

FRASER VALLEY REGIONAL DISTRICT ELECTORAL AREA SERVICES COMMITTEE OPEN MEETING AGENDA

Tuesday, December 8, 2020 1:30 pm Zoom Conference Call

1. CALL TO ORDER

MOTION FOR CONSIDERATION

THAT due to the Provincial Health Order issued on November 19, that the Fraser Valley Regional District conduct meetings without the members of the public present in the Boardroom;

AND THAT the Fraser Valley Regional District continue to promote openness, transparency, accessibility and accountability by webcasting and archiving Board meetings online, allowing members of the public to write, email, call in or appear by Zoom with questions, and promoting public participation at meetings through social media channels.

2. CHAIR'S REPORT ON REGIONAL AND CORPORATE SERVICES COMMITTEE MEETING

3. APPROVAL OF AGENDA, ADDENDA AND LATE ITEMS

MOTION FOR CONSIDERATION

THAT the Agenda, Addenda and Late Items for the Electoral Area Services Committee Open Meeting of December 8, 2020 be approved;

AND THAT all delegations, reports, correspondence and other information set to the Agenda be received for information.

4. MINUTES/MATTERS ARISING

4.1. Draft Electoral Area Services Committee Meeting Minutes - November 10, 2020 7 - 19

MOTION FOR CONSIDERATION

THAT the Minutes of the Electoral Area Services Committee Open Meeting held November 10, 2020 be adopted.

5. LEGISLATIVE SERVICES

Pages

5.1. 2021 FVRD Board & Committee Meeting Schedule

- Corporate report dated December 8, 2020 from Jaime Reilly, Director of Legislative Services
- 2021 Board and Committee Meeting Schedule

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional District Board adopt the proposed 2021 FVRD Board & Committee Meeting Schedule.

6. FINANCE

6.1. 2020 – 2024 Financial Plan Amendment

 Corporate report dated December 8, 2020 from Kelly Lownsbrough, Director of Finance

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional District Board direct staff to prepare for the Board's consideration an amendment to the Fraser Valley Regional District 2020 – 2024 Financial Plan Bylaw No. 1585, 2020 to include expenditures related to Mosquito Control.

6.2. Regional Grant-in-Aid Policy

- Corporate report dated December 8, 2020 from Kelly Lownsbrough, Director of Finance
- Regional Grant-in-aid Policy
- Regional Grant-in-aid Application Form
- Regional Grant-in-aid Policy dated October 26, 1999

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional District Board approve the attached Regional Grant-in-Aid Policy, effective January 1, 2021 and repeal the Grant-in-Aid Policy dated October 26, 1999.

6.3. <u>2020 Grant-In-Aid Request – Deroche Elementary School, Electoral Areas "C"</u> 32 - 35 <u>& "G"</u>

- Corporate report dated December 8, 2020 from Kristy Hodson, Manager of Financial Operations
- Grant-in-aid Application
- Grant-in-aid Application

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional District Board authorize a grant-in-aid in the

25 - 31

amount of \$5,215 to the Deroche Elementary School, \$2,250 funded from the 2020 Electoral Area "C" grant-in-aid budget and \$2,965 funded from the 2020 Electoral Area "G" grant-in-aid budget, to help offset the costs of outdoor learning materials, field trips, ponchos, shovels and risers for their fine arts program.

7. **ENGINEERING & UTILITIES**

36 - 37 7.1. Harrison Mills and Hemlock Valley Transfer Station Operation Contract

Corporate report dated December 8, 2020 from Sterling Chan, Manager of Engineering and Infrastructure

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional District Board authorize its signatories to execute a three year contract with Lacey Developments Ltd. to operate the Harrison Mills and Hemlock Valley Transfer Stations for an annual cost of \$43,680 plus taxes:

7.2. Sylvester Road Transfer Station Operation Contract

Corporate report dated December 8, 2020 from Sterling Chan, Manager of Engineering and Infrastructure

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional District Board authorize its signatories to execute a three year contract with Lacey Developments Ltd. to operate the Sylvester Road Transfer Station for an annual cost of \$25,225 plus taxes;

8. PLANNING, BUILDING INSPECTION AND BYLAW ENFORCEMENT

40 - 598.1. Development Variance Permit 2019-31 to vary size requirements for an accessory building at 9966 Llanberis Way, Electoral Area D

- ٠ Corporate report dated December 8, 2020 from Julie Mundy, Planner I
- ٠ Draft DVP 2019-31
- ٠ **DVP** Application

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional District issue Development Variance Permit 2019-31 for 9966 Llanberis Way to increase the maximum area of an accessory building from 45 square meters to 57.6 square metres, subject to consideration of any comments or concerns raised by the public.

8.2. Development Variance Permit 2020-23 to vary the front lot line setback from 4.6 metres to 1.58 metres for an accessory structure at 48585 Chilliwack Lake Road, Electoral Area E

60 - 84

38 - 39

٠ Corporate report dated December 8, 2020 from Tracey Heron, Planning Technician

- Draft DVP 2020-23
- DVP Application

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional District Board issue Development Variance Permit 2020-23 for 48585 Chilliwack Lake Road, Electoral Area E, to reduce the front lot line setback from 4.6 metres to 1.58 metres for an existing accessory structure, subject to consideration of any comments or concerns raised by the public.

8.3. Zoning Bylaw Amendment No. 1619, 2020 to address Temporary Tourist Accommodation in Snow Avalanche Hazard Areas, Hemlock Valley, Electoral Area C

85 - 152

- Corporate report dated December 8, 2020 from Andrea Antifaeff, Planner I
- Hemlock Valley Snow Avalanche Assessment Report from Dynamic Avalanche Consulting Ltd.
- Draft Zoning Bylaw Amendment No. 1619, 2020

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional District Board give first reading to the bylaw cited as *Fraser Valley Regional District Electoral Area C Zoning Amendment Bylaw No. 1619, 2020* to amend Schedule C in Zoning Bylaw 100, restricting Temporary Tourist Accommodation in areas identified as being in the 'Blue Zone' in the 2020 Dynamic Avalanche Consulting Ltd. *Hemlock Valley Snow Avalanche Assessment*;

THAT *Fraser Valley Regional District Electoral Area C Zoning Amendment Bylaw No. 1619, 2020* be forwarded to Public Hearing;

THAT the Fraser Valley Regional District Board delegate the holding of the Public Hearing with respect to proposed *Fraser Valley Regional District Electoral Area C Zoning Amendment Bylaw No. 1619, 2020* to Director Bales, or her alternate in her absence;

THAT Director Bales or her alternate in her absence preside over and Chair the Public Hearing with respect to proposed *Bylaw 1619, 2020*;

AND THAT the Chair of the Public Hearing be authorized to establish procedural rules for the conduct of the Public Hearing with respect to proposed *Bylaw 1619, 2020* in accordance with the Local Government Act;

AND FURTHER THAT in the absence of Director Bales, or her alternate in her absence at the time of the Public Hearing with respect to proposed *Bylaw 1619, 2020* the Fraser Valley Regional District Board Chair is delegated the authority to designate who shall preside over and Chair the Public Hearing regarding this

matter;

AND FINALLY THAT the Fraser Valley Regional District Board authorize its signatories to execute all documents relating to *Bylaw 1619, 2020*.

8.4. Modification of Covenant BT217825 for 53722 Berston Road, Electoral Area D 153 - 170

- Corporate report dated December 8, 2020 from Gavin Luymes, Planning Technician
- Technical report from Out of the Box Engineering
- Draft Covenant Modification for 53722 Berston Road, Electoral Area D

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional District Board approve the amendment of Covenant BT217825 registered on title to 53722 Berston Road, substantially as drafted and attached hereto.

8.5. Covenants – Proposed Three (3) Lot Subdivision at 20559 Edelweiss Drive, Electoral Area C 171 - 175

 Corporate report dated December 8, 2020 from Andrea Antifaeff, Planner I

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional District Board authorize staff to execute all legal documents relating to the three lot subdivision of 20559 Edelweiss Drive, Electoral Area C, including the registration of section 219 (Land Title Act) covenants relating to riparian areas protection, geo-hazards, storm water management and utility connections

8.6. Agriculture Land Commission Application - Non-Adhering Residential Use at 176 - 183 53788 McGregor Road, Electoral Area D

• Corporate report dated December 8, 2020 from Tracey Heron, Planning Technician

MOTION FOR CONSIDERATION

THAT the ALC application for a non-adhering residential use (building a new principal residence while occupying an existing residence) within the Agricultural Land Reserve for the property located at 53788 McGregor Road, Electoral Area D, be forwarded to the Agricultural Land Commission for consideration;

AND THAT the Agricultural Land Commission consider the FVRD staff report dated December 8, 2020 under file number 3015-20 2020-06.

8.7. Request for FVRD to initiate a zoning amendment for five privately owned 184 - 190 properties adjacent to Coquihalla River Provincial Park, Area B

- Corporate report dated December 8, 2020 from Julie Mundy, Planner I
- Rezoning Request

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional District Board direct staff to initiate a zoning amendment for five privately owned properties adjacent to the Coquihalla River Provincial Park, Area B

8.8. Bylaw Offence Notice Enforcement Amendment Bylaw No. 1618, 2020 191 - 197

- Corporate report dated December 8, 2020 from Louise Hinton, Bylaw Compliance and Enforcement Officer and Pam Loat, Legislative Coordinator
- Draft Bylaw Offence Notice Enforcement Amendment Bylaw No. 1618, 2020

MOTION FOR CONSIDERATION

That the Fraser Valley Regional District Board consider giving three readings and adoption to the bylaw cited as *Fraser Valley Regional District Bylaw Offence Notice Enforcement Amendment Bylaw No. 1618, 2020.*

- 9. ADDENDA ITEMS/LATE ITEMS
- 10. REPORTS BY STAFF
- 11. REPORTS BY ELECTORAL AREA DIRECTORS

12. PUBLIC QUESTION PERIOD FOR ITEMS RELEVANT TO AGENDA

Email submissions can be made to info@fvrd.ca before 1 pm, December 7. Alternatively, you may participate in public question period live on Zoom, by phone or computer using the Zoom information provided on the FVRD website.

13. ADJOURNMENT

MOTION FOR CONSIDERATION

THAT the Electoral Area Services Committee Open Meeting of December 8, 2020 be adjourned.



FRASER VALLEY REGIONAL DISTRICT ELECTORAL AREA SERVICES COMMITTEE OPEN MEETING MINUTES

Tuesday, November 10, 2020 1:30 pm FVRD Boardroom, 45950 Cheam Avenue, Chilliwack, BC

Members Present:	Director Bill Dickey, Electoral Area D, Chair (via Zoom conference call) Director Terry Raymond, Electoral Area A (via Zoom conference call) Director Dennis Adamson, Electoral Area B (via Zoom conference call) Director Wendy Bales, Electoral Area C (via Zoom conference call) Director Orion Engar, Electoral Area E (via Zoom conference call) Director Hugh Davidson, Electoral Area F (via Zoom conference call) Director Al Stobbart, Electoral Area G (via Zoom conference call) Director Taryn Dixon, Electoral Area H (via Zoom conference call)
Staff Present:	 Jennifer Kinneman, Chief Administrative Officer (via Zoom conference call) Kelly Lownsbrough, Director of Finance/Chief Financial Officer (via Zoom conference call) Jaime Reilly, Director of Legislative Services/Corporate Officer (via Zoom conference call) Tareq Islam, Director of Engineering & Community Services (via Zoom conference call) Graham Daneluz, Director of Planning & Development (via Zoom conference call) Stacey Barker, Director of Regional Services (via Zoom conference call) Alison Stewart, Manager of Strategic Planning (via Zoom conference call) Christina Vugteveen, Manager of Parks and Recreation (via Zoom conference call) Sterling Chan, Manager of Engineering and Infrastructure (via Zoom conference call) Katelyn Hipwell, Planner II (via Zoom conference call) Robin Beukens, Planner II (via Zoom conference call) Andrea Antifaeff, Planner II (via Zoom conference call)

Kristen Kohuch, Executive Assistant to CAO and Board (recording secretary) Tyler Davis, Fire Dispatch Management Communications Coordinator Katarina Duke, Engineering and Community Services Technologist (via Zoom conference call) Tracey Heron, Planning Assistant (via Zoom conference call)

Also Present: 2 members of the public (via Zoom conference call)

1. CALL TO ORDER

Chair Dickey called the meeting to order at 1:30 pm.

Discussion ensued and the following motion was introduced:

Moved By DAVIDSON Seconded By RAYMOND

THAT due to the Provincial Health Order issued on Saturday, November 7, that the Fraser Valley Regional District conduct meetings without the members of the public present in the Boardroom;

AND THAT the Fraser Valley Regional District continue to promote openness, transparency, accessibility and accountability by webcasting and archiving Board meetings online, allowing members of the public to write, email, call in or appear by Zoom with questions, and promoting public participation at meetings through social media channels.

CARRIED

2. CHAIR'S REPORT ON REGIONAL AND CORPORATE SERVICES COMMITTEE MEETING

Chair Dickey provided a brief summary of the Regional and Corporate Services Committee Meeting of November 10, 2020.

3. APPROVAL OF AGENDA, ADDENDA AND LATE ITEMS

Moved By ADAMSON Seconded By DAVIDSON

THAT the Agenda, Addenda and Late Items for the Electoral Area Services Committee Open Meeting of November 10, 2020 be approved;

AND THAT all delegations, reports, correspondence and other information set to the Agenda be received for information.

CARRIED

4. MINUTES/MATTERS ARISING

4.1 <u>Draft Electoral Area Services Committee Meeting Minutes - October 15,</u> 2020

Moved By ADAMSON Seconded By DIXON

THAT the Minutes of the Electoral Area Services Committee Open Meeting of October 15, 2020 be adopted.

CARRIED

5. CORPORATE ADMINISTRATION

5.1 Electoral Areas E and H Bylaw Update Project

Staff clarified that this is a housekeeping item to reflect the appropriate naming conventions for Electoral Areas E and H.

Moved By ENGAR Seconded By DIXON

THAT the Fraser Valley Regional District Board of Directors consider giving three readings to the following bylaws:

- Fraser Valley Regional District Columbia Valley Fire Protection Service Area Amendment Bylaw No. 1607 2020;
- Fraser Valley Regional District Cultus Lake Fire Protection Service Area Amendment Bylaw No.1608, 2020;
- Fraser Valley Regional District Yarrow/Ryder Lake Fire Protection Service Area Amendment Bylaw No. 1371, 2020;
- Fraser Valley Regional District Frosst Creek Flood and Debris Control Service Area Amendment Bylaw No. 1609, 2020;

- Fraser Valley Regional District Parkview Street Lighting Service Area Amendment Bylaw No. 1610, 2020;
- Fraser Valley Regional District Electoral Areas E & H Community Parks Service Area Amendment Bylaw No. 1611, 2020;
- Fraser Valley Regional District Building Numbering Service Area Amendment Bylaw No. 1612, 2020;
- Fraser Valley Regional District Cultus Lake Seasonal Conventional Transit Service Area Amendment Bylaw No. 1613, 2020; and
- Fraser Valley Regional District Cultus Lake and Chilliwack River Valley Paratransit Service Area Amendment Bylaw No. 1614, 2020.

CARRIED

5.2 <u>Northside Garbage Disposal Service Area Amendment Bylaw Nos. 1595 and</u> <u>1596, 2020</u>

The Committee thanked staff for bringing this item forward and advised that a public mail-out containing additional financial information will be provided.

Moved By DAVIDSON Seconded By BALES

THAT the Fraser Valley Regional District Board consider giving three readings to the bylaws cited as:

- Bylaw No. 1596, 2020 Electoral Area C Garbage Disposal Service Area Amendment: and
- Bylaw No. 1595, 2020 Electoral Areas F & G Garbage Disposal Service Area Conversion and Amendment

CARRIED

5.3 <u>Northside Community Parks Service Area Amendment Bylaw Nos. 1604 and 1605</u>

The Committee noted this is a housekeeping item and concerns were raised about average residential cost impacts included in the report.

Moved By BALES Seconded By STOBBART

THAT the Fraser Valley Regional District Board consider giving three readings to the bylaws cited as:

- Electoral Area C Community Parks Service Area Merger and Amendment Bylaw No. 1604, 2020; and
- Electoral Areas F & G (DARD) Community Parks Service Area Amendment Bylaw No. 1605, 2020.

CARRIED

6. FINANCE

6.1 Financial Plan 2020 – 2024 Amendments

Moved By BALES Seconded By RAYMOND

THAT the Fraser Valley Regional District Board direct staff to prepare for the Board's consideration an amendment to the Fraser Valley Regional District 2020 – 2024 Financial Plan Bylaw No. 1585, 2020 to include expenditures and funding for the Popkum Sewer System remediation and the Popkum Sewer System SCADA integration.

CARRIED

7. ENGINEERING & UTILITIES

7.1 <u>Fraser Valley Regional District Lake Errock Water System Capital</u> <u>Construction Service Area Amendment Bylaw No. 1538, 2019</u>

Moved By BALES Seconded By DAVIDSON **THAT** the Fraser Valley Regional District Board consider giving first, second and third readings to the bylaw cited as *Fraser Valley Regional District Lake Errock Water Supply and Distribution System Service Area Amendment Bylaw No.* 1537, 2019;

AND THAT the Fraser Valley Regional District Board consider giving first, second and third readings to the bylaw cited as *Fraser Valley Regional District Lake Errock Water System Capital Construction Service Area Amendment Bylaw No.* 1538, 2019;

CARRIED

8. PLANNING, BUILDING INSPECTION AND BYLAW ENFORCEMENT

8.1 <u>Development Variance Permit 2020-17 to vary the maximum height</u> requirement for an accessory building at 3900 Columbia Valley Road, <u>Electoral Area H</u>

The Committee thanked staff for their work on this item. It was noted there have been many similar permit applications in Electoral Area H to vary height requirements of accessory buildings. Staff commented the consolidating zoning bylaw may be an opportunity to reevaluate the current height requirement.

Moved By DIXON Seconded By ENGAR

THAT the Fraser Valley Regional District issue Development Variance Permit 2020-17 to increase the maximum permitted height of an accessory building from 5.0 metres to 6.8 metres, subject to consideration of any comments or concerns raised by the public.

CARRIED

8.2 <u>Development Variance Permit 2020-19 to vary the maximum height</u> requirement for an accessory building at 532 Park Drive, Electoral Area H

The Committee thanked the staff for their work on this item. Discussion ensued regarding development variance permit fees and accessory buildings on the property.

Moved By ADAMSON Seconded By DIXON

Page |7

THAT the Fraser Valley Regional District Board issue Development Variance Permit 2020-19 to vary the maximum height of an accessory building from 4.0 metres (13.0 feet) to 4.5 metres (14.8 feet) for the property located at 532 Park Drive, Area H.

CARRIED

8.3 <u>Development Variance Permit 2020-20 to vary the maximum height and size</u> requirements for an accessory building at 10146 Royalwood Blvd, Electoral <u>Area D</u>

Moved By ENGAR Seconded By DIXON

THAT the Fraser Valley Regional District Board issue Development Variance Permit 2020-20 to increase the maximum permitted height of an accessory building from 5.0 metres to 5.2 metres, and to increase the maximum permitted area of an accessory building from 45 square metres to 58 square metres, subject to consideration of any comments or concerns raised by the public.

CARRIED

8.4 <u>Development Variance Permit 2020-21 to reduce the required highway</u> <u>setback from 4.6 metres (15.1 feet) to 3.9 metres (12.8 feet) for the accessory</u> <u>building at 47840 Chilliwack Lake Road, Electoral Area E</u>

Moved By ENGAR Seconded By RAYMOND

THAT the Fraser Valley Regional District Board issue Development Variance Permit 2020-21 to reduce the required setback from 4.6 metres (15.1 feet) to 3.9 metres (12.8 feet) for the accessory building at 47840 Chilliwack Lake Road, Area E, subject to the consideration of any comments or concerns from the public.

CARRIED

8.5 <u>Development Permit 2020-19 for the form and character of Phase III</u> <u>subdivision of Aquadel Crossing at 1885 Columbia Valley Road Electoral Area</u> <u>H to permit the construction of a mix of ranchers, two storey, and three</u> <u>storey single family detached resort</u> Concerns were raised regarding the location of the three storey single family detached homes, and the requirement for design of the basements to have limited exterior access limiting the likelihood for illegal secondary suites being constructed.

Moved By DIXON Seconded By STOBBART

THAT the Fraser Valley Regional District Board issue Development Permit 2020-19 regarding the form and character of Phase III subdivision of Aquadel Crossing at 1885 Columbia Valley Road Electoral Area "H" to permit the construction of a mix of ranchers, two storey, and three storey single family detached resort residential dwellings;

AND THAT the Fraser Valley Regional District Board authorize amendments to the existing form and character covenant (charge CA5854378) to permit the form and character of Phase III of the development as detailed in Development Permit 2020-19

CARRIED

8.6 <u>Subdivision and Development Servicing Amendment Bylaw No. 1603, 2020</u>

Director Dickey declared a conflict of interest due to having a subdivision application in process and left the meeting for the discussion and voting of this matter.

Discussion ensued regarding servicing standards for parcels of different uses and sizes, noting the proposed amendment to the bylaw will allow the Director of Engineering to wave sidewalk requirements where it is determined there will be no connecting network of sidewalks or it is not desirable for the community.

Moved By RAYMOND Seconded By ENGAR

THAT the Fraser Valley Regional District Board consider giving three readings and adoption to the bylaw cited as "*Fraser Valley Regional District Subdivision and Development Servicing Bylaw Amendment Bylaw No.* 1603, 2020".

CARRIED

Director Dickey returned to the meeting.

8.7 <u>Electoral Area Official Community Plans Accelerated Update Strategy</u>

Discussion ensued regarding concerns Official Community Plans (OCPs) reviews and updates, and concerns were raised about the cost of updating OCPs.

Moved By DAVIDSON Seconded By BALES

THAT the Fraser Valley Regional District Board direct staff to prepare a draft strategy for further consideration to undertake a complete review and update of all Official Community Plans for the Electoral Areas over the next 10 years.

Discussion ensued about the process for updating OCP's and the following amendment was made to the main motion:

Moved By RAYMOND Seconded By ENGAR

THAT staff provide a workshop for the Electoral Area Services Committee about the process for updating Official Community Plans.

CARRIED

The question was called on the main motion as amended:

Moved By RAYMOND Seconded By ENGAR

THAT the Fraser Valley Regional District Board direct staff to prepare a draft strategy for further consideration to undertake a complete review and update of all Official Community Plans for the Electoral Areas over the next 10 years.

AND THAT staff provide a workshop for the Electoral Area Services Committee about the process for updating Official Community Plans.

CARRIED

8.8 Cannabis Regulations in Electoral Areas – Update and Consultation Plan

Moved By RAYMOND Seconded By STOBBART

THAT the Fraser Valley Regional District endorse the proposed consultation plan to inform updates to cannabis regulations in FVRD Zoning Bylaws and to implement the FVRD Land Use Policy for Cannabis Production, Processing, and Retail Sales in the Electoral Areas.

CARRIED

9. OTHER MATTERS

9.1 Housing Needs Assessment Update

The corporate report dated November 10, 2020 from Katelyn Hipwell, Planner II was provided for information.

9.2 <u>Hemlock Valley Avalanche Assessment</u>

The Committee thanked staff for their report and commented that the Hemlock Valley Avalanche Assessment Report was well-received by the community.

Moved By BALES Seconded By ADAMSON

THAT the Fraser Valley Regional District Board authorize the immediate use of *Hemlock Valley Snow Avalanche Hazard Assessment* report by Dynamic Avalanche Consulting Ltd. for permitting purposes, to the extent possible, pending the update of the OCP and development permit area requirements;

THAT the Fraser Valley Regional District Board direct staff to send a mail-out to all property owners within the study area and stakeholders, to share the results of the report;

AND THAT the Fraser Valley Regional District Board adopt the Hazard Acceptability Thresholds for Development Approvals which are revised to incorporate the Canadian Avalanche Association Standards into the snow avalanche section.

CARRIED

9.3 FVRD Regional Growth Strategy ties to Electoral Areas

The corporate report dated November 10, 2020 from Robin Beukens, Planner II and Katelyn Hipwell, Planner II was provided for information.

Concerns were raised regarding the wording of a transportation priority listed for Cultus Lake which notes adding a second access route to the area.

The Committee offered comments about positive impacts and challenges with respect to local tourism as noted in the staff report.

10. ADDENDA ITEMS/LATE ITEMS

None.

11. REPORTS BY STAFF

None.

12. REPORTS BY ELECTORAL AREA DIRECTORS

<u>Director Engar</u> reported on positive comments received by the public about work done by staff in Thompson Regional Park.

<u>Director Dixon</u> congratulated new Chilliwack-Kent MLA Kelli Paddon and reported on the Cultus Lake Water Safety Committee, an upcoming meeting with Ministry of Transportation and Highways, BC Parks, and RCMP with respect to Columbia Valley Highway safety plans for summer 2021, and thanked Ms. Kinneman for her work during the pandemic.

<u>Director Adamson</u> reported on a recent ratepayers meeting and construction on the Sunshine Valley Tashme Museum.

<u>Director Stobbart</u> reported on a recent meeting with Ministry of Transportation and Highways and ICBC regarding safety on the Lougheed Highway, and on the Dewdney Bridge Replacement Project.

<u>Director Raymond</u> commented on the weather, work with Ministry of Transportation and Highways regarding a plugged culvert, and reported on planning for a new recycling program in the Boston Bar area, and an upcoming Remembrance Day celebration in his electoral area.

<u>Director Bales</u> commented on recycling solutions for rural areas, and discussion ensued about the Dewdney Bridge Replacement Project.

<u>Director Davidson</u> commented on following public health guidelines, and a new television show called *Big Sky* being filmed near Hatzic Lake.

<u>Director Dickey</u> commented on a recent online public hearing held for Electoral Area D, and a recent announcement by the federal government for new rural broadband funding.

13. PUBLIC QUESTION PERIOD FOR ITEMS RELEVANT TO AGENDA

There were no written questions submitted with respect to items on the agenda. Staff commented that members of the public were provided the opportunity to join the Zoom call by computer or over the phone and ask questions to the Committee. It was noted that two members of the public joined the meeting online but left after development variance permit items were heard, and no questions were received in-person or online.

14. **RESOLUTION TO CLOSE MEETING**

Moved By ADAMSON Seconded By DIXON

Page | 12

THAT the meeting be closed to the public, except for Senior Staff and the Executive Assistant, for the purpose of receiving and adopting Closed Meeting minutes convened in accordance with Section 90 of the *Community Charter* and to consider matters pursuant to:

• Section 90(1)(c) of the *Community Charter* - labour relations or other employee relations.

CARRIED

The meeting was recessed at 2:30 pm.

15. RECONVENE OPEN MEETING

The meeting reconvened at 2:52 pm.

16. RISE AND REPORT OUT OF CLOSED MEETING

None.

17. ADJOURNMENT

Moved By ADAMSON Seconded By BALES

THAT the Electoral Area Services Committee Open Meeting of November 10, 2020 be adjourned.

CARRIED

The Electoral Area Services Committee Open Meeting of November 10, 2020 adjourned at 2:52 pm.

MINUTES CERTIFIED CORRECT:

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Director Bill Dickey, Chair

Page **| 13**



CORPORATE REPORT

To: Electoral Area Services Committee From: Jaime Reilly, Director of Legislative Services Date: 2020-12-08 File No: 0550-01-01

Subject: 2021 FVRD Board & Committee Meeting Schedule

RECOMMENDATION

THAT the Fraser Valley Regional District Board adopt the proposed 2021 FVRD Board & Committee Meeting Schedule.

STRATEGIC AREA(S) OF FOCUS

Provide Responsive & Effective Public Services

BACKGROUND

At the November 24, 2020 Board meeting, the FVRD Board adopted the Fraser Valley Regional District Board and Committee Procedures Bylaw No. 1600, 2020. The new FVRD procedure bylaw sets the meetings of the Electoral Area Services Committee for 1:30pm on the second Thursday of each month.

At the December meeting of each year, the FVRD Board is provided with a proposed Board and Committee Meeting Schedule for the following year's meetings.

DISCUSSION

In creating the attached proposed schedule, staff review the council meeting schedules for all six Member Municipalities, as well as any BC statutory holidays to ensure that there are no conflicts. Dates for annual conferences such as the Regional District CEO/CAO Forum and Municipal Finance Authority AGM (March 2021), the Lower Mainland Local Government Management Association (May 12 to 14, 2021), Federation of Canadian Municipalities (June 3 to 6, 2021), and the Union of British Columbia Municipalities (September 13 to 17, 2021) are also reviewed to ensure there are no conflicts with the proposed meeting dates.

COST

There are no costs associated with this recommendation.

CONCLUSION

After reviewing municipal council meeting schedules, as well as all BC statutory holidays, the proposed 2021 FVRD Board & Committee Meeting Schedule is being brought forward for the Board's consideration.

COMMENTS BY:

Kelly Lownsbrough, Chief Financial Officer/ Director of Finance: Reviewed and supported.

Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported.

2021 Board & Committee Meeting Schedule

JANUARY

Thu **14** Regional & Corporate Services Committee 10:00 am

Electoral Area Services Committee 1:30 pm

- Tue **19** Recreation, Culture & Airpark Services Commission 6:30 pm
- Thu 28 Board/Hospital Board 7:00 pm

MAY

Thu **06** Regional & Corporate Services Committee 10:00 am

Electoral Area Services Committee 1:30 pm

- Tue **18** Recreation, Culture & Airpark Services Commission 6:30 pm
- Thu 27 Board/Hospital Board 7:00 pm

SEPTEMBER

Thu **09** Regional & Corporate Services Committee 10:00 am

> Electoral Area Services Committee 1:30 pm

Thu 23 Board/Hospital Board 7:00 pm

FEBRUARY

JUNE

Thu 24

Thu **11** Regional & Corporate Services Committee 10:00 am

> Electoral Area Services Committee 1:30 pm

Thu **25** Board/Hospital Board 7:00 pm

Thu 10 Regional & Corporate Services

Board/Hospital Board

Electoral Area Services Committee

Committee

10:00 am

1:30 pm

7:00 pm

MARCH

Thu **11** Regional & Corporate Services Committee 10:00 am

Electoral Area Services Committee 1:30 pm

- Tue **16** Recreation, Culture & Airpark Services Commission 6:30 pm
- Thu 18 Board/Hospital Board 7:00 pm

JULY

Thu 08 Regional & Corporate Services Committee 10:00 am

> Electoral Area Services Committee 1:30 pm

- Tue 13 Recreation, Culture & Airpark Services Commission 6:30 pm
- Thu 22 Board/Hospital Board 7:00 pm

NOVEMBER

Fri 12 Regional & Corporate Services Committee 10:00 am

> Electoral Area Services Committee 1:30 pm

Thu **25** Board/Hospital Board 7:00 pm

APRIL

Thu **08** Regional & Corporate Services Committee 10:00 am

> Electoral Area Services Committee 1:30 pm

Thu 22 Board/Hospital Board 7:00 pm

AUGUST

No Meetings

DECEMBER

Tue **07** Recreation, Culture & Airpark Services Commission 6:30 pm

Thu **09** Regional & Corporate Services Committee 10:00 am

> Electoral Area Services Committee 1:30 pm

Thu **16** Board/Hospital Board 7:00 pm



OCTOBER

Thu 14 Regional & Corporate Services Committee 10:00 am

> Electoral Area Services Committee 1:30 pm

- Tue 19 Recreation, Culture & Airpark Services Commission 6:30 pm
- Thu 28 Board/Hospital Board 7:00 pm

Regional Indigenous Relations Committee — at the call of the Chair

Meeting dates and times are subject to change. Please check fvrd.ca for the most up-to-date meeting schedule.





To: Electoral Area Services Committee From: Kelly Lownsbrough, Director of Finance / CFO Date: 2020-11-27

Subject: 2020 – 2024 Financial Plan Amendment

RECOMMENDATION

THAT the Fraser Valley Regional District Board direct staff to prepare for the Board's consideration an amendment to the Fraser Valley Regional District 2020 – 2024 Financial Plan Bylaw No. 1585, 2020 to include expenditures related to Mosquito Control.

STRATEGIC AREA(S) OF FOCUS

Support Healthy & Sustainable Community Provide Responsive & Effective Public Services

BACKGROUND

Fraser Valley Regional District 2020 – 2024 Financial Plan Bylaw No. 1585, 2020 ("Financial Plan") was adopted by the Board on February 25, 2020. In October, three amendments were proposed to the Board, and in November, two additional amendments were proposed. A further amendment to this bylaw is required as a result of circumstances arising during 2020.

DISCUSSION

Following adoption of the Five-Year Financial Plan in February, circumstances arose during the year, which require updates to the Plan. Section 374 (2) of the Local Government Act states that the Financial Plan may be amended by bylaw at any time. The following amendment to the current Five-Year Plan is recommended:

1. Mosquito Control (Regional Service):

Mosquito Control is a Regional Service provided by the FVRD. This year, unexpected higher peak levels in the Fraser River resulted in more than normal mosquito larvae requiring additional treatment. The FVRD took an aggressive approach to mosquito control in efforts to alleviate the

nuisance these mosquitoes cause for residents who were required to stay close to home, as opposed to travelling this year, due to the global pandemic.

The costs of these works was budgeted at \$248,000, yet cost \$350,100. The excess over budget, \$102,100 will be funded in three ways (1) use of surplus balance \$6,500 (2) reduced contribution to 2020 surplus \$44,600 and (3) the balance remaining, \$51,000, will need to be included in the 2021 Financial Plan as an expense. The Local Government Act requires deficiencies to be carried forward to the next year's budget and included as an expense in that year.

Due to the immediacy of the situation, the funds were spent to ensure these services happened in a timely manner in June. This report seeks direction to amend the Financial Plan to include the expenditures for this initiative.

COST

If directed, the amendment proposed in this report will be incorporated into the Five-Year Financial Plan by bylaw and brought back to the Board for adoption in early 2021.

CONCLUSION

As a result of circumstances arising during 2020, there is one additional amendment to the Five-Year Financial Plan that is recommended to ensure Staff have the appropriate authority to incur these expenditures required to effectively manage FVRD services.

COMMENTS BY:

Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported. Options to fund the remaining balance will be discussed at the scheduled Committee of the Whole budget session in January.



CORPORATE REPORT

To: Electoral Area Services Committee From: Kelly Lownsbrough, Director of Finance Date: 2020-12-08 File No: 0340-30-27229

Subject: Regional Grant-in-Aid Policy

RECOMMENDATION

THAT the Fraser Valley Regional District Board approve the attached Regional Grant-in-Aid Policy, effective January 1, 2021 and repeal the Grant-in-Aid Policy dated October 26, 1999.

STRATEGIC AREA(S) OF FOCUS

Support Healthy & Sustainable Community

BACKGROUND

The Fraser Valley Regional District administers two Grant-in-Aid ("GIA") programs. Electoral Area GIAs are administered through the Electoral Area GIA Guidelines and Application, dated January 1, 2012, Amended October 27, 2015.

For Regional GIAs, while there is a somewhat out-of-date Grant-in-Aid Policy (attached and dated October 26, 1999), the Regional GIAs have historically been incorporated into the Regional Budget Requisitions directly naming the organizations which received support; Wildsafe BC and Elizabeth's Wildlife Center. This report seeks to replace the dated Grant-in-Aid Policy with a Regional GIA Policy.

The Regional GIA Policy is drafted under the authority of the Local Government Act, Section 263(1)(c) which designates the corporate powers of a Regional District Board the ability to provide assistance for the purpose of benefiting the community, or any aspect of the community. For the purposes of this Policy, community is deemed to represent the Regional District.

DISCUSSION

The FVRD has a Grant-in-Aid Policy that is seldom referenced and outdated. This report seeks to update and replace the Grant-in-Aid Policy with a more robust policy, effective January 2021. The purpose of the Regional GIA is to provide a framework whereby financial assistance can be provided to non-profit organizations or community groups who provide services or a benefit to the Regional

District, whether those services span the entire Regional District or the majority of the Regional District.

This updated Regional GIA Policy includes two changes that are proposed to be effective for the 2022 Financial Plan.

- Incorporation of the two long-standing Regional Grant-in-Aids (Wildsafe BC \$15,000 per annum and Elizabeth's Wildlife Center \$5,000 per annum) into the Environmental Services and Animal Control budgets, respectively.
- 2. Launch of an annual Regional GIA application process that includes a set deadline for applications (August 31st) that ties into the annual budget process as well as an annual maximum of \$50,000 (for all Regional GIA). Should the maximum Regional GIA be reached, the impact per residential property is approximately \$0.50 for every residential property in the FVRD.

This Policy is proposed to be effective January 1, 2021 to enable advance communication of the application process and timelines for the 2022 Financial Plan. For Regional GIA funding in 2021, the proposed Financial Plan includes GIA, per past practice, for Wildsafe BC \$15,000 and Elizabeth's Wildlife Center \$5,000.

COST

There are no direct costs with this report. The policy does commit to two items for the 2022 Financial Plan (1) grant certainty for Wildsafe BC \$15,000 and Elizabeth's Wildlife Center \$5,000.

CONCLUSION

The proposed Regional Grant-in-Aid Policy is recommended for approval and to replace the existing Grant-in-Aid policy dated October 26, 1999.

COMMENTS BY:

Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported. Historically, the FVRD has not had a regular budget line-item for regional grants-in-aid. Grants were budgeted ad hoc, on request. Examples of other past regional grants in aid included \$10,000 to the Cultus Lake Park Board for Milfoil removal (2006), \$50,000 to Canuck Place (2012), and \$50,000 to the Abbotsford Hospice (2014). Allocating \$50,000 per year to the budget would not require the Board to award grants annually, or provide the full allotment each year. Rather, this policy update and budget recommendation provides a clear and transparent process for future grant considerations.



FRASER VALLEY REGIONAL DISTRICT POLICY AND PROCEDURES

SUBJECT: Grant-in-Aid	
EFFECTIVE DATE: October 26, 1999	REVISION DATE:

Purpose:

To allow for a grant-in-aid on behalf of the entire Regional District.

Eligibility:

To be eligible for a grant-in-aid on behalf of the entire Regional District, the party must be a community group or organization whose focus or purpose is in the arts, cultural, recreational, or social services, but only if:

- not commercial in nature;
- it is incorporated, either under the Societies Act of BC or under any federal act as a charitable organization;
- if the request for funding is under \$500, it may be an unincorporated group with a written constitution which outlines the objectives of the group as being charitable in nature;
- there is demonstrable financial need;
- funding would benefit the residents of the Regional District; and
- an organization which <u>has an application for a grant-in-aid under consideration by a</u> <u>member municipality</u>, or which has been approved for grant-in-aid funding from a member <u>municipality</u> will be ineligible for funding from the Regional District. This does not apply to a grant-in-aid that may be considered for funding in an electoral area/areas only.

Grant Criteria:

- The organization will have a large number of volunteers and able to demonstrate a broad base of community support.
- The activity or program is accessible to a large portion of the Regional District communities' residents.
- The activity or program is consistent with the objectives and standards of the community as represented to and supported by the Regional District Board.
- No contribution will be made toward travel expenses for individuals or teams to sporting events as this will not be considered as a regional grant-in-aid. Said individuals or teams may make representation to member municipalities or electoral areas where applicable.

- Non-profit societies operating at regional, provincial, or federal levels and conducting fundraising by means of tag days, mail outs, door-to-door campaigns, or telethons will not be eligible for grants-in-aid from the Regional District.
- Organizations which receive a fee-for-service from the Regional District are not eligible for grant-in-aid funding under this regional policy, unless the application is for a program other than the fee-for-service program.
- Preference will be given to applications with at least 50% of required funding coming from sources other than the Regional District.
- Applicants will provide as much detailed information as is possible on their organization including financial statements and annual operating budgets for the immediate year and future year.

Procedure:

All completed grant applications for funding from any regional grant-in-aid will be forwarded to the Executive Committee prior to December 31 for review. The Executive Committee will review each application and make recommendations to the Board as to whether grants should be approved, and the amount, subject to fund availability in the annual budget.

Payment:

- No approved grant will be paid until the adoption of the annual budget.
- The term for the grant shall be for one year only. Applicants are to be advised that the grant-in-aid will not be continued in subsequent years without further application. Renewals are not automatic nor is any increase in funds.
- No grant will be made to pay for past deficits incurred by non-profit societies.
- All applicants must submit a statement on the use of the funds at the end of the event/ project or the end of the calendar year, whichever occurs first. Failure to provide such an evaluation will result in any future grant request being rejected.



Fraser Valley Regional District

REGIONAL GRANT-IN-AID APPLICATION Fraser Valley Regional District, 45950 Cheam Ave, Chilliwack BC, V2P 1N6

Applicant Organization	
Mailing Address:	
Email Address:	
Point of contact:	
Name	Telephone/Fax Number

Statement as to eligibility to apply for Grant-In-Aid Funds (Please attach a separate sheet if required):

APPLICATION SUMMARY:

Project or purpose for which you require assistance (Please attach a separate sheet if required):

Statement as to how these funds will benefit the community or an aspect of the Regional District (Please attach a separate sheet if required):

Amount of Grant Requested: \$_____

**Please note: grants over \$4,000 require a financial statement and/or report on the applicant to be provided with the application.

To the best of my knowledge, all the information that is provided in this application is true and correct. Furthermore, I hereby certify that this application for assistance is NOT being made on behalf of an individual, industry, commercial or business undertaking.

Signature of Applicant

Title



FRASER VALLEY REGIONAL DISTRICT POLICIES AND PROCEDURES

POLICY:	Regional Grant in Aid Guidelines	and Application
Date Issued:	January 1, 2021	Date Amended: November 9, 2020

Purpose

To provide a framework whereby financial assistance can be provided to non-profit organizations or community groups who provide services or a benefit to the Regional District, whether those services span the entire Regional District or the majority of the Regional District.

Application

This policy shall apply to all regional area grant-in-aid requests being considered for funding. This policy does not provide any guidelines for Electoral Area Grants-In-Aid, those guidelines are set out in the Fraser Valley Electoral Area Grant-In-Aid Policies and Procedures dated October 27, 2015.

<u>Authority</u>

Local Government Act Section 263(1)(c): the corporate powers of a Regional District Board allow for the provision of assistance for the purpose of benefiting the community, or any aspect of the community.

For the purposes of this Policy, community is deemed to represent Regional District.

Eligibility Criteria

Who Can Apply:

- a. The applicant must be a registered non-profit organization or community group;
- b. The registered non-profit organization or community group must be locally based within the regional district or must otherwise provide services or benefits to the regional district. The Grant-In-Aid requested must provide a specific service or benefit to the regional district, or any aspect of the regional district; and
- c. The registered non-profit organization or community group must be financially and administratively sound.

Application Restrictions:

- a. Industrial, commercial, and/or business organizations are not eligible to apply.
- b. Grant-In-Aid may not be used to subsidize activities that are the responsibilities of other levels of government;
- c. Grant-In-Aid may not cover any of the following expenses:
 - i) Remuneration including wages and consulting fees;
 - ii) capital improvements to rented or leased premises;
 - iii) operating or capital deficits;
 - iv) tax payments; and/or
 - v) private enterprise.
- d. Grant-In-Aid cannot be used for political purposes or to fund groups or organizations whose primary purpose is of a political nature.



Application Process

- 1. All qualifying organizations and individuals are required to complete the Grant-In-Aid application form. Applications should include a summary of how the Grant-In-Aid will be used, if granted. It should be noted that organizations may be required to make a presentation or provide further documentation to the Fraser Valley Regional District Board before any decisions are made.
- 2. Incomplete applications will not be accepted and will be returned to the applicant.
- 3. All applicants will receive notification on the status of their application once reviewed by the Fraser Valley Regional District Board.
- 4. The Fraser Valley Regional District Board reserves the right to request a full accounting of any and all expenditures of authorized Grant-In-Aid funds.
- 5. Application deadline will be August 31 of each year, for consideration and inclusion in the following year's Financial Plan.
- 6. The Fraser Valley Regional District will set an annual amount up to \$50,000 per year, for the total of all applications.

Financial Accountability & Reporting

- 1. The Fraser Valley Regional District should be recognized as a funding agency through signage, event literature and/or program websites. This needs to be done in coordination with FVRD Manager of Communications.
- 2. Grants over \$1,000 require follow up with the Fraser Valley Regional District upon completion of the capital project or event, by December 31st of the year funds received. Follow up to include a letter to FVRD regarding usage of funds and their success, including pictures of the project/event and any other supporting information.
- 3. Grants over \$4,000 require submission of financial statements/reports for the applicant to be included with the funding application.
- 4. Funds remaining unspent after 12 months must be returned to the Fraser Valley Regional District.

Approval Criteria

The following criteria will be used in evaluating and prioritizing the applications for assistance under Section 263 (1)(c) of the *Local Government Act:*

- a. Confirmation that the applicant is eligible to apply for grant funds pursuant to this Grant-In-Aid Policy;
- b. Purpose for which funding is requested;
- c. Overall benefit to the regional district as a whole, or any aspect of the regional district;
- d. Amount of the grant requested;
- e. Whether or not there is an opportunity for individuals to make direct contributions; and
- f. Whether or not there is available funding for the grant requested.



CORPORATE REPORT

To: Electoral Area Services Committee From: Kristy Hodson, Manager of Financial Operations Date: 2020-12-08 File No: 1850-20 / 010

Subject: 2020 Grant-In-Aid Request – Deroche Elementary School, Electoral Areas "C" & "G"

RECOMMENDATION

THAT the Fraser Valley Regional District Board authorize a grant-in-aid in the amount of \$5,215 to the Deroche Elementary School, \$2,250 funded from the 2020 Electoral Area "C" grant-in-aid budget and \$2,965 funded from the 2020 Electoral Area "G" grant-in-aid budget, to help offset the costs of outdoor learning materials, field trips, ponchos, shovels and risers for their fine arts program.

STRATEGIC AREA(S) OF FOCUS

Support Healthy & Sustainable Community

BACKGROUND

This request for funding is eligible under the Electoral Area Grant-In-Aid Policy under the "Activities/ programs which are accessible to a large portion of the electoral area" option.

DISCUSSION

The Deroche Elementary School serves its community as a non-profit organization that is teaching community sustainability, community history, and land preservation, as well as assisting parents in supporting their children through school.

The Deroche Elementary School is requesting a \$5,215 grant to help offset the costs associated with the following:

- 2 risers for fine arts program
- 10 water speed instruments
- 10 wind speed instruments
- 2 weather stations
- 2 class sets of rain ponchos
- 5 half sized shelves
- Field trips

It should be noted that the costs for some of the above noted items are typically borne by School Districts or the Ministry of Education, so do not technically meet the intent of the grant-in-aid policy.

Both Director Stobbart and Director Bales are in support of the request to provide support in the amount of \$5,215 towards this grant request.

COST

The \$5,215 cost will be funded \$2,250 from the 2020 Electoral Area "C" grant-in-aid budget and \$2,965 from the 2020 Electoral Area "G" grant-in-aid budget, which have sufficient funds to cover this grant.

CONCLUSION

A grant-in-aid application has been received from the Deroche Elementary School seeking funds for several school items.

COMMENTS BY:

Kelly Lownsbrough, Chief Financial Officer/ Director of Finance: Reviewed and supported.

Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported.



Fraser Valley Regional District

GRANT-IN-AID APPLICATION

Fraser Valley Regional District, 45950 Cheam Ave, Chilliwack BC, V2P 1N6

Applicant Name:	Deroche Elementary School Box 70 10340 North Deroche	Rd. , Deroche BC V0M 1G0
Maning Address.		
Email Address:	michael.abercrombie@mpsd.c	a
Contact:		
Michael Al	percrombie, Principal	604 826 2360
Name		Telephone/Fax Number
Statement as to eli	gibility to apply for Grant-In-Aid Fu	nds (Please attach a separate sheet if required):
We are elementary scl	nool in School District 75. Our school is com	prised of 90 students. Being a rural school
we are constantly look available to other stude	ing for ways to offer our students the same l ents located in the urban area of Mission cit	evel of educational services and support v. Due to other demographic realities we are a school that
typically asks for partn	ers to help our families contribute to learning	a opportunities for their children.

APPLICATION SUMMARY:

Project or purpose for which you require assistance (Please attach a separate sheet if required):

Over the past 4 years our staff and community volunteers have developed an forest and stream outdoor education site and program. This has included stream restoration,

bridge and outdoor classroom shelter and several native species planting initiatives. As we do instruction outside on a daily basis, we find we are in constant need of outdoor learning materials, the most expensive of which are various weather, water flow, fish counting and wind speed measuring instruments. We also have been developing a streng performing arts program. To do our concerts, including a monthly Celebration of Learning Assembly for our community, we have to borrow 3 risers from another in order for our children to perform.

Statement as to how these funds will benefit the community or an aspect of the community (Please attach a separate sheet if required):

The risers for our Fine Arts program will benefit our community immediately as we are doing all of our performing arts virtually which gives access to our parents,

grandparents and other relations. When COVID restrictions ease, the risers of course will be a major asset to our fine arts program and our monthly and anual performances. As far as the measurement instruments, we feel teaching our students environmental stewardship on a daily basis indirectly benefits our community a great deal.

Our students have already shown a greater appreciation of nature and protecting our natural resources in how well they are taking care of our outdoor learning site.

Amount of Grant Requested: \$ (\$250 for 10 water speed instruments, \$345 for 10 windspeed, 155 for 2 weather stations = \$750 1 set of 6 ft. risers = \$1550
TOTAL REQUEST = \$2250

**Please note: grants over \$4,000 require a financial statement and/or report on the applicant to be provided with the application.

To the best of my knowledge, all the information that is provided in this application is true and correct. Furthermore, I hereby certify that this application for assistance is NOT being made on behalf of an individual, industry, commercial or business undertaking.

manal

Signature of Authorized Signatory and Title

Amount Approved:

Date:

Signature of Electoral Area Director

Please return completed form by fax or e-mail to: Fax: 604-702-5043 (Finance Dept.); Email: <u>info@fvrd.bc.ca</u>; or to your Electoral Area Director.

aser Valley Regional District	Fraser Valley Regional District, 45	950 Cheam Ave, Chilliwack BC, V2P 1N6
Applicant Name:	Deroche Elementary School	
Mailing Address:	Box 70 10340 North Deroche I	Rd. , Deroche BC V0M 1G0
Email Address:	michael.abercrombie@mpsd.ca	
Contact:		
Michael At	percrombie Principal	604 926 2260
		004 020 2300
Name		Telephone/Fax Number
Name Statement as to elig We are elementary sch students the same leve realities we are a school	gibility to apply for Grant-In-Aid Fund mool in School District 75. Our school is comp and of educational services and support availabilith that typically asks for partners to help our f	Telephone/Fax Number ds (Please attach a separate sheet if required): rised of 90 students. Being a rural school we are constantly looking for ways to offer le to other students located in the urban area of Mission city. Due to other demograp amilies contribute to learning opportunities for their children.
Name Statement as to elig We are elementary sch students the same leve realities we are a schoo APPLICATION SU Project or purpose	gibility to apply for Grant-In-Aid Fun- nool in School District 75. Our school is comp of educational services and support availab of that typically asks for partners to help our f MMARY: for which you require assistance (Pl	Telephone/Fax Number ds (Please attach a separate sheet if required): rised of 90 students. Being a rural school we are constantly looking for ways to offer le to other students located in the urban area of Mission city. Due to other demograp amilies contribute to learning opportunities for their children.

sheet if required): The risers for our Fine Arts program will benefit our community immediately as we are doing all of our performing arts virtually which gives access to our parents,

grandparents and other relations. When COVID restrictions ease, the risers of course will be a major asset to our fine arts program and our monthly and anual performances. As far as ponchos, shovels and field trips to outdoor venues, we feel teaching our students environmental stewardship on a daily basis indirectly benefits our communitya grea

Our students have already shown a greater appreciation of nature and protecting our natural resources in how well they are taking care of our outdoor learning site.

(\$750+ 165 + 500 for field trips Amount of Grant Requested: \$ 1 set of 6 ft. risers = \$1550

TOTAL REQUEST = \$2965

**Please note: grants over \$4,000 require a financial statement and/or report on the applicant to be provided with the application.

To the best of my knowledge, all the information that is provided in this application is true and correct. Furthermore, I hereby certify that this application for assistance is NOT being made on behalf of an individual, industry, commercial or business undertaking.

Signature of Authorized Signatory and Title

Date:

Signature of Electoral Area Director

Please return completed form by fax or e-mail to: Fax: 604-702-5043 (Finance Dept.); Email: info@fvrd.bc.ca; or to your Electoral Area Director.



CORPORATE REPORT

To: Electoral Area Services Committee From: Sterling Chan, Manager of Engineering and Infrastructure

Date: 2020-12-08 File No: 2380-60

Subject: Harrison Mills and Hemlock Valley Transfer Station Operation Contract

RECOMMENDATION

THAT the Fraser Valley Regional District Board authorize its signatories to execute a three year contract with Lacey Developments Ltd. to operate the Harrison Mills and Hemlock Valley Transfer Stations for an annual cost of \$43,680 plus taxes;

STRATEGIC AREA(S) OF FOCUS Provide Responsive & Effective Public Services **PRIORITIES** Priority #1 Waste Management

BACKGROUND

A Request for Proposals (RFP) was issued by the Fraser Valley Regional District to select a qualified contractor to operate the Harrison Mills and Hemlock Valley Transfer Stations for a three year term. The RFP was posted on BC Bid as well as the FVRD website, and closed on November 26, 2020.

DISCUSSION

Proposals were received from three proponents. Each proposal received was evaluated based on the following criteria:

- o Total Cost
- Methodology
- Past Experience Working with the FVRD

After reviewing the proposals, Lacey Developments Ltd. was identified as the preferred proponent as their proposal met all of the RFP's requirements and scored the highest based on the evaluation criteria. Lacey Developments Ltd. has established an excellent reputation with the FVRD as they have operated the FVRD's Harrison Mills Transfer Station since 2014 and the Sylvester Rd Transfer Station since 2017.
COST

The value of this contract is \$43,680 per year.

COMMENTS BY:

Tareq Islam, Director of Engineering & Community Services:

Reviewed and supported.

Kelly Lownsbrough, Chief Financial Officer/ Director of Finance:

Reviewed and supported.

Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported.



CORPORATE REPORT

To: Electoral Area Services Committee From: Sterling Chan, Manager of Engineering and Infrastructure Date: 2020-12-08 File No: 2380-60

Subject: Sylvester Road Transfer Station Operation Contract

RECOMMENDATION

THAT the Fraser Valley Regional District Board authorize its signatories to execute a three year contract with Lacey Developments Ltd. to operate the Sylvester Road Transfer Station for an annual cost of \$25,225 plus taxes;

STRATEGIC AREA(S) OF FOCUS Provide Responsive & Effective Public Services **PRIORITIES** Priority #1 Waste Management

BACKGROUND

A Request for Proposals (RFP) was issued by the Fraser Valley Regional District to select a qualified contractor to operate the Sylvester Road Transfer Station for a three year term. The RFP was posted on BC Bid as well as the FVRD website, and closed on November 26, 2020.

DISCUSSION

Proposals were received from two proponents. Each proposal received was evaluated based on the following criteria:

- o Total Cost
- o Methodology
- Past Experience Working with the FVRD

After reviewing the proposals, Lacey Developments Ltd. was identified as the preferred proponent as their proposal met all of the RFP's requirements and scored the highest based on the evaluation criteria. Lacey Developments Ltd. has established an excellent reputation with the FVRD as they have operated the FVRD's Harrison Mills Transfer Station since 2014 and the Sylvester Rd Transfer Station since 2017.

COST

The value of this contract is \$25,225 per year.

COMMENTS BY:

Tareq Islam, Director of Engineering & Community Services:

Reviewed and supported.

Kelly Lownsbrough, Chief Financial Officer/ Director of Finance:

Reviewed and supported.

Jennifer Kinneman, Chief Administrative Officer:

Reviewed and supported.



CORPORATE REPORT

To: Electoral Area Services Committee From: Julie Mundy, Planner 1 Date: 2020-12-08 File No: 3090-20 2019-31

Subject: Development Variance Permit application to vary size requirements for an accessory building at 9966 Llanberis Way, Electoral Area D

RECOMMENDATION

THAT the Fraser Valley Regional District issue Development Variance Permit 2019-31 for 9966 Llanberis Way to increase the maximum area of an accessory building from 45 square meters to 57.6 square metres, subject to consideration of any comments or concerns raised by the public.

STRATEGIC AREA(S) OF FOCUS

Provide Responsive & Effective Public Services

BACKGROUND

The property owners of 9966 Llanberis Way have applied for Development Variance Permit (DVP) to increase the maximum permitted area of an accessory building (garage) as outlined in *Zoning Bylaw for Electoral Area* "D", 1976 of Regional District of the Fraser-Cheam.

PROPERTY DETAILS				
Electoral Area	D			
Address	9966 Llanberis Way	/		
PID	025-259-091			
Folio	733.06436.030			
Lot Size	o.706 acres			
Owner	Paul & Gina Karr	Agent	n/a	
Current Zoning	Suburban Residential 2 (SBR-2)	Proposed Zoning	No change	
Current OCP	Suburban Residential (SR)	Proposed OCP	No change	
Current Use	Residential	Proposed Use	No change	
Development Perm	Development Permit Areas DPA 6-D – Riparian Areas			
Agricultural Land R	eserve No			

ADJACENT ZONING & LAND USES				
North	۸	Suburban Residential 2 (SBR-2), Single Family Dwelling		
East	>	Suburban Residential 2 (SBR-2), Single Family Dwelling		
West	<	Suburban Residential 2 (SBR-2), Single Family Dwelling		
South	V	Suburban Residential 2 (SBR-2), BC Hydro ROW, Trans-Canada Hwy		



NEIGHBOURHOOD MAP

PROPERTY MAP



DISCUSSION

The applicant wishes to construct a detached shop with a covered timber frame patio which exceeds the maximum allowable area for an accessory building under Zoning Bylaw 75 for Electoral Area D. Within the SBR-2 Zone, the maximum size of an accessory building is 45 metres² (484 feet²).

The proposed structure has:

- An enclosed area of 500 square feet (20 x 25 feet),
- A covered patio area of 120 square feet (10x 12 feet), and
- A total size of 620 square feet (57.6 square metres).

Permitted Size	Requested Size	Variance
45.0 m² (484.4 feet²)	57.6 m² (620 feet²)	12.6 m² (135.6 feet²)

This request represents a variance of 136 square feet (12.6 square meters) which is 28% larger than is permitted in the zoning bylaw.



The applicant advises the reasons for the variance are 1) to increase enjoyment of the backyard, and 2) to add privacy and cover from the sun. Additionally, the open roof area (covered patio) will face towards the applicants yard in order to reduce any conflict with the nearest adjacent neighbour.

If the size variance is not granted, the applicant could reduce the building length by one foot to construct a 20 x 24 foot structure which adheres to the zoning regulation. The applicant could additionally construct the patio cover as a stand alone structure which would not require a development variance permit.

Septic Covenant

The lots on Llanberis Way have a covenant on the property titles reserving a portion of each lot for sewage disposal and backup disposal systems. No construction or parking is permitted within the reserved area.

Over the last year, the owners of 9966 Llanberis Way worked with Ministry of Health to amend their covenant so that it reflects the actual location of their septic system. The goal of this work was to have a building site for the proposed structure. The structure appears to be completely outside the new designated septic field area; this will be confirmed when new construction drawings are submitted prior to issuance of a building permit.

Building Permit Application

A building permit for the construction of the shop/covered patio was applied for in September 2019. The applicants have received a letter from the Building Department listing the outstanding requirements for the permit.

Zoning Bylaw Review

There have been a number of DVP applications relating to the size of accessory buildings in Popkum. The maximum allowable area for an accessory structure in the Popkum residential zones is being reviewed as part of the Electoral Area Zoning Bylaw Consolidation project. This review includes analysis of recent development variance permits to determine if revised zoning bylaw provisions, including maximum height and area restrictions for accessory structures, are warranted.

DVP Summary – Size of Accessory Structures in Electoral Area D

The following table summarizes past DVP applications in Electoral Area D (SBR-2 and SBR-3 zones) to increase the allowable size of an accessory residential building. The information in the tables is provided for context only. Each application is considered on its own merits, and previous DVP approvals/refusals do not set precedence.

DVP for Size of Accessory Buildings				
Civic Address	Permit #	Variation	Status	
10-10200 Gray Rd	DVP 1995-10	Increase size to 98 m² (117% increase)	Approved	
6-10200 Gray Rd	DVP 1996-05	Increase size to 66.9 m² (48.6% increase)	Approved	
18-10200 Gray Rd	DVP 1998-04	Increase size to 76.2 m² (69% increase)	Approved	
11-10200 Gray Rd	DVP 2002-01	Increase size to 80.27 m ² (72% increase)	Approved	
4-10200 Gray Rd	DVP 2002-04	Increase size to 125.4 m ² (179% increase)	Approved	
3-10200 Gray Rd	DVP 2003-06	Increase size to 74.3 m ² (65% increase)	Approved	
10211 Parkwood Dr	DVP 2012-02	Increase size to 50m ² (11% increase)	Approved	
10391 Parkwood Dr	DVP 2013-05	Increase size to 60m ² (33% increase)	Approved	

9974 Llanberis Way	DVP 2013-13	Increase size to 111m ² (147% increase)	Approved
16-10200 Gray Rd	DVP 2014-17	Increase size to 89.2 m ² (98% increase)	Approved
52672 Parkrose Wynd	DVP 2016-13	Increase size to 116.129 m ² (158% increase)	Denied
52672 Parkrose Wynd	DVP 2016-15	Increase size to 81.941 m ² (82 % increase)	Denied
10094 Parkwood Dr	DVP 2017-01	Increase size to 53.14m ² (18% increase)	Approved
52671 Parkrose Wynd	DVP 2017-09	Increase size to 76 m ² (69% increase)	Approved
10338 Wildrose Dr	DVP 2017-19	Increase size to 56.4m ² (25% increase)	Approved
52725 Parkrose Wynd	DVP 2017-20	Increase size to 53.1m ² (18% increase)	Approved
10191 Caryks Rd	DVP 2019-05	Increase size to 53.5m ² (19% increase)	Approved
10395 Wildrose Dr	DVP 2019-10	Increase size to 58 m² (29% increase)	Approved
10163 Royalwood Blvd	DVP 2019-12	Increase size to 76m ² (69% increase)	Approved
10394 Parkwood Dr	DVP 2019-14	Increase size to 107m ² (138% increase)	Approved
10146 Royalwood Blvd	DVP 2020-20	Increase size to 58m ² (29% increase)	Approved

Neighbourhood Notification and Input

All property owners within 30 metres of the property will be notified by FVRD of the Development Variance Permit application and will be given the opportunity to provide written comments or virtually attend the Board meeting to state their comments. FVRD staff encourage applicants to advise neighbouring property owners and residents of the requested variance in advance of the mail-out notification. To date no letters of support or objection have been submitted.

COST

The property owners applied for the Development Variance Permit in September 2019. This was prior to the adoption of the new FVRD Development Application Fees Establishment Bylaw 1560, 2019. The application fee of \$350 has been paid.

CONCLUSION

Staff recommend the FVRD Board issue Development Variance Permit 2019-31 to vary the size requirements for an accessory building at 9966 Llanberis Way for the following reasons:

- The request is relatively minor, and it appears to align with community expectations of accessory buildings as indicated by past variance approvals;
- A Development Variance Permit is needed primarily because of the integration of the shop and the patio cover. The applicant wishes to integrate the structures, but each could be constructed independently without a variance;
- The structure is outside the covenanted septic disposal area, and no adverse health or safety impacts are anticipated.

Option 1 – Issue (Staff Recommendation)

MOTION: THAT the FVRD Board issue Development Variance Permit 2019-31 for 9966 Llanberis Way, Electoral Area D to increase the maximum area of an accessory building from 45 square meters to 57.6 square metres, subject to consideration of any comments or concerns raised by the public.

Option 2 – Refuse

MOTION: THAT the Fraser Valley Regional District Board refuse Development Variance Permit 2019-31 for 9966 Llanberis Way, Electoral Area D

COMMENTS BY:

Graham Daneluz, Director of Planning & Development:

Reviewed and supported

Kelly Lownsbrough, Chief Financial Officer/ Director of Finance: Reviewed and supported

Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported.

Appendix A Site Plan



The maximum area of the proposed shop and covered patio area will be 57.6 metres² (620 feet²)



FRASER VALLEY REGIONAL DISTRICT DEVELOPMENT VARIANCE PERMIT

Permit No. Development Variance Permit 2019-31 Folio No. 733.06436.030

Issued to: Georgina and Paul Karr

Address: 9966 Llanberis Way, Rosedale, BC

Applicant:

Site Address: 9966 Llanberis Way, Electoral Area D

The lands affected by and subject to this permit are shown on Schedule "A", Location Map, attached hereto, which forms an integral part of this permit, and are legally described as:

LOT 7 SECTION 6 TOWNSHIP 3 RANGE 28 WEST OF THE SIXTH MERIDIAN YALE DIVISION OF YALE DISTRICT PLAN LMP52640

PID: 025-259-091

LIST OF ATTACHMENTS

Schedule "A": Location Map Schedule "B": Site Plan

AUTHORITY TO ISSUE

1. This Development Variance Permit is issued under Part 14 - Division 9 of the Local Government Act.

BYLAWS SUPPLEMENTED OR VARIED

Zoning By-law for Electoral Area "D", 1976 of the Regional District of Fraser-Cheam is varied as follows:

Division 23 Section 2302.3 (b): the maximum area of an accessory building is increased from 45 square metres (484 sq.ft) to 57.6 square metres (620 sq ft).

SPECIAL TERMS AND CONDITIONS

- 1. No variances other than those specifically set out in this permit are implied or to be construed.
- 2. If the holder of this permit does not commence the construction with respect to which the Permit was issued within two (2) years after the date of the permit, this permit shall lapse.
- 3. Development of the site shall be undertaken in accordance with the Site Plan attached hereto as Schedule "B".

- 4. All new construction shall be generally in compliance with Building Permit No. BP014724.
- 5. The sides of the patio cover shall not be enclosed with walls.

GENERAL TERMS AND CONDITIONS

- 1. This Development Variance Permit is issued Pursuant to <u>Part 14 Division 9</u> of the *Local Government Act*.
- 2. This Development Variance Permit shall not vary the permitted uses or densities of land use in the applicable zoning bylaw nor a flood plain specification designated under <u>Section 524</u> of the *Local Government Act*.
- 3. Nothing in this permit shall in any way relieve the developer's obligation to ensure that the development proposal complies in every way with the statutes, regulations, requirements, covenants and licences applicable to the undertaking.
- 4. Nothing in this permit shall in any way relieve the developer's obligation to comply with all setback regulations for construction of structures or provision of on-site services pursuant to the *Public Health Act*, the *Fire Services Act*, the *Safety Standards Act*, and any other provincial statutes.
- 5. The Archaeology Branch of the Province of British Columbia must be contacted (phone 250-953-3334) if archaeological material is encountered on the subject property. Archaeological material may be indicated by dark-stained soils containing conspicuous amounts of fire-stained or fire-broken rock, artefacts such as arrowheads and other stone tools, or human remains. If such material is encountered during demolition or construction, a Heritage Conservation Act Permit may be needed before further development is undertaken. This may involve the need to hire a qualified Archaeologist to monitor the work.

SECURITY DEPOSIT

As a condition of the issuance of this Permit, and pursuant to <u>Section 502</u> of the *Local Government Act*, the Regional Board is holding the security set out below to ensure that development is carried out in accordance with the terms and conditions of this Permit

Should the holder of this permit:

- a. fail to complete the works required to satisfy the landscaping conditions contained herein,
- b. contravene a condition of the permit in such a way as to create an unsafe condition,

The Regional Board may undertake and complete the works required to satisfy the landscaping conditions, or carry out any construction required to correct an unsafe condition at the cost of the holder of the permit and may apply the security in payment of the costs of the works, with any excess to be returned to the holder of the permit.

Security Posted: (a) an irrevocable letter of credit in the amount of: $\frac{}{} < N/A >$.

(b) the deposit of the following specified security: $\frac{$ < N/A > .}{}$

Note: The Regional District shall file a notice of this permit in the Land Title Office stating that the land described in the notice is subject to Development Variance Permit Number <u>2019-31</u>. The notice shall take the form of Appendix I attached hereto.

AUTHORIZING RESOLUTION PASSED BY THE BOARD OF DIRECTORS OF THE FRASER VALLEY REGIONAL DISTRICT ON THE <u><DAY></u> DAY OF <u><MONTH></u>, <u><YEAR></u>

Chief Administrative Officer / Deputy

THIS IS NOT A BUILDING PERMIT

DEVELOPMENT VARIANCE PERMIT 2019-31 SCHEDULE "A" Location Map



DEVELOPMENT VARIANCE PERMIT 2019-31 SCHEDULE "B" Site Plan

The maximum area of the proposed shop and covered patio area will be 57.6 metres² (620 feet²)



Fraser Valley Regional Dist	PLANNING & DEVELOPMENT	www.fvrd.ca ,	planning@fvrd.ca
SCHEDULE A-4	under Part 14 of the <i>Local Government A</i>	Act for a;	Permit Application
Developm	ent Variance Permit		
Temporary	/ Use Permit		
Developm	ent Permit		
An Application Fee upon submission of	in the amount of $\frac{350}{350}$ as stipulation.	ated in FVRD Application Fees Bylav	w No. 1231, 2013 must be paid
Civic Address	9966 LLANBERIS WAY	ROSEDATE BC PI	025-259-091
Legal Lo Description	tBlockSection6	28 Township 38 Range 36	Plan_LMP 52640
The property describ with my full knowled respects.	ed above is the subject of this application Ige and consent. I declare that the informa	and is referred to herein as the 'subje ation submitted in support of the app	ct property.' This application is made lication is true and correct in all
Owner's Declaration	Name of Owner (print)	Signature of Owner	Date SCPT 4
	PAUL KARR	Paul ferr	2019
	Name of Owner (print)	Signature of Owner	Date SEPTY
	GINA KANCIL	1 Jena Xar	1 2019

 Owner's Contact Information
 Address 9966
 LLANBERLS WAY
 City ROSEDATE
 B C

 Postal Code VOX (X)
 Postal Code VOX (X)

Office Use	Date	File No.
Only	Received By	Folio No.
	Receipt No.	Fees Paid: \$

45950 Cheam Avenue | Chilliwack, BC | V2P 1N6

Phone: 604-702-5000 | Toll Free: 1-800-528-0061 Fax: 604-792-9684

		n.				
Only complete th the applicant is	is section if	Signature of Owner		Date		
NOT the owner.		Signature of Owner		Date		
Agent's contact information and		Name of Agent		Company		
declaration		Address			City	
		Email			Postal Code	
		Phone	Cell		Fax	
		l declare that the inform	ation submitted in s	support of this application	on is true and correct in all re	spec
		Signature of Agent			Date	
Developmer	nt Details					
Property Size _	0.286	ha Present Z	oning <u>SBR-2</u>			
	DUTIDA	ATTA				
Existing Use	NESIDEN					
Existing Use Proposed Deve	elopment					
Existing Use Proposed Deve Proposed Varia	ation / Suppl	ement 77 HONGE AND FROM 484	PPT TO 7			
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1

From: Sent: To: Subject: Gina Karr November 25, 2020 8:51 AM Julie Mundy Re: DVP - 9966 Llanberis Way

Good Morning Julie,

Paul told me to tell you that the 620 square feet is fine for the size of the variance; the 700 square feet was to be on the safe side so it's not too tight for set backs and such.

Could you please amend the size of the variance to the 620 square foot measurement.

Thanks so much, and if you need a separate email stating this - or if you have any other questions, please let me know.

Have a wonderful day! Gina

Provincial Requirements

(This is not an exhaustive list; other provincial regulations will apply)

Riparian Areas Regulation Please indicate whether the development proposal involves residential, commercial, or including vegetation removal or alteration; soil disturbance; construction of buildings and structures; creation of impervious or semi-pervious surfaces; trails, roads, docks, wharves, bridges and, infrastructure and works of any kind – within:



30 metres of the high water mark of any water body

a ravine or within 30 metres of the top of a ravine bank

"Water body" includes; 1) a watercourse, whether it usually contains water or not; 2) a pond, , lake, river, creek, or brook; 3) a ditch, spring, or wetland that is connected by surface flow to 1 or 2 above.

Under the *Riparian Areas Regulation* and the *Fish Protection Act*, a riparian area assessment report may be required before this application can be approved.

ContaminatedPursuant to the Environmental Management Act, an applicant is required to submit aSites Profilecompleted "Site Profile" for properties that are or were used for purposes indicated in
Schedule 2 of the Contaminated Sites Regulations. Please indicate if:



the property has been used for commercial or industrial purposes.

If you responded 'yes,' you may be required to submit a Site Profile. Please contact FVRD Planning or the Ministry of Environment for further information.

Archaeological Resources Are there archaeological sites or resources on the subject property?

I don't know no ves

If you responded 'yes' or 'I don't know' you may be advised to contact the Archaeology Branch of the Ministry of Tourism, Sport and the Arts for further information.

Page 3 of 4

When providing Application Forms to the applicant, Regional District staff shall indicate which of the following attachments are required for this application. Additional information may also be required at a later date.

	Required	Received	Details
Location Map			Showing the parcel (s) to which this application pertains and uses on
			adjacent parcels
Site Plan			Reduced sets of metric plans
			North arrow and scale
At a scale of:			Dimensions of property lines, rights-of-ways, easements
		1	Location and dimensions of existing buildings & setbacks to lot lines,
1:			rights-of-ways, easements
			Location and dimensions of proposed buildings & setbacks to lot lines,
			rights-of-ways, easements
			Location of all water features, including streams, wetlands, ponds,
			ditches, lakes on or adjacent to the property
			Location of all existing & proposed water lines, wells, septic fields,
			sanitary sewer & storm drain, including sizes
			Location, numbering & dimensions of all vehicle and bicycle parking,
			disabled persons' parking, vehicle stops & loading
			Natural & finished grades of site, at buildings & retaining walls
			Location of existing & proposed access, pathways
			Above ground services, equipment and exterior lighting details
			Location & dimensions of free-standing signs
			Storm water management infrastructure and impermeable surfaces
			Other:
Floor Plans			Uses of spaces & building dimensions
			Other:
Landscape			Location, quantity, size & species of existing & proposed plants, trees &
Plan			turf
			Contour information (metre contour intervals)
Same scale			Major topographical features (water course, rocks, etc.)
as site plan			All screening, paving, retaining walls & other details
			Traffic circulation (pedestrian, automobile, etc.)
			Other:
Reports			Geotechnical Report
			Environmental Assessment
			Archaeological Assessment
			Other:

The personal information on this form is being collected in accordance with Section 26 of the *Freedom of Information and Protection of Privacy Act, RSBC 1996 Ch. 165* and the *Local Government Act, RSBC 2015 Ch. 1*. It will only be collected, used and disclosed for the purpose of administering matters with respect to planning, land use management and related services delivered, or proposed to be delivered, by the FVRD. Questions about the use of personal information and the protection of privacy may be directed to the FVRD Privacy Officer at 45950 Cheam Avenue, Chilliwack, BC V2P 1N6, Tel: 1-800-528-0061 FOI@fvrd.ca.

Page 4 of 4

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CORPORATE REPORT

To: Electoral Area Services Committee From: Tracey Heron, Planning Technician Date: 2020-12-08 File No: 3090-20 2020-23

Subject: Application for Development Variance Permit 2020-23 to vary the front lot line setback from 4.6 metres to 1.58 metres for an accessory structure at 48585 Chilliwack Lake Road, Electoral Area E.

RECOMMENDATION

THAT the Fraser Valley Regional District Board issue Development Variance Permit 2020-23 for 48585 Chilliwack Lake Road, Electoral Area E, to reduce the front lot line setback from 4.6 metres to 1.58 metres for an existing accessory structure, subject to consideration of any comments or concerns raised by the public.

STRATEGIC AREA(S) OF FOCUS

Provide Responsive & Effective Public Services

BACKGROUND

The applicant has applied for a Development Variance Permit (DVP) to reduce the front lot line setback for an existing accessory structure as outlined in *Zoning Bylaw for Electoral Area "E"*, 1976 of the *Regional District of Fraser-Cheam*. The placement of the Quonset structure is closer than 4.6 metres (15 feet) to the road right-of-way, and a Setback Permit has been issued by the BC Ministry of Transportation and Infrastructure (MoTI).

PROPERTY DETAILS				
Electoral Area	E			
Address	48585 Chilliwack Rd			
PID	001-608-568			
Folio	733.01316.516			
Lot Size	o.35 acres			
Owner	Randall & Virginia Houser	Agent	n/a	
Current Zoning	Country Residential (CR)	Proposed Zoning	No change	
Current OCP	Suburban Residential (SR)	Proposed OCP	No change	
Current Use	Residential	Proposed Use	No change	
Development Permit A	reas 3-E – Chilliwack River Val	ley Slope Hazard		

	5-E — Riparian Areas
Agricultural Land Reserve	No

ADJACENT ZONING & LAND USES

North	٨	Country Residential (CR); Single-family Residence
East	>	Country Residential (CR); Single-family Residence
West	<	Country Residential (CR); Single-family Residence
South	V	Park (P-1); Chilliwack Lake Road

NEIGHBOURHOOD MAP



PROPERTY MAP



DISCUSSION

The property owner obtained a building permit (BP013667) for the placement of a metal Quonset structure in July 2016. The structure is 22 x 25 feet, or 550 square feet (15.6 square metres) in size, with a height of 12.8 feet (3.9 metres).



Building Permit – BP013667

A building permit was issued in 2016 for the placement of a steel Quonset structure on the subject property. Final inspection of the structure was not completed and the building permit lapsed in November, 2018. The applicant renewed the permit in July 2020 and submitted a site survey which was one of the outstanding items mentioned in the building permit file.

The site survey showed that the placement of the Quonset structure did not meet the 4.6 metre (15 feet) front lot line setback and encroached into the Ministry of Transportation and Infrastructure highway setback. All other lot line setbacks had been met.

<u>Zoning Bylaw</u>

The Quonset structure meets the side and rear lot line setbacks and height requirements as laid out in *Zoning Bylaw for Electoral Area "E", 1976 of the Regional District of Fraser-Cheam.* The front lot line setback is the only zoning regulation that is not being met.

Zoning Bylaw No. 66 – Country Residential (CR)			
	Required	Actual	
Front lot line setback	4.6 metres (15 feet)	1.58 metres (5.2 feet)	
Side lot line setback	3 metres (10 feet)	3.49 metres (11.5 feet)	
Rear lot line setback	7.6 metres (25 feet)	22.03 metres (72.3 feet)	
Height	10 metres (32.8 feet)	3.9 metres (12.8 feet)	

Rationale for the Variance

The applicant provides the following rationale for the variance:

- 1. He thought he had followed all the Fraser Valley Regional District regulations with regards to meeting all the property setbacks and obtaining all the correct permits and structural drawings;
- 2. He made an honest error in locating the structure within the front setback; and,
- 3. It would be too costly to move the structure now that it has been set in place.

Requested Variance 2020-23

The applicant is seeking to reduce the front lot line setback from Chilliwack Lake Road from 4.6 metres (15 feet) to 1.58 metres (5.2 feet), measured clear to sky. This 3.0 metre (10 feet) relaxation is to bring the existing accessory structure into compliance with FVRD zoning regulations.

Front Lot Line Setback		
Required (zoning)	4.6 metres (15.0 feet)	
Proposed	1.58 metres (5.2 feet)	
Requested Variance	3.0 metres (10 feet)	

If the variance is not issued, the applicant would have to move the structure. This would involve moving the concrete foundation further from the property line at a depth of two feet, similar to the original concrete foundation pour. A structural engineer would also be required to certify that the integrity of the structure is maintained when the structure is moved.

Ministry of Transportation & Infrastructure

If construction of a structure is within the 4.5 metre road setback, approval from the BC Ministry of Transportation and Infrastructure (MoTI) is required. For the Quonset structure, MoTI has issued Setback Permit Number 2020-04377 to reduce the building setback less than 4.5 metres from the property line fronting a provincial public highway. This permit states that if the structure is removed or destroyed for any reason, it must be replaced at 4.5 metres from the legal boundary of the road allowance, and also that in the event of future road widening, MoTI may ask the applicant to re-locate or remove the structure at the applicant's expense. This permit may also be terminated at any time at the discretion of MoTI.

The Ministry of Transportation and Infrastructure (MoTI) setback is approximately 14 metres (46 feet) wider along the properties located at 48575, 48585, and 48610 Chilliwack Lake Road, than the setback along the neighbouring properties. With the large tree coverage along this easement, the Quonset structure, while extending into the MoTI easement, has minimal sight impact from Chilliwack Lake Road.



Figure 2: Additional width of Ministry of Transportation right-of-way along Chilliwack Lake Road.

<u>Covenant</u>

Lands within Electoral Area E are subject to a variety of hazards, including flooding and erosion from the Chilliwack River. The property located at 48585 Chilliwack Lake Road lies within the 100-year Erosion Limit Line, which represents an estimate of the potential for bank migration over the next 100 years unimpeded by hazard mitigation works such as bank protection or other channel controls.

Construction is permitted within this 100-year Erosion Limit Line where the property owner is willing to offer a covenant acknowledging that the property may be affected in the long term by river erosion if bank protection is not completed. The applicant is aware of this requirement and has registered a covenant on the property title for the Quonset structure.

Neighbourhood Notification and Input

All property owners within 30 metres of the property will be notified by the FVRD of the Development Variance Permit application and will be given the opportunity to provide written comments or attend the Board meeting virtually to state their comments. FVRD staff encourage the applicant to advise neighbouring property owners and residents of the requested variance in advance of the mail-out notification. To date, the applicant has submitted four (4) letters of support by adjacent property owners.

COST

The application fee of \$1,300 has been paid by the applicant.

CONCLUSION

The applicant has applied for a Development Variance Permit to vary the front lot line setback from 4.6 metres (15 feet) to 1.58 metres (5.2 feet), measured clear to sky, to bring the existing accessory structure into compliance with FVRD zoning regulations.

The applicant has been working with both the building and planning departments to ensure the structure has met all regulations as laid out in both the Building Code and planning bylaws. An error had been made when the applicant calculated the dimensions for his site plan, and he did not obtain a site survey prior to pouring the concrete foundation as noted on the issued building permit. While this error contributed to further costs for the land owner, he continued to work with staff to bring his structure into compliance with all regulations.

No health and safety concerns have been identified in relation to the proposed variance, and the wider right-of-way at the subject property, and trees within it, screen the Quonset structure from the road. Furthermore, the Ministry of Transportation and Infrastructure has issued a Setback Permit granting the right to use and maintain the structure that encroaches into the setback along Chilliwack Lake Road. For these reasons, staff recommend that DVP 2020-23 be issued subject to comments or concerns raised by the public.

OPTIONS

Option 1 – Issue (Staff Recommendation)

Staff recommend that the FVRD Board issue Development Variance Permit 2020-23 to vary the front lot line setback from 4.6 metres (15 feet) to 1.58 metres (5.2 feet) to allow the accessory structure to remain in place, subject to the consideration of any comments or concerns raised by the public.

Option 2 – Refuse

If the Board wishes to refuse the application, the following motion would be appropriate:

MOTION: THAT the Fraser Valley Regional District Board refuse Development Variance Permit

2020-23.

Option 3 – Refer to Staff

If the Board wishes to refer the application back to staff to address outstanding issues, the following motion would be appropriate:

MOTION: THAT the Fraser Valley Regional District Board refer the application for Development Variance Permit 2020-23 to FVRD Staff.

COMMENTS BY:

Graham Daneluz, Director of Planning & Development:	reviewed and supported			
Kelly Lownsbrough, Chief Financial Officer/ Director of Finance:	reviewed and supported			
Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported.				

SCHEDULE A Site Plan



F. V. R. D. BUILDING DEPT. JUL 1 3 2016





Permit/File Number: 2020-04377 Office: Chilliwack Area Office

PERMIT TO REDUCE BUILDING SETBACK LESS THAN 4.5 METRES FROM THE PROPERTY LINE FRONTING A PROVINCIAL PUBLIC HIGHWAY

PURSUANT TO TRANSPORTATION ACT AND/OR THE INDUSTRIAL ROADS ACT AND/OR THE MOTOR VEHICLE ACT AND/OR AS DEFINED IN THE NISGA'A FINAL AGREEMENT AND THE NISGA'A FINAL AGREEMENT ACT.

BETWEEN:

The Minister of Transportation and Infrastructure

Chilliwack Area Office 45890 Victoria Avenue Chilliwack, BC V2P 2T1 Canada

("The Minister")

AND:

Randall Houser 48585 Chilliwack Lake Road Chilliwack, British Columbia V4Z 1A6 Canada

("The Permittee")

WHEREAS:

- A. The Minister has the authority to grant permits for the auxiliary use of highway right of way, which authority is pursuant to both the Transportation Act and the Industrial Roads Act, the Motor Vehicle Act, as defined in the Nisga'a Final Agreement and the Nisga'a Final Agreement Act,
- B. The Permittee has requested the Minister to issue a permit pursuant to this authority for the following purpose:

The construction of a building, the location of which does not conform with British Columbia Regulation 513/04 made pursuant to section 90 of the Transportation Act, S.B.C. 2004, namely; to allow Structure (existing Quonset shed) within 4.5m setback from, Ministry Right-of-Way, located at 48585 Chillwack Lake Road, as shown on drawing 20-25BLC.

C. The Minister is prepared to issue a permit on certain terms and conditions;

ACCORDINGLY, the Minister hereby grants to the Permittee a permit for the Use (as hereinafter defined) of highway right of way on the following terms and conditions:

- This permit may be terminated at any time at the discretion of the Minister of Transportation and Infrastructure, and that the termination of this permit shall not give rise to any cause of action or claim of any nature whatsoever.
- This permit in no way relieves the owner or occupier of the responsibility of adhering to all other legislation, including zoning, and other land use bylaws of a municipality or regional district.
- 3. The Permittee shall indemnify and save harmless the Ministry, its agents and employees, from and against all claims, liabilities, demands, losses, damages, costs and expenses, fines, penalties, assessments and levies made against or incurred, suffered or sustained by the Ministry, its agents and employees, or any of them at any time or times, whether before or after the expiration or termination of this permit, where the same or any of them are based upon or arise out of or from anything done or omitted to be done by the Permittee, its employees, agents or Subcontractors, in connection with the permit.
- If the structures are to be removed or destroyed for any reason, they must be replaced at 4.5 meters from the legal boundary of all road allowances.
- Please be advised that in the event of future road widening, the Ministry of Transportation may ask the applicant to re-locate or remove the permitted structures at the applicant's expense.

Page 1 of 2



Permit/File Number: 2020-04377 Office: Chilliwack Area Office

There shall be no further encroachments into the 4.5m setback. 6.

The rights granted to the Permittee in this permit are to be exercised only for the purpose as defined in Recital B on page 1.

Dated at Chilliwack British Columbia, this 10 day of September 2020

On Behalf of the Minister

Page 2 of 2



SCHEDULE C Letters of Support

November 10, 2020

I am aware that Randall Houser and Virginia Houser, owners of the property at 48585 Chilliwack Lake Road have applied for a Development Variance Permit on the Quonset Garage that was built in 2016.

This is to reduce the front clearance of the Quonset Garage from 4.6 meters to 1.58 meters.

Randall Houser, owner of said property has a building permit on this Quonset Garage and has discussed that the clearance was reduced in error.

We are the neighbors and Do not object to this application.

48575 CHILLANTRA AFLEHE GILBERT Name Address

Julie Gillert

Signature
November 10, 2020

I am aware that Randall Houser and Virginia Houser, owners of the property at 48585 Chilliwack Lake Road have applied for a Development Variance Permit on the Quonset Garage that was built in 2016.

This is to reduce the front clearance of the Quonset Garage from 4.6 meters to 1.58 meters.

Randall Houser, owner of said property has a building permit on this Quonset Garage and has discussed that the clearance was reduced in error.

We are the neighbors and Do not object to this application.

Abbio Auchenway Rd William J MSGladdery Address Name

William J. Mc Bloddery

Signature

November 10, 2020

I am aware that Randall Houser and Virginia Houser, owners of the property at 48585 Chilliwack Lake Road have applied for a Development Variance Permit on the Quonset Garage that was built in 2016.

This is to reduce the front clearance of the Quonset Garage from 4.6 meters to 1.58 meters.

Randall Houser, owner of said property has a building permit on this Quonset Garage and has discussed that the clearance was reduced in error.

We are the neighbors and Do not object to this application.

48580 Auchenway RZ Gevelt White Address Re Name

Signature

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We are the neighbors and Do not object to this application.

<u>HS570 HUCHENWAY RD</u> Address Name WILLL RICHARD

Signature



FRASER VALLEY REGIONAL DISTRICT DEVELOPMENT VARIANCE PERMIT

Permit No. Development Variance Permit 2020-23

Folio No. 733.01316.516

Issued to: Randall and Virginia Houser

Address: 48585 Chilliwack Lake Road

Applicant: Randall and Virginia Houser

Site Address: 48585 Chilliwack Lake Road

The lands affected by and subject to this permit are shown on Schedule "A", Location Map, attached hereto, which forms an integral part of this permit, and are legally described as:

LOT 6, DISTRICT LOT 780, GROUP 2, NEW WESTMINSTER DISTRICT, PLAN NWP37705 001-608-568

LIST OF ATTACHMENTS

Schedule "A": Location Map Schedule "B": Site Plan

AUTHORITY TO ISSUE

1. This Development Variance Permit is issued under Part 14 - Division 9 of the Local Government Act.

BYLAWS SUPPLEMENTED OR VARIED

Zoning Bylaw for Electoral Area "E", 1976 of the Regional District of Fraser-Cheam is varied as follows:

Division Seven, Section 7.3.1 (a) shall be varied from the required setback of 4.6 metres (15 feet) from the highway right-of-way boundary to 1.58 metres (5.2 feet) for an accessory structure.

SPECIAL TERMS AND CONDITIONS

- 1. No variances other than those specifically set out in this permit are implied or to be construed.
- 2. If the holder of this permit does not commence the construction with respect to which the Permit was issued within two (2) years after the date of the permit, this permit shall lapse.
- 3. Development of the site shall be undertaken in accordance with the Site Plan attached hereto as Schedule "B".
- 4. All new construction shall be generally in compliance with Building Permit No. BP013667.

GENERAL TERMS AND CONDITIONS

- 1. This Development Variance Permit is issued Pursuant to <u>Part 14 Division 9</u> of the *Local Government Act.*
- 2. This Development Variance Permit shall not vary the permitted uses or densities of land use in the applicable zoning bylaw nor a flood plain specification designated under <u>Section 524</u> of the *Local Government Act.*
- 3. Nothing in this permit shall in any way relieve the developer's obligation to ensure that the development proposal complies in every way with the statutes, regulations, requirements, covenants and licences applicable to the undertaking.
- 4. Nothing in this permit shall in any way relieve the developer's obligation to comply with all setback regulations for construction of structures or provision of on-site services pursuant to the *Public Health Act*, the *Fire Services Act*, the *Safety Standards Act*, and any other provincial statutes.
- 5. The Archaeology Branch of the Province of British Columbia must be contacted (phone 250-953-3334) if archaeological material is encountered on the subject property. Archaeological material may be indicated by dark-stained soils containing conspicuous amounts of fire-stained or fire-broken rock, artefacts such as arrowheads and other stone tools, or human remains. If such material is encountered during demolition or construction, a Heritage Conservation Act Permit may be needed before further development is undertaken. This may involve the need to hire a qualified Archaeologist to monitor the work.

SECURITY DEPOSIT

As a condition of the issuance of this Permit, and pursuant to <u>Section 502</u> of the *Local Government Act*, the Regional Board is holding the security set out below to ensure that development is carried out in accordance with the terms and conditions of this Permit

Should the holder of this permit:

(a)

- a. fail to complete the works required to satisfy the landscaping conditions contained herein,
- b. contravene a condition of the permit in such a way as to create an unsafe condition,

The Regional Board may undertake and complete the works required to satisfy the landscaping conditions, or carry out any construction required to correct an unsafe condition at the cost of the holder of the permit and may apply the security in payment of the costs of the works, with any excess to be returned to the holder of the permit.

Security Posted:

- an irrevocable letter of credit in the amount of: <u>\$ <N/A></u>.
- (b) the deposit of the following specified security: $\frac{\langle N/A \rangle}{2}$.

Note: The Regional District shall file a notice of this permit in the Land Title Office stating that the land described in the notice is subject to Development Variance Permit Number 2020-23. The notice shall take the form of Appendix I attached hereto.

AUTHORIZING RESOLUTION PASSED BY THE BOARD OF DIRECTORS OF THE FRASER VALLEY REGIONAL DISTRICT ON THE _____ DAY OF_____, ____.

Chief Administrative Officer / Deputy

THIS IS NOT A BUILDING PERMIT

DEVELOPMENT VARIANCE PERMIT 2020-23 SCHEDULE "A" Location Map



DEVELOPMENT VARIANCE PERMIT 2020-23 SCHEDULE "B" Site Plan





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Fraser Valley Regional District DEVELOPMENT	www.fvrd.ca planning@fvrd.ca
SCHEDULE A-4	Permit Application
Development Variance Permit	
Temporary Use Permit	
Development Permit	
An Application Fee in the amount of \$ <u></u> as stipulated in FV upon submission of this application.	RD Application Fees Bylaw No. 1231, 2013 must be paid
Civic 48585 Chillwack LA	ICE RO. PID 001608568
Legal LotBlockSectionTowns Description	hipRangePlan
The property described above is the subject of this application and is refe with my full knowledge and consent. I declare that the information subm respects.	rred to he <mark>rein as t</mark> he 'subject property.' This applicatio <mark>n is ma</mark> de itted in support of the application is true and correct in all

Owners	Name of Owner (print)	Signature of Owner		Date
Declaration	RANDALL HOUSER	Rauen		5 Nor 2020
	Name of Owner (print)	Signature of Owner		Date
	Allenser	VIRGINIA HOU	set	5 Nov 2 020
Owner's Contact	Address 48585 Chill w	vale Lake Res	it this wa	rele,
Information	Egezil		Postal	Code AL
	Phone Cell	গ	Fax	
Office Use	Date	File No.		
Only	Received By	Folio No.		
	Receipt No.	Fees Paid: \$		

Page 1 of 4

C.

nly complete this section if e applicant is OT the owner.	Signature of Owner Signature of Owner		Date		
DT the owner.	Signature of Owner				
rent's contact			Date		
	Name of Agent		Company		
ormation and claration	Address			City	
-	Email			Postal Code	
-	Phone	Cell		Fax	
L	I declare that the information sub	omitted in support	of this application i	is true and correct in a	ll respects.
ſ	Signature of Agent			Date	
D roperty Size35	Present Zoning	CR		L	
risting Use					
oposed Development <u>&</u>	unice the				
roposed Variation / Supplem	ent lobb warter	-TO FRew	T SET B	BACK.	
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Provincial Requirements (This is not an exhaustive list; other provincial regulations will apply)

Riparian Areas Regulation Please indicate whether the development proposal involves residential, commercial, or including vegetation removal or alteration; soil disturbance; construction of buildings and structures; creation of impervious or semi-pervious surfaces; trails, roads, docks, wharves, bridges and, infrastructure and works of any kind – within:



30 metres of the high water mark of any water body

a ravine or within 30 metres of the top of a ravine bank

"Water body" includes; 1) a watercourse, whether it usually contains water or not; 2) a pond, lake, river, creek, or brook; 3) a ditch, spring, or wetland that is connected by surface flow to 1 or 2 above.

Under the *Riparian Areas Regulation* and the *Fish Protection Act*, a riparian area assessment report may be required before this application can be approved.

ContaminatedPursuant to the Environmental Management Act, an applicant is required to submit aSites Profilecompleted "Site Profile" for properties that are or were used for purposes indicated in
Schedule 2 of the Contaminated Sites Regulations. Please indicate if:



the property has been used for commercial or industrial purposes.

If you responded 'yes,' you may be required to submit a Site Profile. Please contact FVRD Planning or the Ministry of Environment for further information.

Archaeological Resources

Are there archaeological sites or resources on the subject property?

yes	no	l don't know

If you responded 'yes' or 'I don't know' you may be advised to contact the Archaeology Branch of the Ministry of Tourism, Sport and the Arts for further information.

Page 3 of 4

When providing Application Forms to the applicant, Regional District staff shall indicate which of the following attachments are required for this application. Additional information may also be required at a later date.

	Required	Received	Details
Location Map			Showing the parcel (s) to which this application pertains and uses on
			adjacent parcels
Site Plan			Reduced sets of metric plans
			North arrow and scale
At a scale of:			Dimensions of property lines, rights-of-ways, easements
			Location and dimensions of existing buildings & setbacks to lot lines,
1:			rights-of-ways, easements
		1	Location and dimensions of proposed buildings & setbacks to lot lines,
			rights-of-ways, easements
		1	Location of all water features, including streams, wetlands, ponds,
			ditches, lakes on or adjacent to the property
		-	Location of all existing & proposed water lines, wells, septic fields,
			sanitary sewer & storm drain, including sizes
			Location, numbering & dimensions of all vehicle and bicycle parking,
			disabled persons' parking, vehicle stops & loading
			Natural & finished grades of site, at buildings & retaining walls
			Location of existing & proposed access, pathways
			Above ground services, equipment and exterior lighting details
			Location & dimensions of free-standing signs
			Storm water management infrastructure and impermeable surfaces
			Other:
Floor Plans			Uses of spaces & building dimensions
		1	Other:
Landscape			Location, quantity, size & species of existing & proposed plants, trees &
Plan			turf
			Contour information (metre contour intervals)
Same scale			Major topographical features (water course, rocks, etc.)
as site plan			All screening, paving, retaining walls & other details
			Traffic circulation (pedestrian, automobile, etc.)
			Other:
Reports			Geotechnical Report
			Environmental Assessment
			Archaeological Assessment
1			Other:

The personal information on this form is being collected in accordance with Section 26 of the *Freedom of Information and Protection of Privacy Act, RSBC 1996 Ch. 165* and the *Local Government Act, RSBC 2015 Ch. 1.* It will only be collected, used and disclosed for the purpose of administering matters with respect to planning, land use management and related services delivered, *or* proposed to be delivered, by the FVRD. Questions about the use of personal information and the protection of privacy may be directed to the FVRD Privacy Officer at 45950 Cheam Avenue, Chilliwack, BC V2P 1N6, Tel: 1-800-528-0061 FOl@fvrd.ca.

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CORPORATE REPORT

To: Electoral Area Services Committee From: Andrea Antifaeff, Planner 1 Date: 2020-12-08 File No: 3920-20-1619, 2020

Subject: Zoning Bylaw Amendment No. 1619, 2020 to address Temporary Tourist Accommodation in Snow Avalanche Hazard Areas, Hemlock Valley, Area C

RECOMMENDATION

THAT the Fraser Valley Regional District Board give first reading to the bylaw cited as *Fraser Valley Regional District Electoral Area C Zoning Amendment Bylaw No. 1619, 2020* to amend Schedule C in Zoning Bylaw 100, restricting Temporary Tourist Accommodation in areas identified as being in the 'Blue Zone' in the 2020 Dynamic Avalanche Consulting Ltd. *Hemlock Valley Snow Avalanche Assessment*;

THAT *Fraser Valley Regional District Electoral Area C Zoning Amendment Bylaw No.* 1619, 2020 be forwarded to Public Hearing;

THAT the Fraser Valley Regional District Board delegate the holding of the Public Hearing with respect to proposed *Fraser Valley Regional District Electoral Area C Zoning Amendment Bylaw No.* 1619, 2020 to Director Bales, or her alternate in her absence;

THAT Director Bales or her alternate in her absence preside over and Chair the Public Hearing with respect to proposed *Bylaw 1619, 2020*;

AND THAT the Chair of the Public Hearing be authorized to establish procedural rules for the conduct of the Public Hearing with respect to proposed *Bylaw 1619, 2020* in accordance with the Local Government Act;

AND FURTHER THAT in the absence of Director Bales, or her alternate in her absence at the time of the Public Hearing with respect to proposed *Bylaw 1619, 2020* the Fraser Valley Regional District Board Chair is delegated the authority to designate who shall preside over and Chair the Public Hearing regarding this matter;

AND FINALLY THAT the Fraser Valley Regional District Board authorize its signatories to execute all documents relating to *Bylaw 1619, 2020*.

STRATEGIC AREA(S) OF FOCUS

Provide Responsive & Effective Public Services Foster a Strong & Diverse Economy

BACKGROUND

In 2011, Temporary Tourist Accommodation was introduced into the Zoning Bylaw for Electoral Area C to allow temporary tourist accommodation in Hemlock Valley.

Temporary Tourist Accommodation means a temporary rental accommodation for the travelling public not exceeding thirty (30) consecutive days by an individual or group and provides for accommodation in a dwelling unit; it does not include a Hotel, Motel, accessory boarding, or bed and breakfast accommodations.

In 2011, Temporary Tourist Accommodation use was restricted to areas that were identified as being outside the "Blue Zone" snow avalanche hazard area set out in the 2011 avalanche assessment by Dr. D. McClung. The Blue Zone is an area of moderate snow avalanche hazard where construction of occupied structures may be permitted with specified conditions to reduce the avalanche risk (CAA 2016).

The amendment in 2011 restricted Temporary Tourist Accommodation use in avalanche hazard areas, because unlike the bed and breakfast use or boarding use, the owner of the property is not present on site and therefore not able to monitor the situation if snow conditions are creating a situation in which the threat of a snow avalanche is elevated and the safety of people and property is at risk. The assumption was that property owners would have an understanding of the level of hazards that affect their property but people renting the dwelling for short-term vacation uses would not be is a position to understand and accept these risks.

DISCUSSION

The new Hemlock Valley Snow Avalanche Hazard Assessment report by Dynamic Avalanche Consulting Ltd. (Dynamic) changes our understanding of the location of snow avalanche hazards in Hemlock Valley. The proposed zoning amendment would amend the area where Temporary Tourist Accommodation use is restricted to reflect the properties that have been identified as being located in 'Blue Zones' in the updated 2020 Avalanche Assessment.

The proposed change will reduce the number of properties where Temporary Tourist Accommodation use is not permitted from 19 entire parcels to 8 entire parcels plus parts of 9 others.

Below is the 2011 zoning bylaw amendment map, which is currently used and reflects properties where Temporary Tourist Accommodation use is prohibited and the proposed 2020 zoning bylaw amendment map which reflects properties where Temporary Tourist Accommodation use would now be prohibited. (Note hatched properties is where the use is prohibited).



2011

2020

The recent report from Dynamic stated that considerations for development in Blue Zone hazard areas includes but is not limited to the number of occupants and timing of occupancy per the Canadian Avalanche Association (2016) Technical Aspects of Snow Avalanche Risk Management.

FVRD staff feel this amendment to address Temporary Tourist Accommodation is important to the community and will benefit the economy of Hemlock Valley by reducing restrictions on Temporary Tourist Accommodation use in the alpine ski village of Hemlock Valley.

Property Zoning

In 2011, the FVRD applied Zoning to properties located in Hemlock Valley upon the expiration of a previously registered private Building Scheme which had identified permitted uses of land. Zoning was

applied to properties based on the expired building schemes, the 2011 McClung avalanche assessment and a variety of other factors.

The 2011 McClung report concluded that many properties identified in avalanche areas were not suitable for residential construction. As a result, in some cases the zoning bylaw supported densities lower than those previously established by the building scheme.

However, the 2020 Dynamic avalanche assessment concludes that the construction of occupied structures in the Blue Zone is permitted, subject to the following:

- Structural reinforcement designed by a Qualified Professional Engineer to withstand avalanche impact or mitigation measures to modify the avalanche hazard (e.g. deflection dam, snowpack support structures).
 - For residential parcels located partially within a 'Blue Zone', a restrictive covenant could be placed on the parcel indicating that construction of an occupied structure is permitted in only the portion of the parcel that is in the 'White Zone'.
 - For development requested in the 'Blue Zone', mitigation efforts should be reviewed by the FVRD and a qualified Professional Engineer and avalanche professional (or one person that meets both qualifications by virtue of education and experience) prior to approval.

As such, the updated avalanche assessment in conjunction with the forthcoming OCP update may present opportunities for property owners in Hemlock Valley to pursue density increases on existing lots. Contrary to the former avalanche study from 2012, the 2020 avalanche assessment may be a supporting document for property owners wishing to explore greater densities for their properties.

Other factors are often considered when rezoning properties to increase density such as servicing, access, snow management, environmental, geotechnical hazards, etc. These would need to be considered as a part of a rezoning application.

Public Hearing

Pursuant to the *FVRD Development Procedures Bylaw No. o8*31, 2007 a Public Hearing will be advertised and scheduled. A mailed notice to property owners and occupiers will be sent per the *Local Government Act*. In addition, the public hearing will be advertised in the local newspaper and on the FVRD web-site.

COST

No fee is levied for Zoning Bylaw amendments initiated by the Fraser Valley Regional District. Direct expenditures will include the advertising and scheduling of the Public Hearing estimated at about \$2,000. Costs for staff time are not estimated here.

CONCLUSION

Staff recommend that the FVRD Board give first reading to the bylaw cited as *Fraser Valley Regional District Electoral Area C Zoning Amendment Bylaw No. 1619, 2020* as outlined in the recommendation section of this report in order to proceed with the public review process.

COMMENTS BY:

Graham Daneluz, Director of Planning & Development: Reviewed and supported

Kelly Lownsbrough, Chief Financial Officer/ Director of Finance: Reviewed and supported

Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported.

HEMLOCK VALLEY SNOW AVALANCHE HAZARD ASSESSMENT

FINAL

Prepared for: Fraser Valley Regional District 45950 Cheam Ave. Chilliwack, BC V2P 1N6

Fraser Valley Regional District

Prepared by: *Dynamic Avalanche Consulting Ltd. Box 2845 Suite 301, 306 1st St. W. Revelstoke, BC V0E 2S0* 250.837.4466



6 October, 2020

Executive Summary

Dynamic Avalanche Consulting Ltd. (DAC) was retained by Fraser Valley Regional District (FVRD) to assess snow avalanche hazard for sections of Mt. Keenan in the Hemlock Valley. The study area included sections of Mt. Keenan that were previously identified as having snow avalanche hazard that could impact residential land parcels along Edelweiss Drive and infrastructure at the sewage lagoons area. The objective of the assessment described in this report was to update previous hazard assessments for these areas, given changes to vegetation and updated topography since the previous assessment in 2012.

DAC combined desktop, field, and analytical methods to assess the snow avalanche hazard. This included interpretation of historical aerial photographs, review of historical reports and observations, analysis of historical snowpack data, a site visit to assess and collect vegetation and terrain data, and application of statistical and dynamic avalanche runout models. The results were compiled to assess frequency and magnitude of snow avalanches with up to 300year return periods, as recommended by CAA (2016).

The assessment identified seven snow avalanche paths within the vicinity of previously identified paths. More individual paths were identified than previous assessments, as some of the previously defined paths were split into multiple paths. This refinement of the mapping was possible due to the improved topographic base mapping, improved avalanche modelling methods, and detailed field observation. Of the seven paths, three intersect land parcels located along Edelweiss Drive and two paths intersect the sewage lagoons area. Two of the paths do not affect current residential land parcels or FVRD infrastructure.

No current residential land parcels or infrastructure were identified in the Red Zone (high hazard). Hazard areas identified as being within the Blue Zone (moderate hazard) include portions or the entirety of 17 residential land parcels, an approximately 190 m length of Edelweiss Drive, the northern buildings in the sewage lagoons area, and the northwest sewage lagoon.

DAC recommends that FVRD follow the recommendations for occupied and unoccupied structures as outlined by CAA (2016). The current FVRD policy indicates that snow avalanches with a return period of up to 10,000 years should be assessed. The CAA (2016) guidelines recommend consideration of snow avalanches with a return period up to 300 years, which has been followed by most jurisdictions in Canada, and similar classifications are being applied in most U.S. jurisdictions, making this a North America-wide guideline. This guideline is also consistent with hazard map systems in European countries, including Switzerland and Austria.

Hazard boundaries may change in the future due to forest or terrain changes. Hazard boundaries should be updated should substantial changes occur.

To increase confidence and reduce uncertainty in future assessments, FVRD should obtain unedited LiDAR data.

Table of Contents

1.0	Introduction1
1.1	Background1
1.2	Scope of Work
2.0	Technical Overview of Snow Avalanche Hazard3
2.1	Uncertainty and Limitations4
2.2	Frequency and Magnitude4
2.3	Avalanche Hazard Criteria for Occupied and Unoccupied Structures5
3.0	Physical Setting and Snow Climate6
4.0	Analysis and Results7
4.1	Historical Aerial Photographs7
4.2	Previous Reports and Observations9
4.3	Historical Snowpack Data10
4.4	Site Visit12
4	.4.1 Path E-475
4	.4.2 Path E-450
4	.4.3 Path E-405
4	.4.4 Path E-30014
4	.4.5 Path E-9014
4	.4.6 Path SL-10514
4	.4.7 Path SL-20014
4.5	Statistical and Dynamic Models15
5.0	Hazard Assessment
6.0	Forest and Climate Change16
6.1	Forest Change16
6.2	Climate Change17
7.0	Recommendations17
7.1	Occupied Structures
7.2	Unoccupied Structures
7.3	Future Assessments19
8.0	Summary19
9.0	Limitations and Closure19
Refere	ences

List of Appendices

- Appendix 1 Zoning for Occupied Structures, Excerpt from CAA (2016)
- Appendix 2 Historical Aerial Photographs
- Appendix 3 Hazard Boundaries from Previous Reports
- Appendix 4 Photographs from Site Visit
- Appendix 5 Snow Avalanche Path Profiles
- Appendix 6 Statistical and Dynamic Model Parameters
- Appendix 7 Weighted Tables of Runout Distance for Paths

List of Drawings

- Drawing 01 Number 20-0009-FVR-001 Avalanche Path Map
- Drawing 02 Number 20-0009-FVR-002 Avalanche Hazard Map

1.0 Introduction

Fraser Valley Regional District (FVRD) requested that Dynamic Avalanche Consulting Ltd. (DAC) reassess snow avalanche hazard for a portion of Mt. Keenan in the Hemlock Valley, on the northern side of the Fraser Valley near Harrison Lake (Figure 1). There are numerous avalanche paths located on Mt. Keenan above sections of Hemlock Valley, including Edelweiss Drive and the sewage treatment plant (sewage lagoons). Residential properties line Edelweiss Drive, and the sewage lagoons area includes two sewage ponds as well as unoccupied maintenance buildings.



Figure 1. Location map of study area. The northern green polygon shows the Edelweiss Drive development area, and the southern green polygon shows the location of the sewage lagoons.

1.1 Background

Snow avalanche hazards from the slopes of Mt. Keenan were previously identified and documented in the following reports:

• Freer (1981) investigated snow avalanche hazard to Subdivisions 4 (Edelweiss Drive) and 6 (Snowmist Drive near the sewage lagoons) at Hemlock Valley, following the international method of avalanche hazard zoning (up to 300-year return period). Maps outlining Red (high hazard) and Blue (potential hazard) zones were produced. Freer indicated that almost half of the avalanche hazard was due to logging activity above the subdivision.

- Mears (1982) provided avalanche hazard and zoning recommendations for Subdivisions 4 and 6 by assessing a design avalanche with a 1% annual probability (100-year return period). Maps delineating Red (high hazard) and Blue (moderate hazard) zones were produced.
- D&E McClung Enterprises Ltd. (2000) assessed snow avalanche hazard with a return period of about 500 years. Seven sites with avalanche hazard were identified during the assessment, including five sites above Edelweiss Drive, one at Snowmist Place, and one above the sewage lagoons. Maps referenced in their report were not available for inspection for the current (DAC) assessment.
- D&E McClung Enterprises Ltd. (2004) produced a site-specific avalanche hazard report for Plan Number 55972, Lot 53.
- D&E McClung Enterprises Ltd. (2010) completed an assessment of snow avalanche hazards with consideration of occupied structures and facilities, which was to be considered as an updated zoning plan from D&E McClung Enterprises Ltd. (2000). The assessment followed the zoning guidelines prepared by the Canadian Avalanche Association, which analyzed 300-year return period snow avalanches. The report concluded that the sewage lagoons and nearby buildings were in the Blue Zone. Most of the land parcels on the upslope side of Edelweiss Drive were also determined to be located within the Blue Zone.
- D&E McClung Enterprises Ltd. (2012) prepared a risk assessment and suggested mitigation strategies for snow avalanche hazards that may threaten facilities at Hemlock Valley. The findings identified six problem areas, including four along Edelweiss Drive and two above the sewage lagoons. The report mapped snow avalanche hazard with a 500-year return period.

A primary change over the timeframe of the reports is forest cover, which has resulted in changes in avalanche hazard. Most of the trees on the northeast to southeast slopes of Mt. Keenan were logged in the 1960's. The trees were relatively small during the early avalanche assessments and became substantially taller within a higher density forest canopy during the assessments in the 2000's. Vegetation cover affects avalanche hazard, by reducing the size of starting zones and preventing the initiation of avalanches by anchoring of the snow, influencing snowfall distribution and weak layer growth in the snowpack, and forests can limit the runout distance of avalanches at the bottom of the paths (i.e., near residential areas).

FVRD was interested in reassessing snow avalanche hazard for the areas identified by D&E McClung Enterprises Ltd. (2012). The reasoning for FVRD's interest in reassessing the problem areas was due to changes to forest cover, newly available terrain maps and higher resolution digital mapping, and a new site specific geohazard assessment report for the identified areas (FVRD, 2019). The results of the updated assessment are intended to be used by FVRD for development approvals, community planning, hazard management, and emergency management purposes.

1.2 Scope of Work

FVRD requested that DAC perform a snow avalanche zoning assessment of the hazard areas identified by D&E McClung Enterprises Ltd. (2012). The study area includes the sections of Mt. Keenan above Edelweiss Drive and the sewage lagoons area previously identified as being exposed to snow avalanche hazard. Hazard outside of the study area boundaries (Figure 1) were not assessed. Hazard around Snowmist Drive was not analyzed during this assessment, as D&E McClung Enterprises Ltd. (2012) indicated there was adequate forest cover to prevent avalanches from reaching the residences.

The scope of the assessment was based on the Request For Information (RFI) provided by FVRD (2019) and the proposal prepared for FVRD (DAC, 2020a) which provided the following scope of work:

- Project management;
- Site characterization, including review of previous assessments, imagery, snow data, and terrain data;
- Site visit, which was completed on June 10 and 11, 2020, to define snow avalanche path characteristics and collect important data for the assessment;
- Zoning analysis using statistical and dynamic modelling and site visit results to perform frequency and magnitude analysis and estimate approximate velocity and impact pressure to define hazard zones in the study area;
- Forest and climate change analysis, in a qualitative manner;
- Reporting, including a report describing methods and results and plan view maps (this document), as well as Hazard Assurance Statement for Development Approvals for the study area; and,
- A conference call with FVRD staff to discuss the findings of the assessment.

The work was completed under an Agreement for Services dated February, 2020.

2.0 Technical Overview of Snow Avalanche Hazard

A snow avalanche is a rapid flow of snow or ice down a slope. Snow avalanches may release spontaneously, with no obvious trigger, or may be triggered by rapid loading (e.g., human causes, explosives) or mechanical changes to the snowpack brought on by meteorological conditions (e.g., snow, rain, wind, warm air temperature, sun). Snow avalanches can also be triggered by seismic loading.

The two predominant types of snow avalanches include loose avalanches and slab avalanches (McClung and Schaerer, 2006). Loose avalanches occur within snow with low cohesion, where gravitational forces overpower frictional resistance, like sand sliding down a hill. This generally occurs during storms where cohesion of fallen snow is low or on days with substantial warming from air temperature or solar warming, where bonds between snow grains are weakened. Slab avalanches occur when a cohesive block of the snowpack is isolated on all sides and slides downslope due to gravitational forces. Slab avalanches are further categorized based on when they release with respect to storms.

Both loose and slab avalanches can be classified as dry or wet, depending on the water content of the snow involved. Dry avalanches are most common during winter months and wet avalanches are most common in spring and summer months, although they can also occur in the winter during rain events and at low elevations. Fast-flowing dry avalanches may have a powder component, which is a suspended layer of snow, with a height that is often tens of metres above the dense flow. Slab avalanches are typically the most hazardous, as they contain a large amount of snow that can reach the runout zone and be destructive.

A third and much less common type of snow avalanche is a glide avalanche. In this circumstance, the entire snowpack slowly glides downslope because of water flow at the base of the snowpack, possibly opening cracks within the snowpack. The cracks may expand and release a portion of the snowpack downslope, termed a glide avalanche. Such avalanches generally occur in wet snow climates or during the spring in dry snow climates.

This report assumes that the predominant avalanche types in the Hemlock Valley are dry and wet avalanches, and that the design event (i.e., most destructive) within a 300-year return period is a dry slab avalanche.

Snow avalanche hazard may exist anywhere with enough snow accumulation and steep slopes (generally greater than 25°). The terrain feature where a snow avalanche forms, slides, and deposits is referred to as a snow avalanche path. The path includes a starting zone, track, and runout zone. Starting zones are where the snow avalanche initiates and begins to slide, generally on terrain steeper than 30°, but sometimes as low as 25°. Snow avalanches entrain more snow within the track and speed up, usually in terrain with slope angles between 15° and 30°. Snow avalanches then decelerate and stop in the runout zone with slope angles typically less than 15°, leaving a deposit of snow. Larger paths are generally capable of producing avalanches of higher destructive potential, but hazardous snow avalanches may also release and deposit debris on relatively short slopes at any elevation.

2.1 Uncertainty and Limitations

Snow avalanche prediction is complex and subject to high uncertainty. There is uncertainty in snow avalanche runout extent and frequency estimates due to limited historical avalanche observations in the study area, alterations to forest cover from anthropogenic activities, and limitations of statistical and dynamic models. Future alteration of the landscape and vegetation, such as from anthropogenic activities, forest fire, infestation, or other geohazards may alter the frequency and magnitude of snow avalanches and their runout extent and characteristics.

2.2 Frequency and Magnitude

Jamieson (2018) describes frequency as the average number of avalanches that reach or exceed a given location within a specified time period, often a year. The reciprocal of the average annual frequency is the return period. Jamieson (2018) indicates that return period is described as the average time, usually in years, between avalanches that reach or exceed a specified location. For land-use planning, return periods of 3, 10, 30, 100 and 300 years are often used because uncertainty in the data makes it difficult to estimate return periods more

accurately. It is possible for two 100-year avalanches to occur within the same year or within consecutive years, although this would be considered a low probability (unlikely) event.

In Canada, snow avalanche magnitudes are classified by size (Table 1). The maximum size of an avalanche depends on snow supply and terrain configuration and therefore will vary for any given path. Within the Hemlock Valley study area, the potential avalanche sizes range from 1 to 3, with Size 3 being the maximum potential design event.

Magnitude is often related to frequency; in general, large destructive avalanches occur less frequently, while small ones occur more frequently. The magnitude and frequency are also related to location in the overall path.

Size	Destructive Potential	Typical Mass	Typical Path Length	Typical Impact Pressure
1	Relatively harmless to people	<10 t	10 m	1 kPa
2	Could bury, injure, or kill a person	102 t	100 m	10 kPa
3	Could bury and destroy a car, damage a truck, destroy a wood framed house, or break a few trees	103 t	1,000 m	100 kPa
4	Could destroy a railway car, large truck, several buildings, or a forest area of approximately 4 hectares	104 t	2,000 m	500 kPa
5	Largest snow avalanche known. Could destroy a village or a forest area of approximately 40 hectares	105 t	3,000 m	1,000 kPa

Table 1. Canadian classification	ation system for snow a	avalanche destructive size	e (CAA, 2016).
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Note: Size 1 is the minimum size rating. In general, half sizes are not defined, but may be used by experienced practitioners for avalanches which are midway between defined avalanche size classes (i.e., size 2.5).

2.3 Avalanche Hazard Criteria for Occupied and Unoccupied Structures

The CAA guidelines for occupied structures and unoccupied structures are presented in Technical Aspects of Snow Avalanche Risk Management, prepared by the Canadian Avalanche Association (CAA, 2016). The document was prepared to provide snow avalanche professionals resources and guidelines for consistency across the profession. The document describes best practices and was designed to be adopted as the minimum standard throughout Canada for hazard and risk assessment and mitigation, resulting in more consistent decision making and better risk management. DAC (2020b) documents the recommendation of FVRD adopting the CAA (2016) guidelines in place of their hazard acceptability thresholds for snow avalanches (FVRD, 2017). This report assumes that FVRD will accept this recommendation and adopt the CAA (2016) guidelines for snow avalanche hazards.

Occupied structures include industrial, residential, commercial and other structures where people spend portions of the day or night, may gather in or around during a period of avalanche hazard, provide essential services, or otherwise attract people (CAA, 2016). For occupied structures, CAA (2016) recommends that hazard mapping includes the impact-based classification system found in Appendix 1 of this report. CAA (2016) provides further guidance for occupied and unoccupied structures in avalanche terrain (Table 2).

Table 2. Relevant excerpts of Table 9.2 in CAA (2016), captioned "Typical elements at risk for municipal, residential, commercial and industrial areas with avalanche size and return-period thresholds for avalanche planning".

Element at Risk	Typical avalanche size	Typical return period (years)		Typical Planning
			Scale	Path-scale assessment for an exposure time scale of decades.
			Identification and analysis	Path profile mapping (including statistical runout estimation), frequency-magnitude analysis (e.g. vegetation and climate studies, historical and human records)
			Assessment techniques and decision aids	Quantitative procedures (e.g. locally validated numerical runout modeling); impact-based classification
Occupied	> 1 > 1 kPa	≤ 300	Supporting map types	Hazard zone map; avalanche path map.
Structures 2 T KPa		Mitigation options	Location planning, reinforcement and design of structures, starting zone snowpack support structures and, track and runout zone long-term measures (e.g. splitting wedges). Specification of short- term operational measures (e.g. developing operational risk assessment aids and evacuation plans) where long- term mitigation does not achieve tolerable risk.	
			Scale	Path-scale assessment for an exposure time scale of years to decades.
			Identification and analysis	Frequency-magnitude analysis (e.g. vegetation and climate studies, historical and human records)
Unoccupied			Assessment techniques and decision aids	Qualitative or quantitative procedures; impact-based classification.
other	> 2	≤ 30	Supporting map types	Hazard zone map.
infrastructures			Mitigation options	Location planning, reinforcement and design of structures, starting zone snowpack support structures and, track and runout zone long-term measures (e.g. splitting wedges). Specification of short- term operational measures (e.g. developing operational assessment aids).

3.0 Physical Setting and Snow Climate

Hemlock Valley is in the Coast Mountains of BC, which experiences a Maritime snow climate (McClung and Schaerer, 2006) influenced by weather patterns from the Pacific Ocean. Maritime snow climates generally have relatively warm air temperatures and high amounts of precipitation in the form of both snow and rain. This typically results in a relatively deep

snowpack, composed of layers of dense snow and melt-freeze crusts from rain events. Loose and slab avalanches generally occur during and within the days after storm events. With storms that deposit large amounts of new snow and wind-transported snow, large and destructive snow avalanches may result. Storm snow generally bonds to the underlying snowpack within a few days following the storm, which generally reduces snow avalanche hazard over time. However, large and destructive slab avalanches can still occur when weak layers are present in the snowpack. Other triggers may also release snow avalanches well after storms, for example where warm air, solar inputs, or rainfall lead to softening and strain in the snowpack.

The freezing level is variable in a maritime snow climate. A deep snowpack may be present in the starting zones when limited or no snow is present in the valley. Hazard from snow avalanches may thus persist in the valley bottom, even when no snow is present at that elevation. This is accentuated in spring months, when snow melts in lower elevations or precipitation falls as rain, whereas a deep snowpack and snowfall may still occur in the starting zones.

4.0 Analysis and Results

This section summarizes the findings of the analyses conducted, as detailed in the scope of work (DAC, 2020a) and recommended by CAA (2016). The analyses included:

- Comparison of historical aerial photographs to observe for changes over time;
- Review of previous reports from the study area to compare techniques and findings and to obtain information about previous avalanche activity;
- Review of historical snowpack data to assess snow supply;
- A site visit, conducted June 10 to 11, 2020, to assess topography, vegetation, and other evidence and measurements to support the overall assessment; and
- Statistical and dynamic avalanche modelling to assess snow avalanche extents and characteristics.

4.1 Historical Aerial Photographs

Aerial photographs were obtained from Digital Air Photos of B.C. and Natural Resources Canada for the years 1930, 1951, 1968, 1983, 2003, and 2016 (Appendix 2). The photographs were georeferenced to allow comparison between each photo year.

The photographs showed trim lines (location of vegetative type and age differences) of preceding snow avalanche events that occurred at least once between the years the air photos were taken. Prominent avalanche related trim lines were observed in the 1930 and 1951 air photos, as they were both taken prior to logging. Trim lines were observed close to Edelweiss Drive in two areas (Figure 2), suggesting large avalanches reached near the road pre-1930. These same trim lines were not apparent in the 2016 photograph, which suggests that avalanche events similar to the pre-1930 events have not occurred since then.

The photograph from 1968 shows the extensive logging conducted around 1963, which removed large amounts of forest cover in the study area (Appendix 2). Trim lines within the

forest growth since logging in 1960's were generally similar to pre-logging conditions near the sewage lagoons area (Figure 3), although some areas could not be compared due to road and infrastructure construction since the logging activities. There was no obvious trim line in the 2003 air photo of the reported avalanche that reached the fence of the sewage lagoons in 1999 by D&E McClung Enterprises Ltd. (2010), suggesting that the avalanche debris flowed through the trees without knocking them down. This is not uncommon for a wet flow, which still has destructive potential for structures, despite not destroying the forest.



Figure 2. Comparison of aerial photographs from 1930 (left) and 2016 (right) for the Edelweiss Drive area. Red dashed line indicates the approximate location of trim lines observed in 1930 photograph.



Figure 3. Comparison of aerial photographs from 1930 (top) and 2016 (bottom) for the sewage lagoons area. Red dashed line indicates the approximate location of trim lines observed in 1930 photograph.

4.2 **Previous Reports and Observations**

The reports described in Section 1.1 were reviewed during completion of our assessment. Previous hazard boundaries were summarized and compared (Appendix 3), and variation of hazard boundaries between the reports was noted. Variations in runout extent is likely due in large part to changes in vegetation. Lateral differences in the boundaries are expected to be largely based on differences in analyses, techniques, and available data. For example, statistical and dimensional dynamic modelling was not available in the early 1980's and multidimensional dynamic modelling was not available for the previous reports in the 2000's. Modern mapping techniques with high-resolution topography were also not available for any of the previous reports. These are important methods of defining hazard boundaries with increased confidence in today's state-of-practice, and without them the resulting hazard boundaries typically have greater uncertainty. For example, hazard boundaries for the reports produced in the 1980's included hand-drawn lines and the more recent reports appeared to have used satellite imagery that was approximately 50 m shifted from the coordinate system.

Given the expertise of the consultants that completed the previous hazard assessments, the field observations are expected to be of high quality and reliable. However, in completion of our

assessment it was clear that there were issues associated with the transference of this ground information into a reliable, base map format that can reliably be used by the FVRD.

Helpful information from the previous reports include that the slopes of Mt. Keenan were logged around 1963 (D&E McClung Enterprises Ltd., 1999) and that an avalanche reached the fencing around the sewage lagoons in 1999 (D&E McClung Enterprises Ltd., 2010).

Mr. Chris Dyck, a ski patroller at the nearby Sasquatch Mountain Resort with over 10 years of avalanche experience, was interviewed in reference to avalanche activity in Hemlock Valley. Mr. Dyck indicated that most avalanches in the area are direct-action avalanches, i.e., releasing during or shortly after storms. Persistent weak layers have been found in the snowpack, but they are often short-lived due to relatively warm air temperature. The thickest slab avalanche that Mr. Dyck observed was 50 cm thick, but he believes that slabs over 1 m thick may be possible over many years of observations. Mr. Dyck has observed many loose wet avalanches as well, but the destructive size of them were generally small. Mr. Dyck did not have specific observations of avalanche activity for the study area of this assessment but provided useful information on avalanche activity in Hemlock Valley.

4.3 Historical Snowpack Data

Nearby snow course, weather station, and weather plot data were used to assess the potential snow depths and influence on avalanche hazard for the study area. Four stations were used in the analysis, all operated by the province of British Columbia (Table 3). Although the reliability of these data cannot be confirmed, the data were reviewed and appeared representative, and they were generally consistent between nearby stations. Extreme value statistics were used to estimate snow depths for each station for given return periods beyond the length of the data record.

Both linear and exponential regression analyses were conducted on the snow depth data from the stations so that snow depths (cm snow) could be estimated for relevant elevations. Each regression has a coefficient of determination (R²) greater than 0.96, suggesting good fits. The 10-year, 30-year, and 100-year snow depths for relevant elevations are presented in Figure 4.

A second method used to assess the snow depth was completed using elevation corrections for a single representative station. The Dickson Lake station was used due to its proximity and elevation, as it is located approximately 11 km southwest of the study area and at a similar elevation to the upper portions of the avalanche paths. Elevation corrected snow depths were calculated based on the approaches of Claus et al. (1984) and Liston and Elder (2006).

Averaging all the methods (Table 4), the 100-year snow depth is estimated to be between 6.5 and 7.5 m for the starting zone elevations and 5.0 to 5.5 m for the runout zone elevations.

Snow data from the nearby Sasquatch Mountain Resort's weather plot were also analyzed to assess weather trends. Data from the last three winter seasons were available (2017-2018 season to the 2019-2020 season). Summary statistics of the data are presented in Table 5. Although only three years of data were available, the results suggest that a winter storm has the potential to produce slab avalanches approximately 1.0 to 1.5 m thick.

The snow stations used in this analysis are often in relatively flat and sheltered sites, whereas the snow avalanche starting zones are inclined terrain and exposed to wind and sun. The snowpack depths in the starting zones may be influenced from wind events, solar activity, and from the movement of snow during avalanches over the season. Local-scale snowpack depths may therefore vary across the study area on any given year.

Given the findings, the starting zones of the snow avalanche paths in the study area hold sufficient snow to produce snow avalanches during most winter and spring months.

Station Name	Approximate Elevation (m)	Latitude (°)	Longitude (°)	Distance from Study Area (km)	Data Range (From-To)
Dickson Lake	1160	49.32	-122.07	11 km southwest	1991-2020
Spuzzum Creek	1180	49.66	-121.66	37 km northeast	2004-2020
Stave Lake	1250	49.58	-122.31	35 km northwest	1967-2020
Hope	70	49.38	-121.42	40 km east	1966-1981

Table of chemical and weather statistic deed in the showpash analysis	Table 3. Snow course	and weather stations	used in the snow	pack analysis.
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Figure 4. Predicted snow depths for snow course stations near Hemlock Valley, using a linear approach (left) and exponential approach (right).

Table 4. 100-year snow depth derived from various methods. Elevation corrections for the Dickson Lake 100-year snow depth.

	100-year snow depth (cm)						
Elevation (m)	Linear	Exponential	Claus et al. (1984)	Liston and Elder (2006)	Average		
1250 (starting zone)	724	758	729	792	751		
1100 (starting zone)	648	605	606	713	643		
950 (Edelweiss)	573	483	492	642	548		
860 (sewage lagoon)	527	422	429	603	495		

Statistic	2017-2018	2018-2019	2019-2020
Temporal length of dataset	Nov 27 to Apr 2	Dec12 to Mar 31	Dec20 to Mar 16
Maximum 24-hour snowfall (cm)	40	55	55
Maximum 3-day snowfall (cm)	94	64	97
Maximum snow accumulation on storm board (cm)	169	95	88
Average winter snowfall density (kg/m ³)	112	114	99
Maximum 24-hour rainfall (mm)	21	74	30
Maximum snow depth (cm)	424	274	326
Month of maximum snow depth	March	March	March
Coldest recorded air temperature (°C)	-17.9	-20.5	-21
Warmest recorded air temperature (°C)	20.4	16	6.2
Seasonal average of minimum daily air temperature (°C)	-3.8	-2.9	-4.5
Seasonal average of maximum daily air temperature (°C)	0.8	0	-2.3

Table 5. Summary statistics of weather and snowpack data from Sasquatch Mountain Resort

 weather plot at 1200 m.

4.4 Site Visit

The site visit was completed on June 10 and 11, 2020. The visit consisted of collecting topographic data and observing terrain and vegetation in the avalanche paths. Photographs from the visit are presented in Appendix 4. The photographs highlight vegetative evidence of avalanche impacts within the paths. Path profiles are presented in Appendix 5.

The avalanche paths identified during the site visit varied enough from previous reports that a new, systematic scheme was used to name the paths. This would avoid any confusion with previously named avalanche paths, which were identified during studies with a less reliable topographic base map and imagery.

For avalanche paths above Edelweiss Drive, the paths are named based on the intersection of the path centerline with the road. For example, path E-475 indicates that the path centerline intersects Edelweiss Drive 475 m from the intersection of Edelweiss Drive and Hemlock Valley Road. A similar scheme was adopted for the sewage lagoons; path SL-105 indicates that the path centerline intersects the road that accesses the sewage lagoons 105 m from the intersection of that road and Hemlock Valley Road. Table 6 summarizes the path names used in this report and their names applied in previous reports.

The sections below describe the findings of the site visit for each path. The paths are described in order from north to south. Other avalanche paths are located on the slopes of Mt. Keenan but were outside of the study area and are not described in this report. Prominent avalanche paths are present between Edelweiss Drive and the sewage lagoons area, as well as further to the south of the sewage lagoons area but they did not intersect the study area.

Path names in this report	Path names in D&E McClung Enterprises Ltd. (2012)	Path names in Mears (1982)
E-475	Portion of Path 1	Not named
E-450	Portion of Path 1	Not named
E-405	Path 2	Not named
E-300	Path 3	Path 4
E-90	Path 4	Path 3
SL-105	Not identified	Outside of study area
SL-200	Path 5	Outside of study area

Table 6. Path names use	d within this re	port and com	pared to namind	in previous repo	orts.

4.4.1 Path E-475

The starting zone of Path E-475 is a relatively small opening, approximately 20 m by 30 m, with a ground cover composed of boulder colluvium that inhibits vegetation growth. The starting zone elevation is approximately 1075 m. The path's starting zone is a small portion of Path 1 from D&E McClung Enterprises Ltd. (2012), and it was separated from E-450 because it can only produce small avalanches that do not contribute to the overall hazard of Path E-450. The path follows a drainage channel to the northeast and is forced into a southerly direction by a topographical ridge to the north. The drainage channel becomes less prominent past the topographical ridge, where the terrain becomes a relatively uniform slope towards Edelweiss Drive. Both sides of the drainage channel were vegetated with approximately 20 m tall trees with no obvious signs of vegetation damage from avalanches, such as flagged trees (missing branches), pistol butts (curved tree trunks), or regrowth of terminal leaders (new vertical tree leader due to a previously damaged one).

4.4.2 Path E-450

The Path E-450 starting zone includes the northern section of an area clear of trees. This opening is clear due to boulder-sized colluvium inhibiting vegetation growth, but patches of short alder are also present that limits further forest growth. The starting zone elevation is approximately 1065 m. The path's starting zone is part of Path 1 identified by D&E McClung Enterprises Ltd. (2012). The terrain is mostly uniformly sloped towards Edelweiss Drive. The path intersects path E-475 about halfway between the starting zone and Edelweiss Drive, near the edge of the topographical ridge. Below the starting zone clearing, the path is well-vegetated with mature trees but with small (10 m by 10 m) openings. The trees along the path were all approximately 60 years old, consistent with the date of clear-cut logging in the area. There were signs of vegetation damage, including pistol butts and regrowth of terminal leaders, about 40 m upslope of the land parcel boundary, to the south of the Rocky Bluff housing complex. Based on tree age, there may have been an avalanche that reached this area around 20 to 25 years ago.

4.4.3 Path E-405

The starting zone of Path E-405 includes the southern section of an area clear of trees. Much of the opening is clear due to boulder-sized colluvium inhibiting vegetation growth but patches of short alder also exist. The starting zone elevation is approximately 1040 m. The path's starting zone is in the approximate location of Path 2 identified by D&E McClung Enterprises Ltd. (2012). Mature vegetation below the starting zone were mostly free of vegetation damage, with

only minor evidence of flagging of the lower tree limbs. The remainder of the path was wellvegetated with around 20 m tall trees and only a few small areas without vegetation. The topography is relatively uniform, sloping near-perpendicular towards Edelweiss Drive.

4.4.4 Path E-300

The starting zone is a vegetative opening directly beneath rocky cliffs. The rocky cliffs likely frequently shed snow onto the broader starting zone. The starting zone elevation is approximately 1150 m. The path's starting zone is in the approximate location of Path 3 identified by D&E McClung Enterprises Ltd. (2012). The starting zone has likely remained clear of trees due to its composition of boulder-sized colluvium. The path follows a drainage channel with obvious signs of avalanche activity passing through it, such as broken trees and flagging. Vegetative damage was evident within the channel until around the historical logging road about 70 m upslope of Edelweiss Drive.

4.4.5 Path E-90

The starting zone of Path E-90 was covered in snow at the time of the site visit, but it is expected that it has remained free of trees due to a colluvium ground cover, similar to adjacent paths. The starting zone elevation is approximately 1250 m. The path's starting zone is in the approximate location of Path 4 identified by D&E McClung Enterprises Ltd. (2012). This is a prominent avalanche path with historical evidence suggesting that debris has reached near Edelweiss Drive. The starting zone extends further south but was not included in this analysis, as the runout for that section is outside of the study area. The path follows a drainage channel with only sparse mature trees. The trees that exist within the path showed signs of vegetation damage, such as broken trees, flagging, pistol butting, and regrowth of terminal leaders. Many of the trees on either side of the channel were also damaged.

4.4.6 Path SL-105

The starting zone of Path SL-105 is a clearing of vegetation due to colluvium inhibiting vegetation growth. The starting zone elevation is approximately 1000 m. This path was not described by D&E McClung Enterprises Ltd. (2012) but is in the vicinity of the runout of their Path 5. This short path has many anthropogenic activities that have influenced it over the years. Logging in the 1960's removed much of the vegetation in the track and runout of the path, as has the development of logging and access roads. Damage was observed on the trees on the upslope side of the upper road, including damage that appeared to be about 20 to 25 years old (late 1990's or early 2000's). The tree island between the two roads could not be assessed due to potential vegetative damage from road construction and movement of machinery.

4.4.7 Path SL-200

The starting zone of Path SL-200 is a small clearing beneath rocky cliffs, likely due to colluvium inhibiting vegetation growth. The starting zone elevation is approximately 1180 m. This path is in the approximate location of Path 5 described by D&E McClung Enterprises Ltd. (2012); however, the start zone is about 300 m lower than what was identified in the previous report, as topography suggests that snow releasing higher up the slope would flow south and in a direction

that would not impact the study area. The starting zone feeds a drainage channel that ends in a vegetative clearing beneath the channel. Given the relatively small starting zone and steep terrain, this path may commonly experience frequent avalanches, which could trigger or entrain additional snow in the vegetative clearing. There is evidence of vegetation damage in the trees below the clearing. An estimation on the path runout length was not possible during the site visit due to vegetative clearing from infrastructure in the sewage lagoons area.

4.5 Statistical and Dynamic Models

Analyses were completed for each path using several statistical and dynamic models. The range of parameters used for each model are summarized in Appendix 6.

Base topography for the models included LiDAR data where it was available for approximately 400 m upslope from Edelweiss Drive and 200 m upslope from the sewage lagoons. LiDAR data was obtained from FVRD via 2 m contours. To utilize the contours for modelling, a triangulated irregular network (TIN) was produced. The resulting TIN had triangles upwards of 10 m in size, suggesting that the LiDAR data was coarse or perhaps filtered prior to the contours being produced. Drainage channels and small-scale terrain features were not visible in the contours and resulting TIN. This limitation affected the accuracy of some of the modelling methods used producing in some areas additional uncertainty with the model results.

Terrain was supplemented by Natural Resource Canada's Canadian Digital Elevation Model (CDEM) for the remainder of Mt. Keenan, which has a spatial resolution of 0.75 arc seconds (NRC, 2013), or approximately 20 m.

For statistical modelling, the Alpha-Beta model (McClung et al., 1989) and Runout Ratio model (McClung and Mears, 1991) were evaluated. These models use a reference position in the runout zone, termed the Beta Point. The Beta Point is the location within the runout zone of the avalanche path where the slope angle first reaches 10°, which is the slope incline that larger, design avalanches typically start to run out and ultimately stop. The Beta Point was determined to be near Edelweiss Drive and the sewage lagoon road for each of the paths, with Beta Point elevations of about 930 to 950 m along Edelweiss Drive and 880 m near the sewage lagoons. The estimated runout distances for the models are presented in Appendix 7.

Four dynamic models were used to estimate snow avalanche velocities as well as assess runout distances of extreme snow avalanches (i.e., approximately 100-year to 300-year return period events). Three one-dimensional models were used, including the PLK model (Perla et al., 1984), PCM model (Perla et al., 1982), and the Leading Edge Model (LEM) (McClung and Mears, 1995). The 2.5-dimensional model RAMMS (Christen et al., 2010) was used. RAMMS is capable of simulating both runout extent and lateral boundaries. The relatively coarse TIN used from the 2 m LiDAR contours increased uncertainty and therefore reduced confidence in the lateral runout extents of the simulations. To increase confidence (or conversely reduce uncertainty) in future assessments, FVRD should obtain unedited LiDAR data.

Each dynamic model requires calibration of one or more input friction parameters (Appendix 6). The modelled avalanche runout distances are presented in Appendix 7.
5.0 Hazard Assessment

The aerial photography, previous reports, site visit, terrain evaluation, and modelling analyses were combined to determine the extents of avalanche runout boundaries for up to 300-year return period snow avalanches. In some cases, especially the field evidence, observations are representative of events with an approximate 100-year return period, which is a limitation of the methods used and available data. Extrapolation of these estimates to the 300-year boundaries was based on calculations, modifying model parameters, and expert judgement. Weighted tables of the results are provided in Appendix 7. Increased weighting was applied for runout extents identified in aerial photographs, the site visit, and previous reporting due to highest confidence in the quality of the data. Less weight was applied for the modelling results due to lower confidence in the data (e.g., coarse LiDAR) and methods (e.g., large range of potential input parameters which are not typically applied to paths like those at Hemlock Valley). Path outlines for the 300-year return period avalanche paths are presented in Drawing 01. Resulting zoning boundaries are presented in Drawing 02.

The assessment did not identify any residential land parcels or infrastructure that are within the Red Zone (high hazard). The interpreted Red Zone is, at minimum, located 10 m upslope of the land parcel boundaries along Edelweiss Drive. The Red Zone intersects a logging road upslope of the sewage lagoons area.

Land Parcels or infrastructure that are located within the interpreted Blue Zone (moderate hazard) include:

- A portion or the entirety of Land Parcels: 20419, 20428, 20429, 20438, 20439, 20449, 20459, 20488, 20489, 20498, 20508, 20518, 20528, 20538, 20559, 20599, 20609.
- Approximately 190 m of Edelweiss Drive over three separate sections.
- Part of the sewage lagoon area, including the northern buildings and northwestern lagoon.

All other areas within the study area are classified as the White Zone (low hazard).

6.0 Forest and Climate Change

6.1 Forest Change

Forest cover is an important factor for assessing snow avalanche hazard. Forest conditions have drastically changed since the 1960's when much of the area was clear-cut. Since then, the forest density on the slopes of Mt. Keenan has increased in most areas.

With continual forest growth and increasing stem density, hazard boundaries are expected to decrease both laterally and with runout extent. Given the colluvium ground conditions in most of the starting zones, forest growth is unlikely to occur in the immediate future in such locations, suggesting that the starting zones will remain open and avalanche activity will continue for many years to come. Should forest density continue to increase in the track and runout zone of the avalanche paths, avalanches that form will experience increased friction, which may result in avalanches stopping higher up the slopes. However, many of the paths follow drainage channels where trees are less likely to grow due to wet soil conditions. As such, it is unlikely that

most of the avalanche paths described in this report will disappear until the starting zones are sufficiently vegetated.

Potential methods of forest loss include logging activities, development, infestation, or from geohazards. Logging or development activities should not occur on the slopes of Mt. Keenan upslope of any residential, commercial, or industrial properties or the avalanche hazard boundaries determined in this assessment will likely expand. DAC recommends that such slopes are protected from logging and development activities to inhibit avalanche activity from impacting people and infrastructure. In Europe, these areas are designated as Protection Forests, which are protected by law to mitigate hazard to populated areas.

Other forest changes, such as from infestation or geohazards should be monitored in future years to assess for change. Infestation could increase the size of starting zones or allow for avalanches to travel farther downslope and geohazards (e.g., landslides, debris flows) could progressively form trim lines that could eventually allow for snow avalanches and other geohazards to reach land parcel boundaries.

Should a more detailed analysis be desired on forest change, DAC suggests that a probabilistic approach for forest cover be completed. Such an analysis would provide FVRD with an understanding of the likelihood of substantial forest cover change due to a variety of factors (e.g., fire, pests, logging, recreation) and its effects on the avalanche hazard boundaries.

6.2 Climate Change

It is almost certain that snowpack and avalanche conditions will change over time due to climate change (e.g., IPCC, 2019). With a generally warmer climate in Hemlock Valley, fewer dry snow avalanches may result, as warm air temperature generally promotes bonding within the snowpack and inhibits the growth of persistent weak layers. However, the design event for Hemlock Valley is based on the release of accumulated snowfall amounts over a period of days (e.g., 3-day storm, or longer), which is dependent on short-term winter weather. Although the climate average may change, short-term weather fluctuations are expected to continue. Even with a generally warming climate, it is possible that the design event could become larger, if more extreme snowfall amounts result from long-term climate change.

Given the relatively long timescale of this assessment (up to 300-year return period), conditions that match the design event are expected to periodically occur throughout the period and therefore the findings in this assessment are unlikely to change due to climate change alone. We consider changes in the forest cover to be a more important factor in the Hemlock Valley area than climate change, with respect to long-term avalanche hazard.

7.0 Recommendations

DAC acknowledges that FVRD may rely on this snow avalanche hazard assessment for the issuance of site-specific building permits and development approvals. DAC's recommendation is to follow the recommendations outlined in CAA (2016), summarized below.

7.1 Occupied Structures

CAA (2016) recommends the following activities based on zone colour:

- White Zone (low hazard): Construction of occupied structures is normally permitted.
- Blue Zone (moderate hazard): Construction of occupied structures may be permitted with specified conditions.
- Red Zone (high hazard): Construction of occupied structures should not be permitted.

Considerations for development in the Blue Zone include number of occupants, timing of occupancy, awareness and acceptance of the risk, the potential implementation of restrictions, and the potential for an effective precautionary evacuation plan. See CAA (2016, Page 63) for additional details regarding these considerations. Development of occupied structures in a Blue Zone could include structural reinforcement to withstand avalanche impact or mitigation measures to modify the avalanche hazard (e.g., deflection dam, snowpack support structures).

For residential land parcels that are partially within the Blue Zone, a restrictive covenant could be placed on the parcel indicating that construction of an occupied structure is permitted in only the portion of the parcel that is in the White Zone. There are precedents in British Columbia for allowing residential development within the portion of a land parcel not affected by avalanches, and limiting the remainder of the property for other uses.

Should development be requested in the Blue Zone, mitigation efforts should be reviewed by FVRD and a qualified Professional Engineer and avalanche professional (or one person that meets both qualifications by virtue of education and experience) prior to approval.

7.2 Unoccupied Structures

The buildings and sewage lagoon do not exceed the criteria outlined in Table 2; i.e., the infrastructure is not exposed to snow avalanche hazard with a return period less than 30 years. Thus, the use of these buildings for industrial (i.e. non-residential) purposes may be considered appropriate, with appropriate risk management measures.

FVRD should assess the importance of the structures in the sewage lagoons area with respect to the identified avalanche hazard. Should it be deemed acceptable that the buildings and other vulnerable infrastructure are damaged or destroyed by a snow avalanche with a return period greater than 30 years, the snow avalanche hazard to personnel could be managed by avoidance or operational safety measures. Avoidance could include no access during winter months and operational measures could include an avalanche hazard assessment by a qualified avalanche professional prior to workers entering the hazard zones. Should the damage or destruction of infrastructure by a snow avalanche result in additional unacceptable consequences (e.g. environmental impacts, disruptive impacts to the community), the structures and area around the sewage lagoons could be protected using engineered structures (e.g., deflection structures) or by a seasonal avalanche safety program including explosive control. The latter may not be an acceptable alternative to engineered structures, depending on the potential consequences to the infrastructure.

Hemlock Valley Snow Avalanche Hazard Assessment

October 6, 2020

New buildings or infrastructure should not be constructed in the Blue Zones without discussion with a qualified Professional Engineer and avalanche professional (or one person that meets both qualifications by virtue of education and experience) about mitigation efforts to protect workers and infrastructure.

Future Assessments 7.3

Hazard boundaries defined in this assessment should be updated should major changes to vegetation and/or terrain occur in the study area, such as to forest cover. Boundaries could also be reviewed if unedited LiDAR data becomes available for the study area.

8.0 Summary

Snow avalanche hazard zone boundaries were prepared for the slopes of Mt. Keenan around Edelweiss Drive and the sewage lagoons area of Hemlock Valley. Red (high hazard), Blue (moderate hazard), and White (low hazard) zone boundaries were prepared to assist FVRD with evaluation and approval of development requests. Boundaries were determined from review of historical photos, reports, snowpack analysis, field surveys of vegetation and terrain, and estimation of runout distances using statistical and dynamic models.

DAC recommends that FVRD follow the recommendations outlined by CAA (2016) for both occupied and unoccupied structures in the study area. Hazard boundaries may change in the future due to forest and/or terrain changes. Zoning boundaries should be updated if substantial changes to the terrain or vegetation cover occur. To increase confidence and reduce uncertainty in future assessments, FVRD should obtain unedited LiDAR data.

Limitations and Closure 9.0



This report has been prepared for the exclusive use of Fraser Valley Regional District for specific application to the subject site. Any use which a third party makes of this report, or any reliance on or decisions made based on this report are the responsibility of such third parties. Dynamic Avalanche Consulting accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken based on this report.

We trust that this report satisfies your present requirements. Should you have any questions, please contact either of the undersigned at your convenience.

Dynamic Avalanche Consulting Ltd.



Report reviewed by: A.S.T. JONES



19

Alan Jones, P.Eng.

112

Dynamic Avalanche Consulting Ltd.

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APPENDIX 1 ZONING FOR OCCUPIED STRUCTURES, EXCERPT FROM CAA (2016)

Appendix 1: Example of Avalanche Terrain Classification Systems

Impact-based Terrain Classification: Hazard Zones for Occupied Structures

The system of hazard analysis and terrain classification for occupied structures shown in Figure A1.1 and Table A1.1 was developed by the Canadian Avalanche Association after reviewing similar systems in Switzerland and Austria. It applies to all occupied structures. Figure 4.7 (Chapter 4) is an example hazard map based on this classification system. Recommended zoning restrictions for occupied structures in Canada are listed in Section 8.2.2.



Figure A1.1: Hazard zones for occupied structures in Canada. Definition for each zone are listed in Table A1.1.

Table A1.1: Definitions for the three zones used for occupied structures in Canada as shown Figure A1.1.

Zone colour	Definition
White	An area with an estimated avalanche return period of > 300 years, or impact pressures < 1 kPa with a return period of > 30 years.
Blue	An area which lies between the red and white zones where the impact pressure divided by the return period is < 0.1 kPa/year for return periods between 30 and 300 years, and impact pressures ≥ 3 kPa. The blue zone also includes areas where impact pressures are between 1 and 3 kPa with return periods of > 30 years.
Red	An area where the return period is < 30 years and/or impact pressures are ≥ 30 kPa, or where the impact pressure divided by the return period is > 0.1 kPa/year for return periods between 30 and 300 years.

APPENDIX 2 HISTORICAL AERIAL PHOTOGRAPHS

The following aerial photographs were reviewed:

- 1930: A2246/2, obtained from Natural Resources Canada
- 1951: A13245/42, obtained from Natural Resources Canada
- 1968: BC7105/147, obtained from Ministry of Forests, Lands, Natural Resource Operations and Rural Development, Government of British Columbia
- 1983: BC83018/100, obtained from Ministry of Forests, Lands, Natural Resource Operations and Rural Development, Government of British Columbia
- 2002: BCC02030/44, obtained from Ministry of Forests, Lands, Natural Resource Operations and Rural Development, Government of British Columbia
- 2003: georeferenced imagery labelled bc_092h031_xc1m_utm10_2003, obtained from FVRD
- 2016: georeferenced imagery labelled HemlockValley_20160629_30cm, obtained from FVRD

APPENDIX 3 HAZARD BOUNDARIES FROM PREVIOUS REPORTS



Zoning boundaries from Freer (1981), for 300-year return period snow avalanches. Boundaries are approximate and interpreted by DAC from the original report. Map is not to scale.



Zoning boundaries from Mears (1982), for 100-year return period snow avalanches. Boundaries are approximate and interpreted by DAC from the original report. Map is not to scale.

Zoning boundaries from D&E McClung Enterprises Ltd. (2010), for 300-year return period snow avalanches. Boundaries are approximate and interpreted by DAC from the original report. Map is not to scale.



Hazard boundaries from D&E McClung Enterprises Ltd. (2012), for 500-year return period snow avalanches. Boundaries are approximate and interpreted by DAC from the original report. Map is not to scale.



APPENDIX 4 PHOTOGRAPHS FROM SITE VISIT



Photograph 1. Looking southwest towards the paths above Edelweiss Drive.



Photograph 2. Looking southwest with black outlines around the starting zones of the paths above Edelweiss Drive.



Photograph 3. Looking west towards paths E-475, E-450, E-405, and E-300 above Edelweiss Drive.



Photograph 4. Looking northeast and downslope from near the starting zone of path E-475.



Photograph 5. Looking east towards the starting zones of paths E-450 and E-405.



Photograph 6. Looking southeast towards vegetation damage about 90 m upslope of Edelweiss Drive within path E-450.



Photograph 7. Looking south towards the starting zone of paths E-450 and E-405.



Photograph 8. Looking southwest towards path E-300.



Photograph 9. Looking northeast and downslope along path E-300 towards vegetation damage in the track of the path.



Photograph 10. Looking southwest towards path E-90.



Photograph 11. Looking northeast and downslope along path E-90, looking towards vegetative clearing and damage of vegetation within the track.



Photograph 12. Looking west towards paths SL-105 and SL-200 above the sewage lagoons and buildings. Avalanche paths exist adjacent to these paths but do not intersect the study area.



Photograph 13. Looking west towards paths SL-105 and SL-200 above the sewage lagoons buildings.



Photograph 14. Examples of vegetation damage within the runout zones of paths SL-105 and SL-200.

APPENDIX 5 SNOW AVALANCHE PATH PROFILES

Horizontal Distance (m)	Elevation (m)	Average slope angle (°)	Comments		
0	1087	30	Top of starting zone		
25	1073	30	Bottom of starting zone		
50	1056	33			
75	1040	33			
100	1026	29			
115	1020	24	Channel clear of trees		
125	1015	25			
150	1003	26			
175	992	25			
200	981	23			
220	973	22			
225	971	23			
250	962	20			
275	953	20	Land parcel boundary @ 283 m		
300	945	17	Beta point @ 300 m		
325	944	1	Edelweiss Drive west side @ 325 m		
350	939	13	Edelweiss Drive east side @ 345 m		

Horizontal Distance (m)	Elevation (m)	Average slope angle (°)	Comments	
0	1071	34	Top of starting zone	
25	1054	34		
50	1037	35	Bottom of starting zone	
75	1020	34		
100	1007	29		
125	996	24	10 x 10 m openings	
150	985	23		
175	975	22		
200	965	22		
225	957	18		
250	950	16	Land parcel boundary @ 245 m	
275	946	7	Beta point @ 265 m	
300	942	10	Edelweiss Drive west side @ 289 m; Edelweiss Drive east side @ 303 m	
325	935	15		

Horizontal Distance (m)	Elevation (m)	Average slope angle (°)	Comments	
0	1048	35	Top of starting zone	
25	1030	35		
50	1016	30	Bottom of starting zone	
75	1002	29	Dense trees	
100	990	27		
125	980	22		
150	971	20		
175	965	13	Historical logging road	
200	958	16		
225	951	15	Land parcel boundary @ 219 m	
250	946	11	Beta point @ 255 m	
275	940	14	Edelweiss Drive west side @ 260 m; Edelweiss Drive east side @ 278 m	
300	934	14		

Horizontal Distance (m)	Elevation (m)	Average slope angle (°)	Comments
0	1189	44	Top of starting zone
25	1164	45	
50	1142	42	
75	1123	36	Bottom of starting zone
100	1106	34	
125	1088	36	
150	1064	44	
175	1040	44	
200	1026	28	Channel with trees showing extensive damage
225	1013	28	
250	1002	25	
275	992	22	
300	981	24	
325	971	21	
350	963	20	
375	956	15	Historical logging road
400	949	16	
425	942	15	Edelweiss Drive west side @ 437 m
450	937	12	Edelweiss Drive east side @ 455 m
475	932	11	Beta point @ 465 m
500	926	14	
525	923	7	
550	923	0	
575	925	5	
600	926	2	
625	925	2	

Horizontal Distance (m)	Elevation (m)	Average slope angle (°)	Comments
0	1255	42	Top of starting zone
25	1233	42	
50	1210	43	
75	1188	41	Bottom of starting zone
100	1171	35	
125	1152	37	
150	1132	38	
175	1113	38	
200	1098	31	
225	1085	27	Wide channel clear of trees
250	1072	28	
275	1065	16	
300	1042	42	
325	1032	23	
350	1013	37	
375	1002	24	
400	991	23	
425	978	29	End of wide channel clear of trees
450	964	28	
475	953	25	
500	946	14	Historical logging road
525	939	15	Land parcel boundary @ 512 m
550	935	11	Edelweiss Drive west side @ 560 m; Beta point @ 565 m
575	930	10	Edelweiss Drive east side @ 579 m
600	926	10	
625	922	8	
650	920	5	Hemlock Valley Road west side @ 648 m

Horizontal Distance (m)	Elevation (m)	Average slope angle (°)	Comments
0	1005	43	Top of starting zone
25	981	43	
50	958	43	Bottom of starting zone
75	940	35	
100	924	34	
125	911	27	
150	898	26	
175	888	22	Trimline @ 190 m
200	881	17	
225	875	13	Beta point @ 235 m; Road @ 238 m
250	871	10	
275	867	8	Sewage building land parcel upslope boundary @ 274 m
300	865	5	Sewage building land parcel upslope boundary @ 298 m

Path SL-105

Horizontal Distance (m)	Elevation (m)	Average slope angle (°)	Comments	
0	1184	47	Top of starting zone	
25	1157	47		
50	1140	34	Bottom of starting zone	
75	1123	35		
100	1107	33		
125	1082	45		
150	1056	47		
175	1032	43		
188	1020	43		
200	1008	43		
225	988	39		
250	968	40	Vegetative clearing	
275	947	40		
300	928	37		
325	910	37	Trimline	
350	896	28		
375	888	19		
400	882	12	Beta point @ 420 m	
425	878	10	Road @ 430 m	
450	874	8	Sewage lagoon lot line boundary @ 465 m	
475	868	14	Sewage lagoon @ 482 m	
500	865	6		
525	862	7		

Path SL-200

APPENDIX 6 STATISTICAL AND DYNAMIC MODEL PARAMETERS

Assumptions for Alpha Beta model

α = 21.11 + 22.41HoY" – 3.02TP + 0.01Ho (Jones and Jamieson, 2004)

Assumptions for Runout Ratio model

u = 0.494 (Jones and Jamieson, 2004)

b = 0.441 (Jones and Jamieson, 2004)

Non-exceedance probability of 0.5

Assumptions for PLK, PCM, LEM, and RAMMS dynamic models.

		PLK			РСМ	LEM		RAMMS	
Path	μ	log M/D	R	M/D	μ	μ	v₀ (m/s)	Release depth	Friction
E-475									Tiny 300-yr
E-450				0.25 for starting zone 0.25 in open track 0.30 in partial trees 0.40 in dense trees 0.35 pear road	0.47 for open trees 0.50 for partial trees 0.53 for dense trees 0.55 for large path	0	1.5 m	Tiny 300-yr	
E-405								Tiny 300-yr	
E-300	0.3	0.3 2.2 0.2 0.8	0.2 0.8*H					Small 300-yr	
E-90								Small 300-yr	
SL-105									Small 300-yr
SL-200									Tiny 300-yr

APPENDIX 7 WEIGHTED TABLES OF RUNOUT DISTANCE FOR PATHS

Estimation method		Horizontal distance along path (m)	Confidence in runout	Return period of time elapsed (years)	Confidence in time scale	Horizontal distance along path for 300-yr (m)	Weight Wi
Historical records	Reports	~	none	~	none	~	0
Forest damage	Air photos	40	good	3	fair	220	0.6
	Field survey	125	good	20	good	220	
Statistical	Alpha-beta	308	fair	100	good	220	0.2
models	Runout Ratio	303	fair	100	good	320	
	PLK	323	fair	100	fair	305	
Dynamic models	PCM	303	fair	100	fair		0.2
	LEM	223	poor	100	fair		
	RAMMS	268	fair	300	fair		
	Weighted	average 300	-year dense flo	w runout		257	1

Estimation method		Horizontal distance along path (m)	Confidence in runout	Return period of time elapsed (years)	Confidence in time scale	Horizontal distance along path for 300-yr (m)	Weight w _i
Historical records	Reports	~	none	~	none	~	0
Forest damage	Air photos	75	good	10	fair	200	0.6
	Field survey	205	good	30	fair	290	
Statistical	Alpha-beta	270	fair	100	good	200	0.2
models	Runout Ratio	180	fair	100	good	300	
	PLK	274	fair	100	fair	305	
Dynamic models	PCM	262	fair	100	fair		
	LEM	270	poor	100	fair		0.2
	RAMMS	290	fair	300	fair		
	Weighted	average 300	-year dense flo	w runout		295	1

Estimation method		Horizontal distance along path (m)	Confidence in runout	Return period of time elapsed (years)	Confidence in time scale	Horizontal distance along path for 300-yr (m)	Weight Wi
Historical records	Reports	~	none	~	none	~	0
Forest damage	Air photos	58	good	10	fair	115	0.6
	Field survey	58	good	10	fair		
Statistical models	Alpha-beta	225	fair	100	good	220	0.2
	Runout Ratio	170	fair	100	good		
Dynamic models	PLK	236	fair	100	fair	225	0.2
	PCM	185	fair	100	fair		
	LEM	178	poor	100	fair		
	RAMMS	212	fair	300	fair		
	158	1					

Estimation method		Horizontal distance along path (m)	Confidence in runout	Return period of time elapsed (years)	Confidence in time scale	Horizontal distance along path for 300-yr (m)	Weight w _i
Historical records	Reports	~	none	~	none	~	0
Forest damage	Air photos	480	good	100	fair	495	0.6
	Field survey	360	good	30	good		
Statistical models	Alpha-beta	495	fair	100	good	510	0.2
	Runout Ratio	484	fair	100	good		
Dynamic models	PLK	436	fair	100	fair	495	0.2
	PCM	445	fair	100	fair		
	LEM	489	poor	100	fair		
	RAMMS	440	fair	300	fair		
	498	1					
Estimati	ion method	Horizontal distance along path (m)	Confidence in runout	Return period of time elapsed (years)	Confidence in time scale	Horizontal distance along path for 300-yr (m)	Weight wi
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Historical records	Reports	~	none	~	none	~	0
Forest damage	Air photos	495	good	100	fair	565	0.6
	Field survey	435	good	30	good		
Statistical	Alpha-beta	640	fair	100	good	640	0.2
models	Runout Ratio	595	fair	100	good		
	PLK	565	fair	100	fair	630	0.2
Dynamic	PCM	592	fair	100	fair		
models	LEM	583	poor	100	fair		
	RAMMS	560	fair	300	fair		
	Weighted average 300-year dense flow runout					593	1

Path E-90

Path SL-105

Estimation method		Horizontal distance along path (m)	Confidence in runout	Return period of time elapsed (years)	Confidence in time scale	Horizontal distance along path for 300-yr (m)	Weight w _i
Historical records	Reports	~	none	~	none	~	0
Forest damage	Air photos	192	good	10	fair	280	0.6
	Field survey	205	good	20	good		
Statistical	Alpha-beta	239	fair	100	good	290	0.2
models	Runout Ratio	260	fair	100	good		
	PLK	265	fair	100	fair		
Dynamic	PCM	254	fair	100	fair	205	0.2
models	LEM	280	poor	100	fair	- 305	0.2
	RAMMS	295	fair	300	fair		
	Weighted average 300-year dense flow runout					287	1

Path SL-200

Estimati	on method	Horizontal distance along path (m)	Confidence in runout	Return period of time elapsed (years)	Confidence in time scale	Horizontal distance along path for 300-yr (m)	Weight _{Wi}
Historical records	Reports	480	poor	100	fair	520	0.2
Forest damage	Air photos	440	good	80	fair	510	0.4
	Field survey	350	good	20	good		
Statistical	Alpha-beta	415	fair	100	good	520	0.2
models	Runout Ratio	585	fair	100	good		
	PLK	463	fair	100	fair		
Dynamic	PCM	514	fair	100	fair	520	0.2
models	LEM	577	poor	100	fair	520	0.2
	RAMMS	415	fair	300	fair		
	Weighted average 300-year dense flow runout						1

DRAWINGS





FRASER VALLEY REGIONAL DISTRICT Bylaw No. 1619, 2020 A Bylaw to Amend the Zoning for a portion of Electoral Area C

WHEREAS the Fraser Valley Regional District Board of Directors ("the Board") wishes to amend the *Zoning Bylaw for Electoral Area F, 1978 of the Regional District of Fraser-Cheam* (Zoning Bylaw No.100, 1978):

THEREFORE the Board enacts as follows:

1) <u>CITATION</u>

This bylaw may be cited as Fraser Valley Regional District Electoral Area C Zoning Amendment Bylaw No. 1619, 2020.

2) <u>MAP AMENDMENT</u>

a) That the Zoning Bylaw for Electoral Area F, 1978 of the Regional District of Fraser-Cheam (Bylaw No. 100, 1978) be amended by adding the attached Schedule 1619-A as Schedule C to Bylaw No. 100, 1979.

For further clarity, Schedule 1619-A map replaces the map added as Schedule 0993-C from *Fraser Valley Regional District Zoning Amendment Bylaw No. 0993, 2010.*

b) That the map appended hereto as Schedule 1619-A showing such amendments is an integral part of this bylaw.

3) <u>SEVERABILITY</u>

If a portion of this bylaw is found invalid by a court, it will be severed and the remainder of the bylaw will remain in effect.

4) READINGS AND ADOPTION

READ A FIRST TIME THIS	day of
PUBLIC HEARING WAS HELD THIS	day of
READ A SECOND TIME THIS	day of
READ A THIRD TIME THIS	day of

ADOPTED THIS

day of

Chair/Vice Chair

Corporate Officer/Deputy

5) <u>CERTIFICATION</u>

I hereby certify the foregoing to be a true and correct copy of *Fraser Valley Regional District Electoral Area C Zoning Amendment Bylaw No. 1619, 2020* as read a third time by the Board of Directors of the Fraser Valley Regional District on the

Dated at Chilliwack, B.C. this

Corporate Officer/ Deputy



FRASER VALLEY REGIONAL DISTRICT BYLAW NO. 1619, 2020 Map Schedule 1619-A

This is map 1 of 1 constituting Schedule 1619-A, attached to and forming part of *Fraser Valley Regional District Electoral Area C Zoning Amendment Bylaw No. 1619, 2020.*



CORPORATE REPORT

To: Electoral Area Services Committee From: Gavin Luymes, Planning Technician Date: 2020-12-08 File No: BP014195

Subject: Modification of Covenant BT217825 for 53722 Berston Road, Area D

RECOMMENDATION

THAT the Fraser Valley Regional District Board approve the amendment of Covenant BT217825 registered on title to 53722 Berston Road, substantially as drafted and attached hereto.

STRATEGIC AREA(S) OF FOCUS

Provide Responsive & Effective Public Services

BACKGROUND

The applicant has applied for a Building Permit to construct a shop at 53722 Berston Road, Area D. Covenant BT217825, registered on title of the subject property, prohibits construction of floor area at an elevation below 0.4 metres above the crown of the road. The applicant has asked the Regional District to amend the covenant to permit construction below this elevation. Out of the Box Engineering has submitted a report certifying that the proposed construction will be safe for the use intended, attached hereto.

The shop in question has been constructed without a Building Permit and is subject to bylaw enforcement. Though the property owner applied for a Building Permit in January 2018, the permit was not obtained before the shop was constructed. The shop was posted with No Occupancy and Stop Work notices on August 12, 2020. The property owner is retroactively seeking a Building Permit for the shop under the same application made in 2018.

PROPERTY DETAILS				
Electoral Area	D			
Address	53722 Berston Road			
PID	025-437-372			
Folio	733.06469.008			

Lot Size		o.494 acres		
Owner	Ryan &	Katie McKay	Agent	n/a
Current Zoning	Suburban Residential 1 (SBR-1)		Proposed Zoning	No change
Current OCP	Suburb	an Residential (SR)	Proposed OCP	No change
Current Use	Resider	ntial	Proposed Use	No change
Development Permit Areas		Riparian Areas Developm	ient Permit Area 6-D	
Agricultural Land Reserve		No		

ADJACENT ZONING & LAND USES

North	٨	Suburban Residential 1 (SBR-1); Berston Road, Single Family Residence
East	>	Suburban Residential 1 (SBR-1); Single Family Residence
West	<	Suburban Residential 1 (SBR-1); Single Family Residence
South	V	(P-1); Cheam Lake Wetlands Regional Park



NEIGHBOURHOOD MAP

PROPERTY MAP



DISCUSSION

The requested covenant modification is necessary because of lot grading and topography. The subject property slopes significantly downward from Berston Road. Covenant BT217825 requires that habitable floor area be located 0.4 metres above the crown of Berston Road. The grade of the lot is below Berston Road, meaning that new construction at grade requires modification of the covenant. Covenant BT217825 has been modified 13 times since 2002 to address this requirement for various lots in the development, including for the basement of the subject property. This modification cannot be applied to the current shop.



Image of the constructed shop from Berston Road (August 12, 2020). Covenant BT217825 requires floor area to be 0.4 metres above Berston Road. The shop does not meet this requirement



Images of the constructed shop, stop work, and no occupancy notices (August 12, 2020)

Out of the Box Engineering has provided a report certifying that the shop location is safe for the use intended (attached). The basis for this recommendation is a survey confirming that the shop is 0.93 metres above the Flood Construction Level for Cheam Lake. The report includes a sealed Schedule B and designs for a rock pit to manage drainage from the shop. These were submitted in 2018 and Out of the Box Engineering confirms they are valid for the current construction. The report meets the technical requirements necessary for covenant modification.

According to plans submitted by the applicant, the shop meets all setback and height requirements (Appendix 1: Construction Drawings). The shop and proposed rock pit are approximately 30 metres from the septic field, which is located in the front yard of the property (Appendix 2: Septic Field Location). The septic location restricts buildable area in the front yard of the property.

The shop has been substantially constructed without a Building Permit in accordance with plans submitted in 2018. The property is subject to bylaw enforcement for building without a permit. All fees associated with the Building Permit application will be doubled. The Board is not obliged to amend this covenant for a building constructed without a permit, but Building Permits for structures under bylaw enforcement are ordinarily issued in cases where Board approval is not required.

COST

There is no FVRD application fee for covenant modification. The applicant is responsible for all legal, construction, and engineering fees associated with the covenant modification.

CONCLUSION

The property owner of 53722 Berston Road has asked the Fraser Valley Regional District Board to amend Covenant BT217825 for construction of a shop below required Flood Construction Level. Covenant BT217825 has been amended 13 times for various lots in the subdivision (including on the subject property) to allow construction below Flood Construction Level in accordance with the recommendation of a Professional Engineer. FVRD has received a sealed report, designs, and commitment from a Professional Engineer confirming that the shop is safe for the use intended at the present elevation. For this reason, staff recommend the Fraser Valley Regional District Board approve the amendment of Covenant BT217825 registered on title to 53722 Berston Road, substantially as drafted and attached hereto.

If the requested modification is not accepted, the property owner will be unable to obtain a Building Permit for the shop. Bylaw enforcement will continue against the property.

Option 1 – Issue (Staff Recommendation)

Staff recommend that the Fraser Valley Regional District Board approve the amendment of Covenant BT217825 registered on title to 53722 Berston Road, substantially as drafted and attached hereto.

Option 2 – Refuse

If the Board wishes to refuse this request, the following motion would be appropriate:

MOTION: THAT the Fraser Valley Regional District Board refuse the requested amendment of Covenant BT217825.

Option 3 – Refer to Staff

If the Board wishes to refer this request back to staff to address outstanding issues, the following motion would be appropriate:

MOTION: THAT the Fraser Valley Regional District Board refuse the requested amendment of Covenant BT217825.

COMMENTS BY:

Graham Daneluz, Director of Planning & Development: Reviewed & Supported

Kelly Lownsbrough, Chief Financial Officer/ Director of Finance: Reviewed & Supported

Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported.

Appendix 1: Construction Drawings





Appendix 2: Septic Field Location



November 12, 2020



2018-0688

Fraser Valley Regional District – Planning Department 45950 Cheam Avenue Chilliwack, BC V2P 1N6

Attention: Mr. Gavin Luymes, Planning Technician

<u>Reference:</u> Addendum to Letter of Suitability of Site for Accessory Building 53722 Berston Road, Popkum, BC

In 2018, the undersigned provided a letter of suitability of the above-named project site for an Accessory Building (Shop). In addition to the letter, a Soak-Away/Infiltration Plan and a Schedule B (soak away and bearing capacity) were submitted in support of the permitting application.

It is understood that the owner did not follow through with the 2018 permit, but built an un-permitted shop, and is now in process of re-opening the permit. Please accept the previously submitted Schedule B and Soak-Away/Infiltration Plan as still being current and pertinent to the current permit process. Please accept this letter as an addendum to the May 1, 2018 letter by the undersigned and use the original letter and this addendum for the current permit application.

This writer attended the project site and noted the following:

- The structure is roughly the same footprint as the one the soak away was designed for in 2018, therefore, a similar soak away will be required here to provide infiltration of the storm water so no adverse effects will occur to the wetlands through overland flow greater than predevelopment flow. Tie the RWLs to the soak away as per the 2018 Plan.
- A surveyor (Ambit Surveying) was used to confirm slab elevation at 38.4m. This exceeds the noted elevation requirement in the 2018 report by the undersigned. This writer confirms that even though the slab elevation is below the FCL (0.4 above curb), it is safe for the use intended as a shop (storage of goods/location of services). Please note that this writer recommends that the owner install/construct a cut off trench in the parking area north of the shop to minimize potential of stormwater flowing down the driveway from entering the front of the shop.
- The soil (sand and gravel and cobbles with little silt) that the shop is founded on (appears to be a thickened-edge slab) is suitable for foundation support. It is suggested that the owner install insulation around the slab edge to minimize potential for frost heave below the slab.

It is this writer's opinion, based on the above notes and review, that the building is safe for the use intended as a shop. If there are any questions, please do not hesitate to contact the undersigned.

Regards,

Collin S. Johnson, P.Eng.



OUT OF THE BOX ENGINEERING 0772308 BC LTD

May 1, 2018

2018-0688

Fraser Valley Regional District – Building Department 45950 Cheam Avenue Chilliwack, BC V2P 1N6

Attention: Mr. Greg Price

Reference:Submission of Paperwork and Suitability of Site for Accessory Building53722 Bertson Road, Chilliwack, BC

The undersigned has been retained by Ryan McKay to provide Geotechnical/Drainage Engineering services for the proposed Accaessory Building and provide confirmation that this project site is suitable for said construction.

Based on the plans provided by the owner and discussion with a representative of the Fraser Valley Regional District, there is Right Of Way for the Cheam Wetlands at the south side of the property. This requires a setback of 25 feet from the south property line. In addition, there is elevation restrictions and drainage restrictions for proposed structures.

The slab of the proposed structure, based on site observations will be above 38m. There is a limiting elevation of approximately 37.5m which is the flood elevation for Cheam Wetlands. The proposed structure is above this. Also, the proposed structure is an accessory building and not habitable space.

Drainage from the proposed structure will be infiltrated into the ground via suitably sized rock pit (see attached plan) Therefore, no adverse effects from storm drainage will affect the wetlands.

This writer supports the building permit application for the proposed accessory building at the abovementioned site.

In addition, attached to this letter are:

- Schedule B for Geotechnical and Plumbing (Civil Soak-Away), and
- Design drawing for the proposed soak away.

I trust that this letter will suffice. If there are any questions, please do not hesitate to contact the undersigned



Collin S. Johnson, P.Eng.,

cc Ryan McKay

F.V.R.D. BLDG. DEPT MAY 0.4 2018



BRITISH COLUMBIA BUILDING	CODE 2012
SCHEDULE B	
Forming Part of Subsection 2.2.7, Div. C of the British Columbia Building Code	Building Fermit No.
	(on any non-y in diving participant ≤ units)
COMMITMENT FOR FIELD RE	EVIEW
 Notes: (i) This letter must be submitted prior to the commencement of construction below. A separate letter must be submitted by each <i>registered profess</i>. (ii) This letter is endorsed by: Architectural Institute of B.C., Association of Geoscientists of B.C., Building Officials' Association of B.C., and Unior (iii) In this letter the words in italics have the same meaning as in the Britist 	on activities of the components identified <i>ional of record.</i> f Professional Engineers and n of B.C. Municipalities. h Columbia Building Code.
To: The authority having jurisdiction	
Fraser Valley Regional District	
Name of Jurisdiction (Prim)	
Re: Proposed Accessory Building	
name of Project (Print)	
53722 Berston Road, Chilliwack, BC	
Address of Project (Finit)	
ARCHITECTURAL ARCHITECTURAL STRUCTURAL MECHANICAL Civil (soak) FIRE SUPPRESSION SYSTEMS ELECTRICAL 8.1 GEOTECHNICAL — temporary 8.1 GEOTECHNICAL — permanent	Professional's Seal and Signature)
a (SIS) - A (S	May 1, 2018
components of the plans and supporting documents propored by this register	
he application for the <i>building</i> permit as outlined below substantially comply applicable enactments respecting safety except for construction safety aspec	with the B.C. Building Code and other cts.
The undersigned hereby undertakes to be responsible for <i>field reviews</i> of the onstruction, as indicated on the "SUMMARY OF DESIGN AND FIELD REV	e above referenced components during /IEW REQUIREMENTS'' below.
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	Anna Invest
	CRP's Initials
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BRITISH COLUMBIA BUILDING CODE 2012

Schedule B - Continued Building Permit No. (in alternity to ware juried states in one) 53722 Berston Road, Chilliwack, BC Project Address Geotechnical (8.1) / Plumbing (CIVIL - Soak) Discipline The undersigned also undertakes to notify the authority having jurisdiction in writing as soon as possible if the undersigned's contract for field review is terminated at any time during construction. I certify that I am a registered professional as defined in the British Columbia Building Code. Collin Johnson P.Eng. Registered Professional of Record's Name (Print) Box 274 Agassiz PO Address (Print) Agassiz, BC V0M 1A0 604-819-9809 Phone No. sional's Seal and Signature May 1, 2018 (If the Registered Protessional of Record is a member of a firm, complete the following.) I am a member of the firm Out Of The Box Engineering (DBA 0772308 BC LTD) and I sign this letter on behalf of the firm. Note: The above letter must be signed by a registered professional of record, who is a registered professional. The British Columbia Building Code defines a registered professional to mean (a) a person who is registered or licensed to practise as an architect under the Architects Act, or (b) a person who is registered or licensed to practise as a professional engineer under the Engineers and Geoscientists Act. CRP's Initials 2 of 4

BRITISH COLUMBIA BUILDING CODE 2012

Schedule B - Continued Building Permit No. flor cuthod v rendrig Lastolefsin's une-53722 Berston Road, Chilliwack, BC Project Address Geotechnical (8.1) / Plumbing (CIVIL - Soak) Discipline SUMMARY OF DESIGN AND FIELD REVIEW REQUIREMENTS (Initial applicable discipline below and cross out and initial only those items not applicable to the project.) ARCHITECTURAL 1.1 Fire resisting assemblies 1.2 Fire separations and their continuity 1.3 Closures, including tightness and operation 1.4 Egress systems, including access to exit within suites and floor areas 1.5 Performance and physical safety features (guardrails, handrails, etc.) 1.6 Structural capacity of architectural components, including anchorage and seismic restraint 1.7 Sound control Landscaping, screening and site grading 1.8 1.9 Provisions for fire fighting access 1.10 Access requirements for persons with disabilities 1.11 Elevating devices 1.12 Functional testing of architecturally related fire emergency systems and devices, 1.13 Development Permit and conditions therein 1.14 Interior signage, including acceptable materials, dimensions and locations JOHNS 1.15 Review of all applicable shop drawings # 23938 1.16 Interior and exterior finishes 1.17 Dampproofing and/or waterproofing of walls and slabs below grade 1.18 Roofing and flashings NGIN 1.19/ Wall cladding systems 1.20 Condensation control and cavity ventilation (Professional's Seal and Signature) 1.21 Exterior glazing 1,22 Integration of building envelope components May 1, 2018 1.23 Environmental separation requirements (Part 5) 1.24 Building Envelope, Part 10/ASHRAE Requirements STRUCTURAL Structural capacity of structural components of the building, including anchorage and seismic restraint 2.1 2.2 Structural aspects of deep foundations 2.3 Review of all applicable shop drawings 2.4 Structural aspects of unbonded post-tensioned concrete design and construction MECHANICAL 3.1 HVAC systems and devices, including high building requirements where applicable 3.2 Fire dampers at required fire separations Continuity of fire separations at HVAC penetrations 3.3 Functional testing of mechanically related fire emergency systems and devices 3.4 Maintenance manuals for mechanical systems 3.5 Structural capacity of mechanical components, including anchorage and seismic restraint 3.6 3.7 Review of all applicable shop drawings 3.8 Mechanical Systems, Part 10/ASHRAE Requirements CRP's Initials 3 of 4

BRITISH COLUMBIA BUILDING CODE 2012

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	Building Permit No
5372	2 Berston Road, Chilliwack, BC
	Project Address
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PLUMBING Saturnan	Constant (2003)
4.1 Roof drainage systems	
4.3 Plumbing systems and devices	
4.4 Continuity of <i>fire separations</i> at plumbing penetrations	
4.5 Functional testing of plumbing related fire emergency systems and devices 4.6 Maintenance manuals for <i>plumbing systems</i>	\sim
4.7 Structural capacity of plumbing components, including anchorage and seis	mic restraint
4.8 Review of all applicable shop drawings 4.9 Plumbing Systems, Part 10 requirements	
	75251JL
FIRE SUPPRESSION SYSTEMS	~6/10/~
5.2 Design coverage, including concealed or special areas	AL RAN IV
5.3 Compatibility and location of electrical supervision, ancillary alarm and con	trol devices
including pumping devices where necessary	emands and domestic demand,
5.5 Qualification of welder, quality of welds and material	
5.6 Review of all applicable shop drawings 5.7 Acceptance testing for "Contractor's Material and Test Certificate" as per to the state of the sta	NEPA Standards
5.8 Maintenance program and manual for suppression systems	A P A Otal Idalida
5.9 Structural capacity of sprinkler components, including anchorage and seisr	nic restraint
5.10 For partner systems — comminisprinklers are installed in an areas where rec 5.11 Fire Department connections and hydrant locations	quied
5.12 Fire hose standpipes	D, VI
5.13 Freeze protection measures for fire suppression systems 5.14 Functional testing of fire suppression systems and devices	6
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PART II – TERMS OF THE INSTRUMENT

WHEREAS:

A. By an Indenture of Covenant ("the Covenant") registered in the Land Title Office at New Westminster, British Columbia on the 21st day of June, 2002 under charge number BT217825 a Covenant was granted to the Transferee.

B. The parties hereto wish to amend the Covenant as herein provided for.

C. The Transferor is the registered owner of the land referred to in Part 2 of the Form C attached hereto (the "lands").

THEREFORE in consideration of the mutual covenants herein contained the parties hereto wish to amend the Covenant as it relates to the lands and hereby covenant and agree each with the other as follows:

Page 7, Clause 3 (a) vii shall be replaced with the following:

3.(a) vii. Notwithstanding the above, the construction of habitable floor area at an elevation lower than 0.4 metres above the crown of the adjacent road may be permitted provided that the construction is strictly in accordance with:

a) the site specific engineering report by Out of the Box Engineering titled Addendum to Letter of Suitability of Site for Accessory Building 53722 Berston Road, Popkum, BC dated November 12, 2020 including addendums titled Submission of Paperwork and Suitability of Site for Accessory Building 53722 Bertson Road, Chilliwack, BC dated May 1, 2018, Schedule B-1 Assurance of Professional Design and Commitment for Field Review dated May 1, 2018, Schedule B-2 Summary of Design and Field Review Requirements dated May 1, 2018, and On-Site Infiltration (Soak Away) dated May 1, 2018 attached to this Agreement as Schedule A, which reports certify that proposed construction will be suitable for habitation and the storage of goods and location of services; and

b) Fraser Valley Regional District Building Permit No. 014195.

Furthermore, upon completion of the proposed construction and related drainage a professional engineer shall certify that the works were completed to his satisfaction and in accordance with the above mentioned site-specific engineering reports prior to the Transferee issuing a completion certificate or an occupancy permit.

Page 7, Clause 3 (a) viii shall be added as follows:

3.(a) viii. The Transferor further acknowledges that the Transferee does not represent to the Transferor or to any other person that construction of habitable floor

area at an elevation lower than 0.4 metres above the crown of the adjacent road in accordance with this covenant will not be damaged by flooding, water or moisture. The Transferor covenants and agrees to release, indemnify, protect, and save harmless the Transferee from and against all actions, causes of action, claims and demands of every kind, description and nature whatsoever arising out of or in any way due to:

a) damage to any habitable floor which exists at an elevation lower than 0.4 metres above the crown of the adjacent road, or to any person therein, or to any contents or fixtures thereof; or

b) a breach of this covenant; or

c) the existence of this covenant; or

d) the issuance of Fraser Valley Regional District Building Permit No. 014195; or

e) the construction authorized by Fraser Valley Regional District Building Permit No. 014195; or

f) the use of the lands or of the building; or

g) any combination of the above.

Page 7, Clause 3 (a) vii shall be renumbered as Clause 3 (a) ix.

IT IS AGREED and understood between the parties hereto that this Modification of Covenant shall from the date hereof be read and construed with the said covenant registered in the New Westminster Land Title Office on the 21st day of June, 2002 under charge number BT217825 and be treated as part thereof for such purposes and so far as may be necessary to effectuate these presents and the said covenant shall be regarded as being hereby amended and the said covenant so amended together with the covenants and provisos thereto shall remain in full force and effect.

IN WITNESS WHEREOF the parties have hereunto executed these presents by executing the Forms C and D attached hereto.



CORPORATE REPORT

To: Electoral Area Services Committee From: Andrea Antifaeff, Planner 1 Date: 2020-12-08 File No: 3320-20-2019-00312

Subject: Covenants – Proposed Three (3) Lot Subdivision at 20559 Edelweiss Drive, Electoral Area C

RECOMMENDATION

THAT the Fraser Valley Regional District Board authorize staff to execute all legal documents relating to the three lot subdivision of 20559 Edelweiss Drive, Electoral Area C, including the registration of section 219 (Land Title Act) covenants relating to riparian areas protection, geo-hazards, storm water management and utility connections

STRATEGIC AREA(S) OF FOCUS

Provide Responsive & Effective Public Services Support Environmental Stewardship **PRIORITIES** Priority #2 Air & Water Quality

BACKGROUND

The owner of 20559 Edelweiss Drive, Area C has applied to the Provincial Approving Officer (Ministry of Transportation and Infrastructure) to subdivide the parcel into three lots. The property is located within three Development Permit Areas and it requires a storm water management plan and connection to Hemlock Utilities water and sewer services.

PROPERTY DETAILS					
Electoral Area	C				
Address	20559 Edelweiss Drive				
PID	003-411-206				
Folio	776.01407.000				
Lot Size	o.78 acres				
Owner	1194039 BC Ltd. (David Nonis)				
Current Zoning	Resort Residential 3 (RST-3)	Proposed Zoning	No change		
Current OCP	Cottage Residential (CR)	Proposed OCP	No change		

Current Use	V	'acant	Proposed Use	Three Lot Subdivision		
Developmen	t Permit Areas	DPA 1-HV				
Hazards		Flood Protectic (PH) for Geotec	Flood Protection Requirements, Alluvial Fan, Potential Hazard (PH) for Geotechnical Hazards, Site 3 - Avalanche			
Agricultural Land Reserve No						
		ADJACENT ZONIN	G & LAND USES			
North	۸	Resort Residential 4 (R	ST-4), Single Family H	omes		
East	>	Restricted Occupancy	(L-3), Provincial Land	(forested)		
West	<	Resort Residential 3 (R	ST-3) & Limited Use (L	-1), Single Family Homes		
South	v	Limited Use (L-1), Ski F	Resort Land (forested)			

PROPERTY MAP



NEIGHBOURHOOD MAP



DISCUSSION

Section 219 of the *Land Title Act* permits the registration of covenants of a positive or negative nature in favour of the Province and the Regional District in respect of the use of land or the use of a building on, or to be erected on, the land. The property owner has agreed to enter into the below mentioned covenants and the Fraser Valley Regional District may now decide to accept this offer.

<u>Covenants</u>

Riparian Areas

The property is located within Development Permit Area 5-HV for protection of the natural environment, its ecosystems and biological diversity. The purpose of the Development Permit is to ensure that future development of the property occurs in a manner which protects riparian areas. The property owner has submitted a Riparian Areas Protection Regulation (RAPR) assessment, consistent with Development Permit Area guidelines.

The purpose of this restrictive covenant is to ensure that future development of each new parcel will occur in a manner which protects the identified ditch and imposes setbacks and protection measures as recommended by a Qualified Environmental Professional and as approved by the Ministry of Environment.

Geo-Hazard

The property is located within Development Permit Area 1-HV (Geotechnical Hazards) and Development Permit Area 2-HV (Long Term Snow Avalanche Hazard Assessment Area) for the protection of development from hazardous conditions. The purpose of these Development Permits is to ensure that future development of the property occurs in a manner that protects each new parcel from hazardous conditions. The property owner has submitted a geo-hazard report, which is consistent with Development Permit Area guidelines.

The purpose of this restrictive covenant is to identify safe building envelopes and ensure that future development of each new property will occur in a manner that protects occupants from hazardous conditions as recommended by a Qualified Professional and approved by the Ministry of Transportation and Infrastructure and FVRD.

Storm water Management

The property owner is required to provide a comprehensive storm water management plan to address storm water from the proposed three lots. As the FVRD does not operate a local service area for the disposal of storm water in this area, the property owner shall provide each parcel of land within the proposed subdivision area with a storm water management system including a drainage collection and/or disposal system. The purpose of this restrictive covenant is to ensure that at the time of building permit, a final lot grading plan as well as the construction of any storm water management infrastructure is completed.

Utility Connections

The FVRD requires that the proposed three lots connect to the Hemlock Valley Utilities sewer and water systems.

The property owner has already submitted a letter from Hemlock Valley Utilities, which states that all three lots will be individually serviced with sanitation and water services already available at the lot line. There are no outstanding fees owed to Hemlock Valley Utilities by the property owner, and connection fees will be required at the time of building permit.

The purpose of this restrictive covenant is to ensure that each new property connects to both the Hemlock Utilities water and sewer systems.

COST

Costs associated with the registration of the Section 219 Covenants are borne by the property owner.

CONCLUSION

Staff recommend that the FVRD Board authorize staff to execute all legal documents relating to the three lot subdivision of 20559 Edelweiss Drive, Electoral Area C, including the registration of section 219 (*Land Title Act*) covenants relating to riparian areas protection, geo-hazards, storm water management and utility connections.

COMMENTS BY:

Graham Daneluz, Director of Planning & Development:

Reviewed and supported

Kelly Lownsbrough, Chief Financial Officer/ Director of Finance: Reviewed and supported

Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported.



CORPORATE REPORT

To: Electoral Area Services Committee From: Tracey Heron, Planning Technician Date: 2020-12-08 File No: 3015-20 2020-06

Subject: Agricultural Land Commission Application – Non-Adhering Residential Use at 53788 McGregor Road, Electoral Area D

RECOMMENDATION

THAT the ALC application for a non-adhering residential use (building a new principal residence while occupying an existing residence) within the Agricultural Land Reserve for the property located at 53788 McGregor Road, Electoral Area D, be forwarded to the Agricultural Land Commission for consideration; **AND THAT** the Agricultural Land Commission consider the FVRD staff report dated December 8, 2020 under file number 3015-20 2020-06.

STRATEGIC AREA(S) OF FOCUS

Foster a Strong & Diverse Economy Provide Responsive & Effective Public Services

BACKGROUND

The Fraser Valley Regional District has received an application for a non-adhering residential use in the Agricultural Land Reserve for the property located at 53788 McGregor Road, Electoral Area D. The owners wish to reside in their existing house during construction of a new residence on the property, after which the old house will be demolished.

As this property is located within the Agricultural Land Reserve, it is subject to the provincial *Agricultural Land Commission Act (ALC Act)* and the Agricultural Land Reserve Regulations. The *ALC Act* and Regulations require an application for a non-adhering residential use to determine if a second residence can be permitted. Note that upon completion of the new home, the existing house will be removed so that only one permanent residence will remain on the property.

PROPERTY DETAILS

Electoral Area	D		
Address	53788 McGregor Road		
PID	005-742-498		
Folio	733.01151.232		
Lot Size	1.76 acres		
Owner	Wesley & Rianna Klaassen	Agent	n/a
Current Zoning	Country Residential (CR)	Proposed Zoning	No change
	Rural (R)		
Current OCP	Agricultural- Small Holding	Proposed OCP	No change
	(AG-S)		
Current Use	Single Family Dwelling	Proposed Use	No change
Development Permit Ar			
Agricultural Land Reser	ve Yes		

ADJACENT ZONING & LAND USES

North	٨	Rural (R) ; Single Family Dwelling
East	>	Rural (R); Single Family Dwelling
West	<	Rural (R); Farm
South	v	Rural (R); Single Family Dwelling; Cheam Lake Wetlands Regional Park

NEIGHBOURHOOD MAP



PROPERTY MAP



DISCUSSION

ALC Non-Adhering Residential Use Application

The Agricultural Land Commission (ALC) is the provincial agency responsible for administering the Agricultural Land Reserve. In February 2019, the Province amended the *Agricultural Land Commission Act* and the ALR Regulations, changing how additional residences in the ALR are approved.

Under the current rules, local governments must not permit construction of a secondary residence in the ALR without ALC approval. This approval is considered through a Non-adhering Residential Use application. The decision for approving or denying non-adhering residential use is the responsibility of the ALC.

Parcels in the ALR Less Than 2 Acres

Land parcels that are less than 2 acres in size have potential exceptions from the *Agricultural Land Commission Act (ALCA)*. If a registered plan and a certificate of title as of December 21, 1972 show a property to be less than 2 acres, it is exempt from the Agricultural Land Reserve. As the current parcel boundaries were created in 1980, this parcel is not exempt from the ALR.

Current Use of Land

The property is 1.76 acres (0.7 hectares) in size and is located within the Agricultural Land Reserve (ALR). The owners grow a significant amount of produce on their property for personal consumption and preserving, in both a garden and a 20 x 40-foot greenhouse. They indicate they have 40 blueberry bushes, a variety of over 20 fruit trees, a couple rows of raspberry plants, and grape vines. They also have a 5,000 square foot chicken run for free range chickens.

Purpose and Rational of Application

The owners of the property have made an application for a non-adhering residential use at 53788 McGregor Road. They wish to construct a new home closer to the front of their property while residing in their current home. When their new home is complete, they intend to demolish their existing house and use this additional land area for pasture.

If the owners are permitted to reside in their current dwelling during construction of their new home, they will be able to capitalize on the next growing season and maintain their orchard, garden, berry plants, and greenhouse. This will provide them with significant produce for their personal consumption. Residing off-site during construction of their new home will not allow them to plant and maintain their gardens, having them lose out on the entire growing season.

The location of the new home will be to the north, or in front, of the existing dwelling. This portion of the property is currently used as lawn area. The new home would be situated on the presently used lawn area, while the pasture area would be extended when the existing house is demolished.

Proposed New Residence

The existing house on the property is approximately 102.2 square metres (1100 square feet) in size, and the proposed new home is designed to be 313 square metres (3369.1 square feet) in size. The Agricultural Land Commission has a maximum principal residence size of 500 square metres (5381.96 square feet) that they permit on ALR land. The proposed house is consistent with the ALC size limit.

The property owners have designed the proposed new house to be located on the existing lawn area to reduce the disturbance of agricultural uses on the property. They will be using the existing infrastructure on the property such as the current driveway, parking area, and the same landscaped area. No additional fill will be required to be brought in for the construction of the house.

<u>Zoning</u>

The boundaries of the property are within two zones as per '*Zoning Bylaw for Electoral Area* "*D*", 1976 of *the Regional District of Fraser-Cheam'*. These two zones are Country Residential (CR) and Rural (R), and the zoning bylaw allows 'Farm' as a permitted use in both of these zones.



The majority of the property lies within the Country Residential (CR) zone, with a portion of the western boundary in the Rural (R) zone. The existing and proposed new homes both lie within the CR zone. The current site plan indicates that the proposed new home meets all of the zoning setback and height requirements as laid out in the bylaw for Country Residential.

Bylaw No. 75 Zoning Requirements for Country Residential (CR)				
	Required	Proposed		
Front Lot Line	7.62 metres (25 feet)	>50 metres (>164 feet)		
Side Lot Line	3.048 metres (10 feet)	>12 metres (>39 feet)		
Rear Lot Line	7.62 metres (25 feet)	>55metres (>180 feet)		
Height	10 metres (32.8 feet)	7.71 metres (25.3 feet)		

Two Homes One Lot Covenant

Fraser Valley Regional District zoning bylaws limit the number of residential dwellings on a property. The property is zoned Country Residential and Rural, with both zones permitting an additional residence on the property, if the property meets the conditions as laid out in *Zoning Bylaw for Electoral Area "D"*, 1976 of the Regional District of Fraser-Cheam' for accessory employee residence.

Accessory Employee Residential Use

- i) The accommodation is to be the residence of a person directly involved in the operation of a farm unit; and
- ii) The lot is classed as "Farm" by the B.C. Assessment Authority

The property is not classed as "Farm" by the B.C. Assessment Authority, and as such, a second dwelling is not a permitted use on the property.
During construction of a new home on a property, the owners may reside in their current dwelling if the owners register a 'Two Homes on One Lot During Construction' covenant on the title of their property. This would ensure that prior to receiving Final Occupancy for the building permit for the new residential home, the existing house would be demolished. The Agricultural Land Commission has a similar policy in place for owners wishing to reside in their existing dwelling during construction of a new home.

If the ALC approves the application, the owners may be required to register a restrictive covenant on their property title, sign an affidavit committing to removal of the original residence, and provide an irrevocable letter of credit (ILOC) sufficient to ensure removal of the original residence within 60 days of completion of the new principal residence.

ALC Application Process

Non-adhering residential use applications are submitted by the applicant to the ALC Application Portal, and the application is sent directly to the FVRD.

The FVRD Board may either:

- 1. Forward the application to the ALC with any comments it deems appropriate through an authorizing resolution.
- 2. Not forward the application to the ALC, in which case the application will not proceed.

If the application proceeds to the ALC and it is approved, the FVRD may then issue a building permit for the construction of the additional new residential dwelling on the property. The Two Homes on One Lot During Construction covenant will be addressed through the building permit process.



COST

The application fee for a non-adhering residential use application is \$900, split evenly between the local government and the Agricultural Land Commission. The applicant has paid the local government portion to the FVRD in the amount of \$450, and if the application is forwarded to the Agricultural Land Commission for their review, the remaining \$450 will be collected by the ALC.

CONCLUSION

The Fraser Valley Regional District has received an application for a non-adhering residential use in the Agricultural Land Reserve for the property located at 53788 McGregor Road, Electoral Area D. The owners wish to reside in their existing house during construction of a new residence on the property, after which the old house will be demolished.

The property, although less than two acres in size, is not exempt from the ALR. As such, the owners have applied for a non-adhering residential use through the Agricultural Land Commission. The proposed house is consistent with the Country Residential and Rural zones in 'Zoning Bylaw for Electoral Area "D", 1976 of the Regional District of Fraser-Cheam' and it meets all setbacks and height requirements. Through a covenant registered on the property title, the FVRD can allow for a second residence on the property during construction of the new home, provided the existing dwelling is demolished prior to receiving Final Occupancy on the new home.

With the agreement by the property owners to register a Two Homes on One Lot During Construction covenant on the property title in favour of the FVRD, staff recommend that the FVRD Board resolve to forward the application to the ALC.

Options

Option 1 Forward to the ALC (Staff recommendation)

THAT the ALC application for a non-adhering residential use (building a new principal residence while occupying an existing residence) within the Agricultural Land Reserve for the property located at 53788 McGregor Road, Electoral Area D, be forwarded to the Agricultural Land Commission for consideration; **AND THAT** the Agricultural Land Commission consider the FVRD staff report dated December 8, 2020 under file number 3015-20 2020-06.

Option 2 Refuse

THAT the Fraser Valley Regional District Board refuse the application for an ALR non-adhering residential use and not forward the application to the Agricultural Land Commission.

COMMENTS BY:

Graham Daneluz, Director of Planning & Development:	Reviewed and supported.
Kelly Lownsbrough, Chief Financial Officer/ Director of Finance:	Reviewed and supported.
Jennifer Kinneman, Chief Administrative Officer:	Reviewed and supported.

SCHEDULE A Site Plan





CORPORATE REPORT

To: Electoral Area Services Committee From: Julie Mundy, Planer 1 Date: 2020-12-08 File No: 732.05077.002, 732.05077.004, 732.05078.002, 732.05078.050, 732.05079.000

Subject: Request for FVRD to initiate a zoning amendment for five privately owned properties adjacent to Coquihalla River Provincial Park, Area B

RECOMMENDATION

THAT the Fraser Valley Regional District Board direct staff to initiate a zoning amendment for five privately owned properties adjacent to the Coquihalla River Provincial Park, Area B

STRATEGIC AREA(S) OF FOCUS

Support Healthy & Sustainable Community Provide Responsive & Effective Public Services

ISSUE

Five privately owed properties adjacent to Coquihalla River Provincial Park were inappropriately zoned to Park (P-1) in 1989. One of the impacted property owners has requested FVRD undertake a zoning amendment to correct the error.

Rezoning efforts were undertaken in 1996 to correct the zoning. The property owners of the time were not amenable to the Regional District requirement that gravel extraction be prohibited by legal covenant. Consequently, the rezoning was not completed.

BACKGROUND

There are five parcels located off the Caroline Mines Road Exit on Highway 5 which were zoned to Park (P-1) in 1989. At the time, FVRD understood the parcels to be part of the lands designated as the Coquihalla River Recreational Area (circa 1934). The recreation area was later designated as Coquihalla Provincial Park (1986) through Order in Council #1183, and zoned as Park (P-1) when Zoning Bylaw 801, 1989 was adopted. FVRD was unaware that privately owned parcels were included in the P-1 zone.

BC Parks has confirmed that all privately owned properties are excluded from the Coquihalla River Provincial Park boundaries.

Impacted Properties

PID	Property size Acres (ha)		Owner last name
014-560-879	22.24	(9 ha)	Unwin/ Ouellette
014-561-026	0.528	(0.21 ha)	Unwin
014-560-810	12.5	(5.05 ha)	Unwin
007-850-425	1.16	(0.47 ha)	Mason
014-560-453	2.59	(1.05 ha)	Bradner



Rezoning process 1996

In 1996, one of the property owners brought the zoning error to the attention of FVRD. In response, FVRD initiated a zoning amendment with no charge to the property owners to correct the issue.

The zoning amendment had three readings and a public hearing. A condition of the rezoning was that the applicant register a covenant to the property title prohibiting rock quarry and gravel pit uses. This step was not completed by the property owners and, consequently, the rezoning was not completed.

Rezoning request 2009

The topic of rezoning the properties was again raised by a property owner in 2009. At this time staff advised:

- The property owners would be responsible for paying for the zoning amendment, as the Regional District has already funded a full process once (three readings and a public hearing);
- Geotechnical issues need to be addressed with an overview Geohazard assessment prior to a rezoning application;
- Any recommendations from the geotechnical report would need to be registered to each property title as a Section 219 covenant.

DISCUSSION

On September 20, 2020 staff received a request from Mr. Doug Unwin for FVRD to initiate a rezoning of his family's properties. The request is to rezone the properties to R-1 rather than the previously considered R-4 zone. A key difference between the R-1 and R-4 zones is the minimum parcel size that

could be created by subdivision. Mr. Unwin states the R-1 zone is desirable as it may allow for future subdivision.

- R-1 Minimum parcel size of 2 ha
- R-4 Minimum parcel size of 4 ha

Staff would like to draw attention to the following issues:

- 1. **Inappropriate Zoning**. The subject properties are zoned Park (P-1) which is a zone meant to accommodate public use. The Park zone does not allow for principal residences to be constructed on the lands. The subject properties are privately owned and, therefore, should not have this zoning.
- 2. **Development Potential**. Staff are of the opinion the R-4 is the most appropriate zone for the properties. All areas in the vicinity of this part of Hwy 5, the Coquihalla River, and the Coquihalla River Provincial Park are zoned R-4, with the exception of the park. In 2010, three of the five subject properties had a dwelling on them. The R-4 zone would allow the existing residential uses to continue, and would not facilitate additional development potential in terms of subdivision. The R-4 zone in Bylaw 801, 1989 is equivalent to Limited Use in other electoral areas.

The requested R-1 zone could potentially allow for subdivision on two of the properties based on the minimum parcel size. Staff are supportive of correcting the zoning in order to secure existing property rights for the land owners. However, in instances where a rezoning increases the subdivision potential, the costs are typically borne by the parties that would benefit.

If the rezoning were to facilitate subdivision, the rezoning process would need to consider all potential lots. This would increase the costs and potential liability to FVRD. Staff would not recommend FVRD initiate a rezoning which facilitates subdivision.

- 3. **Building Permit Requirements/ Public Road Access**. None of the properties have access from a public road. According to the Fraser Valley Regional District Building Bylaw, the property owners are not required, but <u>may</u> obtain a building permit from the Regional District where the property is not accessible from a public road. It is up to the property owner to decide if they wish to obtain a building permit.
- 4. **Geotechnical Concerns**. During the 1996 rezoning process, staff noted that a landslide occurred in the area in the early 1990s. A geotechnical study was not conducted at the time. A geotechnical feasibility study, or a covenant requiring geotechnical assessment prior to construction of habitable space will likely be required as part of the rezoning.
- 5. **Restrictive Covenant**. The previous rezoning process included the requirement for the property owners to register a restrictive covenant which prohibited rock quarry and gravel pit

uses on the properties. A similar covenant will likely be required should the rezoning move forward. Mr. Unwin has indicated a general acceptance of the covenant in his request to FVRD.

An FVRD initiated rezoning process could be started in 2021, with an estimated completion date by 2022. The project would be placed in queue alongside other priority planning projects.

COST

If the property owners were to initiate this proposal, the cost to rezone five lots with three separate owners would be \$8,400.

If FVRD is to initiate the rezoning, the direct cost of public hearings, advertisements, and any technical assessment would come from the Electoral Area Planning budget. These direct costs, excluding staff and administration time are estimated to be \$4,000.

The costs of covenant registration would be borne by the property owners.

CONCLUSION

Staff are of the opinion that another effort should be made to correct the historical zoning error. It is recommended that the FVRD Board direct staff initiate a rezoning process in order to restore property rights to the landowners. The key purpose of the rezoning would be to bring the existing residential uses on the properties into conformity without creating additional subdivision potential.

Staff note that there is an awareness from at least one property owner that a covenant limiting some land uses, or requiring future geotechnical study may be required. This awareness may help a zoning amendment process to reach a satisfactory conclusion for all parties. If the property owners reject a potential rezoning once it has started, staff would be unlikely to support initiating another process in the future.

OPTIONS

Option 1 – Initiate Rezoning (Recommended)

With this option, FVRD accepts the cost of the rezoning in order to correct a historical error. The property owner may be responsible for bearing costs related registration of required covenants.

THAT the Fraser Valley Regional District Board direct staff to initiate a zoning amendment for five privately owned properties adjacent to Coquihalla River Provincial Park.

Option 2 - Refuse to Initiate Rezoning

With this option, the property owners are responsible for initiating and funding a rezoning application.

THAT the Fraser Valley Regional District Board refuse the request for staff to initiate a zoning amendment for five privately owned properties adjacent to Coquihalla River Provincial Park.

Option 3 – Refer to the Request Back to Staff

THAT the Fraser Valley Regional District Board refer the request for staff to initiate a zoning amendment for five privately owned properties adjacent to Coquihalla River Provincial Park back to staff.

COMMENTS BY:

Graham Daneluz, Director of Planning & Development: Reviewed and supported

Kelly Lownsbrough, Chief Financial Officer/ Director of Finance: Reviewed and supported

Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported.

From:	
To:	Tracey Heron
Subject:	rezoning of the Unwin Property
Date:	September 20, 2020 10:39:54 AN

Tracey Heron Planning Technician Fraser Valley Regional District.

I am writing you to request that our properties in Area B of the Fraser Valley Regional District be Zoned R1 from the current P1 zoning. The PID of the three properties owned by myself and family members are 014-560-879, 014-561-026, 014-560-810. These properties have been in our family for almost 70 years and were inadvertently zoned P1 when the Coquihalla Recreational Area was established.

We would like this change because one of the properties, 014-560-879, is currently non-conforming as it has a residence (built around 1920) on it that is not accessory to the park use. A rezoning to R1 would make the residence conforming to the Area B zoning bylaw. Also, as a new generation of family members which is larger than the current generation matures there may be a desire to build an additional residence on 014-560-879 or an initial residence on the other properties. This succession would not be allowed under the current P1 zoning. In addition, I understand that if our current residence were to be destroyed by fire or other events that we would not be able to rebuild. Hopefully a rezoning to R1 would mitigate this burden.

We are seeking an R1 vs R4 zoning as we do not want the property to become a camp ground or fish farm. Also the R1 zoning would allow for a future generation to sub divide the property into 2 hectare parcels which may assist in solving future issues with multiple families sharing a single property. We have seen to many families torn apart by succession issues with recreational properties and we would like to provide as much flexibility to future generations as possible.

The turn off from highway 1 into the picnic area of the Coquihalla Recreational Area has been closed down for many years now as this initiative has been abandoned by subsequent governments since it was initiated. On the west side of the Coquihalla river neither the park or our property is accessible by public roadway. The only access is on the Transmountain pipeline private road used to maintain the pipeline. In addition the pipeline has a security gate at the north boundary to our property and to the south near Sowaqua Creek. The only access to the park from the North is by trespassing thru our property. The only access from the south is by trespassing on the Transmoutain pipeline road. This is a heavily wooded area, there are no campsites or any other facilities for visitors to the Recreational Area.

Our properties, which have been in the family since the mid fifties, were inadvertently zoned park P1 in the late 1980's as the provincial government introduced a number of recreational areas across the province. Unfortunately, the province did not consider private land owners in these recreational areas and our properties all of a sudden became parks with no consultation. I believe that asking us to put restrictive covenants on our property in order to correct a mistake that was made by government is unwarranted. However, given that we have no intention of ever turning the property

into a gravel pit, we are willing to add a covenant to the 3 properties that we will not extract aggregates from the property.

I understand that there is a potential cost to us for this rezoning. I believe there are a number of reasons that we should not be charged a fee for this rezoning:

- 1. That the property is zoned P1 is not our fault, this zoning was put in place by government not at our request and with no consultation, we should not have to pay for the governments mistake,
- 2. We have been down this road in the past and a lot of the work we would be charged for and has already been completed and is in your files, and
- 3. We are willing to sign a covenant restricting the use of our property so that no aggregate extraction is allowed, aggregate extraction is probably the highest value component of this property, so we are giving up this significant value and receiving nothing for it, having the property rezoned to its proper use from P1 and giving up significant value should not cost us.

As per your request I have discussed the rezoning with our neighbours who are also zoned P1, they would both like to have their properties rezoned as R1 along with us. The PID's for these properties as supplied by you are PIDs: 007-850-425, 014-560-453. Also our neighbours to the west of the Kettle Valley Railway right of way are not zoned P1.

Thank-you for your consideration of this matter.

Although we are not in a great hurry to resolve this matter, we would like the rezoning completed as soon as possible.

Yours truly

Doug Unwin



CORPORATE REPORT

To: Electoral Area Services Committee Date: 2020-12-08 From: Louise Hinton, Bylaw Compliance & Enforcement Officer Pam Loat, Legislative Coordinator

File No: 3920-20

Subject: Bylaw Offence Notice Enforcement Amendment Bylaw No. 1618, 2020

RECOMMENDATION

That the Fraser Valley Regional District Board consider giving three readings and adoption to the bylaw cited as Fraser Valley Regional District Bylaw Offence Notice Enforcement Amendment Bylaw No. 1618, 2020.

STRATEGIC AREA(S) OF FOCUS

Provide Responsive & Effective Public Services

BACKGROUND

These proposed amendments to the Bylaw Offence Notice Enforcement Bylaw include the addition of all nine Official Community Plan (OCP) bylaws to Schedule B of the bylaw (Contravention and Penalties) and the removal of fines associated with four Dewdney Alouette Regional District (DARD) and Regional District of Fraser Cheam (RDFC) vessel noise control bylaws that were repealed by the Board on February 25, 2020.

COST

None

CONCLUSION

The addition of the OCP bylaw contraventions will allow the FVRD to enforce these bylaws by way of bylaw offence notice tickets. This will provide for a low cost enforcement option for works conducted without first obtaining a development permit, when voluntary compliance cannot be reached. Included are reduced amounts for early payment of penalties and increased amounts for late payment of penalties to provide incentives for the payment of tickets in a timely manner.

This amendment also updates Schedule A-8 to remove the fines associated with the repealed vessel noise control bylaws.

COMMENTS BY:

Graham Daneluz, Director of Planning & Development: Reviewed and supported.

Kelly Lownsbrough, Chief Financial Officer/ Director of Finance: Reviewed and supported.

Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported.

FRASER VALLEY REGIONAL DISTRICT BYLAW NO. 1618, 2020

A bylaw to amend the Bylaw Offence Notice Enforcement Bylaw

WHEREAS the Board of Directors of the Fraser Valley Regional District has deemed it advisable to amend *Fraser Valley Regional District Bylaw Offence Notice Enforcement Bylaw No.* 1415, 2017.

THEREFORE the Board of Directors of the Fraser Valley Regional District, in open meeting assembled, enacts as follows:

1) <u>CITATION</u>

This bylaw may be cited as *Fraser Valley Regional District Bylaw Offence Notice Enforcement Amendment Bylaw No.* 1618, 2020

2) <u>ENACTMENTS</u>

That Fraser Valley Regional District Bylaw No. 1415, 2017 be amended by:

a. adding, in Section 12 (Schedules), after Schedule B:

"Schedule B2 – Official Community Plan Contraventions and Penalties"

- b. deleting Schedule A-8 (Noise Regulations) in its entirety and replacing it with Schedule A-8 attached to this bylaw;
- c. adding Schedule B-2 Official Community Plan Contraventions and Penalties attached to this bylaw;

3) <u>SEVERABILITY</u>

If a portion of this bylaw is found invalid by a court, it will be severed and the remainder of the bylaw will remain in effect.

4) <u>READINGS AND ADOPTION</u>

READ A FIRST TIME THIS

READ A SECOND TIME THIS

READ A THIRD TIME THIS

ADOPTED THIS

Chair/Vice-Chair

Corporate Officer/Deputy

5) <u>CERTIFICATION</u>

I hereby certify that this is a true and correct copy of *Fraser Valley Regional District Bylaw Offence Notice Enforcement Amendment Bylaw No. 1618, 2020* as adopted by the Board of Directors of the Fraser Valley Regional District on

Dated at Chilliwack, BC on

Corporate Officer/Deputy

FRASER VALLEY REGIONAL DISTRICT BYLAW NO. 1415, 2017

Schedule A-8

DESIGNATED BYLAW CONTRAVENTIONS AND PENALTIES Noise Regulations

Bylaw Notice bylaw citation	Section	Description	A1 Penalty	A2 Early Payment Penalty	A3 Late Payment Penalty	A4 Compliance Agreement Available
Chilliwack River Valley Noise and Disturbance	4(a)	Noise in/on public place	\$100	\$90	\$110	No
Bylaw No. 799, 1988	4(b)	Noise in/on private property	\$100	\$90	\$110	No

FRASER VALLEY REGIONAL DISTRICT BYLAW NO. 1415, 2017

<u>Schedule B-2</u> OFFICIAL COMMUNITY PLAN BYLAW CONTRAVENTIONS AND PENALTIES

Bylaw Notice bylaw citation	Section	Description	A1 Penalty	A2 Early Payment Penalty	A ₃ Late Payment Penalty	A4 Compliance Agreement Available
Official Community	6	Failure to obtain	\$500	\$450	\$550	Yes
Plan Bylaw		Development				
No. 804, 1994		Permit DPA 1-A				
Electoral Area A		Works contrary to	\$500	\$450	\$550	Yes
		DP requirements				

Bylaw Notice bylaw citation	Section	Description	A1 Penalty	A2 Early Payment Penalty	A3 Late Payment Penalty	A4 Compliance Agreement Available
Official Community Plan Bylaw No. 150, 1998	9	Failure to obtain a Development Permit DPA 1-B	\$500	\$450	\$550	Yes
Electoral Area B		Works contrary to DP requirements	\$500	\$450	\$550	Yes

Bylaw Notice bylaw citation	Section	Description	A1 Penalty	A2 Early Payment Penalty	A3 Late Payment Penalty	A4 Compliance Agreement Available
Official Community Plan Bylaw	9	Failure to obtain a Development	\$500	\$450	\$550	Yes
No. 800, 1985		Permit				
Portions of Electoral		Works contrary to	\$500	\$450	\$550	Yes
Areas B and C		DP requirements				

Bylaw Notice bylaw citation	Section	Description	A1 Penalty	A2 Early Payment Penalty	A ₃ Late Payment Penalty	A4 Compliance Agreement Available
Official Community Plan Bylaw	9	Failure to obtain a Development	\$500	\$450	\$550	Yes
No. 0020, 1998		Permit				
Electoral Area C		Works contrary to DP requirements	\$500	\$450	\$550	Yes

Bylaw Notice bylaw citation	Section	Description	A1 Penalty	A2 Early Payment Penalty	A3 Late Payment Penalty	A4 Compliance Agreement Available
Official Community Plan Bylaw No. 200, 1997	5	Failure to obtain a Development Permit	\$500	\$450	\$550	Yes
Electoral Area D		Works contrary to DP requirements	\$500	\$450	\$550	Yes

Bylaw Notice bylaw citation	Section	Description	A1 Penalty	A2 Early Payment Penalty	A3 Late Payment Penalty	A4 Compliance Agreement Available
Official Community Plan Bylaw	14	Failure to obtain a Development	\$500	\$450	\$550	Yes
No. 1115, 2011		Permit				
Portions of Electoral Areas E and H		Works contrary to DP requirements	\$500	\$450	\$550	Yes

Bylaw Notice bylaw citation	Section	Description	A1 Penalty	A2 Early Payment Penalty	A3 Late Payment Penalty	A4 Compliance Agreement Available
Official Community Plan Bylaw No. 0999, 2010	13	Failure to obtain a Development Permit	\$500	\$450	\$550	Yes
Electoral Area F		Works contrary to DP requirements	\$500	\$450	\$550	Yes

Bylaw Notice bylaw citation	Section	Description	A1 Penalty	A2 Early Payment Penalty	A3 Late Payment Penalty	A4 Compliance Agreement Available
Official Community Plan Bylaw No. 0866, 2009	15	Failure to obtain a Development Permit	\$500	\$450	\$550	Yes
Electoral Area G		Works contrary to DP requirements	\$500	\$450	\$550	Yes