthrow – i.e., the biophysical hazard.

Biophysical Hazard – the intrinsic stability of the stand in its pre-treatment condition. The inherent ability to resist wind damage is the cumulative result of topographic, soils and stand features interacting as the stand develops with endemic windloading.

3. The biophysical hazard is then used along with an estimate of treatment hazard (activity associated with development) to rank the likelihood of windthrow occurring on the edge segment.

Treatment Hazard – is the way in which a particular treatment increases or decreases the windloading or wind resistance of trees. A simple example of treatment hazard is the influence of land clearing to expose new edges. Treatment hazard can be reduced by further treatments such as pruning, or topping.

Treatment hazard ranges from low to high depending on how or where land clearing will be applied. The two working together give an indication of how likely windthrow will be on the edge or within a retained forest stand, (i.e., the likelihood of windthrow).



4. Once the likelihood of windthrow is determined, consequences are considered to provide an assessment of windthrow risk. Windthrow risk is the combination of the likelihood of windthrow and the potential consequences of that windthrow. Windthrow risk reflects the risk associated with the site plan, considering the likelihood of windthrow against limits (thresholds) that are set based on consequences.

Windthrow risk is not equal to the likelihood of windthrow. If considerable windthrow is expected, but there are no consequences, there is little risk.

Windthrow impact definitions

- *Windthrow Likelihood* - is the expected level of damage from endemic winds. It combines Biophysical Hazard and Treatment Hazard.
- *Windthrow Consequences* - is the probable level of impact on specific management objectives, or sensitivity of those objectives, if the expected level of windthrow occurs.
- *Windthrow Risk* - is the potential for a negative consequence from windthrow caused by endemic winds. It is the combination of Windthrow Likelihood and Consequence.

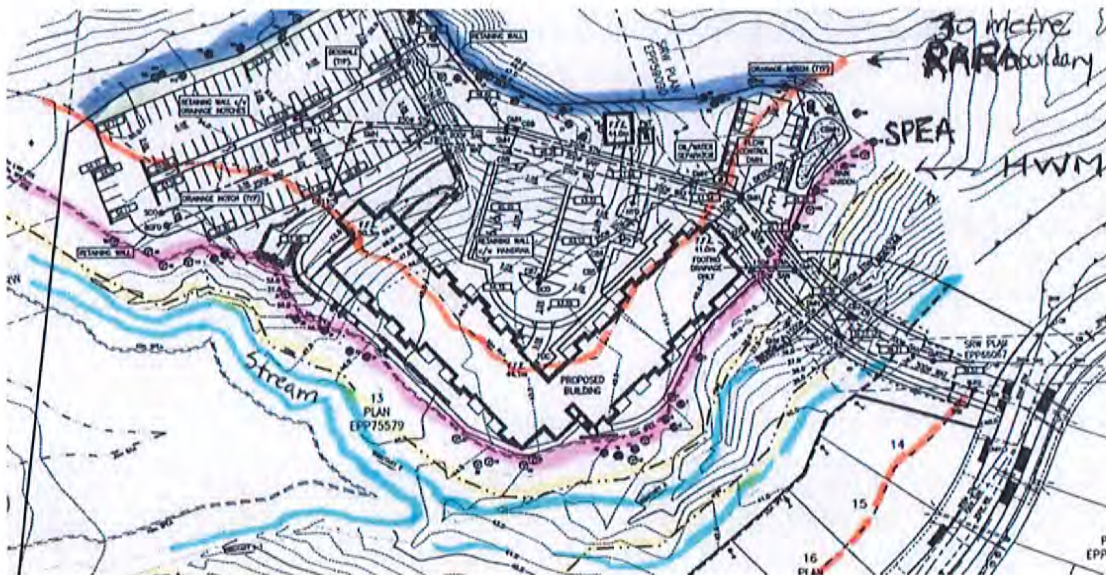
Windthrow treatment, when prescribed, is necessary to retain and/or enhance riparian habitat and reduce hazard (to workers, residents, visitors, structures).

FIELD ASSESSMENT

Two edge segments were examined at Lot 13:

- Edge segment #1 encompassed the southern perimeter of the lot, including the SPEA boundary
- Edge segment #2 incorporated the remaining perimeter.

1. Edge segment #1: southern perimeter (including SPEA boundary-outlined below in pink)



Wind force Indicators:

Biophysical Hazard -

Topographic Exposure: Is this a windy area?

Site occupies bowl / lower valley. Sheltering features of local topography (low hills to south and west) decrease windiness; the hills are sufficiently high to deflect the general wind profile

Topographic Hazard Class: Moderate (intermediate) to Low (very wind sheltered)

Stand stability: Are trees acclimated to wind loading?

Trees are generally acclimated to wind loading. While this edge segment is part of a natural stand edge (streams), land clearing over the last year to the south has exposed stand with minimal blowdown observed. Multi-layered stand has moderate density.

Tree-level indicators of acclimation: Dominants and codominants generally have thick stems with long live crowns; high degree of taper

Stand Hazard Class: Moderate (neutral) to Low (very stable)

Soil Anchorage: Is root anchoring restricted by an impeding layer, low strength soil, or poor drainage? Is this a closed-canopied stand? Is there evidence of blowdown?

Root anchorage not restricted by an impeding layer. Well-drained soils in the area have moderate to high soil strength. Multi-storied stand.

Soil Hazard Class: Moderate (neutral) to Low (unrestricted)

Treatment Hazard: Will the proposed disturbance substantially increase wind loading on trees along the stand edge or retained trees?

Boundary does not face directly toward winds. Boundary not exposed to multiple wind directions.

Treatment Hazard Class: Moderate (moderate increase)

WINDTHROW LIKELIHOOD EVALUATION						
Biophysical Hazard = Topographic, Stand and Soil Hazards						
Windthrow Likelihood = Biophysical Hazard + Treatment Hazard						
If Treatment Risk is 'None,' then Windthrow Likelihood is 'None.'						
	Very High	High	Moderate	Low	Very Low	None
Topographic Hazard		3	2	1	-	-
Stand Hazard		3	2	1	-	-
Soil Hazard		2	1	0	-	-
Biophysical Hazard	8	6-7	4-5	<4	-	-
Treatment Hazard		6	4	2	-	-
Windthrow Likelihood	14	12-13	10-11	6-9	<6	-

Windthrow Risk Category

What will be the consequences for safety and liabilities?

VERY HIGH – very negative consequences	HIGH – negative consequences
MODERATE – slightly negative consequences	LOW – minimal to no consequences

LIKELIHOOD of EXCEEDING WINDTHROW THRESHOLDS:	
Likelihood categories	
Nil –	Both assessed likelihood for penetration and amount are not close to thresholds
Low –	Assessed likelihood does not exceed either thresholds but may be close
Mod –	Assessed likelihood somewhat exceeds amount threshold, but does not seem to exceed penetration threshold (where applicable)
High – exceed	Assessed likelihood considerably exceeds amount threshold, and/or seems to exceed penetration thresholds by a small amount (if applicable)
Very High –	Assessed likelihood considerably exceeds penetration threshold, as well as amount threshold (if both apply)
Estimate likelihood of exceeding windthrow thresholds: Low-Mod	

WINDTHROW RISK ASSESSMENT
DIAGNOSTIC QUESTION: If the thresholds for windthrow are exceeded as expected,

what will be the consequences for development values, safety, liabilities and riparian management concerns?

Risk =	<input type="checkbox"/> Very High (very negative)	<input type="checkbox"/> High (negative)	<input checked="" type="checkbox"/> Moderate (slightly negative)	<input checked="" type="checkbox"/> Low (minimal to no consequences)
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Generally, Very High, or High risk situations must be addressed to lower risk. A Moderate risk situation may also need to be addressed with mitigation measures, depending on consequences.

Hazard Tree Assessment:

Tree #	SPEA Tree	Species*	Description and Recommended Treatment
5	N	Mb	Maple with 3 stems (2 dead). Remove (hazard).
13	Y	Mb	Maple with split stem. Remove dead stem. Coppice live stem at 5-7 m to remove dead/dangerous high branches and to encourage low lateral branching for shading near stream (cut at 6 m height).
31, 32	Y	Cw	Both cedars > 100 cm dbh, inside RAR line. Retain. Spiral prune to reduce "sail" and remove dead branches.
33	Y on line	Cw	Class 3 snag. Retain – coppice at 5 m to retain "high" stump for wildlife purposes (i.e., cavity excavators)
38	N	Bg	Class 4 snag. Remove (hazard tree)
Beside 39	Y	Mb	Class 5 Maple snag beside #39 Mb. Coppice at approx. 10 m – high wildlife use (i.e., cavity nesters, sapsuckers)
41	Y	Mb	Leaning to creek. 35 m tall. Retain.
42	N	Cw	20 cm tree outside RAR line. Scheduled for removal in conjunction with development
46	Y		Class 5 snag. Retain
47	Y	Cw	Multiple tops, try to keep. Flag prior to clearing/construction
49	Y	Fd	Class 3 snag. On RAR line. Remove (hazard). Consider retaining CWD for salamanders.
51	N	Mb	Multi-stemmed. Coppice stems at 5 m to retain shading. This tree is at corner of property (adj. hydro right-of-way)

*see Tree Species abbreviation list Appendix 1

BEST MANAGEMENT PRACTICES to MANAGE WINDTHROW RISK and HAZARD TREES

Treatment	Description	Recommended for Tree #
Topping	Removal of upper crown and stem	
Top pruning	Removal of branches from the upper crown	
Spiral pruning	Removal of branches throughout the crown	13,32
Edge feathering	Intended to mimic partial damage along edges. Vulnerable trees (i.e., slender trees, codoms, low live crown ratios) are harvested at the edge before (it is assumed) they will blow down	
Coppicing	Deciduous trees are cut to reduce height and branching; live stem is retained	13, 51
Remove / High stumping and/or retention of CWD may be a consideration	Tree is determined to be a hazard, and requires falling. Where safe, consider high stumping to retain value for wildlife. Where not safe, consider retaining Coarse Woody Debris to enhance biodiversity	5, 33, 38, 39, 42, 49

2. Edge segment #2: Northern perimeters (no RAR on north side)



Northern perimeter of Lot 13 (boundary outlined in purple)
(N.B. North RAA line is off property)

Wind force Indicators:

Biophysical Hazard -

Topographic Exposure: Is this a windy area?

General site occupies bowl / lower valley. Sheltering features of local topography (low hills to south and west) decrease windiness; the hills are sufficiently high to deflect the general wind profile. Boundary occupies edge of clearing (Hydro RoW) to northwest, and TOB for remainder.

Topographic Hazard Class: Moderate (intermediate) to Low (very wind sheltered)

Stand stability: Are trees acclimated to wind loading?

Trees are generally acclimated to wind loading. This edge segment has been acclimated to wind loading through exposure from cleared Hydro RoW; remainder of boundary is acclimated to wind as a result of position at TOB. Multi-layered stand has moderate density.

Tree-level indicators of acclimation: Dominants and codominants generally have thick stems with long live crowns; high degree of taper

Stand Hazard Class: Moderate (neutral) to Low (very stable)

Soil Anchorage: Is root anchoring restricted by an impeding layer, low strength soil, or poor drainage? Is this a closed-canopied stand?

Root anchorage not restricted by an impeding layer. Well-drained soils in the area have moderate to high soil strength. Multi-storied stand.

Soil Hazard Class: Moderate (neutral) to Low (unrestricted)

Treatment Hazard: Will the proposed disturbance substantially increase wind loading on trees along the stand edge or retained trees?

Boundary does not face directly toward winds. Boundary not exposed to multiple wind directions.

Treatment Hazard Class: Moderate (moderate increase)

WINDTHROW LIKELIHOOD EVALUATION						
Biophysical Hazard = Topographic, Stand and Soil Hazards						
Windthrow Likelihood = Biophysical Hazard + Treatment Hazard						
If Treatment Risk is 'None,' then Windthrow Likelihood is 'None.'						
	Very High	High	Moderate	Low	Very Low	None
Topographic Hazard		3	2	1	-	-
Stand Hazard		3	2	1	-	-
Soil Hazard		2	1	0	-	-
Biophysical Hazard	8	6-7	4-5	<4	-	-
Treatment Hazard		6	4	2	-	-
Windthrow Likelihood	14	12-13	10-11	6-9	<6	-

Windthrow Risk Category

What will be the consequences for safety and liabilities?

VERY HIGH – very negative consequences	HIGH – negative consequences
MODERATE – slightly negative consequences	LOW – minimal to no consequences

LIKELIHOOD of EXCEEDING WINDTHROW THRESHOLDS:	
Likelihood categories	
Nil –	Both assessed likelihood for penetration and amount are not close to thresholds
Low –	Assessed likelihood does not exceed either thresholds but may be close
Mod –	Assessed likelihood somewhat exceeds amount threshold, but does not seem to exceed penetration threshold (where applicable)
High –	Assessed likelihood considerably exceeds amount threshold, and/or seems to exceed penetration thresholds by a small amount (if applicable)
Very High –	Assessed likelihood considerably exceeds penetration threshold, as well as amount threshold (if both apply)
Estimate likelihood of exceeding windthrow thresholds:	

WINDTHROW RISK ASSESSMENT				
DIAGNOSTIC QUESTION: If the thresholds for windthrow are exceeded as expected, what will be the consequences for development values, safety, liabilities and riparian management concerns?				
Risk =	<input type="checkbox"/> Very High (very negative)	<input type="checkbox"/> High (negative)	<input checked="" type="checkbox"/> Moderate (slightly negative)	<input checked="" type="checkbox"/> Low (minimal to no consequences)

Generally, Very High, or High risk situations must be addressed to lower risk. A Moderate risk situation may also need to be addressed with mitigation measures, depending on the consequences.

Hazard Tree Assessment:

Tree #	SPEA Tree	Species	Description and Recommended Treatment
57	N	Mb	Split trunk. 1 stem (with scar) leans toward parking lot. Remove dead stem. Coppice live stems at 5 m.
61, 62	N	Cw	in "clearing" close to line; Retain
63	N	Mb	Perimeter tree, slight lean away. Originally identified as a concern. Retain.
65	N	Dogwood	Forked. Outside property. Retain.
70	N	Fd	Class 5 snag at TOB. High stump to retain as short WT.
75	N	Fd	Large tree, leaning away. Retain. Avoid disturbance within rooting zone.
78	N	Fd	Large tree, hockey stick root(s). Slight lean. TOB and close to hydro lines. Remove.
205	N	Fd	110 cm dbh, 35 m tall. Healthy & straight. Try to retain.
300	N	Fd	90 cm dbh, 35 m tall. Likely will need to be removed as it will probably interfere with infrastructure (located next to parking stalls 8 m to west of Tree 104)

BEST MANAGEMENT PRACTICES to MANAGE WINDTHROW RISK and HAZARD TREES

Treatment	Description	Recommended for Tree #
Topping	Removal of upper crown and stem	
Top pruning	Removal of branches from the upper crown	
Spiral pruning	Removal of branches throughout the crown	
Edge feathering	Intended to mimic partial damage along edges. Vulnerable trees (i.e., slender trees, codoms, low live crown ratios) are harvested at the edge before (it is assumed) they will blow down	
Coppicing	Deciduous trees are decreased in height to reduce top-heavy crowns, to remove hazardous upper branches, while retaining live stem, which will readily sprout to produce lateral branching	57
Remove / High stumping and/or retention of CWD may be a consideration	Tree is determined to be a hazard, and requires falling. Where safe, consider high stumping to retain value for wildlife. Where not safe, consider retaining Coarse Woody Debris to enhance biodiversity	57, 70, 78, 300

Several scraggly Western Flowering Dogwood (*Cornus nuttallii*) are located along the northern edge of the property. Where possible, these trees will be retained; there are plans to plant dogwood at the site entrance. The Town of Ladysmith does not have a Tree Protection bylaw.

Assessment Results

Windthrow risk at two segments at the proposed Westmark development Lot 13 is rated Low-Moderate. Windthrow likelihood is Low-Moderate.

While the coast of British Columbia is subjected to severe storms in the fall/winter, the subject site appears to be generally protected from prevailing winds by local topographic features (low hills and sheltered, bowl-like location). Human disturbance activities (i.e., logging, land clearing) over the last century have altered some of the natural drainage patterns in the area (as evidenced by side channels beside historical skid roads), but appear to have had minimal impact on overall windfirmness of forest cover in the area. The area is characterized by well-drained soils, which provide increased stability during wind events. Recent clearing for another development along the southern edge of Lot 13 has resulted in minimal blowdown. The building opening itself appear to be having an insignificant impact of the windfirmness of the stand; during the assessment we observed no recent downed trees. Trees along the northern perimeter have acclimated to wind due to the presence of the hydro right-of-way. Further to the northeast, trees have acclimated to wind due to their location at top of bank.

Treatment to reduce potential windthrow is recommended for a small number of selected trees with characteristics that could predispose them to blowdown. Trees designated as hazard trees are also more prone to wind damage, and require treatment. Best management practices to manage windthrow risk and hazard trees at Lot 13 comprise a variety of treatments, including spiral pruning, coppicing (to remove dead/dying high branches and reduce height while encouraging lateral branching) and removal (with options for high stumping and / or retention of coarse woody debris). Nesting boxes for bats and birds could installed on high stumps.

Inspection of the proposed building location and SPEA location do not indicate any areas of encroachment.

Summary of Recommendations

BEST MANAGEMENT PRACTICES to MANAGE WINDTHROW RISK and HAZARD TREES at Lot 13

Treatment	Description	Recommended for Tree #
Topping	Removal of upper crown and stem	
Top pruning	Removal of branches from the upper crown	
Spiral pruning	Removal of branches in the crown to reduce heavy weight of upper tree canopy, reducing potential for windthrow; spiral pruning retains height and integrity of the tree	13, 32 (both SPEA)
Edge feathering	Intended to mimic partial damage along edges. Vulnerable trees (i.e., slender trees, codoms, low live crown ratios) are harvested at the edge before (it is assumed) they will blow down	
Coppicing	Deciduous trees are height trimmed to remove heavy windthrow-prone upper crowns and dangerous upper limbs; low lateral branching is encouraged; live stem is retained to readily re-sprout	13 (SPEA), 51, 57, (SPEA)
Fell – high stumping and/or retention of CWD may be a consideration	Tree is determined to be a hazard, and requires falling. Where safe, consider high stumping to retain value for wildlife. Where not safe, consider retaining Coarse Woody Debris to enhance biodiversity	5, 33 (on line), 38, 39 (SPEA), 42, 49 (SPEA), 57, 70, 78, 300

General Guidelines:

- At pre-work meeting(s), review tree list and management priorities with workers. Tree protection fencing must be in place to ensure appropriate setbacks. (See Site Plan and tree list, Appendix 1)
- Prior to commencement of clearing/construction, an ocular survey should take place to identify any additional Danger Trees that may result from conditions occurring after this assessment took place. Appropriate treatment must be implemented prior to clearing/construction in order to ensure the site is safe for the uses intended.
- During site preparation and construction, monitor clearing and construction adjacent to the RAA (DR Clough Consulting).
- Use a qualified Arborist for the treatment work.

- Assign a qualified monitor to oversee tree retention and protection activities within the development area throughout the length of the project.
- Wherever safely possible, attempt to retain existing tree cover within the SPEA, in order to maintain bank stability.
- Minimize disturbance to roots of trees within and on edge of RAA. Limit ground disturbance within the drip line (at least 3 m from boles of trees) within the RAA.
- Promptly re-vegetate any areas disturbed within the RAA (including an approx. 50+m section along the stream, south of the proposed parking lot retaining wall – at the SW area of the property) with native trees and shrub species ecologically suited to the site (as per direction from DR Clough Consulting, and under direction of a qualified landscaper). Infill planting is recommended to improve the ecology of the site which has been impacted by historic logging. Numbers of plantings may need to be adjusted pending a post-clearing survey (DR Clough).

Recommended replacement plantings:

Plantings	Size	Spacing	Total Number* * assess after land clearing
Indian plum (<i>Osmaronia cerasiformis</i>)	2 or 5 gal. pots	1x1 m	30+
Red osier dogwood (<i>Cornus stolonifera</i>)	2 or 5 gal. pots	1x1 m	30+
Red huckleberry (<i>Vaccinium parvifolium</i>)	2 or 5 gal. pots	1.5 x 1.5 m	30+
Ninebark (<i>Physocarpus capitatus</i>)	2 or 5 gal. pots	1.5 x 1.5 m	30+
Western redcedar (<i>Thuja plicata</i>)	415 or 615 1-0 PSB	1.5 x 1.5 m	50+

- Coarse woody debris (CWD) to be added in the SPEA will use local trees treated from inside and outside the SPEA (approximately no more than 1 m of CWD per lineal m of SPEA).
- Remove invasive plant species from the RAA and surrounding area (i.e., holly, daphne, broom).
- In liaison with the R.P. Bio., under plant ecologically suitable, native shrubs along portions of the stream system that have had forest cover reduced as a result of development adjacent to Lot 13.

If the measures identified in this report to protect the integrity of the SPEA and surrounding riparian habitat are implemented by the developer, there will be no harmful alteration, disruption or destruction of natural features, functions and conditions that support fish life processes in (and/or downstream of) the riparian assessment area. Strategies to sustain tree cover will help enhance local biodiversity of both riparian and upland habitats. Finally, if the recommendations contained in this report are followed during planning and construction, risk associated with windthrow and hazard trees can be mitigated to ensure the safety of the intended development.

PHOTOS



Hazardous unstable trees along southern perimeter (i.e., maple with dead stem, Class 3 grand fir snag, Class 3 Douglas-fir snag on SPEA line) are recommended for felling.



Multi-stemmed big leaf maple at southwest corner recommended for coppicing.



Large cedar with large crown on southern perimeter is recommended for spiral pruning



Multi-storied, second-growth stand along southern perimeter contains a number of large conifers and deciduous trees. Historical disturbance is evidenced by old skid roads, stream diversions, an old deer drying rack nailed to trees, and spring-board stumps. Last year, the adjacent stand to the south was cleared for a new subdivision.



Western Flowering Dogwood trees on the north boundary.



Multi-branched maple with a split stem along top of bank on northern perimeter. Recommended treatment includes removal of dead stem and coppicing of live stems.



Two large Douglas-fir trees at the northeast corner. One of the trees will likely interfere with the power lines for the new development, and will need to be felled. Efforts will be made to retain the other large fir.

Appendix 1

Site Map & Tree Inventory

(see next pg.)

Legend:

- 1. Proposed Development
- 2. Existing Development
- 3. Existing Roadway
- 4. Proposed Roadway
- 5. Proposed Utility
- 6. Proposed Stormwater Management
- 7. Proposed Landscaping
- 8. Proposed Security
- 9. Proposed Access
- 10. Proposed Easement
- 11. Proposed Right-of-Way
- 12. Proposed Boundary
- 13. Proposed Setback
- 14. Proposed Zoning
- 15. Proposed Use
- 16. Proposed Density
- 17. Proposed Height
- 18. Proposed Area
- 19. Proposed Volume
- 20. Proposed Weight

Table of Proposed Development Data:

Item	Description	Area (sq. ft.)	Volume (cu. ft.)	Weight (lb.)
1	Proposed Development	100,000	1,000,000	10,000,000
2	Existing Development	50,000	500,000	5,000,000
3	Existing Roadway	10,000	100,000	1,000,000
4	Proposed Roadway	10,000	100,000	1,000,000
5	Proposed Utility	10,000	100,000	1,000,000
6	Proposed Stormwater Management	10,000	100,000	1,000,000
7	Proposed Landscaping	10,000	100,000	1,000,000
8	Proposed Security	10,000	100,000	1,000,000
9	Proposed Access	10,000	100,000	1,000,000
10	Proposed Easement	10,000	100,000	1,000,000
11	Proposed Right-of-Way	10,000	100,000	1,000,000
12	Proposed Boundary	10,000	100,000	1,000,000
13	Proposed Setback	10,000	100,000	1,000,000
14	Proposed Zoning	10,000	100,000	1,000,000
15	Proposed Use	10,000	100,000	1,000,000
16	Proposed Density	10,000	100,000	1,000,000
17	Proposed Height	10,000	100,000	1,000,000
18	Proposed Area	10,000	100,000	1,000,000
19	Proposed Volume	10,000	100,000	1,000,000
20	Proposed Weight	10,000	100,000	1,000,000

List of Proposed Development Items:

- 1. Proposed Development
- 2. Existing Development
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- 15. Proposed Use
- 16. Proposed Density
- 17. Proposed Height
- 18. Proposed Area
- 19. Proposed Volume
- 20. Proposed Weight

Tree Species Abbreviations, Common Names & Latin Names

Bg – Grand fir (*Abies grandis*)
 Cw – Western redcedar (*Thuja plicata*)
 Dr – Red alder (*Alnus rubra*)
 Fd – Douglas-fir (*Pseudotsuga menziesii*)
 Hw – Western hemlock (*Tsuga heterophylla*)
 Mb – Big leaf maple (*Acer macrophyllum*)
 Dogwood = Western flowering dogwood (*Cornus nuttallii*)

Update to Site Plan map: Tree 109 (Mb) outside SPEA, in RoW, to be removed (August 24, 2020)

LIMITATIONS

This report provides an assessment of windthrow/danger tree hazard and risk. Evaluation is based on professional judgment. The investigation involved a field observation. Recommended treatment pertains only to the particular site as disclosed at the time of inspection. The report was prepared considering site-specific circumstances and conditions. It is intended only for use by the client for the purpose for which it was commissioned and for use by local government regulating the activities to which it pertains.

Prepared by:

Margaret Symon, R.P.F. 1485 A.B.C.F.P.
Dangerous Tree Assessor Certification: W8668
Windthrow Assessor credentials: WFP Stillwater Division

**Appendix 3.) Geotechnical Assessment Holland Creek Apartments, Lot 13, District Lot 103,
by Lewkowich Engineering Associates Ltd. August 25, 2020.**

A photograph of a forest floor with large tree trunks, moss, and ferns. The image is split into two vertical panels. The left panel contains a dark blue text box, and the right panel shows the forest scene without text.

GEOTECHNICAL ASSESSMENT

Holland Creek Apartments
Lot 13, District Lot 103, Oyster District
Plan EPP75579.
Ladysmith, BC

Prepared For:

Westmark Construction Ltd.
Unit 1 – 2535 McCullough Road
Nanaimo, BC. V9S 4M9

Attention:

Ms. Jacquie Kinnersley

August 25, 2020

File No.: F8012.02

Revision No.: 03

Prepared by: Stuart Crossfield, P.Geo., Eng.L.

Reviewed by: Jeff Scott, P.Eng

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



OQM
CERTIFIED

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 development and/or building 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. This report supersedes all aspects of our original preliminary report (F8012.02 Dated April 23, 2020), as there have been significant design changes since it was published.
2. This report has been prepared in accordance with standard geotechnical engineering practice solely for and at the expense of Westmark Construction Ltd. 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 encountered 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 structure becomes available, the recommendation 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 term 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, 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. Stuart Crossfield, P.Geo., Eng.L., and reviewed by Mr. Jeff Scott, P.Eng., both adequately experienced and are also members in good standing with their association, the Engineers and Geoscientists of British Columbia (EGBC).

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 property, Holland Creek Apartments, Lot 13, District Lot 103, Oyster District Plan, Ladysmith, BC, 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. The proposed development for the Property at the time of this report consists of the construction of a multi-family residential development consisting of a four story main building, locker building, associated roadways (with creek crossing) and surface parking areas.
3. A hazard assessment was conducted to identify potential geotechnical hazards related to the subject Property. The following hazards were identified:
 - i. The steep slopes located along the northern Property boundary. (Steep Slope Hazard)
 - ii. A very small watercourse is located within the southern area of the Property. (Flood Hazard)
4. It has been determined that the proposed multi-family residential building is located a safe distance back (>30m) from the steeply dipping slopes to the north of the Property, and that the associated developments such as parking lots, access roads, ancillary buildings and civil works which have been located within a few meters of the crest, will not adversely impact the stability of the slope.
5. A minimum flood construction level of 1.5m above the crown of road at the stream crossing, or 1.5m above the natural boundary (highwater mark) of the stream, whichever is greater, has been recommended within this Report. Provided these recommendations are followed, and/or protective design features incorporated in lieu of, the development is considered safe as proposed.
6. Once the site access is available, a subsurface investigation will be required to confirm the findings within this Report. (Prior to BP Acceptance).

List of Abbreviations Used in the Report

Abbreviation	Title
ASTTBC	Applied Science Technologists and Technicians of British Columbia
BCBC	British Columbia Building Code
BP	Building Permit
EGBC	Engineers and Geoscientists of British Columbia
LEA	Lewkowich Engineering Associates Ltd.
NEL	Newcastle Engineering Ltd.
ToL	Town of Ladysmith

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1.0 INTRODUCTION

1.1 General

As requested by Westmark Construction Ltd., LEA has carried out a geotechnical assessment of site conditions at the above noted Property as they relate to the proposed multi-family development of Holland Creek Apartments. This report provides a summary of our findings, recommendations and conclusions

1.2 Background

- a. We understand the proposed development, "Holland Creek Apartments", will be a four (4) level, 94 Unit apartment complex in the Town of Ladysmith, complete with a manager's office and amenity room. Further to this, the development will include parking and driveway areas and associated underground civil works. Gross floor area is 87,789 sq.ft, with 19,101 sq.ft of limited common property as leasable area.
- b. The general site plan titled "Preliminary Site Servicing, Storm Water Management and Grading Plan (Drawing No. 100) June 24, 2020 by Newcastle Engineering has been included as an attachment to this report. The project location is shown in Figure 1 below.



Figure 1 – Project Location

- c. LEA understands once the lot has been cleared and grubbed a subsurface investigation will be undertaken and a subsequent report revisions will be completed to include information confirming soil types for the detailed design stage of the proposed development. (Prior to BP Acceptance).

1.3 Assessment Methodology

- a. An initial field reconnaissance was conducted on March 31, 2020 in order to visually assess the local site conditions as they relate to the proposed development.
- b. A desktop study and literature review of the available background information including; surficial and bedrock geology maps, mining maps, soil survey reports, seismic hazard maps and previous geotechnical studies in the immediate area.

2.0 SITE CONDITIONS

2.1 General

- a. The subject property is located adjacent to Holland Creek in a new subdivision development off Dogwood Drive in the southern portion of the ToL, within the jurisdictional limits of the ToL.
- b. The property is a large irregular shaped lot which lies to the south of Holland Creek Park and to the north of new single family residential developments off Rollie Rose Drive.
- c. The property is located within Development Permit Area (DPA) 6 – Riparian and DPA 8 – Multi-Unit Residential ESA. This DPA has been addressed in concert with RAR assessment report submitted by D.R.Clough Consultants with respect to “Section 3.7.3 Slope stability”, “3.7.6 Sediment and Erosion control during Construction” and “3.7.8 Floodplain Concerns”⁷. For slope stability within the RAA, the only steep slopes are located at the western extent of the building (30 to 50%) and at the eastern extent of the building coincident with the entrance culvert (40 to 50%).

2.2 Terrain and Features

- a. The overall topography of the development area slopes down (20m) toward the northeast from nearby Stanton Peak (El 450m).
- b. The local terrain of the subject Property is complex, with varying slopes throughout including steep to very steeply dipping slopes down to the north and north east towards Heart Creek and Holland Creek. A relatively flat area exists in the central portion of the lot at roughly 45m geodetic, which will be utilized for the development of the apartment buildings.
- c. The northwest wing of the proposed building will be stepped into a 7m high minor slope, dipping at

approximately 25° to the southeast. On top of this slope to the north is a relatively flat area which has been proposed for the parking lot.

- d. Immediately adjacent to, and north of, the parking lot area are moderately steep (27-35°) to steeply (36-42°) dipping 25m high slopes (Photo 1), dipping to the north and northeast, and leading down to Heart Creek. Localized portions of these slopes were noted up to 65°. They are mostly well vegetated with mature second growth forest, with locally thinly vegetated and signs of surficial sloughing. Some trees were noted to be fallen over and others were pistol butted (bent). No evidence of large scale slope failure or tension cracks were noted along the crest.
- e. A trench feature was noted connecting the steep natural slopes in the north to the central interior portion of the site. The trench is linear in shape 4m deep by 4m wide with side slopes at approximately 50° inclination. The trench is obviously man-made and may have been excavated as part of older logging operations, as it is mostly grown over by natural vegetation.
- f. A small un-named creek runs through the southern portion of the property and intersects Heart Creek some distance to the northeast (Photo 2).
- g. Additional, very steep gully slopes (45°) were noted along the un-named creek up to 5m in height in the southeast corner of the property along the future access road. These slopes were limited to the southeast corner, were well vegetated and show no signs of instability. Old culverts which had been installed previously, are noted to have eroded over time (Photo 3).
- h. The above distances are estimates based on measurements taken in the field during our investigation, and a review of available satellite imagery and topographical information available on Google Earth®.
- i. Based on historic imagery, the property is within a previously logged area. At the time of our field review, vegetation within the property limits predominately consisted of mature secondary growth coastal forest of Fir, Cedar and Maple.

2.3 Regional Geology

- a. Surficial geology for the area³ is classified as having glaciofluvial sediments, comprised of sand and gravel deposits related to outwash from previous glaciations. Much of the low-lying coastal areas, including Ladysmith and Chemainus are draped by up to twelve metres of sandy diamicton (sdMb)³.
- b. Bedrock geology for the area⁴ is classified as undivided sedimentary rocks of the Upper Cretaceous, Nanaimo Group.

2.4 Soil Conditions

- a. Visual observations were carried out during the course of our site reconnaissance including within the historic trench which included exposed soils (Photo 4). In addition to our review of the exposed soils on site, we reviewed the test pit data collected from previous assessments in the area by LEA.
- b. Soil conditions within the trench area consist of a well graded silty sand, some gravel and cobbles and has been inferred to be very dense based on the age of the side slopes and steep inclination.
- c. Previous experience from other developments in this area indicates the soils will likely consist of a thin (less than 1.0m) cover of forest debris and brown silts, sands and gravel underlain by very dense silty sand with gravel and cobbles (Impermeable- Glacial Till) near surface.

2.5 Surface and Groundwater

- a. There were no groundwater seepage encountered during our field review of the slopes in the development area, however we note the presence of surface water within 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 within the test pits at the time of our assessment.
- c. The CVRD interactive web map identifies a watercourse located within the property. The unnamed watercourse was confirmed during the field review and included a 450mm diameter culvert which has been partially eroded. The watercourse is likely subject to seasonal drainage for the upland wooded area.

3.0 DISCUSSIONS AND RECOMMENDATIONS

3.1 Steep Slopes and Site Grading

- a. This geotechnical hazard assessment includes a preliminary qualitative analysis of the stability of slopes which could impact the proposed development based on a background review, a site reconnaissance and review of a number of cross sections.
- b. Typically a detailed slope stability analyses is required when a building development is proposed at the top of bedrock slopes steeper than 1 Horizontal to 1 Vertical (45°), or soil slopes steeper than (2H:1V / 27°), excluding circumstances where indicators of global instability are present.
- c. The location of the Holland Creek Apartment building has been proposed in an area which is mainly flat lying, where only a portion of the structure is located into a slope inclined 25° to the south. Based on the anticipated soil conditions, and the inclination of the south slope, LEA believes there is a low risk for slope

instability at the building location. No indications of significant slope movements were found on the property.

- d. Attached to the end of this report is a site plan, produced by LEA, of the proposed development (Drawing No. F8012-02) along with four cross-sections: A-A', B-B', C-C' and D-D' (Drawing No. F8012-03 to 04) which detail the parking lot and access roads with respect to the north slopes (note: outside the RAA).
- e. The development includes a large parking lot, access road, ancillary storage building and associated civil works, which are located on a flat, elevated area, adjacent to the crest of the moderately steep to steeply dipping north facing slope. The majority of the parking lot and access road is approximately 10m back from the crest of this slope, however, in a few locations it lies within a few meters.
- f. LEA believes these steeply dipping slopes to the north represent a moderate to high probability of slope instability in the form of seismic stability, resulting in surficial small scale failures which over time may result in oversteepening, regression of the crest and potentially larger scale failures, which would have an effect on the proposed parking lot, access road and ancillary storage building development. For this reason we recommend that all civil works be located behind a 30 degree reference line as depicted on the drawing cross sections and/or include mitigative works (retaining walls etc.) with direction from the Geotechnical Engineer.
- g. However, it is not anticipated that the parking lot, access roads, ancillary buildings and associated civil works will adversely impact slope stability, primarily by being at or below the existing grade i.e.; no significant surcharge loads. No development or disturbance is being proposed on the slope face or within any SPEA area. Furthermore, best practices should be implemented during construction and it is recommended that both a stormwater management plan and a well-defined construction management plan (ESCP) be required to mitigate any potential effects to the slope.

3.2 Watercourse Flood Construction Level (FCL)

- a. As detailed above, a very small watercourse was observed within the property limit which is a seasonal drainage course for the upland wooded area. There is no floodplain data associated with this watercourse. The existing site plan shows a streamside protection and enhancement area (SPEA) setback of 10m on either side.
- b. As per the "Flood Hazard Area Land Use Management Guidelines",⁶ we recommend a minimum flood construction level of 1.5m above the crown of road at the stream crossing, or a minimum of 1.5m above the natural boundary (highwater mark) as measured perpendicularly to the watercourse, whichever is greater. Based on the topography of the site and stream corridor, we expect the FCL will gradually increase from the road crossing to the west. Should the 1500mm diameter storm culvert under the

crossing become blocked, the flood waters will be able to drain overtop of the low point in the road without the stream exceeding the noted highwater mark (HWM) or the FCL of the northeast wing which has an elevation of 41.0m.

- c. The FCL is defined as the minimum elevation of the top of concrete slab for habitable buildings. The topographic review indicates that the building design incorporates habitable areas below the FCL that range from 2.5m to 4.5m (FFE 44.1m). This is allowable, considering the building is at least 12m from the HWM, incised into an impermeable stratum, and will include impermeable earthen berms and/or concrete walls up to the FCL level to prevent the ingress of water during a maximum 1 in 200 year storm event.
- d. The FCL shall be determined and surveyed in the field by qualified survey personnel.

3.3 Watercourse Setback

- a. Floodplain setbacks are generally established to keep development away from areas of potential erosion and to avoid restricting the floodway.
- b. As per the "Flood Hazard Area Land Use Management Guidelines"⁶, for this very small stream we recommend a watercourse setback of 10.0m, as measured from the natural boundary (high water mark).

3.4 Foundation Design and Construction

- a. Prior to construction, the building area should be stripped to remove all unsuitable materials to provide an undisturbed natural subgrade for the footing support.
- b. Foundation loads should be supported on natural undisturbed material approved for use as a bearing stratum by our office or structural fill and may be designed using the following values.
 - i. For foundations constructed on structural fill, as outlined in Section 4.2 of this report an SLS bearing pressure of 150 kPa, and a ULS bearing pressure of 200 kPa may be used for design purposes.
 - ii. For foundations constructed on glacial till, an SLS bearing pressure of 200 kPa, and a ULS bearing pressure of 265 kPa may be used for design purposes.
- c. As the elevation of the glacial till is expected to vary throughout the building area, we recommend the Structural Engineer for the project use the design values for structural fill provided above. This will prevent conflict where the glacial till soils are not present at a "practical" building elevation. The design values provided above for structural fill can be achieved through the conventional placement and compaction of engineered fill over an approved naturally deposited subgrade.
- d. Exterior footings should be provided with a minimum 0.45m depth of ground cover for frost protection purposes.
- e. The design values provided above for structural fill can be achieved through the conventional placement

and compaction of engineered fill over an approved naturally deposited subgrade.

- f. Prior to placement of concrete footings, any bearing soils that have been softened, loosened, or otherwise disturbed during the course of construction should be removed, or else compacted following our recommendations for structural fill. Compaction will only be feasible if the soil has suitable moisture content and if there is access to heavy compaction equipment. If no structural fill is placed, a smooth-bladed clean up bucket should be used to finish the excavation.

3.5 Seismic Site Classification

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 soils and strata encountered during our involvement to date within the property would be "Site Class C" (very dense soil and soft rock).

3.6 Stormwater Management

- a. The development should be in conformance with the Holland Creek Local Area Plan, Schedule C of Bylaw 1488, section 10.1.3 which states "Provide storm water management which prevents flooding and erosion, and mitigates negative impacts on the natural environment and riparian areas".
- b. Stormwater management will be a critical component in mitigating and preventing slope instabilities by controlling the runoff and preventing discharges on the slope and increasing erosion potential.
- c. As part of the geotechnical investigation, field observations of the subgrade soil conditions with respect to the on-site infiltration and disposal of stormwater were carried out.
- d. Based on the subgrade soil conditions encountered during the investigation, it is the opinion of LEA that site conditions (glacial till) are not conducive to the installation of an on-site stormwater infiltration medium.
- e. Site conditions may be conducive to the installation of storm water detention measures. The location(s) of any proposed detention measures shall be reviewed by the Geotechnical Engineer to determine if the design method(s) and/or location(s) pose a hazard to the subject Properties or any adjacent or adjoining properties.

3.7 Foundation Drainage

- a. Conventional requirements of the 2018 British Columbia Building Code pertaining to building drainage are considered suitable at this site as well as the following:
 - i. 150mm diameter rigid PVC, on clean bottom and 150mm layer of clean drain rock capped with a non-woven geotextile.
 - ii. Cleanouts for inspection and maintenance.

- iii. Drainage to follow major corners only and should not include small alcoves.
- iv. Grade of 0.25%, connected to supplied 150mm diameter civil connection at southeast corner.

4.0 CONSTRUCTION PHASE

4.1 General Excavation - Future Building Sites

- a. All unsuitable overburden materials should be removed to provide a suitable base of support. Unsuitable materials include any non-mineral material such as vegetation, topsoil, peat, fill or other materials containing organic matter, as well as any soft, loose, or disturbed soils.
- b. Unsuitable materials, including topsoil and existing fill soils, were observed throughout the Property and may exist up to a few metres from surface, but are generally considered near surface and shallow.
- c. Fine-grained soils and to a lesser extent glacial tills, are particularly moisture sensitive. Extended periods of saturated soil conditions can make these soils unsuitable for bearing purposes, where they could be suitable bearing surfaces when moist or damp. Exposure of these soils to water after excavation (rain or snow) can also make these soils unsuitable for bearing purposes. Therefore, weather conditions dictate whether these soils are suitable for bearing purposes at the time of construction. LEA recommends contingency plans for over excavation when weather or seasonal conditions could make these soils unsuitable for bearing at the time of construction.
- d. Groundwater ingressing into any excavations should be controlled with a perimeter ditch located just outside of the building areas, connected to positive drainage.
- e. The Geotechnical Engineer is to confirm the removal of unsuitable materials and approve the exposed competent inorganic subgrade.

4.2 Structural Fill

- f. Where fill is required to raise areas that will support buildings, slabs, or pavements, structural fill should be used. The Geotechnical Engineer should first approve the exposed subgrade in fill areas, to confirm the removal of all unsuitable materials.
- g. Structural fill should be inorganic sand and gravel. If structural fill placement is to be carried out in the wet season, material with a fines content limited to 5% passing the 75µm sieve should be used, as such a material will not be overly sensitive to moisture, allowing compaction during rainy periods of weather.
- h. Structural fill should be compacted to a minimum of 95% of Modified Proctor maximum dry density (ASTM D1557) in foundation and floor slab areas, as well as in paved roadway and parking areas.
- i. Structural fills under foundations, roadways, and pavements should include the zone defined by a plane

extending down and outward a minimum 0.5m from the outer edge of the foundation at an angle of 45 degrees from horizontal to ensure adequate subjacent support. Refer to Figure 4.2 below.

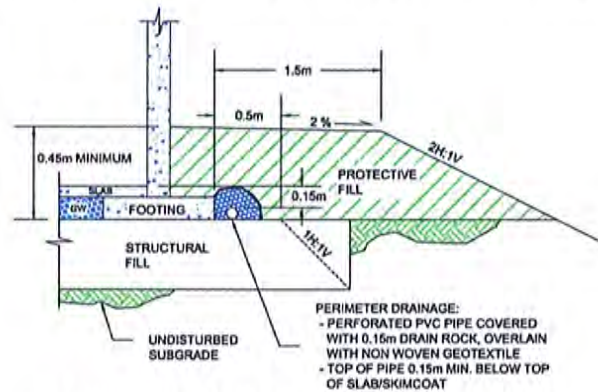


Figure 4.2 – Typical Section, Structural Fill

- j. Compaction of fill should include moisture conditioning as needed to bring the soils to the optimum moisture content and compacted using vibratory compaction equipment in lift thicknesses appropriate for the size and type of compaction equipment used.
- k. A general guideline for maximum lift thickness is no more than 100mm for light hand equipment such as a "jumping-jack," 200mm for a small roller and 300mm for a large roller or heavy (>500 kg) vibratory plate compactor or a backhoe mounted hoe-pac or a large excavator mounted hoe-pac, as measured loose.
- l. It should be emphasized that the long-term performance of buildings, slabs, and pavements is highly dependent on the correct placement and compaction of underlying structural fills. Consequently, we recommend that structural fills be observed and approved by the Geotechnical Engineer. This would include approval of the proposed fill materials and performing a suitable program of compaction testing during construction.

5.0 CONCLUSIONS

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 proposed multi-family 4 storey Apartment Building), 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. 1 in 200 year storm event for the flooding hazard and,
- iii. 10% in 50 years for all other geotechnical hazards.

5.1 ACKNOWLEDGEMENTS

Lewkowich Engineering Associates Ltd. acknowledges 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 Westmark Construction Ltd. We have not acted for or as an agent of the ToL in the preparation of this report.

5.2 LIMITATIONS

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 observed and anticipated subsurface 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 structures becomes available, the recommendations may be altered or modified in writing by the undersigned.

6.0 CLOSURE

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.

Reviewed By:

Text

Stuart Crossfield, P.Geo., Eng.L.
Engineering Geologist

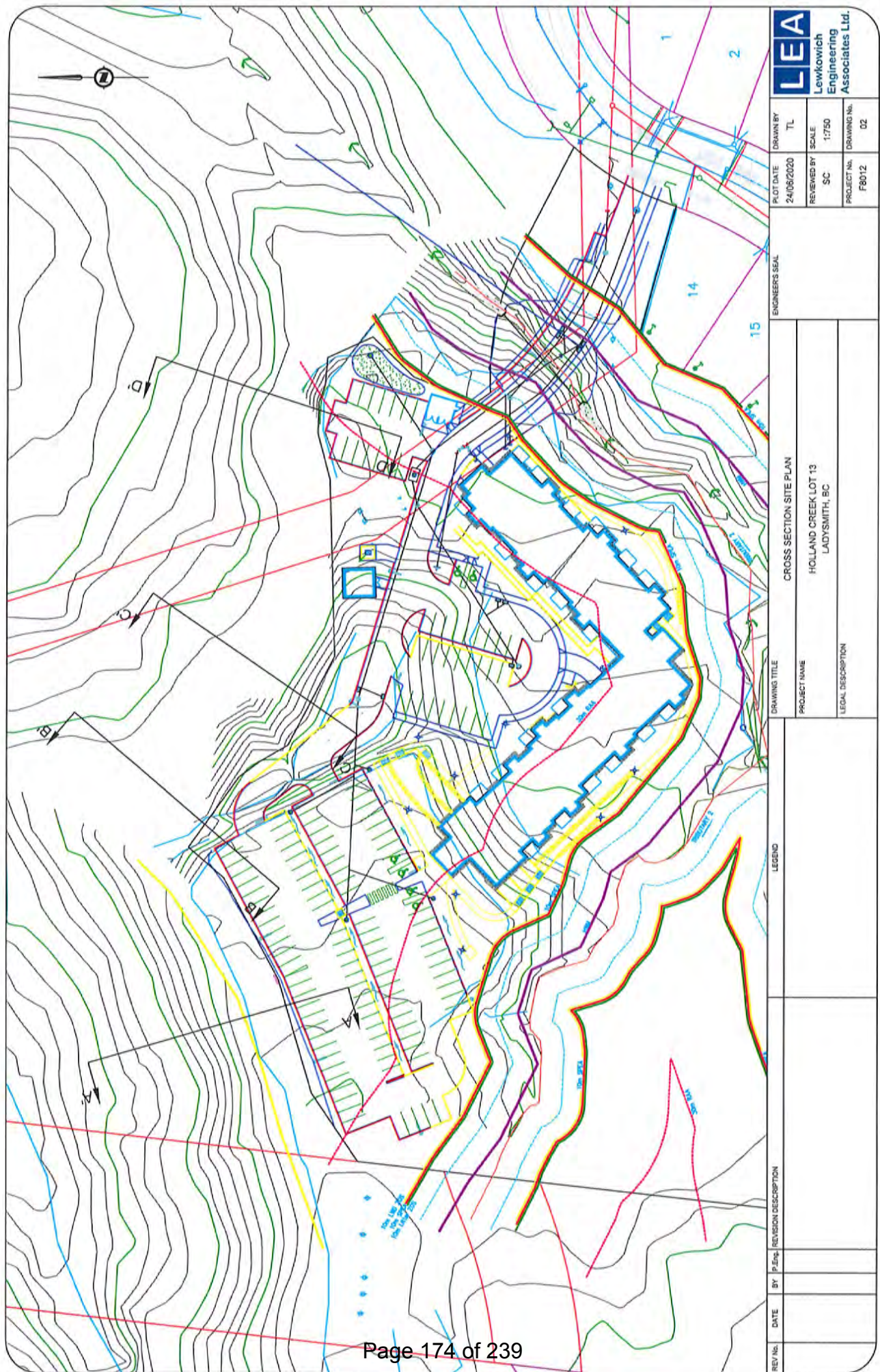
Jeff Scott, P.Eng
Geotechnical Engineer

7.0 ATTACHMENTS

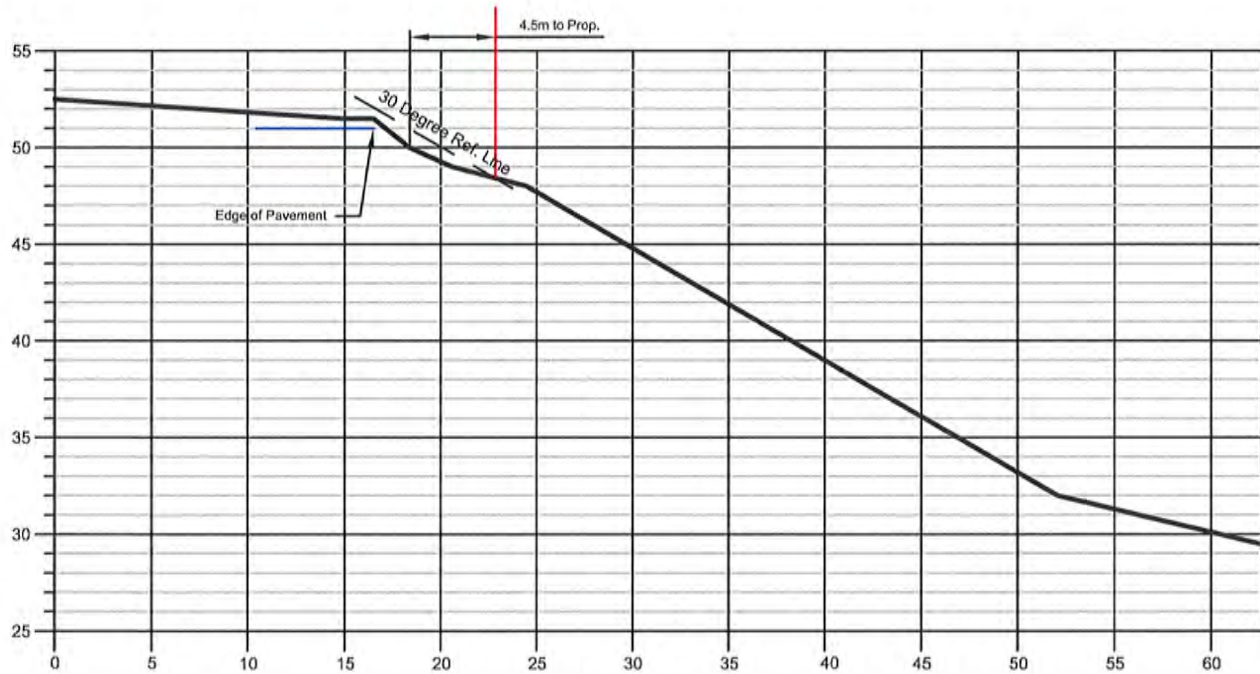
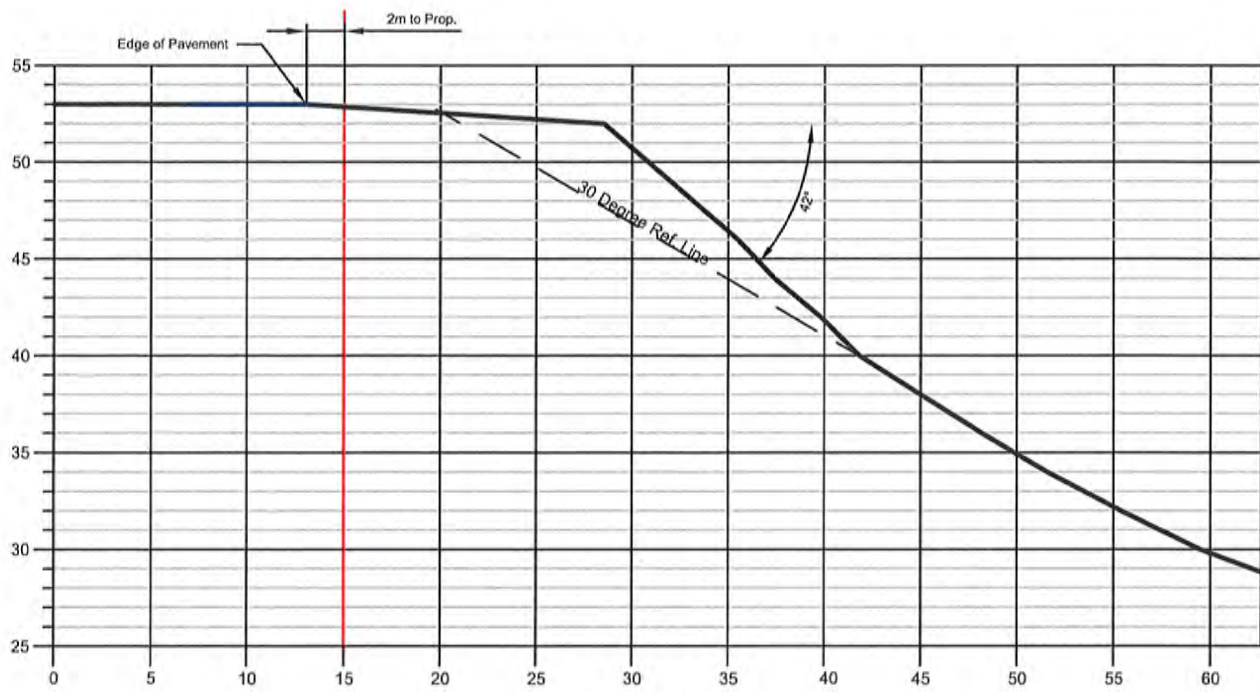
1. Newcastle Engineering Ltd. drawing titled "Preliminary Site Servicing, Storm Water Management and Grading Plan," Drawing No. 100, Dated 06/24/2020.
2. Lewkowich Engineering Associates drawing titled "Cross Section Site Plan", Drawing No. F8012-02, Dated 06/24/2020.
3. Lewkowich Engineering Associates drawing titled "Cross Section A-A', B-B', C-C', D-D'" Drawing No. F8012-03 and F8012-04
4. Site Photos 1 - 4

8.0 REFERENCES

1. Town of Ladysmith map titled "*Official Community Plan, Map 1, Land Use*," Dated September 18, 2018.
2. Town of Ladysmith map titled "*Official Community Plan, Map 2, Development Permit Areas*," Dated September 18, 2018.
3. Town of Ladysmith "*Holland Creek Local Area Plan*" Schedule C of the Town of Ladysmith Official Community Plan Dated September 18, 2018.
4. Ministry of Environment Mapping, Produced by R.H. Guthrie and C.R. Penner, titled "*Vancouver Island Geology*."
5. Geoscience BC map titled "Map 2013-NVI-1-1, Geology, Northern Vancouver Island Project," Dated January 2013.
6. "Flood Hazard Area Land Use Management Guidelines" May 2004; Ministry of Water, Land and Air Protection, Province of British Columbia. Amended by: Ministry of Forests, Lands, Natural Resource Operations and Rural Development, January 1, 2018.
7. Riparian area Regulation Section 3.7.3 to 3.8.2

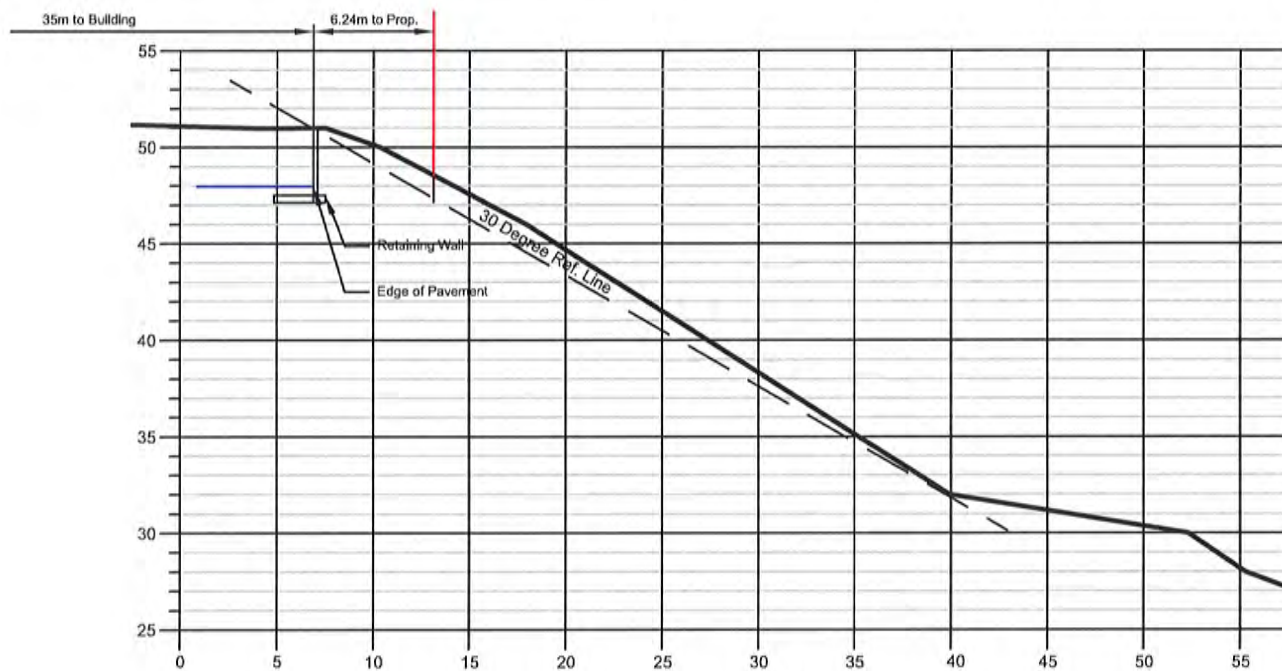


REV No.	DATE	BY	DESCRIPTION	LEGEND	DRAWING TITLE	ENGINEER'S SEAL	PLOT DATE	DRAWN BY	LEA
					CROSS SECTION SITE PLAN		24/06/2020	TL	Lewkowich Engineering Associates Ltd.
					PROJECT NAME		REVIEWED BY	SCALE	
					HOLLAND CREEK LOT 13		SC	1:750	
					LADYSMITH, BC		PROJECT No.	DRAWING No.	
					LEGAL DESCRIPTION		F8012	02	

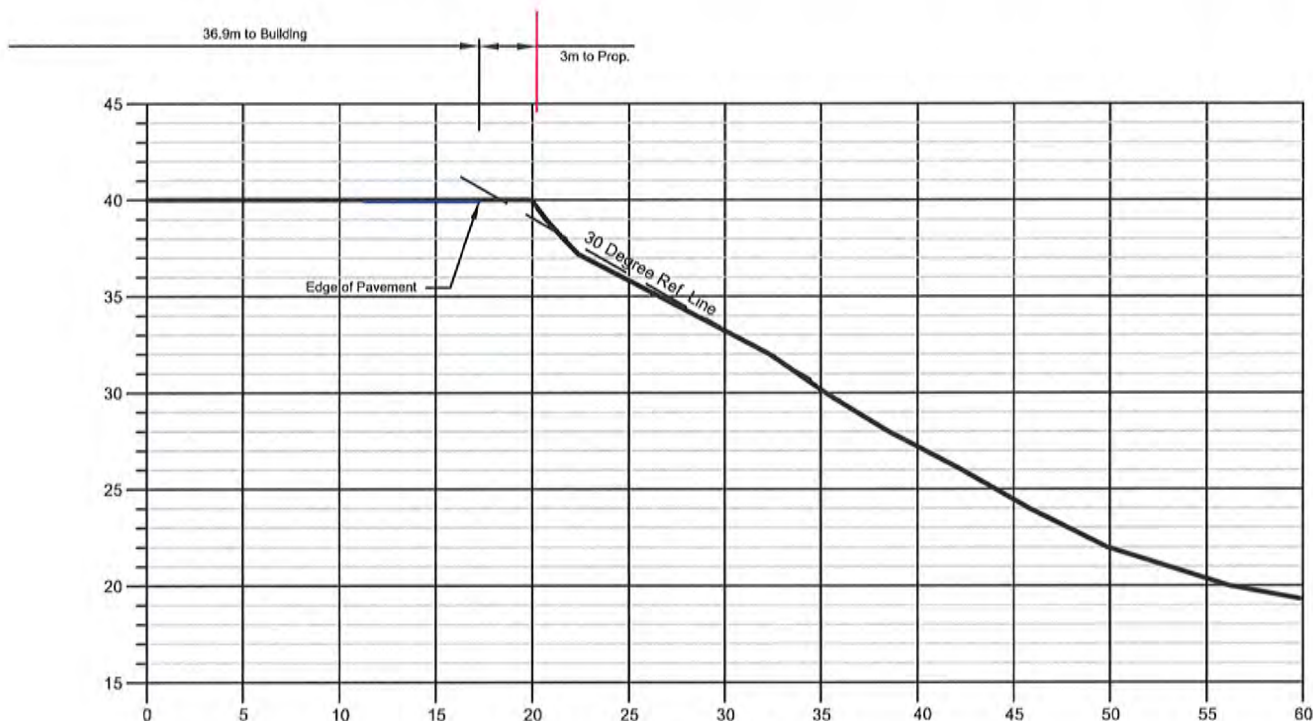


REV No.	DATE	BY	P.Eng.	REVISION DESCRIPTION
01	20-08-04	JH	SC	Add Details

DRAWING TITLE	CROSS SECTIONS A A' & B B'	ENGINEER'S SEAL	PLOT DATE	DRAWN BY	
PROJECT NAME	HOLLAND CREEK LOT 13 LADYSMITH, BC		24/06/2020	TL	
LEGAL DESCRIPTION			REVIEWED BY	SCALE	
			SC	NTS	
			PROJECT No.	DRAWING No.	
			F8012	F8012-03	



Section C C'



Section D D'

REV No.	DATE	BY	P.Eng.	REVISION DESCRIPTION
01	20-08-04	JH	SC	Add Details

DRAWING TITLE CROSS SECTIONS C C' & D D'	ENGINEER'S SEAL	PLOT DATE 24/06/2020	DRAWN BY TL	
		REVIEWED BY SC	SCALE NTS	
		PROJECT No. F8012	DRAWING No. F8012-04	

PROJECT: Holland Creek Lot 13, Ladysmith, BC
FILE NO.: F8012.02r1
DATE: June 26, 2020
SUBJECT: Site Photographs



Photo 1: North Facing Slope



Photo 2: Watercourse Through Forest.



Photo 3: Eroded Culvert



Photo 4: Soil Conditions in Trench

**Appendix 4.) Lewkowich Engineering Associates Ltd Sediment and Erosion Control plan.
August 25, 2020**

FORM 1

Riparian Areas Protection Regulation - Qualified Environmental Professional - Assessment Report

**Appendix 5.) Stormwater Management Plan - Newcastle Engineering Ltd. Holland Creek
Lot 13 Diagram 0127-028-100 DP REV07 Aug 31, 2020**

Appendix 6.) Culvert Installation - Construction Environmental Protection Plan and Water Act Notification Approval.

Environmental Protection Plan

for

LOT 13 Permanent Access

Westmark Construction Inc

Prepared By:
D.R. Clough Consulting
6966 Leland Road
Lantzville, B.C. V0R 2H0
250-390-2901

May 14, 2020

<i>Prepared for</i> Westmark Construction Inc	<i>Prepared By</i> D.R. Clough Consulting	Page 1 of 10
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Introduction:

This report is an Environmental Protection Plan to address environmental values during the installation of an 1500mm diameter concrete culvert at **Lot 13 Rollie Rose Drive** in Holland Creek Estates. The plan was developed by D.R. Clough Consulting staff, in consultation with Newcastle Engineering whom completed the design. An environmental monitor will be required to be on site to ensure safe practices are conducted with regard to work in and around water. Specific environmental concerns are:

1. Introduction of silt and debris into the stream and the associated impacts on water quality and fish habitat downstream of the construction site.
2. Containment of a hydrocarbon spill (e.g., oil, fuel) during construction.
3. Mitigate disturbed habitats upon completion (e.g., instream LWD, riparian).

Project environmental description and location:

Beach Creek flows through the Town of Qualicum Beach under several arterial roads including Village Way ending at the Highway 19A/ Highway 4 intersection and drains into the Salish Sea. Resident Cutthroat Trout and Coho are present in Beach Creek. In the summer the channel is at base low flow with a trickle over the riffles feeding the perennial pools. The 1800mm diameter metal culvert on the existing Hemsworth Road Trail is due for replacement with an associated water line project through this right of way. This project will result in the removal of approximately 30 mature second growth conifer/deciduous trees within the riparian zone.

Schedule of Work

The work is scheduled from mid-August to September 15, 2017. The contractors must be prepared for the environmental limitations and risks associated with this time of year and location. For instance;

- Work preparations must assume rain events may occur and be working within their capabilities to protect the site environment by having covers ready for exposed erodible areas.
- They must also have sediment control and stream flow bypass arranged before they start work.

Construction Environmental Management Plan Check List

Culverts

1. Pre-Work – A job safety and environmental pre-work meeting will be done to ensure that all workers understand the objectives and have clear written plans on their roles and responsibilities. Everyone must be aware of the site environmental liabilities and rules. Environmentally sensitive areas must be identified (e.g., flagging, fencing) and noted to construction crews at the site. There must be no disturbance outside the identified work boundaries of fish habitat or addition of any deleterious substance into their habitat.
2. Monitoring – Site monitoring will be conducted to ensure fish habitat outside of the project footprint is not disturbed. The monitors will identify sensitive areas to construction crews, advise and record procedures. They will also be empowered to

Prepared for Westmark Construction Inc	Prepared By D.R. Clough Consulting	Page 2 of 10
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stop work and direct environmental protection measures to be employed by the site contractors. The monitors will be there during sensitive work activities, such as the culvert removal. This work will primarily be undertaken by D.R. Clough Consulting and Koers Engineering Staff but may involve other qualified personnel.

3. Spill Kits/ Erosion Control – All environmental safety material must be readily available including spill kits with booms, pads and floc powder as well as erosion control coverings such as plastic, pumps, tarps and straw bales (specifications below).
4. Removal – The culvert section and surface materials will be removed with care. There shall be no loss of material into fish habitat. Any native vegetation disturbance is to be minimized. Removed erodible material must be stored away from the wetted area.
5. Installation – Culvert bedding preparation should be careful to control loss of material into fish habitat. Clean materials only for construction (rip rap). Grouting sawing and grinding must be isolated from fish habitat. Concrete or grout works require isolation for fish and fish habitat (e.g., water) until cured with no release of material (typically 48hours).
6. Erosion/Drainage – Drainage and ditches at the work site require installation of turnouts, sumps and swales to reduce site water entry directly to fish habitat. Installation of guard rails, geotextile, rock armour, hay, plastic and grass seed must be applied as required to address runoff and protect fish habitat from deleterious substances (i.e., sediment laden water).
7. Revegetation– A plan with the Town Parks Department will be finalized. It will include potted 5 gallon conifers and other native plants on the outlet side, while low growing shrubs will be included on the inlet given the location of the hydro transmission lines.
8. Reporting – A completion memo that will include milestones will be conducted by the site monitors if requested by agencies.

Environmental Equipment

The contractor must have adequate protective materials and equipment on-site at all times during construction. The following items are necessary mitigation and contingency measures to address on-site erosion and sediment sources and environmental incidents that may arise during the course of construction. All materials should be scaled to the scope of work anticipated. Below are minimum startup recommendations for the site, to be increased in number and type depending on hazards and work scope.

1. 30 m of 20 cm diameter oil containment boom
2. 200 x 2litre absorbent pads
3. Six straw bales
4. 1000 sq ft tarps or rolls of poly sheeting
5. One industrial spill kit on each piece of heavy equipment
6. Water bypass (2 inch or larger) pump and 200 ft hose (to go around work site)
7. Waste water (2 inch or larger) pump and 200 ft hose.(to reach permeable ground)

<i>Prepared for</i> Westmark Construction Inc	<i>Prepared By</i> D.R. Clough Consulting	Page 3 of 10
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8. Fire tools as per MOF/local FD requirements

General:

1. Water quality adjacent and within the construction area will be maintained by installing mitigative measures identified in this document or those determined by the Environmental Monitor.
2. All areas disturbed during construction will be covered.
3. Fertilizer must not be used within 5m of any stream.
4. Grass seed shall be applied at a rate of 40 kg per hectare on exposed surfaces.
5. Seeding and fertilizing should closely follow the final landscaping, weather permitting.

Personnel:

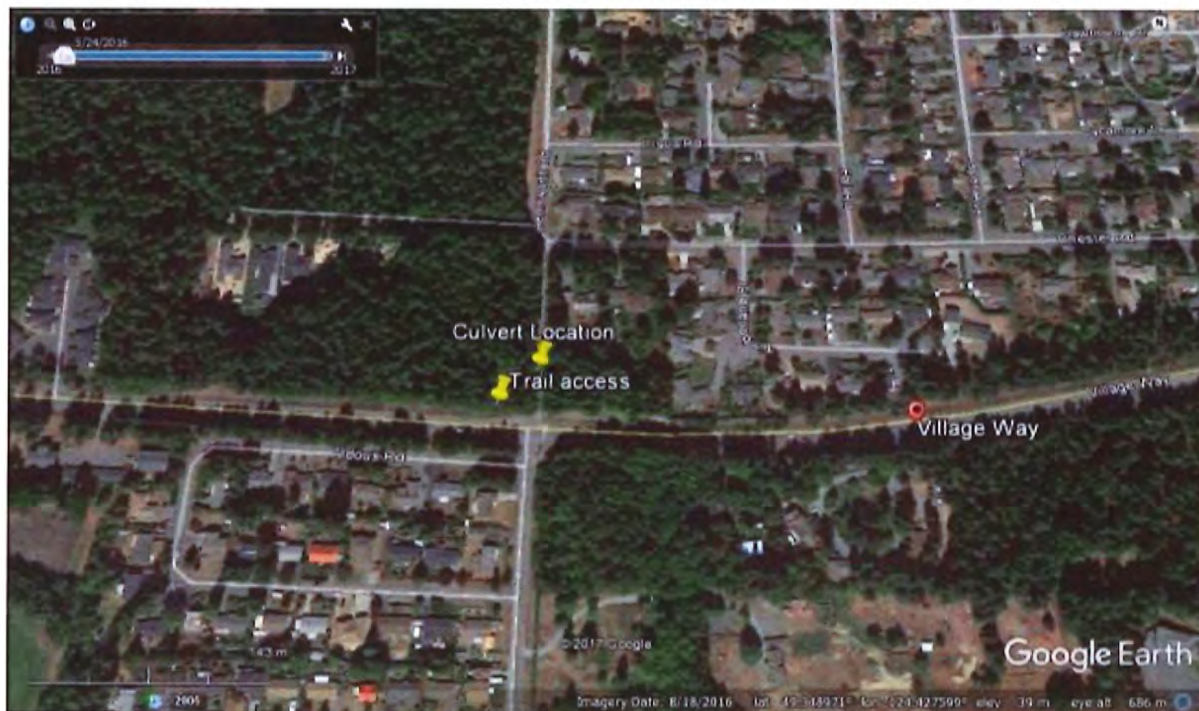
All personnel on the project will be made aware of the Sediment Control Plan and what is required with regards to compliance with the plan.

Permits/Planning:

A BC Government Section 11 *Water Act* Notification was prepared on behalf of the Town of Qualicum Beach. A copy of this work must be onsite at all times for Habitat staff inspections.

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Figure 1. 2017 Beach Creek Worksite



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Figure 2: Site Photos



1.) Looking upstream at existing culvert outlet



2.) Typical habitat looking downstream from culvert

Prepared for Westmark Construction Inc	Prepared By D.R. Clough Consulting	Page 7 of 10
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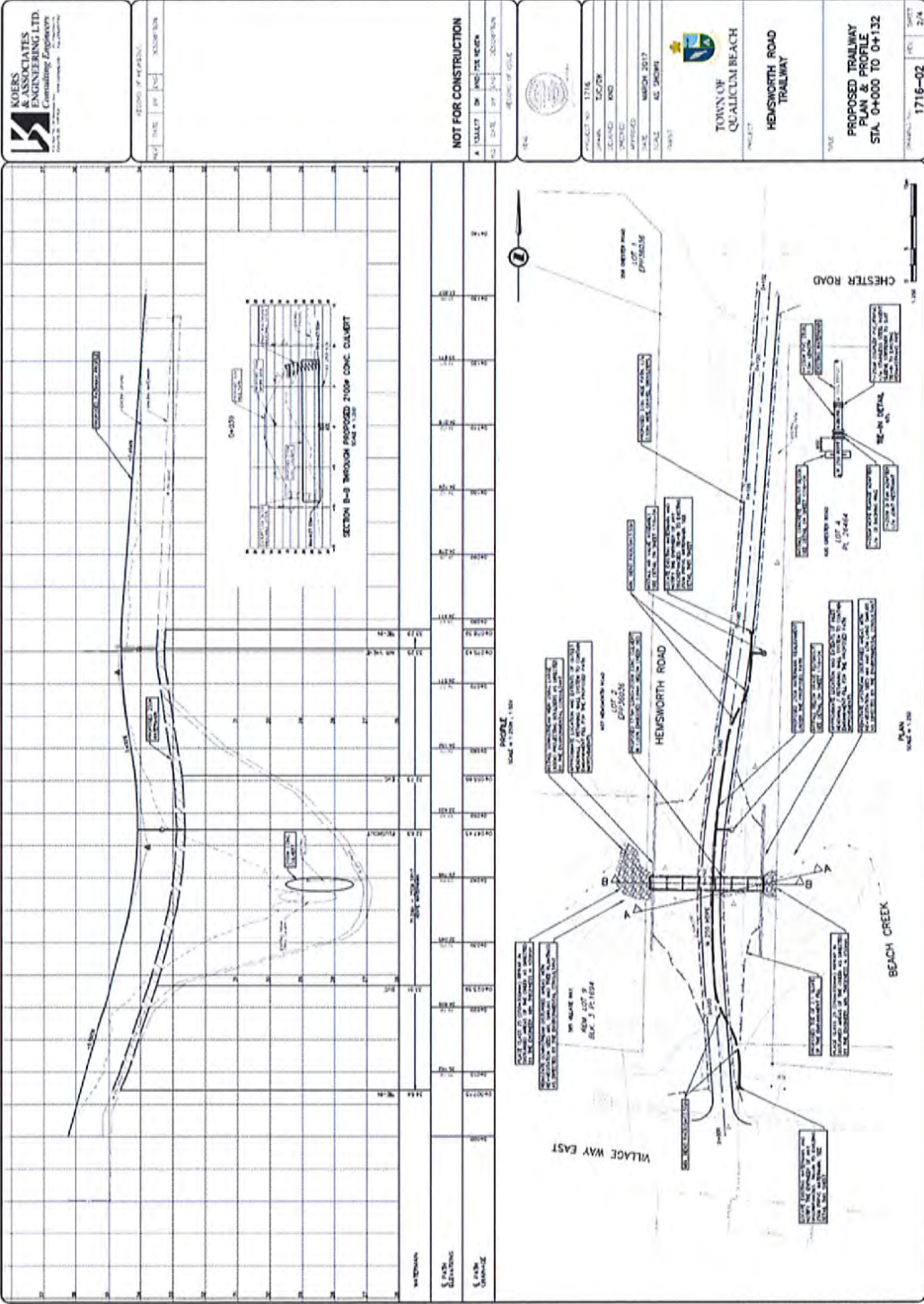


3.) Looking downstream at existing outlet



4.) Looking upstream from inlet of culvert

Prepared for Westmark Construction Inc	Prepared By D.R. Clough Consulting	Page 8 of 10
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From: Roden, Jacqueline FLNR:EX Jacqueline.Roden@gov.bc.ca
Subject: Response to Section 11 Notification ~ 1004801 - Trib into Holland Cr
Date: May 20, 2020 at 4:08 PM
To: jacquie@westmarkconstruction.ca, drclough@shaw.ca



Habitat Officer Mary Toews has reviewed your application and you may proceed with your proposed changes with the following conditions:

- Complete works in 2020 during least risk fish window (June 15 to September 15) or in conditions deemed appropriate by QEP and FLNRORD habitat officer;
- Follow environmental management plan submitted by D.R. Clough consulting; and
- Remove all temporary erosion control structures following completion of works. Revegetate exposed soils along stream banks to avoid sedimentation.

Notifications received by this office will be used to plan and carry out on-site inspections and monitoring during and after the works are completed.

This email provides direction under Section 11 of the *Water Sustainability Act* only, and does not constitute permission or consent under any other Act or Authority. It is your responsibility to consult with other Provincial program areas, Fisheries and Oceans Canada (DFO) and the local government (municipality or regional district) to determine if there are any additional requirements for your proposed works.

Thank you,

Jacqueline Roden

Program Assistant

Phone (250) 751-7352

**Forest Lands, Natural Resource Operations
and Rural Development**

From: Roden, Jacqueline FLNR:EX
Sent: May 15, 2020 9:36 AM
To: 'jacquie@westmarkconstruction.ca' <jacquie@westmarkconstruction.ca>;
'drclough@shaw.ca' <drclough@shaw.ca>
Subject: Section 11 Notification ~ 1004801 - Trib into Holland Cr

File: 1004801

Tracking Number: 100317923

Ministry of Forests, Lands and Natural Resource Operations has received your *Water Sustainability Act* Section 11 Notification. Please quote the above file number, if you have any questions.

It is the applicant's responsibility to ensure that all sections of the notification form are complete, as processing of this notification will not commence until we have a complete application. We remind you that by signing the notification, ***you are accepting the legal responsibility for this work.***

The Habitat Officer will usually confirm acceptance of the application or ask for clarification of details of the project within 10 working days. Once the Habitat Officer has completed the review, you will receive a response that may include further conditions or information. If after 45 days you have not received a response from the Habitat Officer, you may proceed with the work, subject to the following:

- West Coast Region *Terms and Conditions of the Habitat Officer* (please see the attached pdf)
<< File: VI-HabitatOfficer_TermsandConditions_Feb11.pdf >>
- *User's Guide to Working In and Around Water*
<https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/water-licensing-rights/working-around-water>

We recommend that you also review the following information.

- *Best Management Practices (BMP's) Instream Works*
<https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/laws-policies-standards-guidance/best-management-practices>

If you plan to remove/salvage fish, you will require a Fish Salvage Permit before work can proceed. Please contact FrontCounter BC at 1 877-855-3222 or go to http://www.env.gov.bc.ca/pasb/applications/process/scientific_fish_collect.html#new for application forms and information. Please provide our office with a copy of your approved permit.

Thank you,

Jacqueline Roden

Program Assistant

Phone (250) 751-7352

**Forest Lands, Natural Resource Operations
and Rural Development**



TOWN OF LADYSMITH DEVELOPMENT VARIANCE PERMIT

(Section 498 Local Government Act)

FILE NO: 3090-20-04
DATE: November 17, 2020

Name of Owner(s) of Land (Permittee): 1223434 B.C. LTD., INC.NO. BC1223434

Applicant: Jacquie Kinnersley (Westmark Construction Ltd.)

Subject Property (Civic Address): 107 Rollie Rose Drive

1. This Development Variance Permit is issued subject to compliance with all of the bylaws of the Town of Ladysmith applicable thereto, except as specifically varied or supplemented by this Permit.
2. This Development Variance Permit applies to and only to those lands within the Town of Ladysmith described below and any and all buildings, structures and other development thereon:

LOT 13, DISTRICT LOT 103, OYSTER DISTRICT, PLAN EPP75579
PID: 030-477-638
(107 Rollie Rose Drive)

3. Table 8.1: Required Off-Street Parking Spaces of the "Town of Ladysmith Zoning Bylaw 2014, No. 1860", as amended, is varied for the subject property to reduce the required parking spaces for a proposed multiple-unit dwelling:

From:

COLUMN 1 USE	COLUMN 2 REQUIRED NUMBER OF SPACES
Multiple-Unit Dwelling, Townhouse Dwelling	1 bedroom: 1 per <i>Dwelling Unit</i>
	2 or more bedrooms: 2 per <i>Dwelling Unit</i>
	Plus 1 per 5 <i>Dwelling Units</i> to be designated and signed for visitor parking

To:

COLUMN 1 USE	COLUMN 2 REQUIRED NUMBER OF SPACES
<i>Multiple-Unit Dwelling, Townhouse Dwelling</i>	1 bedroom: 1 per <i>Dwelling Unit</i>
	2 or more bedrooms: 1.5 per <i>Dwelling Unit</i>
	Plus 1 per 5 <i>Dwelling Units</i> to be designated and signed for visitor parking

4. Section 10.11 (Low Density Residential (R-3-A)) 5.a) (height of principal building) of the "Town of Ladysmith Zoning Bylaw 2014, No. 1860", as amended, is varied to allow for a four-storey, multiple-unit dwelling:

From:

- a) No *Principal Building or Structure* shall exceed a *Height* of 10.0 metres.

To:

- a) No *Principal Building or Structure* shall exceed a *Height* of 14.9 metres

5. The land described herein shall be developed strictly in accordance with terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit which shall form a part thereof.
6. The following plans and specifications are attached:

Schedule A – Building Location

Schedule B – Elevation Plans

7. Notice of this Permit shall be filed in the Land Title Office at Victoria under s.503 of the *Local Government Act*, and upon such filing, the terms of this Permit (3090-20-04) or any amendment hereto shall be binding upon all persons who acquire an interest in the land affected by this Permit.
8. **THIS PERMIT IS NOT A BUILDING PERMIT.** No occupancy permit shall be issued until all items of this Development Variance Permit have been complied with to the satisfaction of the Corporate Officer.

AUTHORIZING RESOLUTION PASSED BY MUNICIPAL COUNCIL ON THE DAY OF 2020.

Mayor (A. Stone)

Corporate Officer (D. Smith)

I **HEREBY CERTIFY** that I have read the terms and conditions of the Development Variance Permit contained herein. I understand and agree that the Town of Ladysmith has made no representations, covenants, warranties, guarantees, promises or agreements (verbal or otherwise) with **1223434 B.C. LTD., INC. NO. BC1223434** other than those contained in this permit.

Signed

Witness

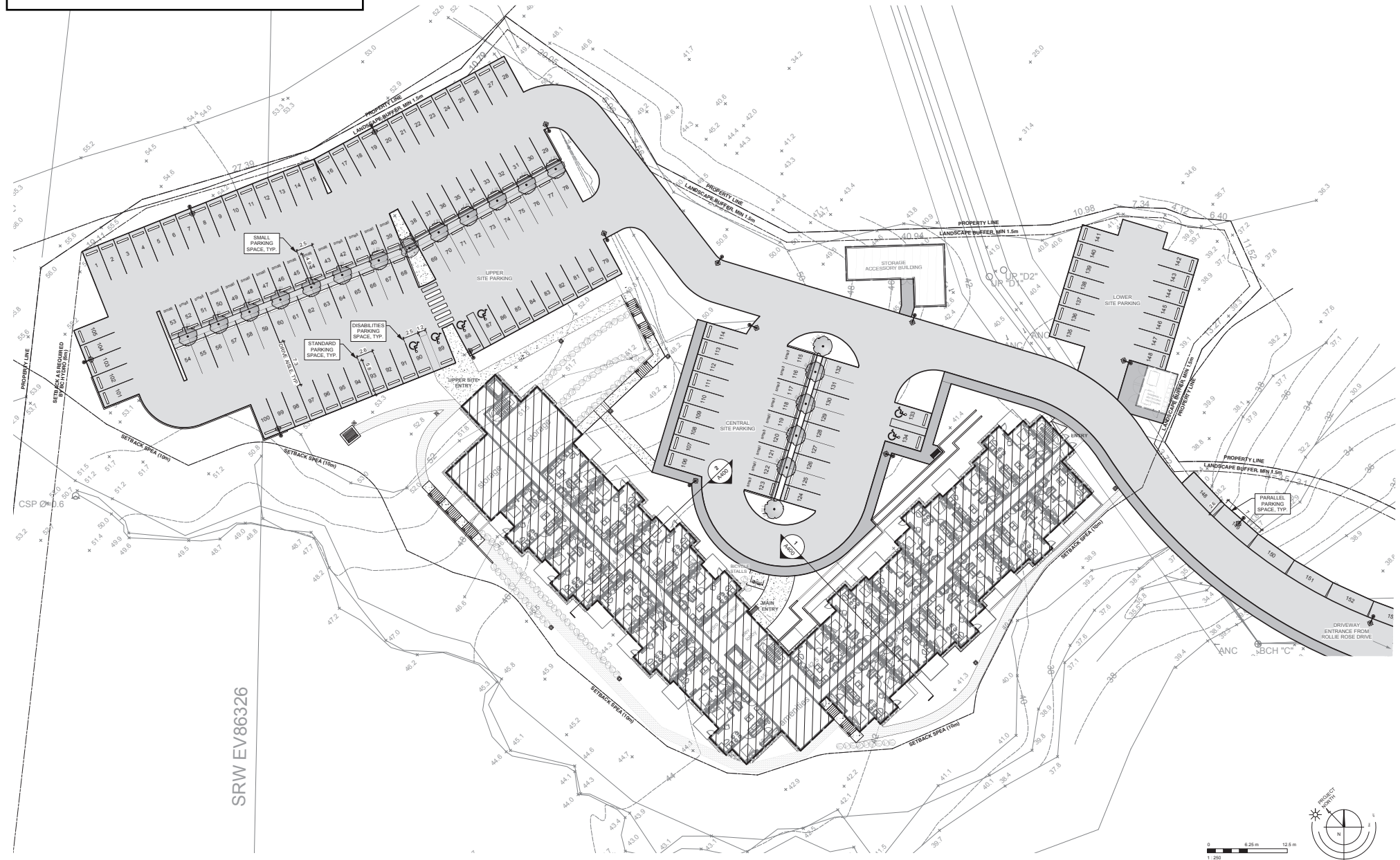
Title

Occupation

Date

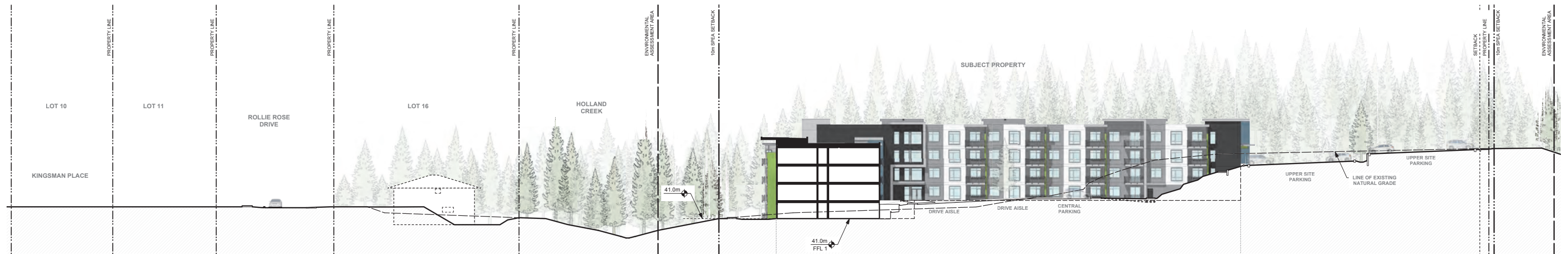
Date

Schedule A - Building Location
DVP 3090-20-04
107 Rollie Rose Drive

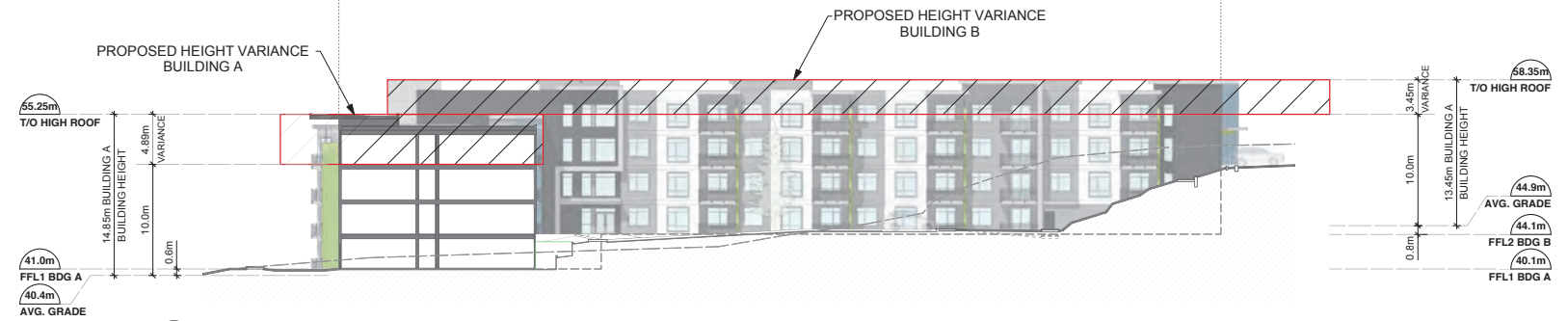


SRW EV86326

Note: Schedule A is only intended to show building location.



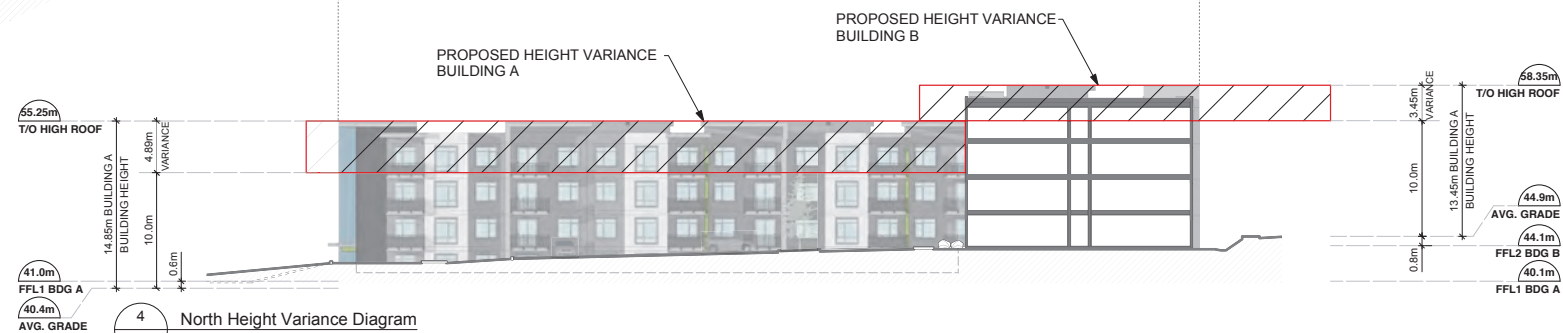
1 East SITESCAPE
A400



2 East Height Variance Diagram
A400



3 North SITESCAPE
A400



4 North Height Variance Diagram
A400

Schedule B - Elevation Plans
DVP 3090-20-04
107 Rollie Rose Drive



Received August 7, 2020

Within Circulation Area

Hi Christina and Julie,

I just have a few questions about the proposal and the building itself. We own 133 Rollie Rose, it was our understanding that behind our house is riparian area and therefore will always have trees. It appears that the upcoming building goes up the road further than we had thought. Will there be a tree corridor between the building and the current lots that are on rollie rose?

My other question is how does making the building taller reduce the number of parking spaces to 1.5 from 2? Will that mean that more people will need to park on the street, thereby clogging our road?

Thanks for your help,

Brandi

Received August 10, 2020

Within Circulation Area

From: Ken Chipeniuk

Sent: August 9, 2020 5:42 PM

Dear Ms. Hovey.

Thank you for your letter dropped on our doorsteps on Friday August 7. We appreciate receiving the notice about a development variance permit application in Holland Creek Development. However, we are significantly dismayed we have been granted only 11 days to prepare a response to the application for consideration by Council. We do have numerous questions including the following preliminary ones. Due to the time frame you have imposed, we must expect your responses to our questions by close of business August 10. Thank you.

1. Who are the proponents for the request? Who are the principals of the company? Are there any potential conflicts of interest with the Town staff or Councillors that you are aware of?
2. Please provide us a copy of the complete development proposal so we can understand the project better. For example, will this be a rental apartment or a condominium development or mixed?
3. Have the proponents given any rationale to support their request for variances? Have they provided any impact assessment?
4. Has your planning department conducted any impact analysis or study related to the requests? For example, will the top storey of the proposed building be visible from Rollie Rose Drive and adjacent properties, and Holland Creek Trail? Will the proposed top storey be looking into our houses and backyards?
5. Has the planning department prepared a recommendation to Council? If not yet, will a recommendation be made?
6. Is it possible for the public to view the permit issued by the province for the temporary bridge?
7. Why are there so many different map images in play for the subject property? The imagery you gave us is old and outdated imagery. The map you gave us is different than the map attached to the paperwork for Council.
8. Why have you drawn the Property Boundary you have drawn for the subject property Lot 13 about the rear boundary of our property? Is the riparian zone and the SPEA included in the boundaries of Lot 13?

9. What is the legal authority to grant variances from the zoning bylaw? What is the legal authority for appeals of decisions to grant variances?

10. Who determines when the request for variances will go before Council and is there discretion in the time frame to go forward? In an environment of transparency and accountability, it seems inappropriate to be rushing through the requests in the middle of summer with residents and property owners on vacations.

11. Has any consideration been given to the impact of the variances on the Holland Creek Trail and its users? It would seem there may be a broader impact than simply adjacent property owners to Lot 13.

12. Are there any precedents in Ladysmith for these variances?

13. Since your notices were simply dropped on the ground, are you undertaking any further efforts to ensure they were not simply blown away by the wind...or rained on.

14. What efforts are being undertaken to notify affected property owners who are not currently resident on their properties? We are doing our best to contact these individuals, however we feel this is your responsibility, not ours.

Best regards, thank you, and again, **we will expect your reply August 10, by close of business.**

Ken Chipeniuk
131 Rollie Rose Drive

Jim Tallman
137 Rollie Rose Drive

Received August 18, 2020

Within Circulation Area

-----Original Message-----

From: Amanda Barker

Sent: August 18, 2020 1:39 PM

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

Subject: Re: Permit for 107 Rollie Rose Drive

NOTICE OF DEVELOPMENT VARIANCE PERMIT: DVP 3090-20-04 (107 Rollie Rose Drive) Lot 13, District Lot 103, Oyster District, Plan EPP75579 PID: 030-477-638 Our File: DVP 3090-20-04

To Whom it May Concern,

Regarding the above listed notice of development, I would like to express a concern with the proposed reduction in parking spaces for the residential unit.

Rollie Rose Drive is already a narrow roadway, and when vehicles are parked on either side of the roadway between Dogwood Drive and Kinsmen Place, there are concerns with larger vehicles (even standard sized pickup trucks) being able to easily pass by. This issue is compounded during weather events, which we experienced this past January. Reducing parking spaces for this proposed residential building will encourage occupants to park on Rollie Rose Drive and Kinsmen Place, which is already overcrowded most evenings and weekends.

I would like to suggest that 'no parking' signs are implemented on Rollie Rose Drive and Kinsmen Place, or permit parking for residents only is initiated.

Thank you for your consideration,

Kind regards,
Amanda Barker
126 Kinsmen Place

376 Dogwood Drive
Ladysmith, B.C
August 17, 2020

Within Circulation Area

Town of Ladysmith
PO Box 220
Ladysmith, B.C. V9G 1A2

Re: NOTICE OF DEVELOPMENT VARIANCE PERMIT: DVP 3090-20-04 (107 Rollie Rose Drive)

As an established resident backing onto the Holland Creek Development we are not happy about the proposed building due to the increased traffic but realize the original plan has already been approved. Increasing the maximum height of the building and reducing the number of parking spaces does not make any sense at all. Most families have 2 vehicles and the fact that Ladysmith does not have full transit services to neighbouring communities, that will not change. If you drive around the homes on Rollie Rose Drive and Kinsmen Place, there are always vehicles on the roadside. Homeowners who have recreational vehicles are using roadside parking for their personal vehicles.

We are not in favour of increasing the maximum height of the building from 10.0 metres to 14.85 metres and would rather see a smaller parking lot but that may cause more roadside congestion.

Regards,

The image shows two handwritten signatures in dark ink. The top signature is cursive and appears to read 'John Halkett'. The bottom signature is also cursive and appears to read 'Lynn Halkett'. Both signatures are written over a light background.

John and Lynn Halkett

August 25, 2020



To: Mayor Aaron Stone, Councillor Amanda Jacobson, Councillor Rob Johnson,
Councillor Tricia McKay, Councillor Duck Paterson, Councillor Marsh Stevens,
Councillor Jeff Virtanen

RE: NOTICE OF DEVELOPMENT VARIANCE PERMIT
DVP 3090-20-04 (107 Rollie Rose Drive)
Lot 13, District Lot 103, Oyster District, Plan EPP75579
PID: 030-477-638

Dear Mayor Stone and Town Councillors,

We are writing today because we oppose the variances being requested for the above property, and request Council to reject the variances.

When we moved into our homes on Rollie Rose Drive, we knew that there would be a multi-unit project built on Lot 13. We acknowledge that. However, we feel that approving the requested variances would be a violation of the understandings under which we purchased our properties, including the Town Zoning Bylaw 2014, #1860.

Variance 1. Increase the maximum height of the building from 10.0 metres to 14.85 metres

- a. *Increase in Noise Levels:* The increase in building height will cause noise from the higher units to spread over the top of the trees buffering the lots on Rollie Rose Drive.
- b. *Privacy:* The additional height may mean that residents of the complex can peer into our yards.
- c. *Lighting:* Lights atop the building may shine into our yards.
- d. *Impact on visuals due to the higher building:* The top of the building may rise above the trees in the buffer zone.

Variance 2. Reduce the total number of parking spaces from requiring 2 spaces per two-bedroom unit to 1.5 spaces per two-bedroom unit. For the proposed building, this would reduce the total number of required parking spaces from 172 to 144.

Overflow Parking on Rollie Rose Drive and Kinsman Place: With a decrease in parking spaces for the residential building, we believe that parking will overflow onto Rollie Rose Drive and Kinsman Place. It's already narrow on Rollie Rose Drive at this point, which we agree is necessary for traffic calming, but when vehicles park there, the space for other vehicles, including emergency vehicles, to get through is compromised. We are concerned that additional cars from Lot 13 will make for a bottleneck at the driveway to Rollie Rose Drive, as well as requiring more cars to park further up the hill. This will spread out the congestion even further, and squeeze out the cars for visitors of houses up the hill. There are only limited pull outs on Rollie Rose Drive and they are further up the hill, and there are none in Kinsman Place.

We would make one additional observation. This really is not a 2.72 hectares property qualifying under the Town Zoning bylaw for development of upwards of 100 residential units. As stated by the applicant's architect, only 1.47 hectares can actually be developed since the balance of the land is protected riparian zone. A property of this size would qualify for only 60 units and would not require zoning variances. This brings us to wonder why the proposal is for 90 units on 1.47 hectares of developable land?

We respectfully ask that Council deny the variance requests for this property, or at the very least, require additional research before decision. The owners of Lot 13 knew the zoning for their property when they purchased the parcel.

Printed Name	Signature	Address
Jim Tallman		137 Rollie Rose Dr.
Patricia Tallman		137 "
Brandi Chesher		133 Rollie Rose Dr
Micah Chesher		133 Rollie Rose Dr

Printed Name	Signature	Address
Adam Grubert		108 Rollie Rose Dr. Ladysmith
Jodi Grubert		108 Rollie Rose Dr.
Jenny Barber		104 Rollie Rose Dr.
Don Barber		104 Rollie Rose Dr.
Janelle Williamson		110 Kinsmen Place.
James Burke		110 Kinsmen Place.
Lewis Vinnish		120 Kinsmen Place
Dandy Vinnish		120 Kinsmen Place
Barbara Mulla		118 Kinsmen Place
Ron Bergsma		116 Kinsmen Place
Barb Bergsma		116 Kinsmen Place
Shannon Fuzi		112 Kinsmen Pl.
Joshua Ruiz		112 Kinsmen Pl.
Grant Blanchette		124 Kinsmen Pl
Amy Blanchette		124 Kinsmen Pl.
DEBRA GRAHAM		131 Rollie Rose Dr
Ken Chipenink		131 Rollie Rose Dr.
Greg Pierce		145 Rollie Rose Dr.

Printed Name	Signature	Address
Heather Pierce		145 Rollie Rose
GRANT LOVE		135 ROLLIE ROSE DR.
KAREN LOVE		135 Rollie Rose Dr.
Jeremy Duenk		123 Rollie Rose Dr.
JACLYN RIVIERE		123 ROLLIE ROSE DR.
Adam Barker		126 Kinsmen Pl
Joanne Fehr		111 Rollie Rose Drive.
Mike Porto		111 Rollie Rose Dr.
John Hall		129 Rollie Rose Dr.
NAOMI Hall		129 Rollie Rose Dr.
Amanda Barker		126 Kinsmen Pl.

November 6, 2020

Mayor and Town Councillors
Town of Ladysmith

Mayor Aaron Stone, Councillor Amanda Jacobson, Councillor Rob Johnson, Councillor Tricia McKay,
Councillor Duck Paterson, Councillor Marsh Stevens, Councillor Jeff Virtanen

c/o Julie Thompson, Senior Active Planner
VIA Email: jthompson@ladysmith.ca

RE: Development Variance Permit

DVP 3090-20-04 (107 Rollie Rose Drive)
Lot 13, District Lot 103, Oyster District, Plan EPP75579
PID: 030-477-638

Dear Mayor Stone and Town Councillors,

My name is Chris Lundy and I am the owner and developer of the subject property. We have been in business for 30 years building and developing in the Mid-Island area and over the past 15 years have completed three subdivisions and 20 homes in the Town of Ladysmith. We are very excited about the latest housing project that is in the planning process with the Town as we believe there is great demand for new community housing in Ladysmith.

We have been working diligently with the Planning Department to address the requirements of a complicated site. We are working within the existing zoning of the property, and within the allowable density for the property. Our request for a height variance and a parking variance for the project is on the basis of very sound planning. We are proposing a smaller footprint for the building and a slightly lower parking requirement in an effort to prevent building structure and parking sprawl on this beautifully forested site. It is our goal to create a community surrounded by forest and water courses with significant land space for the enjoyment of the building's residents.

After providing notice of the Development Variance Permit, we have received some comments back from the surrounding neighbors and we would like to speak to a couple of points:

Variance 1: Increase the maximum height of the building from 10.0 meters to 14.85 meters.

There is a concern by the neighbors that there could be privacy issues, lighting issues and visual impact. The Planning Department has provided a drawing showing the actual height of the building and surrounding trees which indicates that the neighbors will completely retain their privacy due to the towering forest buffer within the SPEA. Simply put, our apartment building will not be seen by any of the neighbors and will be surrounded by Provincially protected forest.

Variance 2: Reduce the total number of parking spaces from 172 to 154.

We are requesting a slight reduction in required parking which is in keeping with the direction of the Planning Department. Contrary to the neighbors' parking concerns, all residents and visitors will be parking on site in their assigned spaces or guest parking.

We will be promoting a green recreational lifestyle for this community which includes an interior bike storage locker with multiple e-bike chargers. In addition, we will have 4 electrical vehicle charging stations with the ability to expand to 8. Furthermore, we will have a Statutory Right of Way over the property connecting the project to Rollie Rose Drive and the Holland Creek Trail.

In closing, Westmark is a highly experienced Developer that is committed to bringing a first-class project to the Town of Ladysmith. Holland Creek Apartments will add 100 rental housing opportunities in a community that has virtually no available rental space. We look forward to planning future rental projects in the Town of Ladysmith.

We are asking for your support on November 17th when our project comes before the Council for consideration.

Thank you,

Westmark Construction



Chris Lundy
President

STAFF REPORT TO COUNCIL

Report Prepared By: Jake Belobaba
Meeting Date: November 17, 2020
File No: 6480-20
RE: Official Community Plan Review

RECOMMENDATION:

That Council:

1. Approve the Official Community Plan Steering Committee Terms of Reference attached as Appendix A to the report from the Director of Development Services;
2. Approve the Official Community Plan Project Charter attached as Appendix B to the report from the Director of Development Services;
3. Endorse a legal budget of \$7,000 and incidentals budget of \$10,000 for the Official Community Plan Review ; and
4. Direct staff to increase the Official Community Plan Development budget from \$150,000 to \$220,000 with \$200,000 to come from Gas Tax, \$10,283 to come from the OCP Reserve, and \$9,717 to come from General Government Reserves.

EXECUTIVE SUMMARY:

This report follows a discussion on the proposed Official Community Plan (OCP) review process at the Committee of the Whole meeting held October 27, 2020. Staff have implemented the feedback of the Committee and are seeking Council approval of the project scope and Steering Committee Terms of Reference to enable staff to begin seeking steering committee members and a qualified consultant.

PREVIOUS COUNCIL DIRECTION:

Resolution	Meeting Date	Resolution Details
CS 2020-320	11/03/2020	<p>That Council adopt the following resolution related to the Official Community Plan Development report presented at the Special Committee of the Whole Meeting held October 27, 2020 Resolution CW 2020-048.</p> <p>That Council endorse a comprehensive review of the existing Official Community Plan using previously completed plans, growth projections and background materials as a foundation with a project budget of \$200,000, excluding legal and incidentals, and an estimated timeline of 18-21 months.</p>
CS 2020-321	11/03/2020	<p>That Council adopt the following resolution related to the Official Community Plan Development report presented at the Special Committee of the Whole Meeting held October 27, 2020 Resolution CW 2020-049.</p> <p>That Council direct staff to bring the proposed Project Charter and Steering Committee Terms of Reference, including amendments to membership numbers and descriptors, consultant selection process and desired level of engagement to the November 17, 2020 Council meeting for Council consideration.</p>
CS 2020-271	09/15/2020	<p>That Council:</p> <ol style="list-style-type: none"> 1. Confirm the kickoff date of February 2021 to commence community engagement for the new Official Community Plan; 2. Approve that the scope for the Official Community Plan review will be comprehensive/new; and 3. Direct staff to schedule a Special Committee of the Whole Meeting for October 2020, dedicated to discussing the Official Community Plan review process.
CW 2020-037	09/08/2020	<p>That the Committee recommend that Council:</p> <ol style="list-style-type: none"> 1. Confirm the kick-off date of February 2021 to commence community engagement for the new Official Community Plan; 2. Approve that the scope for the Official Community Plan review will be comprehensive/new; and 3. Direct staff to schedule a Special Committee of the Whole Meeting for October 2020 dedicated to discussing the Official Community Plan review process.

BACKGROUND:

On September 15, 2020, Council endorsed undertaking a comprehensive review of the OCP with a February 2021 kick-off date. Staff developed variants of a comprehensive OCP review process, a draft "Project Charter" and a draft Steering Committee "Terms of Reference" which were reviewed by the Committee of the Whole on October 27, 2020. Staff have implemented the feedback of the Committee of the Whole and are now presenting the revised Project Charter and Steering Committee Terms of Reference for Council's endorsement.

PROPOSED TERMS OF REFERENCE AND PROJECT CHARTER

Steering Committee Terms of Reference (Appendix A)

A stakeholder steering committee is a common tool used to support sustained, effective and meaningful public engagement throughout the process. Under the proposed Terms of Reference, the Steering Committee's role will be to provide guidance to staff, consultants and Council during the OCP development process. The Steering Committee would not replace public engagement processes, nor render decisions reserved for Council, but would have some autonomy supporting staff and consultants.

The following changes have been made to the Steering Committee Terms of Reference based on feedback from the Committee of the Whole:

1. Reference to certain agencies has been removed in favour of more generalized descriptions (e.g., the reference to the Ladysmith and District Historical Society has been changed to refer to a representative from the "heritage conservation sector".) Staff note that members from the previously stated organizations are still eligible to sit on the Steering Committee.
2. The membership section has been amended to call for members from a broader section of interests (e.g., different neighbourhoods, employment, etc.).
3. The number of members from the Community Planning Advisory Committee (CPAC) has been increased to two. The CPAC is required to nominate three members from which Council will choose two, in keeping with the original wording for CPAC nominations.
4. An additional member from the "tourism, commercial recreation, outdoor recreation or emerging tourism markets sector" has been added. This wording is slightly broader than the wording recommended by the Committee of the Whole to ensure that potential candidates described in the meeting (e.g., mountain bike trail network stakeholders) will be eligible under this membership criteria.
5. A seniors representative (60 +) has been added.
6. The committee mandate section is now clearer and simpler. A dual mandate has been delineated, where the committee will provide opinions and recommendations to staff and consultants on "operational matters" and Council on matters decided by Council.

Once Council has endorsed the Steering Committee Terms of Reference, staff will carry out the necessary outreach and nomination process and bring back a list of nominees from which

Council can appoint members to the Committee¹. The nomination process will take at least one month and can run in tandem with the Request for Proposal (RFP) process.

Project Charter (Appendix B)

At its meeting held November 3, 2020, Council endorsed the Committee of the Whole's recommendation for "Option B" for the overall scope of the OCP review process. This option is a complete rewrite of the OCP with a process that builds on previous planning work (e.g. growth projections, previous studies and plans, the existing OCP, etc.). This option has a shorter timeframe and smaller project budget and may leave some room to examine previously unexplored themes and subject matter. Council also has the option to allocate additional resources in specific areas. For example, if stakeholder engagement reveals a strong desire to explore a new themes or policy areas.

The approximate cost for option B is \$200,000 for consulting fees, \$5,000-\$7,000 for legal, and \$5,000-\$10,000 for incidentals². Staff expect incidental expenses to fall to the higher end of the range due to COVID-19 precautions and the legal budget would cover the cost of a legal review of a draft of the OCP, and legal advice while the OCP is under development. The project budget does not include internal staffing expenses nor does it include an overtime allocation. The project timeframe (from start to adoption) is anticipated to be 18-21 months.

The proposed Project Charter, attached as Appendix B, has also been revised to reflect Council's endorsement of the Committee of the Whole's recommendation. The intent is to revise the charter at key milestones throughout the project (e.g., after a consultant is selected).

Highlights of the revised Project Charter include:

- A 21-month maximum project timeline, from kick off to adoption of the OCP, and a \$200,000 consulting budget.
- The use of a single "full-service" consultant for the duration of the project that can provide anticipated (e.g., mapping and GIS) and unanticipated (e.g., specialized analysis requested by stakeholders) services, recognizing that the Town is a small organization with limited resources.
- An RFP process where proponents will provide a project roadmap and engagement strategy that will form the first update to the Project Charter.
- Objectives and in-scope and out-of-scope areas based on the requirements of the *Local Government Act*, with extra room to add themes revealed during stakeholder consultation.

¹ In the case of the Stz'uminus First Nation representatives, the Stz'uminus First Nation appoints the committee members.

² e.g. facility rental for engagement events, advertising, COVID-19 safety items, committee expenses, stationery, printing, signage etc.

- Reliance on the [IAP2 public consultation model](#), (International Association for Public Participation), to the “Collaborate” level of public influence. The successful consulting firm will be expected to develop an engagement strategy and project roadmap that is consistent with IAP2 principles.
- An adaptable, self-modifying project roadmap that allows the process to be modified at any point, making the process fully responsive to stakeholder feedback or external factors such as the COVID-19 pandemic.

NEXT STEPS

A rough timeline is provided below for the next phase of the project:

Task	Completion Date
1. Council endorsement of Project Charter and Steering Committee Terms of Reference	November 17, 2020
2. Steering Committee member nominations and appointment process	Early January 2021
3. RFP and consultant selection	
4. Revise Project Charter (based on winning proposal) and commence OCP review process	Late January, early February 2021
5. Project Kick Off	February 2021
6. OCP review process	June 2022
7. Adopt the OCP	2022

DISCUSSION:

Staff have reviewed several comparable OCP review processes in relation to the Town’s resources and implemented feedback from the Committee of the Whole. Staff see the general terms outlined in the Project Charter and the proposed Steering Committee Terms of Reference as necessary and appropriate to achieve a comprehensive, stakeholder-supported OCP review process. Staff recommend approving the Project Charter and Steering Committee Terms of Reference as presented.

I approve the report and recommendation(s).

Allison McCarrick, Chief Administrative Officer

ATTACHMENT(S):

- Appendix A: Steering Committee Terms of Reference
- Appendix B: Project Charter

OFFICIAL COMMUNITY PLAN STEERING COMMITTEE

Type

☒ Council Committee

☐ Task Force

Mandate

The Official Community Plan (OCP) Steering Committee is a Select Committee of Council pursuant to section 142 of the *Community Charter*. The mandate of the Committee is to consider and inquire into matters related to the OCP review process and to report its findings and opinions to:

1. Council, on matters to be considered by Council; and
2. Staff and consultants on the execution of tasks assigned by Council.

Membership

The Committee will be comprised of the following members:

Voting Members (17)

- Two representatives appointed by the Stz'uminus First Nation.
- One member representing the heritage conservation sector, appointed by Council.
- One member representing the housing and homelessness sector, appointed by Council.
- One member representing the maritime sector, appointed by Council.
- One member representing the environmental stewardship sector, appointed by Council.
- One member representing the development sector, appointed by Council.
- Two members representing the business sector, appointed by Council.
- One member from the tourism, commercial recreation, outdoor recreation or emerging tourism markets sector, appointed by Council.
- Two members from the Community Planning Advisory Committee (CPAC) appointed by Council.
- One member from the Parks, Recreation and Culture Advisory Committee (PRCAC), appointed by Council.
- One youth representative, appointed by Council, who is between the ages of 15-19 and is currently enrolled in secondary school or recently graduated from secondary school.
- One seniors' representative, appointed by Council who is 60 years of age or older.
- Two members at large, appointed by Council.

Voting membership shall be diverse, with representation that reflects:

- Gender, age and racial diversity; and
- A broad cross section of stakeholder interests, such as neighborhood/community of residence, property and business ownership, and employment.

Non-Voting Members (7)

- One member of Council
- Director of Development Services
- Director of Infrastructure Services

- Director of Parks, Recreation and Culture
- Director of Financial Services (as needed)
- Recording Secretary
- Communications Specialist

Nominations

The Director of Development Services shall issue a call for nominations for a period of at least one month from the date of adoption of these Terms of Reference. The nomination process shall be as follows:

- For the CPAC representatives, the Committee shall submit three nominees, from which Council will select two nominees.
- For the PRCAC representative, the Committee shall submit two nominees, from which Council will select one nominee.
- For the Stz'uminus First Nation representatives, the Stz'uminus First Nation shall appoint two members of its choosing.
- For all other member positions, a written letter from the nominee or from an organization to which the nominee belongs shall suffice for a nomination.

Term

The term of each member shall be from the date of appointment to the date of the adoption of a new OCP.

Membership Requirements and Expectations

The Advisory Group will operate under the following principles:

- Respect and Integrity: Members shall treat stakeholders, fellow committee members, Council, consultants, members of the public and staff with courtesy and respect at all times. Codes of conduct that apply to staff and members of Council also apply to members of the committee.
- Accountability: Members shall strive to attend meetings, read meeting materials in advance and participate in stakeholder engagement activities where necessary.
- Collaboration: Members shall at all times strive to support the successful adoption of an OCP and shall work together to carry out this objective. Members shall be open to alternatives and work to reconcile differing views in a professional and constructive manner.

These expectations apply to Committee members while attending Committee meetings, representing the Town or the Committee, and participating in OCP events and forums. Where a member breaks any of the principles, Council may revoke the membership of the Committee member.

Reporting

Committee minutes will be provided to Council on a regular basis.

Meetings*Chair and Vice Chair*

- The Chair and Vice Chair will be elected at the first meeting of the Committee and as needed

should the Chair or Vice Chair be unable to fulfill their respective duties.


- If the Chair is unable to attend a meeting, the Vice Chair shall chair the meeting.
- A non-voting member may not serve as Chair or Vice Chair of the Committee.

Meetings Schedule and Procedures

- Meetings will be on an as-needed basis, but shall not be more than twice per month.
- Meetings may take place in any suitable venue or electronically.
- The Council Procedure Bylaw of the Town applies to meetings of the Committee.
- A quorum is required.
- Meetings of the Committee will be open meetings pursuant to section 89 of the *Community Charter*.
- The Committee may meet in-camera pursuant to section 90(1)(i) of the *Community Charter* to receive legal advice related to the development of the OCP.

Agendas and Minutes

- The Director of Development Services will prepare meeting agendas.
- The Recording Secretary will distribute the meeting agenda to the members of the Committee at least one week prior to the meeting date.
- The Recording Secretary will record the minutes. The Director of Development Services may direct that audio and video recordings of a Committee meeting be made, provided that the Committee is advised that the meeting will be recorded prior to the start of the meeting.
- Draft minutes of the previous meeting will be distributed with the meeting agenda package.
- Minutes of the Committee meetings will be posted on the Town of Ladysmith website and included in Council agenda packages.

BACKGROUND

[Strategic Plan](#) adopted November 2019:


“Update the Official Community Plan (adopted in 2003) to set the vision and a road map to build the community we want over the next quarter century”

Council Direction September 15, 2020


- Kickoff date of February 2021.
- Overall scope for the OCP review: comprehensive/new.

Council Direction November 3, 2020

- Comprehensive review of the existing OCP using previously completed plans, growth projections and background materials as a foundation.

OBJECTIVES

- Meaningful, inclusive and comprehensive stakeholder engagement.
- Indigenous participation and engagement with focus on reconciliation.
- Meet legislative requirements for OCP content and adoption.
- Adaptable process: Update this charter as new information and ideas emerge.

IN-SCOPE

Top Priority: Mandatory Content s. [473 of the Local Government Act](#):


- Location, amount, type and density of residential development;
- Location, amount and type of commercial, industrial, institutional, agricultural, recreational and public utility/facility land uses;
- Location and area of suitable sand and gravel deposits;
- Land use restrictions on hazardous and environmentally sensitive lands;
- Approximate location and phasing of major road, sewer and water systems;
- Housing policies respecting affordable housing, rental housing and special needs housing (must consider the most recent housing needs report); and,
- GHG reduction targets and policies.

High Priority: Optional Content s. [474 of the Local Government Act](#):

- Policies relating to social needs, social well-being and social development;
- Agricultural policies;
- Protection and restoration of the natural environment; and,
- Development Permit Area Designations and Guidelines.

Corollaries:

- Consequential bylaw amendments (e.g. zoning amendments to align with OCP); and,
- Alignment of recently completed plans (e.g. Waterfront Area Plan) with new OCP.

OUT OF SCOPE

- Regional Context Statement/Compliance with Regional Growth Strategy (The CVRD does not have regional growth strategy).
- Preparation of a Housing needs Report (Underway, estimated completion date January 2021).


KEY STAKEHOLDERS & ROLES

Stakeholders

- [Steering Committee](#) will represent major stakeholder groups (selection to occur late 2020)
- General public
- Government (regional municipalities, Provincial/Federal, First Nations)

Roles

- Council (Decision maker)
- Dir. Development Services (Staff Lead)
- In-house content experts
 - Dir. of Financial Services
 - Dir. Parks and Recreation
 - Dir. of Infrastructure Services
- Consultant(s)
 - Process delivery and engagement
 - Drafting
 - Specialized research & Analysis
 - Mapping and GIS
- Town’s solicitor
 - Legal review of OCP
 - Legislative compliance during OCP development

Engagement

Desired level of engagement

INFORM CONSULT INVOLVE COLLABORATE EMPOWER

PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.


Consultants and staff will develop and engagement strategy consistent with IAP2 framework

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KEY RISKS & Mitigation Strategies

COVID-19: Barriers to effective public participation. Innovative engagement techniques required.

BUDGET

Total project budget: \$200,000 (max) excluding legal (\$7,000), staff time and incidentals (\$10,000).

KEY DELIVERABLES

- RFP for Consultant: December 2020.
- Council to award RFP: January 2021.
- Adopt New OCP: 2022.
- Interim deliverables (e.g. engagement reports) TBD based on winning consultant proposal.

TIMELINE

RFP/Consultant Selection (Nov-Jan 2021)

Finalize OCP review process (Jan-Feb 2021)

Engagment and OCP Development (Feb 2021-Aug 2022)

Adopt OCP (2022)

Timeline to be updated based on winning consultant proposal. Note each project phase is expected to include engagement, and key deliverables.

STAFF REPORT TO COUNCIL

Report Prepared By: Julie Tierney, Executive Liaison
Meeting Date: November 17, 2020
File No: 1855-20 (2021)
RE: UBCM Community to Community (C2C) Forum Program Application

RECOMMENDATION:

That Council:

1. Authorize staff to apply to the Union of BC Municipalities, for up to \$5,000 during the December 2020 application intake for the Regional Community to Community Forum Program to support a community forum with the Stz'uminus First Nation Council, to be held prior to March 31, 2021; and
2. Approve the allocation of up to \$5,000 as the Town's contribution.

EXECUTIVE SUMMARY:

To obtain Council approval to apply for funding through the UBCM's Regional Community to Community Forum (C2C) Program. The Program provides funds to assist communities to hold an event that provides an opportunity for dialogue with neighbouring First Nations, on topics of mutual interest.

PREVIOUS COUNCIL DIRECTION

N/A

INTRODUCTION/BACKGROUND:

The Town has received funds through this program for several C2C forums held as far back as 2009.

It is proposed that the Town and the Stz'uminus First Nation work together to hold an event that will provide an opportunity for dialogue and planning on topics of mutual interest. While the specific details of the proposed forum will be developed over the next few months between Stz'uminus and the Town, it is proposed that the previous format of a dinner and meeting between the two Councils and staff representatives be pursued. A few of the past forums have included hiring a facilitator, which may be an option for Council.

The Town will take the lead in organizing the proposed forum. Funds would be available to hire a facilitator on contract should that be necessary.

The Stz'uminus First Nation is also required to provide written support of this initiative and the grant application.

ALTERNATIVES:

Council can choose to apply for a lesser grant amount, or may choose not to apply for the funds this year. The next C2C offering will likely occur in April 2021.

FINANCIAL IMPLICATIONS:

The Town must match the \$5,000 grant from UBCM. Matching funds can be a combination of cash and in-kind contributions (such as staff time or donation of meeting space and materials) from the Town and the community.

LEGAL IMPLICATIONS:

N/A

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

The C2C Forum will be a positive step in strengthening the Town's relationship with the Stz'uminus First Nation, and an opportunity for Council and senior staff to work with Council and staff of the Stz'uminus First Nation to address items of mutual interest. The opportunity for open communication will engage our communities and further build relationships and understanding.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

N/A

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

- | | |
|---|--|
| <input type="checkbox"/> Complete Community Land Use | <input type="checkbox"/> Low Impact Transportation |
| <input type="checkbox"/> Green Buildings | <input type="checkbox"/> Multi-Use Landscapes |
| <input type="checkbox"/> Innovative Infrastructure | <input type="checkbox"/> Local Food Systems |
| <input checked="" type="checkbox"/> Healthy Community | <input checked="" type="checkbox"/> Local, Diverse Economy |
| <input type="checkbox"/> Not Applicable | |

ALIGNMENT WITH STRATEGIC PRIORITIES:

- | | |
|---|---|
| <input type="checkbox"/> Infrastructure | <input type="checkbox"/> Economy |
| <input checked="" type="checkbox"/> Community | <input type="checkbox"/> Not Applicable |
| <input type="checkbox"/> Waterfront | |

I approve the report and recommendation(s).

Allison McCarrick, Chief Administrative Officer

ATTACHMENT(S):

- UBCM 2020/2021 Regional Community to Community Forum Program Application Guide

Regional Community to Community Forum Program

2020/21 Program & Application Guide

1. Introduction

In January 1997, the Union of British Columbia Municipalities (UBCM) and the First Nations Summit (FNS) jointly organized the first province-wide Community to Community (C2C) Forum. This event brought together First Nations and local governments from across BC to discuss common goals and opportunities for joint action. The success of the event was due to a spirit of goodwill and an open exchange of concerns, ideas, and constructive viewpoints. There was consensus among the participants that regional C2C Forums should be supported.

In most years since 1999, the provincial Ministry of Municipal Affairs & Housing and Indigenous Services Canada have provided funding for the C2C program. In this time, more than 650 C2C Forums have been held in communities across the province.

Regional C2C Forum Grant Program

The goal of a Regional C2C Forum is increased understanding and improved overall relations between First Nations and local governments. Forum events are intended to provide a time and place for dialogue to build on opportunities, support reconciliation efforts, resolve issues of common responsibility, interest or concern, and/or to advance tangible outcomes.

To qualify for funding, C2C Forums must include direct dialogue between elected officials and/or senior staff of neighbouring First Nations and local governments and work toward one or more of the following objectives:

- Strengthening relationships and fostering future co-operative action by building stronger links between First Nation and local government elected officials and senior staff
- Advancing First Nations and local governments to more formal relationships through protocols, MOUs, service agreements and/or collaboration on plans or projects
- Supporting local reconciliation efforts and shared capacity building
- Developing or improving coordinated approaches to emergency preparation, mitigation, response and recovery

2. Eligible Applicants

Funding permitting, any local government (municipality or regional district) or First Nation (Treaty First Nation, Band, Tribal Council or National Government) may apply to host a Regional C2C Forum. First time and repeat applicants (i.e. those who received funding in previous years) are eligible.

Eligible applicants may submit one application per intake.

3. Eligible Events

In order to qualify for funding:

- Events must occur between April 1, 2020 and March 31, 2021.
- Events must include direct participation by the elected officials and/or senior staff from both First Nation(s) and local government(s).
- Willingness of the elected officials and/or senior staff of the partnering community to participate in the event must be confirmed and provided in writing to UBCM.
- The communities engaging in dialogue must be neighbouring. However, “neighbouring” may mean in the vicinity of, but not necessarily immediately adjacent to each other.

Topic Ideas & Outcomes

Table 1 outlines potential dialogue topics. The following resources may also be helpful:

- [2019 Guide to Community to Community Forums in British Columbia](#)
- [2008-2018 Regional Community to Community Forum Status Report](#)
- [First Nations Health Authority Policy Statement on Cultural Safety and Humility](#)
- [Truth and Reconciliation Commission of Canada: Calls to Action](#)
- [UBCM Reconciliation Resources](#)

Table 1: Dialogue Topics & Outcomes

Reconciliation & Relationship Building <ul style="list-style-type: none">• Shared understanding of collective history• Reconciliation Action Plans• Joint cultural safety and cultural humility training• United Nations Declaration on the Rights of Indigenous Peoples, Treaties and Aboriginal rights, Indigenous law and Crown-Indigenous relations	Emergency Management <ul style="list-style-type: none">• Planning for coordinated and shared:<ul style="list-style-type: none">○ Preparation and risk mitigation○ Emergency response○ Recovery efforts• Joint training to support partnerships with and assistance to Indigenous communities during times of emergency.	Service Delivery & Planning <ul style="list-style-type: none">• Service agreements• Joint land use, sustainability or other plans or policies• Agreements for archaeological or culturally significant sites
Economic Development <ul style="list-style-type: none">• Agreements for improving regional and local economies• Joint interests/initiatives• Community economic development plans	Community Development <ul style="list-style-type: none">• Age- and accessibility-friendly assessments• Joint youth engagement plans or projects• Agreements for climate action	Infrastructure Planning <ul style="list-style-type: none">• Asset Management• Needs assessments• Joint development of infrastructure

Length and Format

Event length and format are up to the applicant and attendees. In some cases, a day-long event may be preferred to allow participants sufficient time to meet each other and work together to generate ideas and plans for future activities. In situations where the participants do not know one another, an “ice-breaker” event, such as an introductory dinner or reception, may be useful.

Taking the forum out into the community can be a valuable way to learn about an area’s shared history. This could include a tour of traditional territories or joint visits to participant’s facilities, lands, buildings or infrastructure.

Organization and Facilitation

Experience has shown that a major challenge in organizing a C2C Forum is finding adequate staff time and resources. Many previous applicants have found that contracting the services of a professional facilitator/event organizer can assist in planning, convening and reporting on the forum.

Facilitators can also be very useful in helping communities talk about difficult issues, such as the history and legacy of residential schools or inter-generational trauma. In such events, hiring a facilitator with specific expertise in creating culturally safe spaces and dialogue may be of immense value.

4. Eligible & Ineligible Costs & Activities

Eligible Costs & Activities

Eligible costs are direct costs that are approved by the UBCM, properly and reasonably incurred, and paid by the applicant to carry out eligible activities. An in-kind contribution is one for which no money is paid directly, such as the use of facilities.

Eligible costs can only be incurred from the date of application submission until the final report is submitted. Under the Regional C2C Forum program, eligible activities must be cost-effective and may include:

- Event organization (e.g. invitations, agendas, event planning, etc.)
- Event costs:
 - Meals, snacks and non-alcoholic beverages
 - Venue rentals, including any required audio-visual equipment rentals
 - Facilitation services and/or guest speakers
 - Preparation of materials required for the forum, including printing costs
 - Expenses related to joint visits to participant’s facilities, lands or buildings provided the visits occur as part of the forum
- Transportation between communities as required to attend a forum. Mileage estimates and calculations are required for vehicle travel.
- Honoraria for elders only when the elder is a scheduled speaker. If honoraria are included in the event budget, a description of the role(s) of the honoraria recipient(s) in the forum is required.
- Completion of event minutes, reports, etc. including printing costs.

Ineligible Costs & Activities

Any activity that is not outlined above or is not directly connected to activities approved in the application by UBCM is not eligible for grant funding or as the community contribution. This includes:

- Alcohol
- Travel within communities
- Gifts and cultural performances
- Costs related to the development of materials required for broader project development, implementation or assessment, including legal fees, architectural, engineering or other design drawing, studies, etc.

5. Grant Maximum

The C2C program can contribute a maximum of 50% of the cost of eligible activities – to a maximum of \$5,000.00. The applicant is required to provide 50% of the total eligible costs for the forum in cash or in-kind contributions. This may include contributions from the invited First Nation or local government participant.

In order to ensure transparency and accountability in the expenditure of public funds, all other grant contributions for eligible portions of the project must be declared and, depending on the total value, may decrease the value of the grant

6. Application Requirements & Process

Application Deadline

The Regional C2C program is administered over the course of the fiscal year (April 1 to March 31). Funding permitting, three calls for applications are planned for 2020/21.

Applicants will be notified of the status of their application within 30 days of the following application deadlines:

- April 9, 2020. For events between April 24, 2020 and March 31, 2021
- September 4, 2020. For events between September 30, 2020 and March 31, 2021
- December 4, 2020. For events between January 1 and March 31, 2021

Required Application Contents

- Completed and signed Application Form.
- Event budget(s). See below for more information.
- Confirmation of partners. Written confirmations can be submitted after the application, but are needed in order for grant approval.

Information on Event Budgets

An itemized budget for each planned event must be submitted with the application and indicate that a minimum of 50% of the total eligible event cost will be covered by the applicant or invited First Nation or local government participant (in cash or in-kind). Please submit the event budget(s) in the same format as outlined in Table 2.

Budgets and proposed activities are approved as part of the application and any significant changes to a budget or forum event must be approved before an event takes place. Applicants are responsible for any cost over-runs unless a revised budget is submitted and approved before an event takes place.

Table 2: Sample Event Budget

Budgeted Expenditures	Proposed Cost
Event organization	\$750
Meals, snacks and beverages (include # of people)	\$900
Venue rental costs	\$300
Facilitation services	\$1,450
Guest Speakers	\$650
Forum materials	\$1,000
Transportation (include # of km)	\$25
Eligible honoraria for elders (include description)	\$500
Event minutes or reports	\$550
Contingency	\$175
TOTAL	\$6,300.00
FUNDING REQUEST (50%)	\$3,150.00

Submission of Applications

Applications should be submitted as Word or PDF files. If you choose to submit your application by e-mail, hard copies do not need to follow.

All applications should be submitted to:

Local Government Program Services, Union of BC Municipalities

E-mail: lgps@ubcm.ca

Mail: 525 Government Street, Victoria, BC, V8V 0A8

Review of Applications

UBCM will perform a preliminary review of applications to ensure the required application elements have been submitted and to ensure that basic eligibility criteria have been met. Only complete application packages will be reviewed.

UBCM and the First Nations Summit will then review all complete applications.

7. Grant Management & Applicant Responsibilities

Please note that grants are awarded to eligible applicants only and, as such, the applicant is responsible for completion of the project as approved and for meeting reporting requirements.

Applicants are also responsible for proper fiscal management, including maintaining acceptable accounting records for the project. UBCM reserves the right to audit these records.

Notice of Funding Decision & Payments

All applicants will receive written notice of funding decisions, which will include the terms and conditions of any grant that is awarded. All approved applicants are required to return a signed copy of the approval agreement.

Please note that in cases where revisions are required to an application, or an application has been approved in principle only, the applicant has 30 days from the date of the written notice of the status of the application to complete the application requirements. Applications that are not completed within 30 days may be closed.

Grants payments are issued when the approved event(s) are complete and UBCM has received and approved the required final report and financial summary.

8. Final Report Requirements & Process

Applicants are required to submit an electronic copy of the complete final report within 30 days of completed C2C event(s) and no later than April 30, 2021, including the following:

- Completed and signed Final Report Form.
- Financial summary. See below for more information.
- Attendance list, including name, title and organization of each participant. Please do not submit sign-in sheets.
- Optional:
 - Final agenda, session summaries or minutes and other documents/presentations
 - Photos, media releases and press coverage and other public communications
 - Any other relevant background information (e.g. planning process, context, goals)

Information on the Financial Summary

Financial summaries should be submitted in the same format as the sample summary below.

Table 3: Sample Financial Summary

Actual Expenditures	Budgeted	Actual
Event organization	\$750	\$700
Meals, snacks and beverages (include # of people)	\$900	\$925
Venue rental costs	\$300	\$175
Facilitation services	\$1,450	\$1,600
Guest Speakers	\$650	\$0
Forum materials	\$1,000	\$500
Transportation (include # of km)	\$25	\$37
Eligible honoraria for elders (include description)	\$500	\$500
Event minutes or reports	\$550	\$450
Contingency	\$175	
TOTAL	\$6,300.00	\$4,887.00
FUNDING REQUEST (50%)		\$2,443.50

Please note that 'Contingency' is not an eligible final expense and any expenditures made from the funds allocated to contingency in the budget should be allocated to the appropriate line item in the financial summary.

Submission of Final Reports

All final reports should be submitted to:

Local Government Program Services, Union of BC Municipalities

E-mail: lgps@ubcm.ca

Mail: 525 Government Street, Victoria, BC, V8V 0A8

9. Additional Information

For information on the C2C Forum program, please contact:

Local Government Program Services
Union of BC Municipalities
525 Government Street
Victoria, BC, V8V 0A8

Tel: (250) 356-5193
Email: lgps@ubcm.ca

First Nations Summit
#1200 - 100 Park Royal South
West Vancouver, BC, V7T 1A2

Tel: (604) 926-9903
Email: cbraker@fns.bc.ca

November 9, 2020

Dear Ladysmith Town and Council,

I hope this message finds you well during these unique days. This message is for each of you and I invite you to share it with the Ladysmith Community.

With the holiday season just around the corner I am reaching out with an update of where I am at and where LaFF is at. Like the majority of families LaFF serves, I continue to experience waves of grief, missing the life I had, the ways I used to be able to connect with people and the way I used to LaFF in connection in community but also feeling the excitement of creating new ways to continue to support over 350 families. I'm so proud of our LaFF'ing Team of staff and volunteers. Each showing up uniquely to wrap a blanket of support around families.

LaFF's 16th Annual Breakfast with Santa FUNdraiser will not be an option, however we have found a new, creative and exciting FUNdraiser that we hope will go over wonderfully....creating great memories for families and building on the beautiful community spirit that we all have come to know and love.

Honoring LaFF's 25th anniversary we have created 250 commemorative crates full of 12 Days of Holiday Cheer activities for families to do in the safety of their own bubble but with the knowledge that they are participating in the same activities as the rest of the community.

I hope you will consider helping LaFF by:

- Sponsoring this event
- Sponsoring a specific Holiday Cheer Day
- Sponsoring the LaFF Holiday Cheer Crate(s)it is our goal to gift at least 75 crates to families who could use a helping hand this holiday season.
- Purchasing a crate for your family and/ or gifting a crate to another family
- Donate a local gift card that LaFF can add to the "Golden Ticket" winner crate....which will be one of the 250 LaFF Holiday Cheer Crates

Thank you for your consideration and past support. I would love to connect and brainstorm how LaFF can continue to move forward during these unique days.

Wishing you all the best.

Sincerely,
Jacqueline Neligan

Executive Director
Ladysmith Family and Friends/

LaFF's 12 Days of Holiday Cheer FUNdraiser



This year LaFF's Breakfast with Santa looks a little different. In the past LaFF's Breakfast with Santa FUNdraiser would have been how hundreds of families would have celebrated together and made special memories. This unique year calls for this unique way of celebrating together – but apart. We still value our commitment to the Ladysmith community and are currently supporting more than 350 families with food and clothing donations, care packages and well-being focused zoom sessions.

In order to make sure our community has continued support over the holidays and into the coming year, we have created **LaFF's 12 days of Holiday Cheer**- in 25th anniversary commemorative wooden crates with each crate containing 12 festive activities. Of the 250 unique crates created, one crate will contain a special “Golden Ticket” surprise!

Thank you for your helping to make beautiful memories during these days when we are all realizing just how vital community is in our lives.

To sponsor this event:

1. Sponsor a particular Holiday Cheer Day (Days 1-12) (Full or partial sponsorship of that day)
2. Sponsor a Cheer Kit for a family who will not be able to pay for this holiday activity kit themselves.
3. Donate what you can towards this heartwarming LaFF FUNdraising initiative that will help us help families for the coming year.

----- PLEASE RETURN THIS FORM TO LaFF -----

LaFF's 12 Days of Holiday Cheer FUNdraiser

Day	Holiday Cheer Day (each crate will contain the following)	Sponsorship Opportunity (full or partial funding)		I wish to invest this amount towards this Cheer Day
1	Festive family spaghetti dinner	Goal \$2000		
2	Games night/ movie night with a special treat	Goal \$750	SPONSORED	\$750
3	Story time and nature scavenger hunt walk	Goal \$2500	SPONSORED	
4	Safety first –family night	Goal \$1000	SPONSORED	\$1000
5	Family nurturing night	Goal \$1000	SPONSORED	\$1000
6	Festive holiday musical adventure	Goal \$750		
7	LaFF family pancake breakfast in the comfort of home	Goal \$1500		
8	Festival of Lights -1 st Ave community walk	Goal \$750		
9	Seasonal family selfie kit	Goal \$300	SPONSORED	\$300
10	Create an ornament and homemade card to share	Goal \$500	SPONSORED	\$500
11	Bake delicious healthy brownies for Santa - or your favorite elf	Goal \$500	SPONSORED	
12	Feed the reindeer and birds	Goal \$250	SPONSORED	\$250

	Additional Sponsorship Opportunities	Sponsorship Opportunity (full or partial funding)	I wish to invest this amount towards this Cheer Day
	250 LaFF's 25 th Anniversary Commemorative Wooden Crates	Goal \$2500	
	LaFF Cheer Event Sponsor		
	Sponsor Family Cheer Kit(s) (full or partial sponsorship)	Goal \$75 per kit	
	Purchase Family Cheer Kit(s)	Goal 250 @ \$75 each	

Your full name/ business/ organization: _____

The amount you would like to invest in LaFF's Holiday Cheer event \$ _____

Contact information: Email: _____ Phone: _____

Mailing address: _____

Method of payment: Mail cheque and form to: Box 1830, Ladysmith BC, V9G 1B4 or E-transfer directly to LaFF at: ilovetolaff@shaw.ca and leave a message in the memo. (Purchase your Cheer Crate through Eventbrite starting Nov 12 <https://laffs12daysofcheer.eventbrite.ca>)

___ I am enclosing a business card LaFF may use to acknowledge my commitment to community on social media and in each Cheer Kit

___ Please use "this name" to acknowledge my commitment to community " _____ "

___ I wish to remain anonymous and know that LaFF and the families supported by LaFF are grateful for my support!

___ I wish to contribute to LaFF in another way. Please contact us to discuss how I believe we could collaborate! My # is _____

For more information please do not hesitate to email laffadmin@shawbiz.ca or call 250-210-0870

LaFF Office: 532 1st Ave, Ladysmith Mail: Box 1830, Ladysmith BC, V9G 1B4 www.familyandfriends.ca

Thank you for making a difference in our community!

Sincerely,

Jacqueline and the LaFF'ing Team

Whatever the question... community is the answer! Thank you for being a part of this amazing community!

STAFF REPORT TO COUNCIL

Report Prepared By: Infrastructure Services
 Meeting Date: November 17, 2020
 File No:
 Re: **Holland Creek Supply Main (Phase 2), Negotiated Schedule**

Note: The following recommendation may proceed if Council reconsiders Resolution No. CS 2020-322 and awards the tender to Don Mann Excavating Ltd.

RECOMMENDATION:

That Council direct staff to include in the contract with Don Mann Excavating Ltd. a construction period of 45 days plus up to 3 days in the spring to complete final preparations and paving for the Holland Creek Supply Main (Phase 2).

EXECUTIVE SUMMARY:

Staff have tendered the construction of the Holland Creek Supply Main (Phase 2) and eleven bids were received. The lowest bid was from Don Mann Excavating Ltd., in the amount of \$288,298.50, including GST. The award of the contract to Don Mann Excavating Ltd. was defeated, due to concerns related to the 140 day construction period. Following provisions in the tender document, staff have negotiated with Don Mann Excavating Ltd. a 45 day construction period plus a short window in the spring to complete final paving.

PREVIOUS COUNCIL DIRECTION

Resolution	Meeting Date	Resolution Details
CS 2020-322	11/03/2020	MOTION DEFEATED That Council award the contract for the Holland Creek Supply Main (Phase 2) to Don Mann Excavating Ltd. for \$288,298.50 including GST. OPPOSED: Councillors Jacobson, Johnson, McKay, Paterson
CS 2020-192	06/16/2020	That Council direct staff to: Amend the 2020-2024 Financial Plan to include \$382,000 for the Holland Creek Water Supply Main (Phase 2) project with the funding to come from the High Street Watermain Project, the remaining funds from Phase 1 of the Holland Creek Water Supply Main project and the remaining \$198,000 to come from the Water Capital Reserve.

INTRODUCTION/BACKGROUND:

At the November 3, 2020 Council meeting, the staff recommendation to award the Holland Creek Water Supply Main (Phase 2) contract to Don Mann Excavating Ltd. was defeated by

Council due to concerns related to the 140 day schedule to complete the works. Staff, following provisions listed in the tender, have negotiated with the low bidder a tender construction period of 45 days plus a short period for paving. The initial construction of the watermain within the roadway will be completed within 45 days of project commencement and will be followed by a short period (few days) of final prep and paving in the spring when the paving plant opens and the weather is conducive for paving. There is a provision in the contract that ditches will be temporarily filled with cold patch until such time as the final paving can be completed. It should be noted that items out of the contractor's control such as weather, may have an adverse impact on the project schedule.

ALTERNATIVES:

N/A

FINANCIAL IMPLICATIONS:

The project budget was estimated at \$382,000, which includes engineering and project management. The low bid meets this budget.

LEGAL IMPLICATIONS:

All of the bids received were in compliance with the terms stated in the tender document, therefore the Town is obligated to award the tender.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

This project will cause disruption to residents on Mackie Rd. Staff will ensure residents are notified of the project and kept up to date on project progress and anticipated interruptions.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

Engineering staff will be involved in monitoring this project.

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

- | | |
|---|--|
| <input type="checkbox"/> Complete Community Land Use | <input type="checkbox"/> Low Impact Transportation |
| <input type="checkbox"/> Green Buildings | <input type="checkbox"/> Multi-Use Landscapes |
| <input checked="" type="checkbox"/> Innovative Infrastructure | <input type="checkbox"/> Local Food Systems |
| <input type="checkbox"/> Healthy Community | <input type="checkbox"/> Local, Diverse Economy |
| <input type="checkbox"/> Not Applicable | |

ALIGNMENT WITH STRATEGIC PRIORITIES:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Infrastructure | <input type="checkbox"/> Economy |
| <input type="checkbox"/> Community | <input type="checkbox"/> Not Applicable |
| <input type="checkbox"/> Waterfront | |

I approve the report and recommendation(s).

Allison McCarrick, Chief Administrative Officer

ATTACHMENT:

- Staff report dated November 3, 2020

STAFF REPORT TO COUNCIL

Report Prepared By: Infrastructure Services
 Meeting Date: November 3, 2020
 File No:
 Re: Holland Creek Supply Main (Phase 2) Award

RECOMMENDATION:

That Council award the contract for the Holland Creek Supply Main (Phase 2) to Don Mann Excavating Ltd. for \$288,298.50 including GST.

EXECUTIVE SUMMARY:

Staff have tendered the construction of the Holland Creek Supply Main (Phase 2) and eleven bids were received. The lowest bid was from Don Mann Excavating Ltd., in the amount of \$288,298.50, including GST.

PREVIOUS COUNCIL DIRECTION

1. Amend the 2020-2024 Financial Plan to include \$382,000 for the Holland Creek Water Supply Main (Phase 2) project with the funding to come from the High Street Watermain Project, the remaining funds from Phase 1 of the Holland Creek Water Supply Main project and the remaining \$198,000 to come from the Water Capital Reserve.

INTRODUCTION/BACKGROUND:

Staff have completed the design and tendered the Holland Creek Supply Main (Phase 2) project. The invitation to tender was issued on September 28, 2020, and closed on October 22, 2020. This project is the second phase of the Holland Creek Supply main upgrade which, when all phases are completed, will allow the abandonment of the main that currently runs along the Holland Creek Trail behind Public Works.

Eleven tenders were received as follows:

Tenderer	Total Tender (incl. GST)	Days to Complete
Don Mann Excavating Ltd.	\$288,298.50	140
Coast Utility Contracting Ltd.	\$290,808.00	45
Leuco Construction Inc.	\$290,931.09	45

Copcan Civil Ltd.	\$307,637.72	45
IWC Excavation Ltd.	\$318,131.52	90
Milestone Equipment Contracting Inc.	\$319,783.80	110
Knappett Industries	\$338,147.25	120
Hazelwood Construction Service Inc.	\$343,736.12	50
Stalker Excavating Ltd.	\$351,058.84	61
Jacob Bros. Construction Inc.	\$504,304.50	56
J. Cote & Sons Excavating Ltd.	\$613,247.25	60

ALTERNATIVES:

N/A

FINANCIAL IMPLICATIONS:

The project budget was estimated at \$382,000 which includes engineering and project management. The low bid meets this budget.

LEGAL IMPLICATIONS:

Staff have not identified any legal implications.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

This project will cause disruption to residents on Mackie Rd. Staff will ensure residents are notified of the project and kept up to date on project progress and anticipated interruptions.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

Engineering staff will be involved in monitoring this project.

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

- | | |
|---|--|
| <input type="checkbox"/> Complete Community Land Use | <input type="checkbox"/> Low Impact Transportation |
| <input type="checkbox"/> Green Buildings | <input type="checkbox"/> Multi-Use Landscapes |
| <input checked="" type="checkbox"/> Innovative Infrastructure | <input type="checkbox"/> Local Food Systems |
| <input type="checkbox"/> Healthy Community | <input type="checkbox"/> Local, Diverse Economy |
| <input type="checkbox"/> Not Applicable | |

ALIGNMENT WITH STRATEGIC PRIORITIES:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Infrastructure | <input type="checkbox"/> Economy |
| <input type="checkbox"/> Community | <input type="checkbox"/> Not Applicable |
| <input type="checkbox"/> Waterfront | |

I approve the report and recommendation(s).

Allison McCarrick, Chief Administrative Officer