

BOARD OF DIRECTORS

OPEN MEETING AGENDA

Tuesday, June 25, 2019

(Immediately following the FVRHD Open Meeting)

FVRD Boardroom, 45950 Cheam Avenue, Chilliwack, BC

Pages

1. CALL TO ORDER
2. IN MEMORIAM - WALTER KASSIAN
3. APPROVAL OF AGENDA, ADDENDA AND LATE ITEMS

All/Unweighted

MOTION FOR CONSIDERATION

THAT the Agenda, Addenda and Late Items for the Fraser Valley Regional District Board Open Meeting of June 25, 2019 be approved;

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

4. DELEGATIONS AND PRESENTATIONS

4.1 Fraser Valley Regional District Clean Economy Study

13 - 117

All/Unweighted

- Presentation by Paul Shorthouse, Senior Director, Delphi Group
- Corporate report dated June 11, 2019 from Alison Stewart, Manager of Strategic Planning
- FVRD Clean Economy Study - Final Report

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional District Board receive the "*Fraser Valley Regional District Clean Economy Study*";

AND THAT staff be directed to create a companion resource guide for local governments, First Nations and stakeholders to serve as a tool to support clean economy opportunities.

5. BOARD MINUTES & MATTERS ARISING

5.1	<u>Board Meeting - May 22, 2019</u>	118 - 131
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All/Unweighted

MOTION FOR CONSIDERATION

THAT the Minutes of the Fraser Valley Regional District Board Open Meeting of May 22, 2019 be adopted.

6. COMMITTEE AND COMMISSION MINUTES FOR INFORMATION AND MATTERS ARISING

6.1	<u>Draft Regional and Corporate Services Committee - June 11, 2019</u>	132 - 137
6.2	<u>Draft Electoral Area Services Committee - June 11, 2019</u>	138 - 146
6.3	<u>Board of Variance Hearing - May 24, 2019</u>	147 - 149
6.4	<u>Draft Internal Affairs Committee - May 22, 2019</u>	150 - 152
6.5	<u>Cultus Lake Advisory Planning Commission - May 15, 2019</u>	153 - 157
6.6	<u>Recreation, Culture and Airpark Services Commission Special Minute dated May 17, 2019 - FVRD Hope and District Recreation Centre Fees and Other Charges Amendment Bylaw No. 1529, 2019</u>	158 - 159

7. CORPORATE ADMINISTRATION

No Items.

8. FINANCE

8.1	<u>Electoral Area A & B Heritage Conservation Service – Tashme Museum Kindergarten Schoolhouse Project</u>	160 - 169
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Areas A and B/Weighted

- Corporate report dated June 25, 2019 from Mike Veenbaas, Director of Financial Services
- Funding Request Letter
- Kindergarten Schoolhouse Project - Budget
- Kindergarten Schoolhouse Project Pictures
- Tashme Museum Pictures

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional Board support a contribution of \$55,000 from

the Electoral Area A & B Heritage Conservation Service Area for the Tashme Museum Kindergarten Schoolhouse Project, subject to the imposition of a ten year covenant.

8.2 2018 Fraser Valley Regional District Statement of Financial Information 170 - 187

FOR INFORMATION ONLY

- Corporate report dated June 25, 2019 from Mike Veenbaas, Director of Financial Services
- 2018 FVRD Statement of Financial Information

9. BYLAWS

9.1 FVRD Animal Control Regulation Amendment Bylaw No. 1527, 2019 188 - 193

Motion No. 1: First Reading - All/Unweighted

Motion No. 2: Second and Third Reading - All/Unweighted

Motion No. 3: Adoption - All/Unweighted (2/3 Majority)

- Corporate report dated May 9, 2019 from Stacey Barker, Director of Regional Services
- Draft Bylaw No. 1527, 2019

MOTION FOR CONSIDERATION

MOTION NO. 1: [RACS-MAY 2019] THAT the Fraser Valley Regional District Board consider giving first reading to the bylaw cited as *Fraser Valley Regional District Animal Control Regulation Amendment Bylaw No. 1527, 2019*.

MOTION FOR CONSIDERATION

MOTION NO. 2: [RACS-MAY 2019] THAT the Fraser Valley Regional District Board consider giving second and third reading to the bylaw cited as *Fraser Valley Regional District Animal Control Regulation Amendment Bylaw No. 1527, 2019*.

MOTION FOR CONSIDERATION

MOTION NO. 3: [RACS-MAY 2019] THAT the Fraser Valley Regional District Board consider adopting the bylaw cited as *Fraser Valley Regional District Animal Control Regulation Amendment Bylaw No. 1527, 2019*.

9.2 Electoral Areas Animal Control Regulation Amendment Bylaw No. 1531, 2019 194 - 200

Motion No. 1: First Reading - All/Unweighted

Motion No. 2: Second and Third Reading - All/Unweighted

Motion No. 3: Adoption - All/Unweighted (2/3 Majority)

- Corporate report dated June 11, 2019 from Stacey Barker, Director of Regional Services
- Draft Bylaw No. 1531, 2019

MOTION FOR CONSIDERATION

MOTION NO. 1: [EASC-JUNE 2019] THAT the Fraser Valley Regional District Board consider giving first reading to the bylaw cited as *Fraser Valley Regional District Electoral Areas Dangerous and Aggressive Dog Regulation Amendment Bylaw No. 1531, 2019*.

MOTION FOR CONSIDERATION

MOTION NO. 2: [EASC-JUNE 2019] THAT the Fraser Valley Regional District Board consider giving second and third reading to the bylaw cited as *Fraser Valley Regional District Electoral Areas Dangerous and Aggressive Dog Regulation Amendment Bylaw No. 1531, 2019*.

MOTION FOR CONSIDERATION

MOTION NO. 3: [EASC-JUNE 2019] THAT the Fraser Valley Regional District Board consider adopting the bylaw cited as *Fraser Valley Regional District Electoral Areas Dangerous and Aggressive Dog Regulation Amendment Bylaw No. 1531, 2019*.

9.3 FVRD Electoral Area D Zoning Amendment Bylaw No. 1518, 2019 - application for 10180 Royalwood Boulevard to facilitate an increase in lot coverage 201 - 208

- Corporate report dated June 25, 2019 from Andrea Antifaeff, Planner I
- Draft Bylaw No. 1518, 2019

MOTION FOR CONSIDERATION

THAT proposed *Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1518, 2019* be adopted.

9.4 FVRD Hatzic Prairie Water Supply and Distribution System Service Area Amendment Bylaw No. 1519, 2019, Electoral Area "F" 209 - 213

Motion No. 1: First Reading - All/Unweighted

Motion No. 2: Second and Third Reading - All/Unweighted

- Corporate report dated June 11, 2019 from Katarina Duke, Engineering and Community Services Technologist
- Draft Bylaw No. 1519, 2019

MOTION FOR CONSIDERATION

MOTION NO. 1: [EASC-JUNE 2019] THAT the Fraser Valley Regional District Board consider giving first reading to the bylaw cited as *Fraser Valley Regional District Hatzic Prairie Water Supply and Distribution System Service Area Amendment Bylaw No. 1519, 2019*.

MOTION FOR CONSIDERATION

MOTION NO. 2: [EASC-JUNE 2019] THAT the Fraser Valley Regional District Board consider giving second and third reading to the bylaw cited as *Fraser Valley Regional District Hatzic Prairie Water Supply and Distribution System Service Area Amendment Bylaw No. 1519, 2019*.

9.5 FVRD Directors Remuneration Bylaw No. 1528, 2019

214 - 218

Motion No. 1: First Reading - All/Weighted

Motion No. 2: Second and Third Reading - All/Weighted

Motion No. 3: Adoption - All/Weighted (2/3 Majority)

- Corporate report dated June 25, 2019 from Mike Veenbaas, Director of Financial Services
- Draft Bylaw No. 1528, 2019

MOTION FOR CONSIDERATION

MOTION NO. 1: THAT the Fraser Valley Regional District Board consider giving first reading to the bylaw cited as *Fraser Valley Regional District Directors Remuneration Bylaw No. 1528, 2019*.

MOTION FOR CONSIDERATION

MOTION NO. 2: THAT the Fraser Valley Regional District Board consider giving second and third reading to the bylaw cited as *Fraser Valley Regional District Directors Remuneration Bylaw No. 1528, 2019*.

MOTION FOR CONSIDERATION

MOTION NO. 3: THAT the Fraser Valley Regional District Board consider adopting the bylaw cited as *Fraser Valley Regional District Directors Remuneration Bylaw No. 1528, 2019*.

9.6 FVRD Hope and District Recreation Centre Fees and Other Charges Amendment Bylaw No. 1529, 2019

219 - 234

Motion No. 1: First Reading - Hope and Area B/Weighted

Motion No. 2: Second and Third Reading - Hope and Area B/Weighted

Motion No. 3: Adoption - Hope and Area B/Weighted (2/3 Majority)

- Corporate report dated May 17, 2019 from Mike Freimark, Assistant Manager, Recreation Services
- Draft Bylaw No. 1529, 2019
- Facilities Rates and Fees Comparison - April 2019

MOTION FOR CONSIDERATION

MOTION NO. 1: [RCASC-May 17, 2019 Special Minute] THAT the Fraser

Valley Regional District Board consider giving first reading to the bylaw cited as *Fraser Valley Regional District Hope and District Recreation Centre Fees and Other Charges Amendment Bylaw No. 1529, 2019*.

MOTION FOR CONSIDERATION

MOTION NO. 2: [RCASC-May 17, 2019 Special Minute] THAT the Fraser Valley Regional District Board consider giving second and third reading to the bylaw cited as *Fraser Valley Regional District Hope and District Recreation Centre Fees and Other Charges Amendment Bylaw No. 1529, 2019*.

MOTION FOR CONSIDERATION

MOTION NO. 3: [RCASC- May 17, 2019 Special Minute] THAT the Fraser Valley Regional District Board consider adopting the bylaw cited as *Fraser Valley Regional District Hope and District Recreation Centre Fees and Other Charges Amendment Bylaw No. 1529, 2019*.

10. PERMITS

[OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO BE HEARD]

- 10.1 **Application for Development Variance Permit 2019-07 to vary the size of an accessory building for a detached garage at 10180 Royalwood Boulevard, Electoral Area "D"** 235 - 257

EAs/Unweighted

- Corporate report dated June 11, 2019 from Andrea Antifaeff, Planner I
- Draft DVP 2019-07
- DVP Application

MOTION FOR CONSIDERATION

[EASC-JUNE 2019] THAT the Fraser Valley Regional District Board issue Development Variance Permit 2019-07 to increase the size of an accessory building from the maximum permitted area of 45 square metres to 64 square metres, to facilitate the construction of a detached garage at 10180 Royalwood Boulevard, Area "D", subject to the consideration of any comments or concerns raised by the public.

- 10.2 **Application for Development Variance Permit 2019-13 to reduce the setback from a well for an aquaculture building at 12443 Stave Lake Road, Electoral Area "F"** 258 - 303

Motion No. 1: EAs/Unweighted

Motion No. 2: All/Weighted

- Corporate report dated June 11, 2019 from Julie Mundy, Planning Technician

- Draft DVP 2019-13
- DVP Application

MOTION FOR CONSIDERATION

MOTION NO. 1: [EASC-JUNE 2019] THAT the Fraser Valley Regional District issue Development Variance Permit 2019-13 to vary the minimum setback requirement of aquaculture structures to existing wells at 12443 Stave Lake Road from 30.0m metres to 0.0 metres subject to consideration of any comments or concerns raised by the public.

MOTION FOR CONSIDERATION

MOTION NO. 2: [EASC-JUNE 2019] THAT the Fraser Valley Regional District Board authorize its signatories to execute all legal instruments associated with this application, including a Section 219 restrictive covenant advising future property owners that the agricultural and domestic water supply intake is within 30.0 metres of aquaculture structures and that the management of the water supply must be consistent with the Standard Operating Procedure prepared by the applicant as well as with the recommendations of the Hydrogeological Report, and to include regular tests of the water to provide warning of possible contamination.

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|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 10.3 | <p><u>Application for Development Variance Permit 2019-14 to vary the maximum height and size requirements for an accessory building at 10394 Parkwood Drive, Electoral Area "D"</u></p> | 304 - 333 |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|

EAs/Unweighted

- Corporate report dated June 11, 2019 from Julie Mundy, Planning Technician
- Draft DVP 2019-14
- DVP Application

MOTION FOR CONSIDERATION

[EASC-JUNE 2019] THAT the Fraser Valley Regional District Board issue Development Variance Permit 2019-14 to increase the maximum permitted area of an accessory building from 45 square metres to 107 square metres and to increase the maximum permitted height of an accessory building from 5.0 metres to 7.5 metres, subject to consideration of any comments or concerns raised by the public.

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|------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 10.4 | <p><u>Application for Development Variance Permit 2019-15 to reduce the front lot line setback at 58161 Fancher Road, Electoral Area "B"</u></p> | 334 - 349 |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|

EAs/Unweighted

- Corporate report dated June 11, 2019 from Julie Mundy, Planning Technician

- Draft DVP 2019-15
- DVP Application

MOTION FOR CONSIDERATION

[EASC-JUNE 2019] THAT the Fraser Valley Regional District Board issue Development Variance Permit 2019-15 for 58161 Fancher Road, Electoral Area B to reduce the front lot line setback from 25 feet (7.6 metres) to 10 feet (3.05 metres), clear to sky, to facilitate the construction of a residence and a residential accessory building, subject to consideration of any comments or concerns raised by the public.

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|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 10.5 | <u>Application for Development Variance Permit 2019-16 to reduce the interior side lot line setback for the construction of a wheelchair ramp at #78-14550 Morris Valley Road, Electoral Area "C" (River Reach Estates)</u> | 350 - 365 |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|

EAs/Unweighted

- Corporate report dated June 11, 2019 from Andrea Antifaeff, Planner
I
- Draft DVP 2019-16
- DVP Application

MOTION FOR CONSIDERATION

[EASC-JUNE 2019] THAT the Fraser Valley Regional District Board issue Development Variance Permit 2019-16 to reduce the setback from the interior side lot line from 2.1 metres to 1.0 metres, clear to sky to facilitate the construction of a wheelchair ramp at #78-14550 Morris Valley Road, Area "C", subject to the consideration of any comments or concerns raised by the public.

11. CONTRACTS, COVENANTS AND OTHER AGREEMENTS

- | | | |
|------|---------------------------------------------------------------------------|-----------|
| 11.1 | <u>Cultus Lake North Waste Water Treatment Plant Odour Control</u> | 366 - 367 |
|------|---------------------------------------------------------------------------|-----------|

All/Weighted

- Corporate report dated June 25, 2019 from Dave Roblin, Manager of Operations

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional District Board authorize its signatories to execute a contract with Ramtech Environmental Products. to provide the Odour Control equipment for the Cultus Lake North Wastewater Treatment Plant for the sum of \$269,000 plus tax.

12. OTHER MATTERS

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|------|-----------------------------------------------------------------------------------------------|-----------|
| 12.1 | <u>Proposed UBCM Resolution - Provincial Response to Homeless Camps on Crown Lands</u> | 368 - 371 |
|------|-----------------------------------------------------------------------------------------------|-----------|

All/Unweighted

- Corporate report dated June 11, 2019 from Alison Stewart, Manager of Strategic Planning

MOTION FOR CONSIDERATION

[RACS/EASC-JUNE 2019] THAT the Fraser Valley Regional District Board forward a resolution on the need for a provincial strategy to address rural homelessness and encampments on Crown land to the Union of BC Municipalities for consideration at its September 2019 convention;

AND THAT the resolution shall be as follows:

RURAL HOMELESSNESS: CROWN LAND ENCAMPMENTS

WHEREAS Homelessness is a challenge facing both urban and rural communities;

AND WHEREAS electoral areas have the least ability to address homelessness, in that they are by their very nature remote from health, social, police and other services and the minimal tax bases cannot support the hard and soft infrastructure required to address homelessness;

AND WHEREAS the province's response to homeless encampments on Crown land has been inconsistent or ad-hoc in nature, sometimes relocating encampments without taking into account impacts on rural communities and regional district resources;

THEREFORE IT BE RESOLVED that the province of British Columbia through its newly established Office of Homelessness Coordination within the Ministry of Poverty Reduction and Social Development develop a rural homelessness strategy to address what is clearly a gap in the province's response to homelessness.

12.2 Updated FVRD Parks Closure Policy

372 - 376

All/Unweighted

- Corporate report dated June 11, 2019 from Christina Vugteveen, Manager of Park Operations
- Draft updated FVRD Parks Closure Policy

MOTION FOR CONSIDERATION

[RACS-JUNE 2019] THAT the Fraser Valley Regional District Board adopt the updated *Parks Closure Policy*.

12.3 Proposal on Community Rail South of the Fraser on the Interurban Corridor

All/Unweighted

MOTION FOR CONSIDERATION

[RACS-JUNE 2019] THAT the proposal provided by South Fraser Community Rail with respect to *Community Rail South of the Fraser on the InterUrban Corridor* be referred to staff to report back for further discussion at an upcoming Board meeting.

13. CONSENT AGENDA

13.1 CONSENT AGENDA - FULL BOARD

All/Unweighted

All staff reports respecting these items are available in the Directors' Office and on the FVRD website.

MOTION FOR CONSIDERATION

THAT the following Consent Agenda items 13.1.1 to 13.1.2 be endorsed:

13.1.1 EASC-JUNE 2019

THAT the Fraser Valley Regional District Board authorize a grant-in-aid in the amount of \$1,500 to Spuzzum First Nation, funded from the 2019 Electoral Area "B" grant-in-aid budget, to help fund the outfitting of their Elders shelter with benches and tables to help bring the community together.

Reference item 6.2 of June 11, 2019 EASC Agenda.

13.1.2 EASC-JUNE 2019

THAT the Fraser Valley Regional District Board authorize a grant-in-aid in the amount of \$11,200 to the Sunshine Valley Ratepayers Association, funded from the 2019 Electoral Area "B" grant-in-aid budget, to help offset the costs of equipment rental for river cleanup, community garden beds, a community composter, hosting a Canada Day celebration, website migration, and hosting Heritage Day.

Reference item 6.3 of June 11, 2019 EASC Agenda.

13.2 CONSENT AGENDA - ELECTORAL AREAS

EAs/Unweighted

MOTION FOR CONSIDERATION

THAT the following Consent Agenda item 13.2.1 be endorsed:

13.2.1 EASC-JUNE 2019

THAT the Fraser Valley Regional District Board adopt the policy titled *Secondary dwellings in the Electoral Areas*

14. ADDENDA ITEMS/LATE ITEMS
15. REPORTS FROM COMMITTEE MEETINGS - FOR INFORMATION
 - 15.1 Report regarding '2018 Electoral Area Annual Development Cost Charge Report' - June 2019 EASC 377 - 379
16. ITEMS FOR INFORMATION AND CORRESPONDENCE 16.1 - 16.7)
 - 16.1 Letter dated May 24, 2019 from Ministry of Forests, Lands, Natural Resource Operations and Rural Development regarding proposals from Lil'wat Nation for name changes to a few features in the FVRD. 380 - 382
 - 16.2 Letter dated May 29, 2019 from City of Victoria to UBCM regarding Provincial support for libraries. 383 - 383
 - 16.3 Letter dated April 29, 2019 from qathet Regional District to the Province regarding expanding the scope of the Recycling Regulation for PPP to include the ICI sector. 384 - 388
 - 16.4 Lower Mainland Local Government Association (LMLGA) 2019 Resolutions Disposition 389 - 407
 - 16.5 Letter dated June 1, 2019 from Wood Works BC regarding 'The 2019 Community Recognition Awards Call for Nominations'. 408 - 409
 - 16.6 Fraser Basin Council - Fraser Valley Update - June 2019 410 - 410
 - 16.7 Squamish-Lillooet Regional District Update - May 2019 411 - 413
17. REPORTS BY STAFF
18. REPORTS BY BOARD DIRECTORS
19. PUBLIC QUESTION PERIOD FOR ITEMS RELEVANT TO AGENDA
20. RESOLUTION TO CLOSE MEETING

All/Unweighted

MOTION FOR CONSIDERATION

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 to 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;

- Section 90(1)(e) of the *Community Charter* - the acquisition, disposition or expropriation of land or improvements, if the Board considers that disclosure could reasonably be expected to harm the interests of the regional district.

R E C E S S

21. RECONVENE OPEN MEETING

22. RISE AND REPORT OUT OF CLOSED MEETING

23. ADJOURNMENT

All/Unweighted

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional District Board Open Meeting of June 25, 2019 be adjourned.

To: CAO for the Regional and Corporate Services Committee

Date: 2019-06-11

From: Alison Stewart, Manager of Strategic Planning

File No: 6430-30-013

Subject: Fraser Valley Regional District Clean Economy Study

RECOMMENDATION

THAT the Fraser Valley Regional District Board receive the "*Fraser Valley Regional District Clean Economy Study*";

AND THAT staff be directed to create a companion resource guide for local governments, First Nations and stakeholders to serve as a tool to support clean economy opportunities.

STRATEGIC AREA(S) OF FOCUS

Support Environmental Stewardship

Foster a Strong & Diverse Economy

Support Healthy & Sustainable Community

BACKGROUND

A formal presentation of the findings will be provided to the Board at its June 25, 2019 meeting.

Goal 4 of the Fraser Valley Regional District's (FVRD) Regional Growth Strategy (RGS) is for the Region to be "a network of sustainable communities that will be developed by:

- strengthening transportation, economic, and social linkages between communities;
- maintaining the unique historic identities of communities;
- providing opportunities for residents to live and work in the same community or region; and
- creating economically, environmentally and socially sustainable communities."

The FVRD undertook this study to monitor the region's economy per the current RGS and to provide input to the RGS update process currently underway. The updated RGS will reflect a changing social and economic environment as well as new legislative requirements. As a long range vision with a 20-30 year scope, the RGS must recognize the changing economy and ensure that the region as a whole is working toward a common future.

The goals of this study are to:

- Better understand the existing clean economy in the region and its comparative strengths
- Identify clean economy growth opportunities

- Align with senior government policy priorities and leverage them into expanding the region's clean economy
- Identify the supporting hard and soft infrastructure required

The desired outcomes of this study are to:

- Develop strategies to grow the clean economy in the region
- Support the Regional Growth Strategy
- Identify opportunities for strategic partnerships within the region's clean economy

The *Clean Economy Study* is intended to provide the FVRD, local governments, First Nations and other regional stakeholders with an understanding of clean economy sector opportunities that build upon the region's existing economic strengths. It also identifies opportunities for alignment with federal and provincial policy priorities including the province's recently announced *CleanBC Climate Plan*.

It is hoped that the outcomes from this project will be used to grow the Fraser Valley's clean economy sectors, to support the Fraser Valley Regional District's RGS process with relevant information, and to encourage the development of strategic partnerships that will help position the Fraser Valley as a growing clean economy leader.

DISCUSSION

In this study, the "clean economy" is an economy that aims at reducing environmental risks and ecological scarcities, and that aims for sustainable development without degrading the environment.

The study takes into account Federal and Provincial policy drivers, as well as regional policies embodied in the RGS and the FVRD's Solid Waste Management Plan (SWMP). Waste-to-energy initiatives discussed in this report are consistent with the SWMP's rejection of incineration as a tool in the zero waste strategy.

Delphi Group was engaged in the Fall of 2018 to undertake high level research and analysis designed to better understand the existing capacity and competitive strengths related to the Fraser Valley region's clean economy. Consultation was undertaken through a series of 13 key informant interviews with industry leaders, economic development agencies, and a focus group that brought together stakeholders from business, academia, and government to discuss the local opportunities and challenges for growing the Fraser Valley's clean economy.

Secondary and primary research for this study included a review of major industry trends, policy drivers, and growth opportunities. Sector profiles were developed based on data collection and an analysis of statistical sources in order to estimate clean economy sector employment and gross domestic product (GDP); compiling lists of relevant companies, projects, investments, and research activities; and undertaking an assessment of existing strengths, weaknesses, and gaps.

Findings

For the purposes of this study, the clean economy in the FVRD can be grouped into the following five sectors:



Figure 2: Framework for the Clean Economy in the Fraser Valley

These are defined as:

- 1) **Sustainable Resource and Ecosystem Management:** Including a focus on the region's sustainable industry practices and clean technologies for the agriculture and other resource sectors (e.g., food processing, etc.), waste management / recycling, waste-to-resource / circular economy opportunities, and the restoration of air, water, and land ecosystems (e.g., water monitoring and treatment, natural asset management, carbon capture, sequestration, and utilization, etc.).
- 2) **Green and Sustainable Transportation:** Including electric and autonomous vehicles, public transit, alternative fuels (e.g., biofuels, hydrogen, renewable natural gas), smart transportation systems and technologies, and related integrated land use planning.
- 3) **Green and High-Performance Buildings:** Including products, services, and building materials related to energy efficient and high-performance building design, construction, renovation, and operations such as building envelope products (pre-fabricated walls and building components, windows / doors, insulation), mechanical systems (e.g., HVAC, hot water), lighting and control systems, and other products (engineered wood, etc.).
- 4) **Renewable Energy Supply and Storage:** Including wind, solar, geothermal, hydro, biomass, district energy, waste heat to power, anaerobic digestion, as well as energy storage / battery technology, smart grid, and related energy management technologies.

- 5) **Knowledge and Innovation:** In particular, educational institutions for workforce skills development, investment, research and development, and centers of excellence that build on the knowledge base of the clean economy.

While tourism can be considered part of the clean economy, it was not considered in this study as the FVRD is currently engaged in a much more detailed economic study of outdoor recreation and tourism in the region.

The study found that the Fraser Valley's clean economy was responsible for generating \$2.45 billion in gross output¹, \$1.17 billion in gross domestic product (GDP), and employed approximately 11,100 people (equal to 7.4% of the Fraser Valley's workforce) in 2016.

The study states that the Fraser Valley's clean economy value chain has strengths across all five sectors. These strengths include research, design, engineering and technical services, construction and manufacturing, natural asset management, and broader ecosystem supports (such as finance and government policy).

Table 1: Clean Economy Jobs and GDP by Sector in the Fraser Valley (2016)

Clean Economy Jobs	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
Sustainable Resource & Ecosystem Management	5,813	4,060	1,900	11,774
Green & Sustainable Transportation Solutions	727	447	360	1,533
Green & High-Performance Buildings	3,522	1,459	1,057	6,038
Renewable Energy Supply & Storage	517	355	299	1,171
Knowledge & Innovation	532	170	186	888
Total	11,111	6,492	3,801	21,404
Clean Economy GDP (thousands \$)	Direct GDP	Indirect GDP	Induced GDP	Total GDP
Sustainable Resource & Ecosystem Management	\$467,666	\$368,955	\$198,616	\$1,035,236
Green & Sustainable Transportation Solutions	\$163,352	\$44,024	\$37,751	\$245,127
Green & High-Performance Buildings	\$297,455	\$127,334	\$110,889	\$535,678
Renewable Energy Supply & Storage	\$188,922	\$64,528	\$57,941	\$311,391
Knowledge & Innovation	\$50,559	\$14,414	\$19,491	\$84,463
Total Clean Economy (thousands \$)	\$1,167,954	\$619,254	\$424,687	\$2,211,895

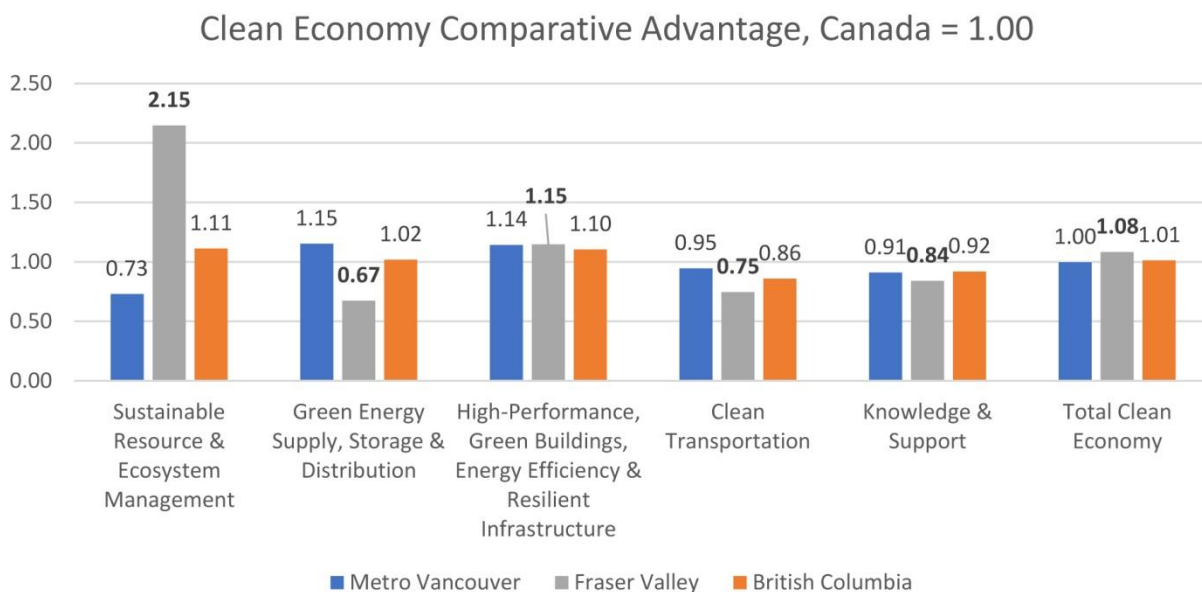
Source: The Delphi Group

From a comparative advantage perspective the FVRD region, not surprisingly, performs best in the Sustainable Resource and Ecosystem Management sector which includes agriculture. The following

¹ Gross output measures total economic activity in the production of new goods and services in an accounting period. It is more representative of 'revenues' and is a much broader measure of the economy than GDP, which is limited mainly to final output (finished goods and services).

Figure illustrates the clean economy comparative advantage of the Fraser Valley, Metro Vancouver, and province of British Columbia when compared to Canada as a whole (where Canada = 1.00).

The study finds that opportunities exist to further diversify and strengthen the Fraser Valley's clean economy by developing transferable skills and knowledge within the existing workforce. Careers in management, professional services, engineering, science, project management, information and communications technologies (ICT), construction, trades, and manufacturing all have elements that can be applied to strengthen the Fraser Valley's clean economy and its key sectors.



While this research highlights many sector-specific opportunities for growing the Fraser Valley's clean economy, some common themes and cross-sector opportunities emerged as well. These include:

- Advancing partnerships between governments, business, and educational institutions to promote information sharing, both in terms of open data portals and local expertise on clean economy solutions.
- New opportunities for green building and transportation solutions through enhanced land use planning practices that encourage transit-oriented development and energy-efficient multi-unit residential and mixed-use commercial / light industrial buildings.
- Continuing to build the critical underlying infrastructure in telecommunications and information technology, as well as water and energy distribution, in order to support modernization and clustering of industrial and commercial activities across the clean economy sectors.
- Industrial and commercial activities that can be further supported by facilitating waste-to-resource and circular economy partnerships, linked closely to the region's agricultural-based feedstocks.

- Fostering partnerships with local First Nations and building a broader understanding of Indigenous worldviews that can lead to innovation in the management of ecosystem health and natural assets.

This study confirms that the Fraser Valley has a solid foundation and set of underlying strengths to grow the region's clean economy. While there are numerous opportunities, there are challenges related to workforce capacity, industrial land supply (a clean economy still requires an industrial land base), education, internet connectivity and transportation that need to be addressed. The summary of strengths, weaknesses, opportunities, and threats (SWOT) analysis in *Appendix A* provides more detailed information and is based on secondary research, feedback obtained from industry stakeholders during consultation, as well as a review of current industry and market trends, government policy, and investment priorities.

COST

As allocated in the 2018 budget for a cost of \$38,000.

CONCLUSION

The *Clean Economy Study* is intended to provide the FVRD, local governments, First Nations and other regional stakeholders with an understanding of clean economy sector opportunities that build upon the region's existing economic strengths. It also identifies opportunities for alignment with federal and provincial policy priorities including the province's recently announced CleanBC Climate Plan. The creation of a resource guide on the contents of this report for local governments, First Nations and stakeholders would serve as a valuable tool in supporting the opportunities highlighted in the report.

A formal presentation of the findings will be provided to the Board at its June 25, 2019 meeting.

COMMENTS BY:

Stacey Barker, Director of Regional Services

Reviewed and supported.

Mike Veenbaas, Director of Financial Services

No further financial comments.

Jennifer Kinneman, Acting Chief Administrative Officer

Reviewed and supported.



Fraser Valley Regional District
Clean Economy Study

Final Report



DISCLAIMER

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Chilliwack Economic Partners Corporation	Structurecraft
City of Abbotsford	University of the Fraser Valley
City of Chilliwack	XLRator
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Preface

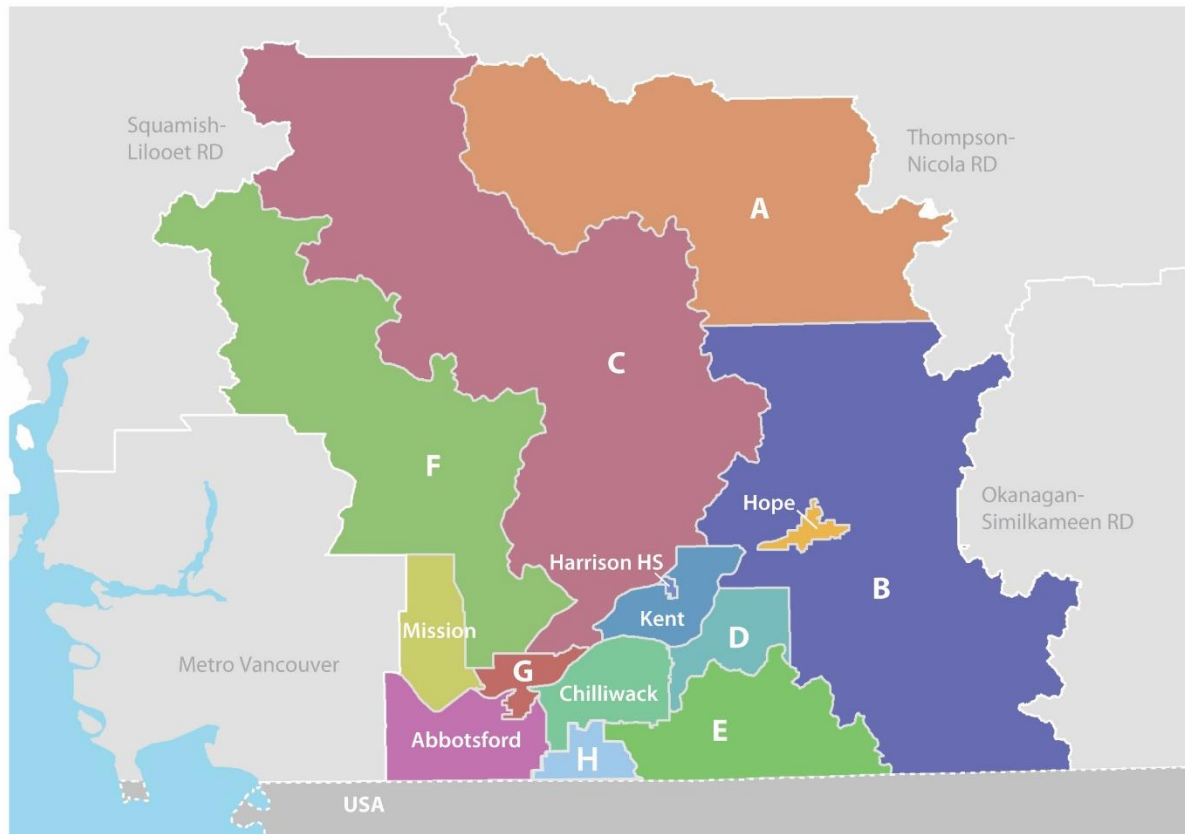
The Fraser Valley Regional District (FVRD) engaged The Delphi Group in the Fall of 2018 to undertake research and analysis designed to better understand the existing capacity and competitive strengths related to the Fraser Valley region's clean economy. The Delphi Group has produced this report to support the FVRD, local governments, and other regional stakeholders with the identification of clean economy sector opportunities. This report also identifies opportunities for alignment with federal and provincial policy priorities (e.g., the Province's CleanBC Climate Plan).

Secondary and primary research for this study included a review of major industry trends, policy drivers, and growth opportunities. Sector profiles were developed based on data collection and an analysis of statistical sources in order to estimate clean economy sector employment and gross domestic product (GDP); compiling lists of relevant companies, projects, investments, and research activities; and undertaking an assessment of existing strengths, weaknesses, and gaps.

Consultation was also undertaken through a series of 13 key informant interviews with industry leaders and a focus group that brought together stakeholders from business, academia, and government to discuss the local opportunities and challenges for growing the Fraser Valley's clean economy.

It is hoped that the outcomes from this project will be used to grow the Fraser Valley's clean economy sectors, to support the Fraser Valley Regional District's Regional Growth Strategy process with relevant information, and to encourage the development of strategic partnerships that will help position the Fraser Valley as a growing clean economy leader.

A note on geography and terminology: The scope of this study is the Fraser Valley Regional District and includes the municipalities of Abbotsford, Chilliwack, Harrison Hot Springs, Hope, Kent, and Mission, as well as the eight unincorporated electoral areas (see Figure 1). The jurisdiction covered by these areas is referred to in this report collectively as the "Fraser Valley" or the "region".



Source: Fraser Valley Regional District

Figure 1: Fraser Valley Regional District Municipalities and Electoral Areas.

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List of Acronyms

4IR: Fourth industrial revolution

CMA: Census metropolitan area

CN: Canadian National (railway)

CNG: Compressed natural gas

CP: Canadian Pacific (railway)

EV: Electric vehicle

GDP: Gross domestic product

GHG: Greenhouse gas

HVAC: Heating, ventilation, and air conditioning

ICT: Information and communications technology

IoT: Internet of things

LNG: Liquefied natural gas

NRCan: Natural Resources Canada

OEM: Original equipment manufacturer

RGS: Regional Growth Strategy

RNG: Renewable natural gas

SDG: Sustainable Development Goals

SWMP: Solid Waste Management Plan (FVRD)

UFV: University of the Fraser Valley

YXX: Abbotsford International Airport

ZEV: Zero-emissions vehicle

Executive Summary

In this study, the “clean economy” is an economy that aims at reducing environmental risks and ecological scarcities, and that aims for sustainable development without degrading the environment. The following definition of the “green economy” from ECO Canada is used to guide this study:

The clean economy is “the aggregate of all activity operating with the primary intention of reducing conventional levels of resource consumption, harmful emissions, and minimizing all forms of environmental impact. The [clean] economy includes the inputs, activities, outputs, and outcomes as they relate to the production of clean products and services.”¹

This study, for the Fraser Valley Regional District (FVRD), sought to develop a better understanding of how to support the growth of the clean economy sectors in the Fraser Valley in line with traditional industrial economy strengths across the region, identify federal and provincial policies that could be leveraged for growing the clean economy, and identify the necessary types of supporting hard and soft infrastructure that support sustainable growth.

The research conducted in this study included establishing an overarching framework for the region’s clean economy, data gathering, undertaking a statistical analysis of existing economic and employment activities, developing SWOT and gap analyses, and engaging with key stakeholders through interviews and a focus group session.

The clean economy in the Fraser Valley is described in five sectors in Figure 2. The Fraser Valley has many underlying strengths upon which to build prosperity across the clean economy, as highlighted below.



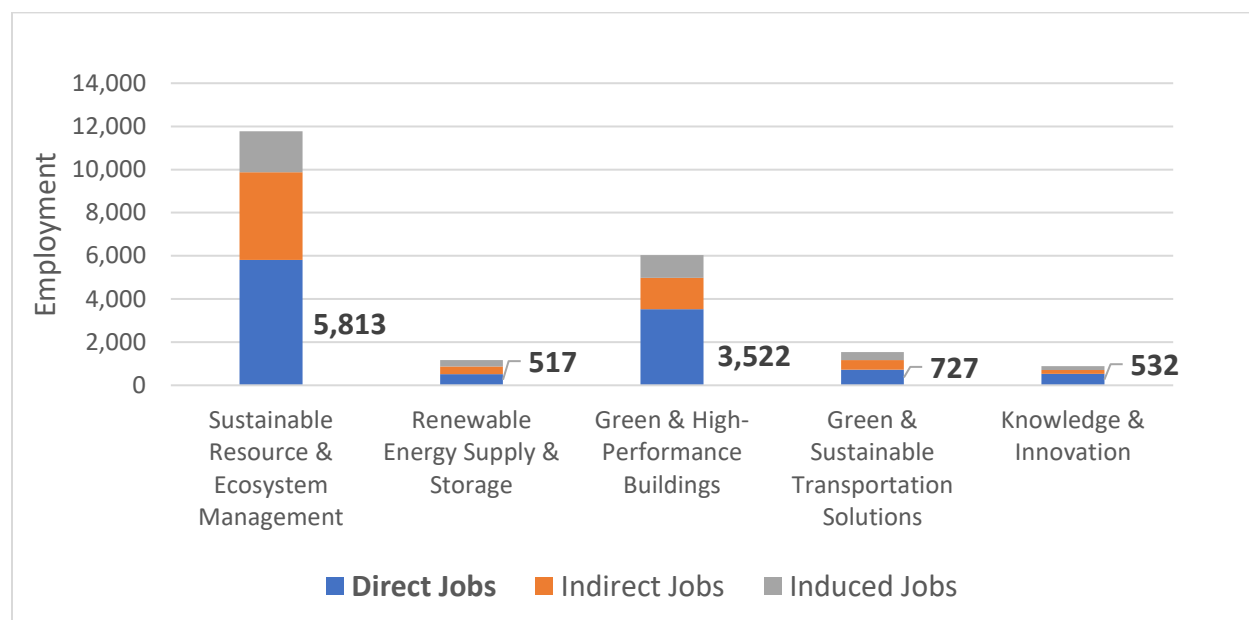
Figure 2: Framework for the Clean Economy in the Fraser Valley

Clean Economy in the Fraser Valley

The economic contribution of the clean economy across the region is already significant. It is estimated that the Fraser Valley’s clean economy was responsible for generating \$1.17 billion in direct GDP in 2016.

¹See: <http://www.eco.ca/pdf/Defining-the-Green-Economy-2010.pdf>

This study also estimates that approximately 11,100 direct jobs existed in the Fraser Valley’s clean economy in 2016; equal to 7.4% of the region’s workforce (see Figure 3). Most of these jobs are in the Sustainable Resource and Ecosystem Management and Green and High-Performance Buildings sectors.



Source: The Delphi Group

Figure 3: Clean Economy Employment in the Fraser Valley (2016).

Sector-specific Opportunities

In the Sustainable Resource and Ecosystem Management sector, well-established agriculture operations have the potential to increase value-added food processing and waste-to-resource projects, including the production of renewable natural gas and bioproducts (such as organic fertilizers and compost). Adoption and application of precision agriculture technologies and data-driven crop management can optimize the use of inputs and help address labour shortages.

In the Green and Sustainable Transportation sector, smart mobility solutions and more efficient goods movement supported by information and communications technology (ICT) infrastructure present an opportunity for the region. The presence of an international airport and proximity to nearby population centres form a solid foundation for taking advantage of global and regional trends in vehicle electrification, logistics hubs, and renewable fuels.

Modular construction and pre-fabrication solutions and local wood products manufacturing contribute to the growth of the Green and High-Performance Buildings sector, as do higher performing and energy efficient products and materials, including windows / doors, insulation, and building control systems. These products and

technologies are increasingly important as policies such as the BC Energy Step Code are adopted and an emphasis in place on energy efficient building retrofits.

In the Renewable Energy Supply and Storage sector, existing generation facilities and geothermal energy capacity provide an opportunity to develop sustainable energy solutions, including emerging smart grid and energy storage technologies that can help better manage and modernize the region's energy infrastructure. It also presents opportunities for collaboration and new partnerships with the region's First Nations communities.

Knowledge and Innovation sector assets include the University of the Fraser Valley and technology-focused accelerators, with the power to attract talent and deploy local products and solutions across the clean economy.

Growing the Fraser Valley's Clean Economy

While this research highlights many sector-specific opportunities for growing the Fraser Valley's clean economy, some common themes and cross-sector opportunities emerged as well. These include:

- Advancing partnerships between governments, business, and educational institutions to promote information sharing, both in terms of open data portals and local expertise on clean economy solutions.
- New opportunities for green building and transportation solutions through enhanced land use planning practices that encourage transit-oriented development and energy-efficient multi-unit residential and mixed-use commercial / light industrial buildings.
- Continuing to build the critical underlying infrastructure in telecommunications and information technology, as well as water and energy distribution, in order to support modernization and clustering of industrial and commercial activities across the clean economy sectors.
- Industrial and commercial activities that can be further supported by facilitating waste-to-resource and circular economy partnerships, linked closely to the region's agricultural-based feedstocks.
- Fostering partnerships with local First Nations and building a broader understanding of Indigenous worldviews that can lead to innovation in the management of ecosystem health and natural assets.

This study confirms that the Fraser Valley has a solid foundation and set of underlying strengths to grow the region's clean economy. While there are numerous opportunities, there are challenges related to workforce capacity, industrial land supply, education, internet connectivity and transportation that need to be addressed. Through the process of updating the FVRD's Regional Growth Strategy and advancing related initiatives and partnerships with key stakeholders, it will be possible to realize both short-term successes and long-term sustainable prosperity for the region and local residents.

Introduction

A global shift to a clean or low-carbon economy is underway, being driven by international climate change concerns, an exploding population which is transitioning from poverty to middle-class, and an improved business case for renewable energy and related clean technology. Given the colliding forces of resource scarcity, population growth, technology trends, and policy drivers under the climate action agenda, the way forward presents an exciting suite of new and expanded business, investment, and job creation opportunities for local governments, businesses, and residents across the Fraser Valley.

Federal policy. To determine whether the Paris Agreement will be met, participating nations are requested to submit Nationally Determined Contributions (NDCs) that outline long-term climate actions post 2020. Canada's NDC sets a 30% economy-wide greenhouse gas (GHG) emissions reduction target below 2005 levels by 2030.² Canada's long-term goal is to reduce emissions by 80% from 2005 levels by 2050.³ While much effort has been put into individual actions and projects to reduce GHG emissions, a low carbon economy will ultimately be required to achieve the significant GHG emission reductions required to reach these goals.

In 2016, the federal and provincial governments adopted the Pan-Canadian Framework on Clean Growth and Climate Change (i.e., the "Framework"),⁴ which includes commitments to carbon pricing complemented by policies and programs for reducing GHG emissions. These policies will increase the cost of fossil fuels and make renewables more competitive. The Framework will develop a series of policies and regulations to promote collaboration of electricity grid interconnections, building codes, and a zero-emissions vehicle strategy. Other outcomes of the Framework will include new programs for green infrastructure investments and deepening clean technology innovation and implementation.⁵

Provincial policy. At the provincial level, the Government of BC introduced its CleanBC Climate Plan in December 2018 with the following key aspects:

- Directing a portion of B.C.'s carbon tax paid by industry into incentives for cleaner operations;
- Helping communities to achieve 95% organic waste diversion for agricultural, industrial, and municipal waste;
- Making industrial natural gas consumption cleaner by putting in place a minimum requirement of 15% to come from renewable gas;
- Expanding job training, research, and commercialization for electric and other zero-emission vehicles;
- Developing training programs for Energy Step Code and Certified Retrofit Professionals.

² See: <http://www4.unfccc.int/ndcregistry/PublishedDocuments/Canada%20First/Canada%20First%20NDC-Revised%20submission%202017-05-11.pdf>

³ See: <https://www.newswire.ca/news-releases/government-of-canada-sets-ambitious-ghg-reduction-targets-for-federal-operations-665237843.html>

⁴ See: <https://www.canada.ca/en/services/environment/weather/climatechange/pan-canadian-framework.html>

⁵ See: https://www.canada.ca/content/dam/themes/environment/weather/climatechange/PCF-FirstSynthesis_ENG.pdf

The Government of BC has shown a commitment to CleanBC in its 2019 budget. \$902 million over the next three years is designated for CleanBC programming with \$354 million in operating funding, \$299 million for new programs, \$26 million in capital investments, and \$223 million to increase the climate action tax credit.⁶

Regional policy. The FVRD adopted its first **Regional Growth Strategy** (RGS) in 2004 and is updating the plan to readjust the long-term strategic plan to reflect changes in legislation, growth, and demographics. Based on the review, the updated draft RGS is structured under the following pillars:

1. Collaboration
2. Economic Strength and Resiliency
3. Living Well
4. Community Building
5. Ecosystem Health
6. Transportation and Mobility
7. Infrastructure and Services
8. Energy and Climate Change

Based on the opportunities identified through this research, these eight pillars align well with the clean economy themes and position the FVRD for success as it moves forward with finalizing and implementing the RGS.

Also contained in the draft RGS are GHG reduction targets of 20% per capita by 2020 and 50% per capita by 2050, relative to 2007 levels. The FVRD is a signatory to the B.C. Climate Action Charter, which commits to becoming carbon neutral in their corporate operations, measuring their community-wide GHG emissions, and building compact, complete, more energy efficient rural and urban communities.

The FVRD's **Solid Waste Management Plan** (SWMP) also provides a strong foundation for growing the clean economy in the region. Waste-to-energy initiatives discussed in this report are consistent with the SWMP's rejection of incineration as a tool in the zero waste strategy.

Definition of Clean Economy Sub-sectors

For the purposes of this research, the clean economy can be grouped into the following five sectors:

- 1) **Sustainable Resource and Ecosystem Management:** Including a focus on the region's sustainable industry practices and clean technologies for the agriculture and other resource sectors (e.g., food processing, etc.), waste management / recycling, waste-to-resource / circular economy opportunities, and the restoration of air, water, and land ecosystems (e.g., water monitoring and treatment, natural asset management, carbon capture, sequestration, and utilization, etc.).
- 2) **Green and Sustainable Transportation:** Including electric and autonomous vehicles, public transit, alternative fuels (e.g., biofuels, hydrogen, renewable natural gas), smart transportation systems and technologies, and related integrated land use planning.

⁶ See: https://www.bcbudget.gov.bc.ca/2019/pdf/2019_Backgrounder_2_CleanBC.pdf

- 3) **Green and High-Performance Buildings:** Including products, services, and building materials related to energy efficient and high-performance building design, construction, renovation, and operations such as building envelope products (pre-fabricated walls and building components, windows / doors, insulation), mechanical systems (e.g., HVAC, hot water), lighting and control systems, and other products (engineered wood, etc.).
- 4) **Renewable Energy Supply and Storage:** Including wind, solar, geothermal, hydro, biomass, district energy, waste heat to power, anaerobic digestion, as well as energy storage / battery technology, smart grid, and related energy management technologies.
- 5) **Knowledge and Innovation:** In particular, educational institutions for workforce skills development, investment, research and development, and centers of excellence that build on the knowledge base of the clean economy.

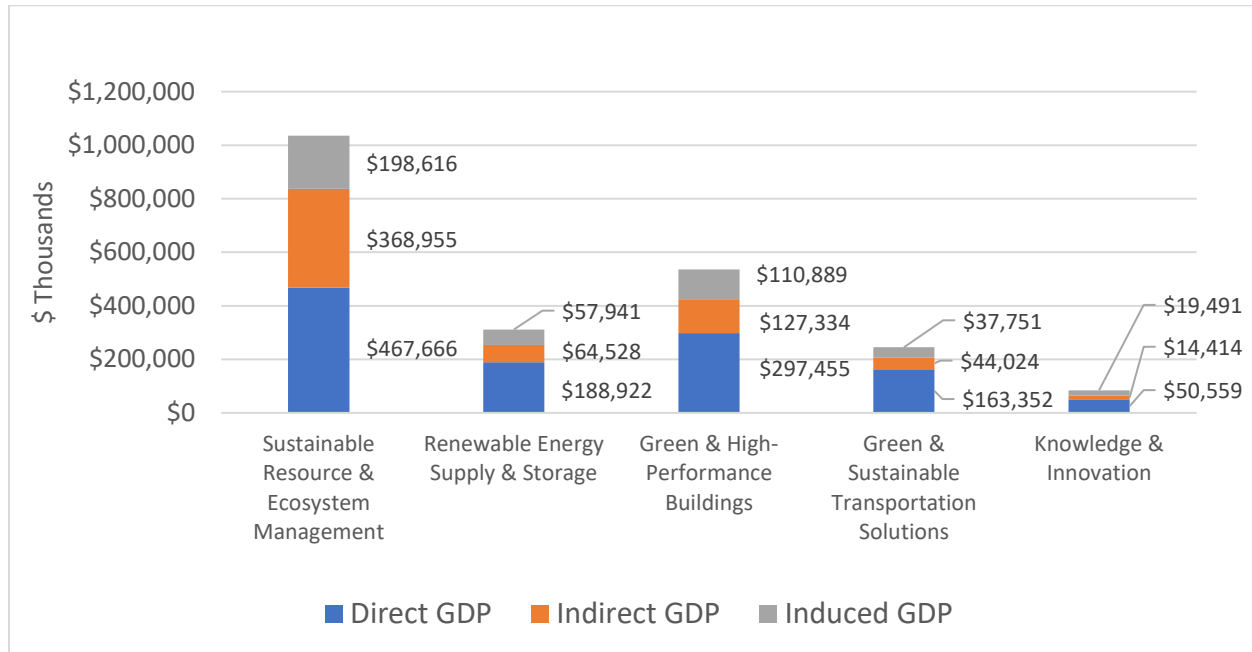
The sections that follow showcase some of the Fraser Valley's key players, projects, and activities; identify potential opportunities for growth and further investment based on existing value chain strengths and gaps; and provide strategic considerations that will help the region maximize its opportunities and minimize its risks. The report is broken out into the following sections:

- **Macro Overview:** Provides an overview of the Fraser Valley's clean economy at a macro-level.
- **Sector Profiles:** Provides more detailed profiles of the Fraser Valley's five clean economy sectors.
- **Summary:** Highlights potential opportunity areas and key conclusions from the research.

In addition, Appendices include a SWOT and Gap Analysis (Appendix A), Macro Trends Summary (Appendix B), Policy Overview (Appendix C), and summary notes from the Focus Group of key stakeholders (Appendix D).

Macro Overview

It is estimated that the Fraser Valley's clean economy was responsible for generating \$2.45 billion in gross output⁷, \$1.17 billion in gross domestic product (GDP), and employed approximately 11,100 people (equal to 7.4% of the Fraser Valley's workforce) in 2016 (see Figure 4 below).⁸



Source: The Delphi Group

Figure 4: Clean Economy GDP in the Fraser Valley (2016).

By leveraging the growing public interest to make the most of natural resources, reduce environmental impacts, improve energy affordability and resilience, and improve transportation, the five sectors profiled in this report present a strong foundation upon which the Fraser Valley can continue to grow sustainable prosperity related to the clean economy (See Table 1 below).

The Fraser Valley's clean economy value chain has strengths across all five sectors. These strengths include research, design, engineering and technical services, construction and manufacturing, natural asset management, and broader ecosystem supports (such as finance and government policy).

⁷ Gross output measures total economic activity in the production of new goods and services in an accounting period. It is more representative of 'revenues' and is a much broader measure of the economy than GDP, which is limited mainly to final output (finished goods and services).

⁸ Direct impacts are related to the specific industry, while indirect impacts relate to activities that support or supply the industry. Induced impacts are those that are a result of direct / indirect spending in the local economy outside of the industry (i.e. the economy as a whole).

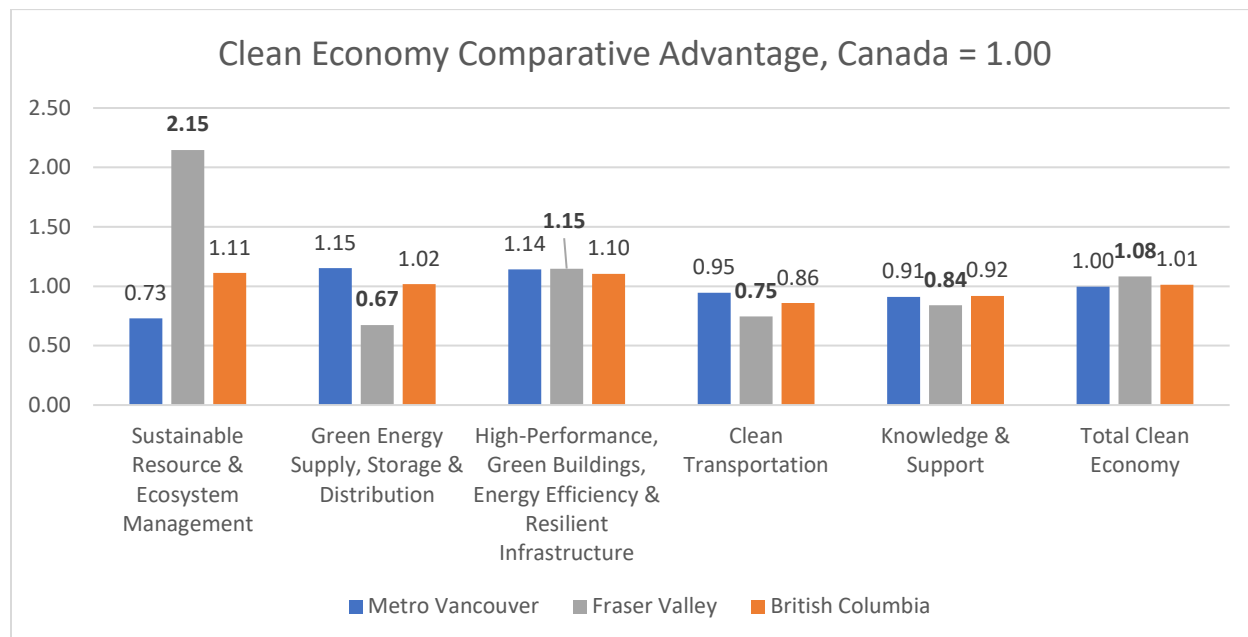
Table 1: Clean Economy Jobs and GDP by Sector in the Fraser Valley (2016)

Clean Economy Jobs	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
Sustainable Resource & Ecosystem Management	5,813	4,060	1,900	11,774
Green & Sustainable Transportation Solutions	727	447	360	1,533
Green & High-Performance Buildings	3,522	1,459	1,057	6,038
Renewable Energy Supply & Storage	517	355	299	1,171
Knowledge & Innovation	532	170	186	888
Total	11,111	6,492	3,801	21,404
Clean Economy GDP (thousands \$)	Direct GDP	Indirect GDP	Induced GDP	Total GDP
Sustainable Resource & Ecosystem Management	\$467,666	\$368,955	\$198,616	\$1,035,236
Green & Sustainable Transportation Solutions	\$163,352	\$44,024	\$37,751	\$245,127
Green & High-Performance Buildings	\$297,455	\$127,334	\$110,889	\$535,678
Renewable Energy Supply & Storage	\$188,922	\$64,528	\$57,941	\$311,391
Knowledge & Innovation	\$50,559	\$14,414	\$19,491	\$84,463
Total Clean Economy (thousands \$)	\$1,167,954	\$619,254	\$424,687	\$2,211,895

Source: The Delphi Group

Opportunities exist to further diversify and strengthen the Fraser Valley's clean economy by developing transferable skills and knowledge within the existing workforce. Careers in management, professional services, engineering, science, project management, information and communications technologies (ICT), construction, trades, and manufacturing all have elements that can be applied to strengthen the Fraser Valley's clean economy and its key sectors.

Figure 5 below illustrates the clean economy comparative advantage of the Fraser Valley, Metro Vancouver, and province of British Columbia when compared to Canada as a whole (where Canada = 1.00).



Source: The Delphi Group

Figure 5: Fraser Valley's clean economy comparative advantage.

In the Sustainable Resource and Ecosystem Management sector, the Fraser Valley has existing strengths in its well-established agriculture sector, this includes farming, greenhouse growing, food processing, and waste-to-energy operations. These strengths serve as the foundation for developing further opportunities in line with industry trends in areas such as precision agriculture, crop management, next-generation food processing, and bio-products (see Appendix B for more information on macro trends).

Strengths in Renewable Energy Supply and Storage include electric power generation facilities, geothermal energy capacity, and current and potential future sources of biogas from agriculture and forestry waste. Together these strengths provide an opportunity to leverage broader trends in smart grid, energy storage, and demand for renewable fuels.

The Fraser Valley has established capacity in many aspects of the Green and High-Performance Buildings sector. Modular, pre-fabricated, and wood construction products already being manufactured locally will be key to the growth of this sector as policies like the BC Energy Step Code drive the industry toward higher energy efficiency standards.

In the Green and Sustainable Transportation sector, the Fraser Valley's strengths include its location relative to nearby large population centres, a major transportation corridor running through the valley, and the presence of an international airport. These are all assets that can be leveraged to take advantage of global and regional trends in smart mobility, vehicle electrification, logistics hubs, and renewable fuels.

Anchored by the University of the Fraser Valley, research and trades training in the region includes centres of excellence, technology-focused accelerators, and professional innovation networks that can be leveraged to attract investment, build knowledge, and bring new talent to the region.

The following Sector Profiles section looks at each of the five clean economy sectors and dives deeper into the Fraser Valley's local capacity and comparative strengths in line with global macro trends.

Sector Profiles

Sustainable Resource & Ecosystem Management

On a global level, the drive toward sustainable development is being guided by the United Nations 17 Sustainable Development Goals (SDGs).⁹ The SDGs are an effort to establish a shared blueprint that focuses both on social and environmental priorities as a means to sustainably grow economies worldwide. Governments, including Canada's federal government, are aligning their sustainable development priorities and strategies with the UN SDGs. For Canada this includes a focus on maintaining or improving the health of water and land resources, reducing air pollution, and reducing waste, including a special focus at the moment on addressing plastic waste.¹⁰

Partnerships and organizations such as the Canadian Agricultural Partnership¹¹, and Canada's innovation superclusters¹² for Advanced Manufacturing and the Protein Industry are examples of where market trends and investments are heading in response to the global trend toward the efficient and sustainable production, use, and re-use of natural resources and their end products.

Within the agriculture sector, activity is growing around the collection of data to optimize the management and operation of farms. For example, companies (such as Famers Edge) are applying new technologies in the area of precision agriculture. Precision agriculture technology companies specialize in the collection and processing of large quantities of big data (e.g., soil and water quality, weather conditions, performance of farm equipment) through satellite imagery and in-field sensors that they provide to farmers to help them improve productivity and yields while reducing operational costs and drive efficiencies.¹³

What is Sustainable Resource & Ecosystem Management?

This sector is focused on the region's sustainable industry practices and clean technologies across:

- Agriculture (including food processing) and other natural resource sectors;
- Waste management and recycling;
- Waste-to-resource and circular economy opportunities; and
- Restoration of air, water, and land ecosystems through water monitoring and treatment; natural asset management; and carbon capture, sequestration, and utilization).

⁹ See: <https://sustainabledevelopment.un.org/sdgs>

¹⁰ See: http://www.fsds-sfdd.ca/downloads/Draft_FSDS_2019-2022.pdf

¹¹ See: <http://www.agr.gc.ca/eng/about-us/key-departmental-initiatives/canadian-agricultural-partnership/?id=1461767369849>

¹² See: <https://www.ic.gc.ca/eic/site/093.nsf/eng/00008.html>

¹³ See: <https://www.theglobeandmail.com/report-on-business/rob-commentary/big-data-and-ai-are-poised-to-transform-our-natural-resources-sector/article38287125/>

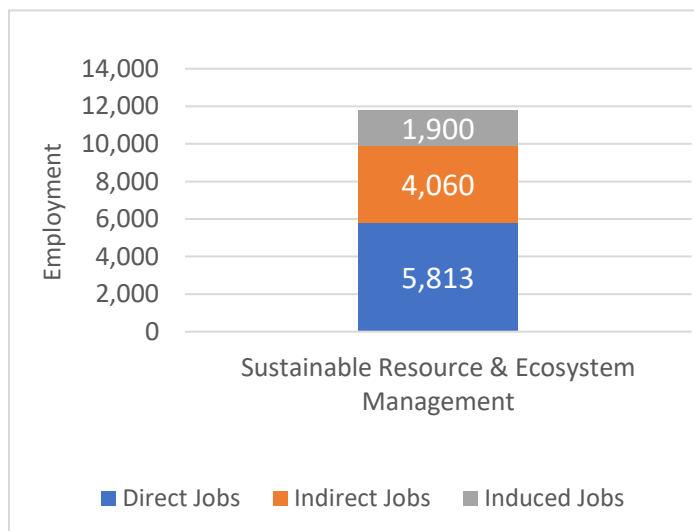
Fraser Valley Sector Snapshot

The Fraser Valley's clean economy comparative advantage is firmly rooted in its Sustainable Resource and Ecosystem Management sector, particularly in the agriculture space. This is largely due to the existing infrastructure, business experience, and well-established workforce that has advanced the region's key sectors in agriculture and the production of related products that serve global markets. More specifically, the region has a strong base of infrastructure in Chilliwack and Abbotsford related to advanced and niche manufacturing for food processing and in Mission for steel fabrication, plastics, and wood products manufacturing.

Policy Drivers in Sustainable Resource & Ecosystem Management

- Low Carbon Leadership Fund
- Clean-tech Innovation Strategy for the Forest Sector
- Clean Growth Program for Industry
- Innovative Clean Energy Fund
- Agritech Innovation Challenge
- CAP Innovation Program
- Canada-BC Agri-Innovation Program

It is estimated that the Sustainable Resource and Ecosystem Management sector was responsible for 9,873 direct and indirect jobs (5,813 direct and 4,060 indirect) \$1,035,236 in GDP in 2016. Jobs within this sector are largely related to farm operations and greenhouse production, food manufacturing, and the processing of wood products.¹⁴



Source: The Delphi Group, based on Statistics Canada 2016 Census data.

Figure 6: Sustainable Resource and Ecosystem Management Employment in the Fraser Valley (2016).

Local Capacity & Comparative Strengths

The region's relatively affordable industrial land, burgeoning ICT sector¹⁵, existing workforce, high quality of life, and knowledge-based economy (i.e., local university and research centres) collectively create the ideal conditions for showcasing and expanding emerging technology opportunities and best practices in sustainable agriculture and advanced manufacturing. In addition, these industries provide valuable waste-to-resource streams that could be reused or recycled as value-added inputs to other local industries or as an export commodity to other parts of B.C., Canada, and/or U.S.-based markets.

The Fraser Valley is home to some of the richest soils in Canada which generated 39% of the province's gross farm receipts in 2015.¹⁶ Farmers benefit from the moderate climate,

¹⁴ See: Statistics Canada. 2016 Census.

¹⁵ See: <https://xlrator.ca/technology-sector-strengthens-regional-east-fraser-valley-outlook-by-formalizing-strategic-partnership-between-xlrator-and-chilliwack-tech/>

¹⁶ See: <http://www.fvrd.ca/assets/Government/Documents/AgricultureSnapshot.pdf>

plentiful water resources, and access to a local market that is expected to reach a population of 3.6 million by 2041.¹⁷

These conditions also create an ideal environment for research, testing, and deployment of innovative solutions. Leading research facilities include the University of the Fraser Valley's (UFV) Food and Agriculture Institute and the Pacific Agri-Food Research Centre in Agassiz (Federal Government). Many individual farmers are actively involved with the development and testing of sustainable agriculture best practices (including waste reduction, re-using waste streams, and nutrient management) while contributing to the rich local knowledge base.

In addition, there are several projects throughout the region that exemplify the business case for sustainable resource management and build on the region's strengths, including:

- Net Zero Waste Inc.'s food and agricultural waste commercial composting facility in the City of Abbotsford.
- Molson Coors new brewery in Chilliwack where an anaerobic digester will be installed to treat wastewater and collect biogas for power generation.
- Abbotsford's Bakerview EcoDairy biogas generator which consumes approximately 1.6 million litres of manure and produces 170,000 kilowatts of electricity, preventing about 150 tonnes of GHGs from entering the atmosphere per year.¹⁸
- Fraser Valley Biogas which is currently producing approximately 350 GJ/day of renewable natural gas (RNG) from 20+ farms in the region, many of which are in close proximity to one another, creating further opportunities for collaboration and shared resources.
- A cluster of companies in Mission specializing in soil remediation and returning former brownfields into revitalized industrial land.

Existing barriers and gaps related to this sector include a lack of:

- Industrial land to expand manufacturing operations.
- Skilled high-tech workers to operate complex machinery and software used for both manufacturing and agriculture operations.
- Water resources and water/sewage infrastructure which has caused businesses to be turned away in some parts of the region.
- Awareness amongst farmers on the evolving business case and opportunities related to agriculture clean technology (e.g., RNG production, precision agriculture, etc.).

Table 2 below provides a snapshot of the Fraser Valley's current strengths in line with relevant macro-level trends.

¹⁷ See: <http://www.fvrd.ca/assets/Government/Documents/AgricultureSnapshot.pdf>

¹⁸ See: <http://www.vancouversun.com/technology/manure+powers+businesses/8555845/story.html>

Table 2: Fraser Valley Strengths in line with Macro Trends in Sustainable Resource and Ecosystem Management.

Macro Trend	Alignment with Local Strengths	Potential Project Opportunities	Key Stakeholders
Precision Agriculture: Data driven crop management maximizes outputs, optimizes the use of inputs (water, fertilizer and other nutrients).	The region is the agricultural capital of Canada, home to the most productive soils in the country and well positioned to showcase leading crop management technologies.	<ul style="list-style-type: none"> • Spatial AI Technology: Manipulate and forecast land use changes and plan for allocation of land resources. • Agriculture Data Portal: Forecast and plan land use and allow local industry to collect and consume data related to terrain, soil, clean water, contaminated water. 	<ul style="list-style-type: none"> • Local technology accelerators • Local R&D leaders and universities Other community and regional stakeholders
Mechanization: Data collection, automation and sensors boost productivity, create efficiencies, and address labour/skills shortages while creating opportunities to train existing workforce on high-tech systems.	Local manufacturing and food processing businesses have expertise and experience in updating and advancing their systems and infrastructure to keep pace with market demands, making them well positioned for future technological shifts.	<ul style="list-style-type: none"> • Advanced Manufacturing Cluster and Skills Development: A targeted initiative to upgrade infrastructure across the region's manufacturing facilities while leveraging trades and training programs through local universities to build capacity among the local community to operate advanced manufacturing software and machinery. 	<ul style="list-style-type: none"> • Local technology accelerators • Local R&D leaders and universities • Economic development team leaders • First Nation community organizations • Other community and regional stakeholders • <i>Note: Key case study reference: <u>Advanced Manufacturing Supercluster program, Southern Ontario</u></i>
Circular Economy: Diverting waste streams to create new resources	<p>Strong political will exists across municipalities to increase recycling and composting infrastructure and programs.</p> <p>Mattress Recycling, based in Hope, BC, is the first and largest dedicated mattress recycling company that breaks down used mattresses into its basic components and recycled into new uses.</p>	<ul style="list-style-type: none"> • Waste to Resource Stakeholder Matchmaking: Create a platform for local farmers and other businesses to connect waste streams with resource gaps and apply technologies (e.g. anaerobic digesters producing biogas). • Circular Economy Feasibility Study: 	<ul style="list-style-type: none"> • Local government • Business leaders from existing waste-to-resource companies • Local R&D leaders and universities • First Nations community organizations

	Local commercial operations such as Net Zero Waste Inc., Bakerview EcoDairy and the Molson Coors Brewery demonstrate the business case for using waste as a resource.	Continue to explore the feasibility of a material separation facility. This could result in more circular economy and renewable energy opportunities per the FVRD SWMP.	
Land Use & Densification: Maximizing the utilization of available resources	A cluster of soil and brownfield remediation companies in Mission that specialize in technology that cleans and processes contaminated land.	<ul style="list-style-type: none"> • Land Remediation Program: Apply local expertise in soil remediation technology to transform parcels of land into project sites that provide development opportunities for industry. 	<ul style="list-style-type: none"> • Local technology accelerators • Local R&D leaders and universities • First Nations community organizations

Green & Sustainable Transportation

On a global scale, there is a shift happening to decarbonize transportation through increased electrification, deployment, and adoption of zero emissions vehicles, low carbon fuels, and implementing infrastructure to reduce the number of vehicles on the road and move people and goods through more efficient and alternative forms of mobility.¹⁹ Sustainable modes of transportation are becoming increasingly common across Canada as governments at the federal, provincial, and local levels look to green transportation solutions to reduce emissions, create jobs, and spur economic growth.^{20 21}

The solutions being emphasized by governments²² include the implementation of electric vehicle and low-carbon fuel infrastructure, regulation and testing of autonomous vehicles, implementation of clean fuel standards for vehicles, and the piloting and deployment of low-carbon solutions, including electrification and biofuels, for long-haul trucking, rail, marine, and aviation.²³

At a local level, the focus is on smart mobility and land use planning that enables sustainable multi-modal options (e.g., transit, walking, cycling, car share) and avoids locking citizens into carbon-intensive patterns or habits (e.g., single occupancy vehicle trips exacerbated by urban sprawl).²⁴ Recent findings from Statistics Canada show that in 2016, nearly one-third of Canadians used a mode of sustainable transportation as part of their primary mode of commuting.²⁵ The statistics also show that cycling and public transit experienced the highest growth of any mode between 1996 and 2016.

Trends in car ownership are also showing a shift toward sustainable transportation modes, especially in urban centres. For example, the City of Vancouver is experiencing a steady decline in car ownership due to the rising cost of operating a vehicle alongside parking fees.²⁶ The decline is also being driven by the City's success in encouraging citizens to take different modes of transportation by providing more frequent and integrated transit service (e.g.,

What is Green & Sustainable Transportation?

The Green and Sustainable Transportation sector includes:

- Electric and autonomous vehicles
- Public transit and rail
- Alternative fuels (e.g., biofuels, hydrogen, renewable natural gas)
- Smart transportation systems and technologies, and related integrated land use planning.

¹⁹ See: <https://www.pembina.org/blog/global-momentum-clean-transportation-lets-bring-it-canada>

²⁰ See: <https://www.pembina.org/blog/global-momentum-clean-transportation-lets-bring-it-canada>

²¹ See: <https://www.tc.gc.ca/eng/future-transportation-canada.html>

²² See: <https://www.tc.gc.ca/eng/future-transportation-canada-green-innovative-transportation.html>

²³ See: <https://www.canada.ca/en/natural-resources-canada/news/2018/08/challenging-canadian-innovators-to-develop-cleaner-aviation-fuel.html>

²⁴ See: <https://www.pembina.org/blog/global-momentum-clean-transportation-lets-bring-it-canada>

²⁵ See: <https://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016029/98-200-x2016029-eng.cfm>

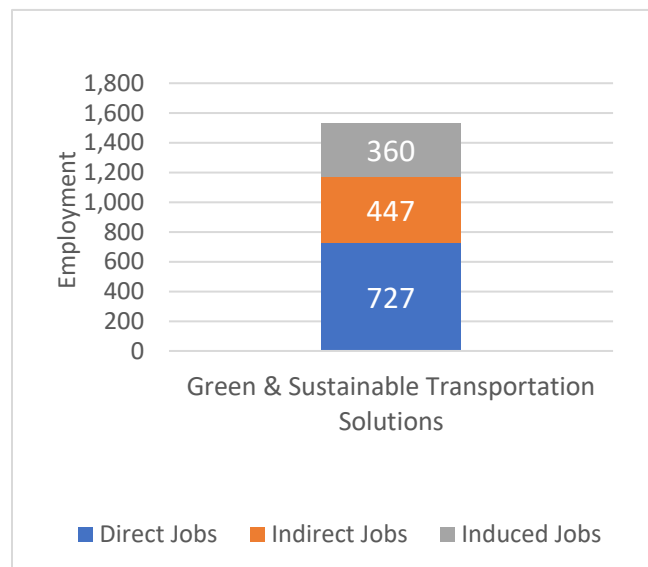
²⁶ See: <https://biv.com/article/2017/01/car-ownership-declining-city-vancouver>

expanded and more frequent bus and rail services, ease of payment, apps integrating real time transit, and car sharing programs), as well as safer infrastructure for cyclists and pedestrians.²⁷

There are also green transportation trends emerging around the efficient and sustainable movement of goods. Supply and distribution companies are pushing toward cloud-based digital platforms that allow them to track real-time data as goods move along the supply chain, pinpoint inefficiencies, enhance responsiveness to problems, and deliver better overall client service.²⁸ Distribution companies are also moving toward zero or low-emissions

Policy Drivers in Green & Sustainable Transportation

- Investing in Canada Infrastructure Program
- Clean Energy Innovation Program (NRCan)
- Federal Clean Fuel Standard
- CEV Advanced Research & Commercialization
- Renewable & Low Carbon Fuel Requirements Regulation
- BC Clean Vehicle Program
- BC ZEV Legislation



Source: Delphi Group, based on Statistics Canada 2016 Census data.

Figure 7: Green and Sustainable Transportation Employment in the Fraser Valley (2016).

transportation (22.7%) due to a high proportion of car pooling (16.5%). However, it had one of the lowest proportions of public transit commuters (2.5%) and the lowest proportion of commuters using active transportation (3.7%).³¹ It is important to note that since 2007, transit ridership in the region has increased by 43%

vehicles as a means of implementing sustainable practices. Walmart, for example, will have 20 new Tesla trucks operating from its Surrey, B.C. distribution centre by 2022.²⁹ The movement of goods and people via rail is also moving to decarbonize their operations through electrification of urban rail transit and use of alternatives fuels such as liquified natural gas (LNG) in the freight railway sector³⁰ and compressed natural gas (CNG) for conventional transit.

Fraser Valley Sector Snapshot

It is estimated that the Green and Sustainable Transportation sector was responsible for 727 direct jobs, 447 indirect jobs and \$245,127 in direct GDP in 2016. Jobs in this sub-sector are concentrated largely in repair and maintenance, scientific and technical consulting, and rail and urban transportation systems. (See Figure 7)

Statistics Canada revealed that in the Fraser Valley Abbotsford–Mission CMA had the highest proportion of commuters using sustainable

²⁷ See: <https://biv.com/article/2017/01/car-ownership-declining-city-vancouver>

²⁸ See: <https://www.mixmove.io/blog/these-are-the-5-key-logistics-trends-in-2019>

²⁹ See: <https://www.newswire.ca/news-releases/walmart-canada-commits-to-100-per-cent-alternatively-powered-fleet-vehicles-by-2028-692578051.html>

³⁰ See: https://sencanada.ca/content/sen/committee/421/ENEV/Briefs/2016-10-25RailwayAssociationofCanada_Brief_e.pdf

³¹ See: <https://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016029/98-200-x2016029-eng.cfm>

through the expansion of municipal systems and the introduction of the Fraser Valley Express.³² While progress has been made, the low proportion of commuters using active transportation and transit options reflects the challenge that the region faces in diverting commuter traffic away from single occupancy vehicle trips. This also presents an opportunity to move quickly toward solutions based in sustainable transportation technologies across transit, electric vehicles and micro-mobility (e.g. sharing programs for cars, bikes and electric scooters).

The economic performance of the Green and Sustainable Transportation sector could be improved through further investment in electrifying transit fleets, producing or purchasing biofuels for both air and ground travel, and updating infrastructure and smart city applications to enable walking, transit service, cycling and car sharing. The latter is key in addressing the challenge around “last mile”³³ or the distance between a transit hub and a passenger’s final destination that is common in suburban and rural areas.³⁴

Local Capacity & Comparative Strengths

The Fraser Valley’s proximity to Metro Vancouver, the U.S. border, and the Cascadia Corridor is a key strength that promotes the flow of goods, people, and business. Moving forward, the region can apply sustainable transportation planning and adopt new opportunities related to smart mobility services, technology, and infrastructure to improve the flow of traffic and mitigate congestion. The Fraser Valley is one of the regions in B.C. with the highest potential for growth and innovation in green and sustainable transportation as it is currently expanding and improving transit services to meet the needs of a growing population and greater movement of goods and people.³⁵

Other key strengths that exist in the region are the presence of two major airports: Abbotsford International Airport and Chilliwack Airport, each offering valuable connections to national and international markets. They also have the potential to serve as hubs for research and development on technologies that reduce the carbon footprint of aviation (such as biofuels, IoT and automation technologies, electrification of ground-based vehicles and equipment, energy efficient systems to support amenities at the main terminal).

Regarding rail infrastructure, the Fraser Valley is serviced by both passenger and freight rail. VIA Rail offers passenger service to several FVRD communities, including Abbotsford and Chilliwack³⁶, while Southern Railway of BC (SRY), CN, and CP provide freight rail service to the Fraser Valley with stations in Mission, Abbotsford, and Chilliwack.³⁷ TransLink’s West Coast Express service provides commuter rail service between Mission and downtown Vancouver on the north side of the Fraser River. As the Fraser Valley’s population grows, there are opportunities around passenger rail service between the Fraser Valley and Metro Vancouver on the south side of the Fraser, however this remains a long-term goal as governments and local stakeholders continue to strategize around infrastructure and cost-benefit analysis.³⁸

³² See: Fraser Valley Regional District Draft Regional Growth Strategy 2018 Monitoring Report.

³³ The final distance between transit hubs and commuters’ final destination (i.e. house or work).

³⁴ See: Key informant interview with provincial transit provider.

³⁵ See: Key informant interview with provincial transit provider.

³⁶ See: <https://www.viarail.ca/en/explore-our-destinations/stations/rockies-and-pacific/list>

³⁷ See: <https://www.sryrallink.com/about-us/overview/>

³⁸ See: https://www2.gov.bc.ca/assets/gov/driving-and-transportation/reports-and-reference/reports-and-studies/transit/summary_strategic_review_fraser_valley_summary.pdf

Existing gaps within the Fraser Valley's Green and Sustainable Transportation sector include:

- Lack of transportation options or routes to bypass the traffic congestion on the main Highway 1 corridor (currently this main corridor is designed to prioritize cars and commercial vehicle traffic and not for transit or other modes);
- Inter-connected transit service between municipalities and from main hubs to final destinations in residential or industrial areas;
- Patchwork of EV charging stations available across municipalities;
- Safe cycling and pedestrian routes connecting transit hubs to "last mile" destinations;
- Relatively low population density creates challenges around cost of building out rail transportation to the region.³⁹

While these gaps represent challenges around the efficient movement of people and goods, they provide an avenue for municipalities to work together on a regional level to implement more integrated, regionally-focused sustainable transportation strategies. As an example, there are approximately 10 projects currently underway to upgrade road infrastructure to provide more access to HOV lanes and transit routes, with the goal of reducing congestion.⁴⁰

The region is also benefiting from the following projects that are expanding transit service, zero emission bus fleets, electric vehicle infrastructure, and applying software platforms to inform and update transit users:

- BC Transit's new transit facility in the region will store and maintain an expanding bus fleet that will be converted to compressed gas natural gas by 2020;⁴¹
- Potential to replicate Vancouver Island's electric bus pilot program in the Fraser Valley;⁴²
- The Smart Bus Next Ride Program which is under development and expected to be launched in the Fraser Valley in the coming years to provide customers with real time bus schedules and locations to improve rider service among municipalities;
- Abbotsford's membership with the Intelligent Communities Forum is driving smart city best practices and projects across intelligent transit corridors, alongside related smart infrastructure and digital solutions to optimize the movement of people.⁴³

Table 3 below provides a snapshot of the Fraser Valley's current strengths in line with macro trends in green and sustainable transportation.

³⁹ See: https://www2.gov.bc.ca/assets/gov/driving-and-transportation/reports-and-reference/reports-and-studies/transit/summary_strategic_review_fraser_valley_summary.pdf

⁴⁰ BC Major Projects Inventory Q2 2018 <http://maps.gov.bc.ca/ess/hm/bcea/?catalogLayers=5178> and Fraser Valley Regional District Draft Regional Growth Strategy.

⁴¹ See: <https://bctransit.com/central-fraser-valley/transit-future/corporate-infrastructure-initiatives/transit-operations-maintenance-facility>

⁴² Key informant interview with provincial transit provider.

⁴³ See: <https://caed.abbotsford.ca/locate-here/smart-city-abbotsford/>

Table 3: Fraser Valley's Strength in line with Global Macro Trends in Green and Sustainable Transportation.

Macro Trend	Alignment with Local Strengths	Potential Project Opportunities	Key Stakeholders
Electrification of Transportation: from domestic EVs to electric airlines, electrification of transportation is a key tool to achieve emission reduction targets.	The region and its municipalities are aligned with province-wide goals to install EV charging stations and promote the electrification of transit and fleets across municipal governments and businesses.	<ul style="list-style-type: none"> • EV Charging Stations: Municipalities and the FVRD have already begun installing EV charging stations, and opportunity lies in expanding this process and applying lessons learned around maintenance, location, ease of use. • Electrification of Rail and Air Travel: A strategy for the medium-long term to further reduce emissions. • EV Mechanics: Updating the skillsets and knowledge of automotive repair and maintenance will be a key investment opportunity to support the growth of EVs. 	<ul style="list-style-type: none"> • Private businesses • Local government • Local transit providers • R&D leaders and universities • Other community and regional stakeholders
Autonomous Vehicles: Self parking, self braking, and self driving, the use of autonomous vehicle technology will be road ready by 2025.	As the region looks to address transit and congestion issues, it is well positioned to begin adapting infrastructure and transportation projects to support autonomous vehicles.	<ul style="list-style-type: none"> • Autonomous Vehicle Piloting: The Abbotsford International Airport can be looked to as a key location to trial autonomous vehicles within the airport boundaries (e.g. transporting luggage from plane to terminal) or moving passengers from the airport to their destination. 	<ul style="list-style-type: none"> • Abbotsford International Airport • Local tec accelerators • Local universities
Smart Mobility and Logistic Hubs: Application of sensors and software enable intelligent traffic management and keep drivers and transit users informed before, during and after their trip.	<p>There is a growing digital and information and communication technologies (ICT) base in the region that can serve as a foundation for building software-based solutions for transportation.</p> <p>Activity is already underway in this area through Abbotsford and its partnership with the Intelligent Community Forum to</p>	<ul style="list-style-type: none"> • Micro-mobility / Sharing Programs: A solution to close the distance between commercial and residential destinations from transit hubs (e.g. sharing programs for electric scooters, bicycles, etc.). 	<ul style="list-style-type: none"> • Local government • Local transit providers • R&D leaders and universities • Private businesses • Other community and regional stakeholders

	<p>develop an intelligent transit corridor.⁴⁴</p> <p>The region has pocket transit hubs that can act as launch points for micro mobility⁴⁵ (i.e., bike share car share programs).</p>		
Renewable Fuels	<p>The region is well positioned to support the provincial government mandate on low carbon fuels as a means to achieve emission reduction targets.</p>	<ul style="list-style-type: none"> • Low Carbon Fleets: Corporate strategy to require the use of low carbon fuels across all light and heavy duty vehicles used for municipal operations. • Biofuel R&D: Partnerships between local universities and the Abbotsford International Airport to test and pilot biofuels can generate high tech and knowledge-based jobs (i.e., a UFV Aviation Centre of Excellence). This could facilitate hydrogen-based aviation research at YXX. 	<ul style="list-style-type: none"> • Local governments • Abbotsford International Airport • Local universities • Private businesses

⁴⁴ See: https://www.abbotsford.ca/city_hall/smart_cities_challenge.htm

⁴⁵ This term refers to the use of small personal transportation options, such as bicycles, electric scooters, or small electric cars. These are available to commuters to travel from a transit hub to their fin

Green & High-Performance Buildings

Both Canadian and global building markets are experiencing a clear shift toward green buildings and infrastructure. The drivers for green building projects across residential and commercial construction include client demands, environmental regulations and building codes, and the value placed in healthy buildings.⁴⁶

Canada's green building sector contributed \$23.45 billion in GDP in 2014 and this level of output is only expected to grow as the market recognizes the value of green buildings and more provinces and municipalities enact building codes that drive high performance building construction (e.g., BC Energy Step Code).⁴⁷ As an example, a recent report by McGraw Hill Construction points to a growing recognition of the business case for green buildings which is encouraging investment in both related building construction and supply of products and materials.⁴⁸

What are Green and High-Performance Buildings?

The Green and High-Performance Building sector includes products, services, and building materials related to energy efficient and high-performance building design, construction, renovation, and operations such as building envelope products (pre-fabricated walls and building components, windows / doors, insulation), mechanical systems (e.g., HVAC, hot water), lighting and control systems, and other products (e.g., engineered wood, etc.).

Policy Drivers in Green & High-Performance Buildings

- Low Carbon Leadership Fund
- Green Municipal Fund
- BC Energy Step Code
- BC Building Code
- EfficiencyBC Incentives
- CleanBC Strategy

The Fraser Valley is well-positioned to be active in this space through its strengths in local manufacturing and presence of developers experienced in sustainable building construction methods. Population growth forecasts and the pressure of the housing market in nearby Metro Vancouver create an opportunity for green building construction best practices to be deployed in order to accommodate new residents in a sustainable built environment. Modern green building design practices also create benefits with respect to both comfort and operational savings.

⁴⁶ See: https://www.cagbc.org/cagbcdocs/advocacy/World_Green_Building_Trends_2018_SMR.PDF

⁴⁷ Green Building in Canada: Assessing the Market Impacts and Opportunities. Canada Green Building Council.

⁴⁸ See: https://www.cagbc.org/cagbcdocs/advocacy/World_Green_Building_Trends_2018_SMR.PDF

Fraser Valley Sector Snapshot

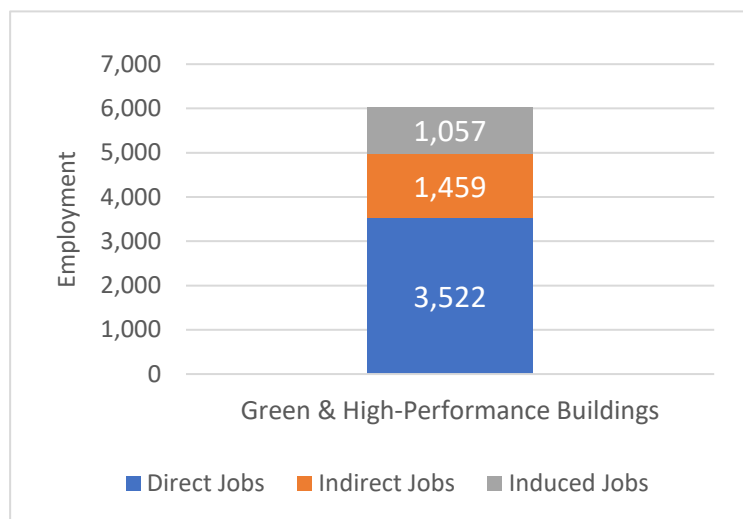
In B.C., there has been a 38% increase in investment in larger green buildings, totalling \$10.6 billion in 2016, spurring on job growth for green building products.⁴⁹ The Fraser Valley's Green and High-Performance Building sector is no exception. In 2016, the sector was responsible for 3,522 direct and 1,459 indirect jobs and a GDP contribution of \$297,455 (See Figure 8). The established workforce base represents an opportunity to use existing skillsets to expand knowledge and skills in high performance building design, construction and installation of energy efficient mechanical and building envelope components.

Local Capacity and Comparative Strengths

There are several builders and developers in the region that represent a key source of expertise that can be applied to the development of green building infrastructure in the region.

The Fraser Valley is also home to many manufacturing companies that implement green building principles and technologies and are well-positioned to adapt to the evolving high-performance building code in B.C. Examples of local industry leaders include Westeck Windows, Structurecraft, Algra Brothers, and Ram Construction.

The Fraser Valley can use the strengths of companies who offer manufacturing and construction services to partner with training institutions in order to grow local talent and skills. UFV's research and trades training provides modern programs for building talent in areas such as architectural drafting and design, carpentry, welding, electrical, and electronics, automation, and robotics.⁵⁰



Source: The Delphi Group, based on Statistics Canada 2016 Census data.

Figure 8: Green Building sector employment in the Fraser Valley (2016 estimate).

This sector also stands to benefit from the growth of modular and pre-fabricated building components; part of a global trend taking place across construction markets. Manufacturers of pre-fabricated building components are well-suited to utilize affordable, small-scale and cost-effective industrial land to establish manufacturing operations that can connect local suppliers and construction sites.

⁴⁹ See: <https://www.pembina.org/op-ed/growing-green-building-sector>

⁵⁰ See: <https://www.ufv.ca/programs/>

Structurecraft is one example of a leading manufacturer that moved to the Fraser Valley to take advantage of affordable industrial land and serve the growing market for engineered wood products. The company's new 50,000 square foot facility manufactures Dowel Laminated Timber (DLT) and has strengthened the local supply chain around pre-fabricated walls and roof panels. As demand continues to grow for such products in line with the B.C. Energy Step Code and other high-performance building codes, the Fraser Valley stands to become a hub for micro-manufacturers who can benefit from the region's proximity to key local and international markets.

In terms of construction, the Canada Education Park, U-District, and neighbourhoods built by SonBuilt Homes exemplify the region's knowledge and capabilities in delivering high-performance buildings.

Local green builders and developers in the Fraser Valley include:

- Algra Brothers
- Island West Coast Developments
- Kindred Construction Ltd.
- Maclean Homes Ltd.
- Major Homes Ltd.
- Monolith Design Build Ltd.
- Optimum Solution Design Build Ltd.
- Ram Construction
- RJR Construction Management Ltd.
- Silver Valley Homes Ltd.
- SonBuilt Custom Homes

- **Canada Education Park**, located in Abbotsford, has led the planning and development of commercial and institutional buildings that implement sustainable building design and technology (examples of projects include the Prospera multiplex arena, Chilliwack General Hospital, Cheam Leisure Centre, and Garrison Crossing).⁵¹
- **The U-District** represents a collaboration between the University of Fraser Valley and City of Abbotsford to showcase the concept of sustainable neighbourhoods built around centres through densities, public spaces, multi-modal transportation network, and servicing / green infrastructure strategies.⁵²
- **SonBuilt Homes** led the construction of The Vine, a master planned neighbourhood of 16 high performance homes built to R-2000 standards and with ENERGY STAR approved windows and heating/cooling systems.⁵³

Table 4 below provides a snapshot of the Fraser Valley's current strengths in line with macro trends in Green and High-Performance Buildings.

⁵¹ See: <http://businessinchilliwack.com/major-projects/>

⁵² See: https://www.abbotsford.ca/city_hall/plan_for_200K/neighbourhood_plan_-_udistrict.htm

⁵³ See: <http://sonbulthomes.com/thevine/>

Table 4: Fraser Valley's Strengths in line with Global Macro Trends in Green and High-Performance Buildings.

Macro Trend	Local Strengths	Opportunity for Investment	Key Stakeholders
"Envelope First" Approach, Next Generation Material and Wood Construction, and the BC Building Code: Increasing demand for high-performing windows, doors, insulation, and engineered wood products.	<p>The region is home to many local business leaders in building construction that have aligned with the shift to energy efficient and high-performing buildings.</p> <p>Leading manufacturers in the region produce engineered wood products and energy efficient windows and are well positioned to meet increased demand for energy efficient building construction.</p>	Municipal governments can encourage local businesses to innovate in green building technology. By applying the higher steps of the building code to municipal buildings, builders can showcase the envelope first approach and realize subsequent savings in heating and cooling costs.	<ul style="list-style-type: none"> Local building developers Municipal governments Manufacturers of high-performance building products and materials (i.e., windows and doors, insulation, wood products, pre-fabrication) Local universities
Growth of Pre-fabrication & Modular Construction	Low-cost and accessible industrial land offers pre-fabrication or modular construction operations valuable space to develop their business and support the growth in building construction across the region.	Local governments can provide support micro manufacturers wishing to locate on affordable industrial land near transportation corridors to serve the Fraser Valley and Metro Vancouver regions.	<ul style="list-style-type: none"> Municipal governments Economic development agencies Local modular home developers Other community and regional stakeholders

Renewable Energy Supply & Storage

There is a global transition underway to clean and low carbon sources of energy, driven by the growing understanding of the pollution and GHG emissions created through the combustion of fossil fuels. Countries, cities, businesses, and citizens are increasingly exploring renewable and alternative forms of energy as technology advances lead to affordability and reliability of new energy sources.

The International Energy Agency estimates that over 70% of the world's energy supply investment comes from governments and their policies, and these policies shape improvements in energy efficiency and technology innovation.⁵⁴

The growing field of smart grid / grid modernization leverages advances in computing and telecommunications technology to embed intelligence into the grid. By using these new technologies to monitor and control the grid, utilities can enable energy storage and grid optimization, capacity for electric vehicles, integration of renewable energy sources, and improved reliability. Natural Resources Canada estimates a \$70 billion investment opportunity to apply smart grid technologies over the next 20 years.⁵⁵

In Canada, renewable energy sources provided 66% of total generating capacity in 2016.⁵⁶ Canada's commitment to the Paris Agreement led to the Pan-Canadian Framework for Climate Change and Clean Growth and includes new policies and incentives to reduce GHG emissions and transition to renewable energy. (see policy sidebar)

Policy Drivers in Renewable Energy

- Pan-Canadian Framework for Climate Change and Clean Growth
- Low Carbon Economy Fund
- Clean Energy Innovation Program (NRCan)
- CleanBC Communities Fund
- BC Clean Growth Program for Industry
- Innovative Clean Energy (ICE) Fund
- Canada-BC Agri-Innovation Program

What is Renewable Energy Supply and Storage?

The Renewable Energy Supply and Storage sector includes wind, solar, geothermal, hydro, biomass, district energy, waste heat to power, anaerobic digestion, as well as energy storage / battery technology, smart grid, and related energy management technologies.

British Columbia's electricity generation is dominated by clean hydroelectricity, resulting in close to 95% clean electricity for the province.⁵⁷ This backbone of clean electricity in B.C. provides an added benefit for reducing GHGs through the electrification of other sectors such as electric vehicles in transportation, the heating and cooling of buildings, and industrial operations.

At a local level, governments in B.C. are increasingly taking the lead on developing and managing sources of renewable energy. For example, Revelstoke District Energy⁵⁸, Surrey Biofuel Facility⁵⁹, and the Salmon Arm

⁵⁴ See: <https://webstore.iea.org/download/summary/190?fileName=English-WEO-2018-ES.pdf>

⁵⁵ See: https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/canmetenergy/files/pubs/SmartGrid_e_acc.pdf

⁵⁶ See: <https://www.neb-one.gc.ca/nrg/sttstc/lctrct/rprt/2017cndrnwblpwr/2017cndrnwblpwr-eng.pdf>

⁵⁷ See: <https://www.neb-one.gc.ca/nrg/sttstc/lctrct/rprt/2016cndrnwblpwr/prvnc/bc-eng.html>

⁵⁸ See: <http://www.revelstokecommunityenergy.ca/sustainability.html>

⁵⁹ See: <https://www.surreybiofuel.ca/>

Landfill Gas Capture⁶⁰ are models of local government-led renewable energy projects with the potential to be replicated in other parts of the province. More locally, the JAMES wastewater treatment plant in Abbotsford⁶¹ has three digesters generating methane gas which is used as a fuel to produce heat and electricity at the plant.

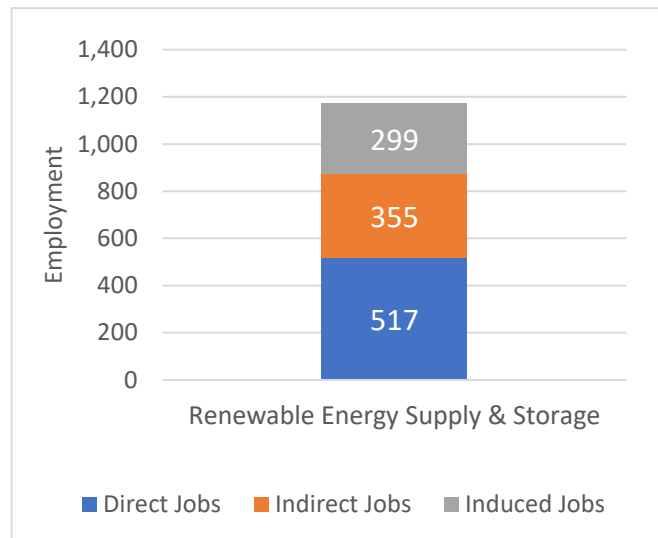
Fraser Valley Sector Snapshot

The importance of this sector to the region's clean economy is significant. Power supply and storage is an enabling tool for many other clean economy initiatives in the region.

The Fraser Valley's power supply comes from relatively clean sources due to the abundance of nearby hydroelectricity facilities. There are 5 new small-scale hydroelectricity projects proposed or underway in the region, representing over 90 MW of new electricity supply. This additional supply can help to support the growth of electric vehicles, energy efficiency upgrades in buildings, and electrification of large industrial operations.

The region's agriculture sector is well established, and associated waste products provide an opportunity for increased production of renewable natural gas (RNG) as an energy source.

It is estimated that the Renewable Energy Supply and Storage sector was responsible for 517 direct jobs, 355 indirect jobs, and \$188,922 in direct GDP in 2016 (see Figure 9). Jobs in this sector are concentrated in specialty trades, engineering, and scientific and technical consulting services.



Source: The Delphi Group, based on Statistics Canada 2016 Census data.

Figure 9: Renewable Energy Supply and Storage sector employment in 2016.

⁶⁰ See: <https://www.toolkit.bc.ca/Success-Story/Columbia-Shuswap-Regional-District-Landfill-Methane-Gas-Capture>

⁶¹ See: https://www.abbotsford.ca/city_services/wastewater/wastewater_faqs.htm

Local Capacity & Comparative Strengths

The Fraser Valley region has a significant amount of energy capacity and future potential across multiple energy sources. Hydro projects are being developed across the region, with two construction-stage facilities combining for approximately 50MW of run-of-river hydroelectricity near Harrison Lake.

District energy and geo-exchange systems also provide new investment and GHG reduction opportunities for the region. UFV has been a leader in this space, having installed a geo-exchange system as part of a broader suite of energy efficiency technologies in one of its new campus buildings. The project demonstrated a leading-edge system for the region and the carbon intensity of the building is 68% less than other buildings on campus.⁶²

The abundance of agriculture waste and other biomass gives the Fraser Valley a comparative advantage in the growing field of biogas production. Fraser Valley Biogas converts agricultural waste into biogas that is further upgraded to RNG. The facility produces 90,000 GJ of RNG per year, enough to heat more than 1,000 homes.

Awareness of the RNG program is growing, but FortisBC relies on technology providers and engineering consultants to help build renewable energy literacy among farmers and other potential biogas producers. Coordination between FortisBC, consultants, and training institutions could help potential producers better understand the project development process, available technology, and best sources of information.

Hydrogen fuel cells are another source of renewable power that represent an opportunity for the region. Terrella Energy Systems, located in Mission, is a local leader in the manufacturing of corrosive-resistant graphite plates, a key component of hydrogen fuel cells. Related research is underway at UFV to optimize the production of hydrogen fuel and improve its economic viability to benefit companies, both regionally and province-wide.

Table 5 below provides a snapshot of the Fraser Valley's current strengths in line with current macro trends in renewable energy supply and storage.

⁶² See: <https://ufv.ca/media/assets/energy-management/energy-management/UFV-SEMP-2017-2018.pdf>

Table 5: Fraser Valley’s Strengths in line with Global Macro Trends in Renewable Energy Supply and Storage.

Macro Trend	Alignment with Local Strength	Potential Project Opportunities	Key Stakeholders
Renewable Power Supply – Hydroelectricity and Solar PV	The region is home to existing and planned hydroelectricity infrastructure.	<ul style="list-style-type: none"> • Proposed run-of-river hydroelectricity infrastructure: four projects are currently in the proposal stage and new opportunities for the deployment of solar PV installations exist throughout the region, including through partnerships with First Nation communities. 	<ul style="list-style-type: none"> • Local utility providers • First Nation community organizations
Renewable Energy Supply – Biogas and RNG	An abundance of biomass from agriculture and forestry creates the potential for biogas and renewable natural gas (RNG) production.	<ul style="list-style-type: none"> • Community-Scale Digester Facilities: agricultural operations can feed organic waste into community-scale facilities that are near existing gas infrastructure. 	<ul style="list-style-type: none"> • Local utility providers • Local First Nations • Local governments • Local agriculture operations / farmers • others
Energy Storage and Grid Infrastructure Modernization	Distributed energy sources and remote communities provide opportunities for grid modernization and expansion.	<ul style="list-style-type: none"> • Smart Grid Applications: an opportunity to manage the efficient distribution of electricity throughout municipalities through software solutions • Micro Grids: a valuable tool that can be applied to the region’s remote communities, creating opportunities to boost resiliency and develop projects on land that was otherwise inaccessible to electricity infrastructure. 	<ul style="list-style-type: none"> • Local utility providers • Local universities • Local governments • First Nation community organizations

Knowledge & Innovation

At a national, provincial and regional level, the Knowledge and Innovation sector of the clean economy is a key driver of solutions and best practices in sustainable resource management, green transportation, green buildings, and renewable energy. This sector underpins the innovation required to advance the transition to a low-carbon economy and is comprised of an ecosystem of R&D institutions, universities, centres of excellence, industry partners, and tech accelerators. Collectively, the sector is responsible for piloting and scaling clean technological solutions, collection and analysis of big data, policy and regulatory design, and implementation of programs that encompass each aspect.⁶³

This technological shift is known as the Fourth Industrial Revolution (4IR) and is characterized by technologies that bring together the physical, digital and biological worlds in real-time.⁶⁴ These technologies include artificial intelligence, robotics, internet of things (IoT), 3D printing and additive printing, data analytics, nano-technology, and materials science.⁶⁵ Collectively these technologies are disrupting nearly every industry by boosting productivity, connectivity, and responsiveness to disruptions or advances in the market place.⁶⁶ These advanced technologies are also driving the creation of new jobs across business and industry and demanding new skillsets and areas of expertise from college and university faculty and graduates.⁶⁷

Increasingly, the knowledge and innovation space within the clean economy (and specifically cleantech) is focused on the collection and analysis of data to optimize operations and better understand trends.⁶⁸ In 2017, the federal government recognized this growing trend and announced a \$14.5 million investment to establish a Pan-Canadian Clean Technology Data Strategy.⁶⁹ The goal of the strategy is to transform data into insight and visualize impacts to better understand the emerging trends and opportunities as governments at all levels plan for the transition to a clean economy.⁷⁰

The trend around big data comes from the idea that “what gets measured, gets managed”, and there are applications of this across manufacturing, agriculture, transportation, buildings, and energy. The process of implementing digital systems to collect and analyze data is further strengthened through collaboration between industry and the knowledge base at R&D institutions.

What is Knowledge and Innovation?

The Knowledge and Innovation sector includes:

- Educational institutions for workforce and skills development
- Finance and investment support;
- Research and development (R&D) institutions;
- Centers of excellence that build on the knowledge base of the clean economy.

⁶³ See: http://globe.ca/wp-content/uploads/2012/10/wcce_report_web_final.pdf

⁶⁴ See: <https://www.weforum.org/about/the-fourth-industrial-revolution-by-klaus-schwab>

⁶⁵ See: <https://medium.com/@jessicasmith/what-4ir-is-all-about-and-why-everyone-needs-to-know-ab2d64094a7d>

⁶⁶ Ibid.

⁶⁷ Ibid.

⁶⁸ See: <https://institute.smartprosperity.ca/sites/default/files/cleantechnologyandbusinessinnovationwp30-07.pdf>

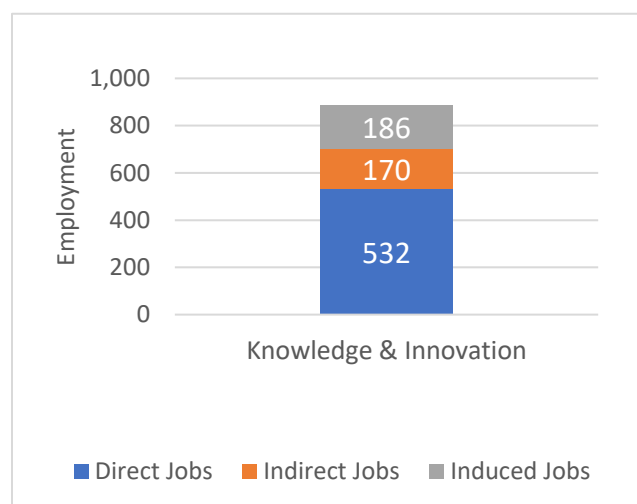
⁶⁹ See: <https://www.newswire.ca/news-releases/federal-data-measures-economic-contribution-of-clean-technology-in-canada-for-the-first-time-663948093.html>

⁷⁰ See: <https://www.newswire.ca/news-releases/federal-data-measures-economic-contribution-of-clean-technology-in-canada-for-the-first-time-663948093.html>

This type of collaboration ensures that current technology is used for data collection, and that results are properly analyzed to inform the challenges faced by industry, governments and other key stakeholders.⁷¹

Fraser Valley Sector Snapshot

The Fraser Valley's local governments and leading industries, partnered with the network of post-secondary institutions, tech accelerators, and centres of excellence, can together create a valuable niche for collaboration to implement region-wide strategies for data collection and analysis. This creates opportunities not only to implement new systems and technologies, but to develop skillsets and a local knowledge base in data analysis; a common need across Canada.⁷²



Source: The Delphi Group, based on Statistics Canada 2016 Census data.

Figure 10: Knowledge and Innovation sector employment in the Fraser Valley (2016).

In 2016, it is estimated that the Knowledge and Innovation sector was responsible for 532 direct and 170 indirect jobs, the bulk of which are employed across management, scientific and technical consulting services, business, professional and labour organizations, and financial investment services. In terms of GDP, in 2016 the sector generated \$50,559 in direct GDP and \$84,463 in total GDP contribution (See Figure 10). Given the land constraints faced by the Fraser Valley, building out the knowledge economy presents a key investment strategy that is not land intensive, can be coupled with the densification and sustainable design of new building construction, and capitalizes on national and global trends in the development and deployment 4IR technologies.

Local Capacity & Comparative Strengths

The Fraser Valley is home to valuable R&D institutions and technology accelerators that are generally focused on agriculture and digital innovation. Table 6 below showcases key leaders in this space.

Table 6: Fraser Valley's Key Leaders in Agriculture and Digital Innovation

Knowledge and Innovation Leaders	Alignment with Clean Economy Innovation
XLRator	A non-profit organization led by a select group of technology executives, industry partners and high education institutions, XLRator is working to attract technology-based investment to the region. The team is committed to growing out the economic potential of the region's clean economy through digital innovation around agri-tech and geospatial artificial intelligence.

⁷¹ See: <https://institute.smartprosperity.ca/sites/default/files/cleantechnologyandbusinessinnovationwp30-07.pdf>

⁷² See: https://www.sas.com/en_ca/insights/articles/analytics/local/analytics-skill-gap.html

University of Fraser Valley Trades and Technology Centre	The UFV Centre for Trades and Technology is a fundamental resource in the region that is dedicated to building a workforce equipped with skills in robotics, automation, 3D printing, additive manufacturing, and many other technical and digital skillsets relevant to each of the clean economy subsectors. ⁷³
Canada Education Park	This park was launched by the City of Chilliwack, the Chilliwack Economic Partners Corporation, and Canada Lands Company in 2003 to provide facilities and human resources to develop a sustainable economic base for Chilliwack in the knowledge-based sector. Projects include the construction of compact efficient community hubs that provide walkable, green hubs and LEED certified buildings. ⁷⁴
University of Fraser Valley Agriculture and Food Institute	The \$5 million Agriculture and Food Institute (AFI), includes a 250-square-metre demonstration barn, a 400-square-metre glass greenhouse, and two traditional poly-houses. The AFI has undertaken the following studies as examples: <i>Innovative Crops: Diversifying production on agricultural lands in Southwestern British Columbia</i> ; <i>Dairy 2.0: Exploring policy implications and public perceptions of cellular agriculture</i> ; and <i>Farming for the future: Maximizing the return on investment of agricultural land preservation</i> . ⁷⁵
Pacific Agri-Food Research Centre	The Pacific Agri-Food Research Centre located in Agassiz, studies the flows, interactions and impacts of agriculture systems within populated areas and agroecosystem resiliency. Through its R&D the centre has developed solutions to help farmers apply sustainable practices such as an online computer model for farmers to obtain real time decision support for precise management of nitrogen. ⁷⁶
Chilliwack Innovation Network	A standing committee tasked with developing opportunities, partnerships, projects and events that foster innovation, specially those focused on technological solutions. The committee is comprised of stakeholders from academia, industry, local governments and business representing strengths and leadership from across the Fraser Valley. ⁷⁷
WestGen	A leader in Western Canada on genetics and reproduction, WestGen (located in Abbotsford) conducts leading edge research and delivers advanced technology solutions that support the sustainable development of Western Canada's dairy and beef industries. Their research epitomizes the 4IR shift towards data and productivity driven solutions. ⁷⁸

⁷³ <https://www.ufv.ca/trades/>

⁷⁴ <http://businessinchilliwack.com/canada-education-park/>

⁷⁵ <https://www.ufv.ca/food-agriculture-institute/projects-partnerships/current-research-projects/>

⁷⁶ <http://www.agr.gc.ca/eng/science-and-innovation/agriculture-and-agri-food-research-centres-and-collections/british-columbia/agassiz-research-and-development-centre/?id=1351005326819>

⁷⁷ See: <http://businessinchilliwack.com/chilliwack-innovation-network/>

⁷⁸ See: <https://westgen.com/about/the-westgen-group/>

The food production supply chain is one of the region's assets where digital innovation can be applied. The UFV Food and Agriculture Institute, for example, is part of a collaboration working on building an integrated food hub network in the region using a platform that enables open-source farm management software and diversified farming systems. Both initiatives overlap with sustainable resource management but also require a knowledge base in digital operations and offer a space for training, learning and innovation to take place.

UFV's Digital Innovation Hub is working with Stantec, a global engineering and professional services company to design and develop the Digital Hub, a high-tech facility located on the Abbotsford Campus.⁷⁹ The Digital Hub will deliver technologically advanced learning for students and industry and will provide access to flexible power grids, digital communication platforms, leading-edge audio-visual equipment and industry standard digital tools.⁸⁰ This initiative aligns with the BC Tech Strategy and will ultimately look to attract talent to the Fraser Valley to create a tech hub beyond Metro Vancouver.

UFV's Trades and Technology Centre is also a hub for training and innovation where faculty are building skills and knowledge across:

- Robotics;
- Automation;
- Architectural drafting using industry standard technology in virtual reality;
- 3D printing; and
- Computer numerical control (CNC) routers.

Interest has also been garnered around creating training partnerships with local companies to advance skillsets in technology and practices used to manufacture engineered wood products. This type of collaboration is a key example of how the region can leverage its strengths across industry, education, and the existing workforce to create pockets of innovation and niche technical and digital skillsets that enable the sustainable and efficient production and management of resources.

Another key advantage for the Fraser Valley is access to the Cascadia Corridor, spanning from Vancouver, British Columbia, to Portland, Oregon. The initiative formed out of the jurisdictions' shared culture, geography, and growing economies as well as common strengths in sciences, cleantech, and advanced agricultural and forestry sectors.⁸¹ The trading relationship rooted in these shared strengths is also a fundamental aspect of each jurisdiction's prosperity. Given these existing synergies, the initiative provides a platform for leaders from the Fraser Valley to participate in collaborative partnerships and grow technological and economic development across:

- Life Sciences;
- Financial and Retail Innovations;
- Transportation, Housing, and Connectivity;
- Sustainable Agriculture;
- Transformative Technologies (AI/Cloud/MR/VR/AR); and
- Post-Secondary Education and Research.

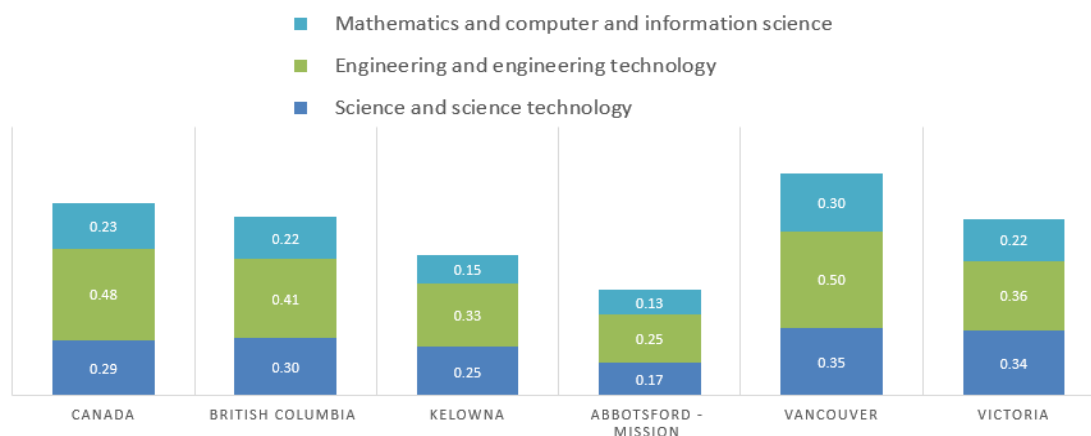
⁷⁹ See: <https://blogs.ufv.ca/blog/2017/01/ufv-hires-stantec-to-hone-digital-hub-vision/>

⁸⁰ Ibid.

⁸¹ https://www.bcbc.com/content/4058/BC-Washington_Linkages_FINAL.pdf

Potential gaps in the region in the Knowledge and Innovation sector include:

- Lack of workforce capacity to provide highly skilled technical workers for advanced manufacturing jobs and the ICT sector; relative to the other regions of BC, the Fraser Valley region lags behind in the total number of STEM occupations (see Figure 11).
- “Last mile” challenges, relating to business parks in the region that are operating on slower internet connections and have yet to connect to TELUS fibre upgrades.
- Lack of 5G internet; while some of the region has improved connectively through TELUS, there is still a gap before reaching 5G.
- Lack of internet services in some rural areas that hinders potential for economic development in these areas.



Source: Statistics Canada, December 2016.

Figure 11: Comparison of Fraser Valley Stem Occupations

Table 7 below provides a snapshot of the Fraser Valley’s current strengths in line with macro trends in the Knowledge and Innovation sector.

Table 7: Fraser Valley’s Strengths in Line with Global Macro Trends in Knowledge and Innovation

Macro Trend	Alignment with Local Strengths	Potential Project Opportunities	Key Stakeholders
Artificial Intelligence: Machine learning, cognitive computer, smart workspace.	The UFV’s Trades and Technology Centre, XLRator, and WestGen are examples of stakeholders who are working to in this space and present opportunities to focus their training and technology on challenges across all sectors.	<ul style="list-style-type: none"> • Agrifood and ICT cluster: Create a merging/cluster along the agriculture value chain – agriculture foods, land and ICT- can form a strategic hub for logistics and distribution and leverage the Fraser 	<ul style="list-style-type: none"> • Local tech accelerators • Local R&D leaders and universities • Other community and regional stakeholders

Digital Platforms: Blockchain ⁸⁷ , IoT and big data relay chain of custody information for businesses and can track real time conditions across supply chains.	Key players in the region such as XLRator and Sumas Consortium on High Tech (SRTec) are active in building up the high-tech skills and knowledge base related to collection, tracking and analysis of data.	Valley's proximity to the Cascadia Innovation Corridor. <ul style="list-style-type: none"> • Data Scientist⁸² Program: Develop training in data science that would equip students with the skills to analyze and communicate insights from collection of large amounts of data.⁸³ • Cascadia Innovation Corridor: Leverage the Cascadia's Innovation Corridor's binational steering committee⁸⁴ composed of the region's top business, research and community leaders, including Microsoft, Amazon⁸⁵ and Boeing⁸⁶ who have already leveraged the workforce and infrastructure offered by the corridor between Seattle and Vancouver. 	
Biotechnology & Advanced Materials: Underpins the bioeconomy / circular economy concept. The product of advanced materials from waste includes nano-materials and carbon fibre applications across ceramics, glasses, and metals.	UFV's Food and Agriculture Institute, Net Zero Waste Inc., and Bakerview EcoDairy are all active in the use of circular economy principles by reusing waste and creating closed loop systems.		
Additive Manufacturing: 3D and 4D printing are changing traditional supply chains, bring manufacturing opportunities closer to home.	UFV's Trades and Technology Centre offers programs that train students on 3D printing, robotics, automation and other skills relevant to manufacturing software programs that are increasingly demanded by industry leaders.		

⁸⁷ Blockchain is a decentralized and public digital ledger that tracks information on transactions (i.e. date, time, and dollar amount) and stores this information for various users (i.e. supplier or business owner).

⁸² A person employed to analyze and interpret complex digital data, such as the usage statistics of a website, especially to assist a business in its decision-making.

⁸³ <https://www.ept.ca/2017/02/york-university-responds-canadas-talent-shortage-big-data/>

⁸⁴ <https://www.newswire.ca/news-releases/canadian-us-business-leaders-announce-joint-framework-for-cross-border-growth-693169641.html>

⁸⁵ <https://www.nytimes.com/2016/10/03/technology/next-big-tech-corridor-between-seattle-and-vancouver-planners-hope.html>

⁸⁶ <https://www.newswire.ca/news-releases/new-regional-effort-aims-to-establish-cascadia-innovation-corridor-594174321.html>

Summary

The goals of this study were to gain a better understanding of the Fraser Valley's existing strengths, gaps, and opportunities as they relate to the clean economy, identify supportive federal and provincial policies, and identify the necessary types of infrastructure to lay the foundation for sustainable growth. This section presents the most evident cross-sector themes and opportunities that emerged in the research, followed by specific opportunities in each of the five clean economy sectors.

Table 8: Summary of the Fraser Valley's Clean Economy Cross-Sector and Sector-Specific Opportunities

CROSS-SECTOR OPPORTUNITIES	
Agriculture and manufacturing are the backbone of the region's economy, provide many education and employment opportunities, and can be the focus for advancing economic strength and resiliency.	
Collaboration between jurisdictions, industry, and post-secondary institutions in information sharing and open data portals can inform decision making and progress toward common goals.	
Land use planning practices that enable transit-oriented development can create compact, complete, energy efficient communities, improve public health, and provide further opportunities for local manufacturers.	
Policies that facilitate waste-to-resource and circular economy partnerships between industrial users create an opportunity to create efficiencies in infrastructure and services.	
Further development of biogas / RNG from agriculture and forestry operations can increase renewable energy production and reduce GHG emissions.	
Fostering community partnerships with First Nation communities in land use, infrastructure, and skills development can also lead to innovation in management of natural assets and ecosystem health.	
SECTOR-SPECIFIC OPPORTUNITIES	
Sustainable Resource and Ecosystem Management	<ul style="list-style-type: none"> Growing concerns over waste management coupled with an increasing appetite for renewable energy encourages waste-to-energy projects consistent with the FVRD's SWMP (e.g., biogas capture for energy production, anaerobic digestion and RNG production for input into the FortisBC pipeline and/or fueling transportation fleets). The Fraser Valley has the highest concentration of livestock in the province which produces large amounts of waste that can support RNG production. Private agriculture operations have the potential to expedite RNG project development.

	<ul style="list-style-type: none"> • Application of water, soil, and nutrient management strategies to maintain the region's rich agricultural land informed by a centralized database that is open to land planners and farmers (including data about soil type and quality, water quality) • The BC Organics Conversion Initiative is a five-stage plan to drive resource efficiency solutions in the bioeconomy. This plan comes from a group of local technology entrepreneurs (Catalyst Agri-Innovations Society). • Leveraging local businesses that specialize in soil remediation to further rehabilitate brownfields as a means of revitalizing under-utilized industrial land. • Precision agriculture and data-driven crop management technologies can be applied to the region's crop production and harvesting operations, including the application of AI and sensors to track water, air and soil quality and robotics (e.g., the use of on-farm robot harvesters) to address labor shortage issues. • Blockchain solutions for improving safety and transparency of sustainable resource product supply chains could be applied to other companies operating in the Fraser Valley (for example, IBM Food Trust, a blockchain in food safety initiative that is being used extensively by major global brands such as Walmart and Coca Cola). • Developing partnerships with organizations like the Municipal Natural Assets Initiative that work with local governments to develop strategies focused on protecting natural assets (e.g., bioswales, water filtering marshlands, etc.) in place of the need to invest in new infrastructure. • Focusing on the higher value end of the supply chain and making the Fraser Valley a hub of locally sourced, sustainably harvested/processed foods. • Continuing to explore the feasibility of a material separation facility that could lead to the development of more circular economy and renewable energy opportunities. • Developing an agriculture data portal open to government, industry and universities to make satellite and GIS data available to key stakeholders and inform decision making (i.e. better understand where the opportunities and challenges exist across agricultural land). • Partnering with First Nation communities who possess valuable skillsets and traditional ecological knowledge that could act as a launch pad for sustainable agriculture and other resource development projects.
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Green and Sustainable Transportation	<ul style="list-style-type: none"> • Micro-mobility as a solution to close the distance between commercial and residential destinations from transit hubs (e.g. sharing programs for electric scooters, bicycles). • Moving toward a larger and more energy efficient bus fleet to reduce emissions and reduce the number of cars on the main corridors in the region. • Electrification of fleets as a tool to achieve GHG emission reduction targets and show corporate leadership. • Electrification of rail is an emerging trend alongside the electrification of air travel expected to take off by 2030. • Planning for the growth of autonomous vehicles in road and city infrastructure; 80% of top OEMs have announced plans for highly autonomous technology road-ready by 2025. • Leveraging the CleanBC Communities Fund, a federal-provincial initiative that supports cost-sharing of infrastructure projects that align with renewable energy, access to clean energy transportation, improved energy efficiency of buildings, and generation of clean energy. • Exploring the potential for hydrogen-based aviation research at YXX through a UFV Aviation Centre of Excellence. • Continuing to expand EV infrastructure by installing more EV charging stations across the region. • Pairing reverse logistics and smart mobility solutions with new development of residential and industrial areas (e.g., transit-oriented residential and industrial development). • Implementing transit software platforms to allow transit users to easily interact with payment, schedules, and real-time updates.
Green and High-Performance Buildings	<ul style="list-style-type: none"> • The BC Energy Step Code emphasizes an envelope-first approach to boost energy efficiency in buildings and will create demand from the region's manufacturers and suppliers for high-performance windows, insulation, heat recovery ventilators, and other building envelope products. • The Energy Step Code also presents an opportunity for the region to build capacity in energy advisors and train its trade base in best practices around the proper installation of high-performance windows, mechanical systems, and building envelope

	<p>components. Contractors can look to the Home Performance Stakeholder Council for training resources related to the BC Energy Step Code.</p> <ul style="list-style-type: none"> • As the Fraser Valley region plans for population growth, the green building sector can benefit from land use planning processes and zoning bylaws that encourage densification of residential and commercial areas with interconnected transit options. • Existing buildings also represent an opportunity to replace inefficient and older windows, furnaces, boilers, and insulation with high-efficiency models and apply healthy building concepts to improve tenant well-being. • Building architects and construction firms in the region can incorporate advanced building controls and technologies that are increasingly being built into residential and commercial construction to optimize the use of energy and efficiency of lighting, HVAC, security and sprinkler systems. • Construction companies in the region can collaborate with local waste management companies to find pathways for recycling and reuse of waste streams from construction sites across the region. • The region can build on the supply chain that is developing through Structurecraft's new facility to advance the production and use of next-generation materials and wood construction. • The manufacturing of prefabricated building components utilizes small scale and cost-effective industrial land to establish micro-manufacturers that can close the gap between suppliers and construction sites. Municipalities can position themselves as hubs for micro-manufacturing or prefab operations given their access to relatively affordable land and transportation corridors. • The construction industry stands to benefit from adapting current trends taking place across technology, materials and tools given they tend to lag behind other industries (such as the automotive industry) that have already undergone a digital transformation. Construction operations in the Fraser Valley can use this an opportunity to become leaders in applying tools such as 3D printing, smart and life-cycle optimizing equipment, semi-automatic equipment, and enhanced contract and employee management software.
Renewable Energy Supply and Storage	<ul style="list-style-type: none"> • The combination of waste management challenges and an increasing demand for renewable energy to meet provincial low-carbon energy targets could fuel new waste-to-energy projects and infrastructure consistent with the FVRD's SWMP.

	<ul style="list-style-type: none"> FortisBC has a voluntary target to increase the amount of RNG in its system, with a goal under CleanBC of having 15% of natural gas consumption in the province coming from RNG. Provincial regulations have given FortisBC an expanded procurement price cap of \$30 per GigaJoule for RNG, allowing the utility to take a more expanded view of projects that were previously not economically viable for farmers and other biogas producers. The electricity grid will require upgrades to support the increasing electrification of vehicles. As such, there is an opportunity to develop more small-scale renewable energy generation, micro grid, and energy storage solutions to meet this future demand. Also related to grid modernization is the significant investment opportunity to use energy storage solutions to increase grid reliability and resilience in the face of climate change and extreme weather events There are opportunities to develop increased renewable energy capacity (e.g., deployment of solar PV and energy storage solutions) within local First Nation communities. These opportunities could be advanced through a community partnership model with training institutions, technology providers, and other First Nations with renewable energy project experience.
Knowledge and Innovation	<ul style="list-style-type: none"> Building vertically instead of horizontally via technology and the knowledge-based economy with a focus on leveraging local capacity and filling the gap in the region's skilled technical workforce. Leveraging and attracting local expertise to educate and implement new technologies, policies, and projects (e.g., home energy assessments). There are opportunities for government in linking new policies and incentives to local experts and suppliers. Expressing clear priorities to UFV for certain skillsets (e.g., data scientists, engineers) to help mobilize funds and develop relevant programs in line with local clean economy business strengths and industries. Creating a forum with UFV, XLRator, and local municipalities (and/or regional economic development agencies), to strategize around high-tech skilled workers and which skills need targeted training and development.

Appendices

- A. SWOT and Gap Analysis
- B. Macro Trends Analysis
- C. Policy Overview
- D. Focus Group Summary Notes

Clean Economy in the Fraser Valley

Appendix A: SWOT & Gap Analyses

SWOT Analysis

The list below is a summary of strengths, weaknesses, opportunities, and threats (SWOT) designed to help better understand the current state of the FVRD's clean economy sub-sectors. This list was created based on secondary research, feedback obtained from industry stakeholders during consultation, as well as a review of current industry and market trends, government policy, and investment priorities.

STRENGTHS

- The Fraser Valley region has a base of infrastructure related to advanced and niche manufacturing (e.g., Chilliwack and Abbotsford for food processing; Mission for steel fabrication, plastics, and wood products manufacturing).
- The Fraser Valley's agriculture sector is well-established and home to some of the richest soils in Canada.
- There is a growing digital and information and communication technologies (ICT) base in the region that can serve as a foundation for building a larger knowledge-based economy.
- TELUS PureFibre has been installed across four of the six municipalities within the FVRD; this can improve business operations and enable residents to work remotely and serves as a foundation for progress to 5G.
- Relatively affordable housing and industrial lands are important strengths for attracting more jobs and talent to the region.
- The region has the advantage of an established workforce across food processing, manufacturing, farming, engineers and building contractors, and workers are less transient compared to cities where land and housing costs can push workers and businesses to move to more affordable areas.
- The region has several Centres of Excellence, technology-focused accelerators, and professional innovation networks that can be leveraged for research and development (R&D), as well as talent attraction to the region. These include WestGen, Ministry of Agriculture's BC Agriculture Centre (Abbotsford), University of the Fraser Valley (UFV) and its Food and Agriculture Institute, UFV's Trades and Technology Centre, XLRator, Canada Education Park, Pacific Agri-Food Research Centre, Chilliwack Innovation Network, Sumas Consortium on High Tech.
- There are key R&D, demonstration, and business initiatives, such as Abbotsford's Bakerview EcoDairy and the new Molson-Coors brewery in Chilliwack, that are utilizing waste streams as a means of producing electricity and for capturing other resources.
- The Abbotsford International Airport is a valuable component of the region's transportation system that supports connectivity to other regions of BC, Canada, and the United States.
- The region is home to companies that specialize in soil and brownfield remediation.

- Anchor companies (such as Structurecraft and its new manufacturing facility) can be leveraged to grow local talent and skills.
- UFV's R&D and trades training provide modern knowledge-focused programs for building talent, including in the areas of architectural drafting, automation and robotics, and electronics.¹

WEAKNESSES

- Lack of workforce capacity to fill low-skilled or labour-intensive jobs as well as skilled technical workers for advanced manufacturing jobs and the ICT sector.
- Lack of industrial land for business expansion and value-added activities may force businesses elsewhere.
- "Last mile" challenges, relating to business parks in the region that are operating on slower internet connections and networks since some have yet to connect to TELUS's fibre upgrades.
- Lack of 5G internet; while the region has improved its connectivity through TELUS, there is still a gap before reaching 5G.
- Lack of highspeed internet in rural areas is limiting the ability to revitalize economic activity outside the region's urban centres.
- Insufficient water resources and water/sewage infrastructure has caused businesses to be turned away in some parts of the region.
- Highway 1, the main corridor into the Fraser Valley region, is designed for cars with single occupants and commercial vehicles and not for mixed use (i.e., transit); this is a main cause for lengthy congestion delays due to high volume and lack of alternate routes.
- The transit system serving the Fraser Valley region struggles with offering reliable rider service and interconnectivity among municipalities.
- Relative to the other regions of BC, the Fraser Valley region lags behind in the total number of STEM occupations.
- Lack of awareness among farmers on the evolving business case and opportunities related to agriculture clean technology (e.g., RNG production, precision agriculture, etc.).

OPPORTUNITIES

General

- Eco tourism is a means of promoting and preserving the region's access to outdoor activities. It is also an opportunity to showcase the application of high-performance buildings that efficiently use and re-use energy, waste, and are designed to promote sustainable transportation options.
- Global megatrend toward the 'digitalization' and automation of the energy, building, and transportation sectors.
- Increasing application of geomatics, GIS, and sensors-based expertise to resource management (i.e. energy, agriculture) including remote sensing, real-time monitoring, and asset optimization.

¹ See: UFV Trades and Technology Programs <https://www.ufv.ca/programs/>

Programs & Funding

- The Provincial Government’s CleanBC climate plan aligns with four focus areas all relevant to the FVRD including transportation, buildings, industry, and waste.
- Leverage the CleanBC Communities Fund, a federal-provincial initiative that supports cost-sharing of infrastructure projects that align with renewable energy, access to clean energy transportation, improved energy efficiency of buildings, and generation of clean energy.²
- Utilize the Canada-BC Agri-Innovation Program that offers \$14 million in funding (CAP) over five years. FVRD municipalities can access this fund to support projects that combine clean technology with agriculture, waste management, and transit solutions.³
- The region’s agriculture, forestry and manufacturing sectors provide valuable waste streams that could be reused or recycled as value added inputs to other local industries or as an export to BC or US based markets.

Sustainable Resource & Ecosystem Management

- Growing concerns over waste management coupled with an increasing appetite for renewable energy encourages waste-to-energy projects (e.g., biogas capture for energy production, anaerobic digestion for fueling municipal fleets, etc.)
- The Fraser Valley has the highest concentration of livestock in the province that produces large amounts of waste that can be transformed into RNG to support the province’s low carbon energy goals. Supporting private agriculture is a means of expediting project development to kickstart biogas/RNG production.
- Apply water, soil and nutrient management strategies to maintain the region’s rich agricultural land informed by a centralized database that is open to land planners and farmers (includes data around soil type and quality, water quality, etc.)
- Leverage local businesses that specialize in soil remediation to use brownfields as a means of building out industrial land.
- Precision Agriculture and data-driven crop management technology, can be applied to the region’s crop production and harvesting operations through the application of sensors, big data analytics, and robotics. This can include the expanded use of robotics to address existing labour shortages.
- Blockchain solutions provide opportunities for local farmers to improve food safety, transparency (chain of custody), and sustainability which can also have environmental benefits.
- Partnerships with organizations such as the Municipal Natural Assets Initiative⁴ that work with local governments to develop strategies focused on valuing natural capital assets and ecosystem services in place of traditional investments in infrastructure such as wastewater treatment.

² See: Investing in Canada Infrastructure Program - British Columbia – Green Infrastructure - Climate Change Mitigation – CleanBC Communities Fund <https://www2.gov.bc.ca/gov/content/transportation/funding-engagement-permits/funding-grants/investing-in-canada-infrastructure-program/green-infrastructure/cleanbc-communities-fund>

³ See: Canada-B Agri-Innovation Program <http://iafb.bc.ca/funding-opportunities/innovation/>. Further details on policies and programs are available in the FVRD Policy Overview document.

⁴ See: see www.mnai.ca

Green & Sustainable Transportation Solutions

- Micro-mobility as a solution to close the distance between commercial and residential destinations from transit hubs (e.g. sharing programs for electric scooters, bicycles, etc.).
- Move toward a larger and more energy efficient bus fleet to reduce emissions and reduce the number of cars on the main highway arteries in the region.
- Electrification of fleets (e.g. municipal vehicles) as a tool to achieve regional GHG emission reduction targets.
- Electrification of rail is an emerging trend alongside the electrification of air travel expected to take off by 2030 that should be incorporated in long term planning for the region.
- Autonomous vehicles are another key emerging trend; 80% of top OEMs have announced highly autonomous technology road-ready by 2025.

Green & High-Performance Buildings

- The manufacturing of prefabricated building components utilize small scale and cost-effective industrial land to establish micro manufacturers that can close the gap between suppliers and construction sites.
- The region can build on the supply chain being created around Structurecraft's new facility to advance the production and use of next-generation materials and wood construction.
- Building architects and construction firms in the region can incorporate advanced building controls and technologies that are increasingly being built into residential and commercial construction to optimize the use of energy and efficiency of lighting, HVAC, security and sprinkler systems.
- As the Fraser Valley region plans for population growth, continue to support land use planning processes and zoning bylaws that encourage densification of residential and commercial areas with interconnected transit options.
- The BC Energy Step Code is an envelope first approach to boosting energy efficiency in buildings will create the demand for high efficiency windows, insulation, heat recovery ventilators (HRVs) and other building envelope products.
- The trend toward green, efficient buildings in new construction across BC will also create demand for low-carbon materials and engineered wood products to reduce the carbon footprint of buildings.
- Healthy buildings are another key trend that is focused on creating high quality indoor environment through the use of naturally-based, low-VOC paints, natural light, ventilation, and noise reduction.

Renewable Energy Supply & Storage

- Grid modernization and deployment of smart grid (e.g., sensors and internet of things) and energy storage solutions in the region is an opportunity for BC Hydro and grid operators more efficiently manage the efficient supply and demand of electricity as well as improve overall grid resiliency to extreme weather events.

- The development of micro grids can be valuable when deployed in the region to improve resiliency.
- Solar photovoltaic installations in First Nations communities provide opportunities for electricity self-sufficiency, skills training, and capacity building.

Knowledge & Innovation

- Given the Fraser Valley's land constraints, there is an opportunity for the region to focus on its knowledge-based economy to increase efficiency and productivity across key sectors such as manufacturing, agriculture, and food processing through the further application of technologies such as automation, instrumentation, blockchain, IoT, and cloud technology.
- Create a merging/cluster along the agriculture value chain – agriculture foods, land and ICT- can form a strategic hub for logistics and distribution and leverage the Fraser Valley's proximity to the Cascadia Innovation corridor including Metro Vancouver, US, and rest of BC.
- Leverage the Cascadia's Innovation Corridor's binational steering committee⁵ composed of the region's top business, research and community leaders, including Microsoft, Amazon⁶ and Boeing⁷ who have already leveraged the workforce and infrastructure offered by the corridor between Seattle and Vancouver.

THREATS

- Inefficient political processes and tensions around the ALR can hinder progress towards collaboration and communication of alternative land use planning.
- Senior levels of government have jurisdiction over the main transportation corridor (Highway 1) and their strategic plans are not always aligned with the Fraser Valley region's. This is a barrier to addressing congestion and making the movement of goods and people more efficient.
- Integration of renewables without effective smart grid and energy storage infrastructure in place could have a negative impact on grid reliability.
- Future changes to provincial or federal government priorities and mandates could change the policy landscape in BC, removing some of the drivers and/or incentives for developing more green energy economy projects.
- Push-back from the public and/or lack of public support for renewable energy projects that are in line with the FVRD SWMP may create challenges with 'NIMBYism'.
- The evolution of technology and/or breakthrough products or processes could render current investments in today's technology obsolete and/or more costly in the long-run.
- Climate change impacts may affect certain technologies more than others (e.g., changes to hydrological cycles could impact on the availability of water for hydroelectricity generation).
- Brain drain, or the loss of those educated in green economy to other jurisdictions where green economy jobs and companies are more prominent.

⁵ See: Canadian, US business leaders announce joint framework for cross-border growth <https://www.newswire.ca/news-releases/canadian-us-business-leaders-announce-joint-framework-for-cross-border-growth-693169641.html>

⁶ See: <https://www.nytimes.com/2016/10/03/technology/next-big-tech-corridor-between-seattle-and-vancouver-planners-hope.html>

⁷ See: <https://www.newswire.ca/news-releases/new-regional-effort-aims-to-establish-cascadia-innovation-corridor-594174321.html>

Gap Analysis

This gap analysis is part of a project to study the existing capacity, competitive strengths, and opportunities related to the clean economy in the Fraser Valley Regional District. The analysis is structured based on the five clean economy sub-sectors and informed by background research and conversations with key industry stakeholders.

Based on the analysis of FVRD's key industry, infrastructure, and workforce strengths and gaps, recommendations are put forward to identify opportunities for capacity building, investment attraction, and local growth.

Overall, there is an opportunity to increase economic prosperity through development of the clean economy, by increasing collaboration between the public and private sector at a regional scale. This can include scaling successful initiatives up to a regional level to address common challenges or taking advantage of the existing strengths and unique landscapes throughout the region. This challenge becomes more important when dealing with senior levels of government and attracting investment to the region.

Gap Analysis by Clean Economy Sub-sector

Sustainable Resource & Ecosystem Management

- A limited supply of industrial land presents barriers to value-added food processing and other agriculture-supporting industries. With higher lease rates in Metro Vancouver, food processing and related businesses may move to the valley if land is available.
- Secondary uses for agricultural land may not be pursued because of lack of information and knowledge, or because of the administrative requirements associated with approvals in the ALR.
- Providing an accessible and reliable supply of water to municipalities and businesses is important for agriculture and other industries. Conservation and grey water initiatives may be a complementary solution to upgrading current infrastructure.

Green & Sustainable Transportation Solutions

- Mobility and alternative transportation solutions are desired for Highway 1. Alternative routes and methods of travel provide an incentive for businesses and employees.
- Transit systems are treated as separate systems in each municipality and are not integrated from a customer perspective. Harmonizing the customer experience and providing infrastructure that prioritizes efficient public transit would help this.
- Last mile / micro-mobility solutions can provide people with an incentive to take public transit. For example, there may be an opportunity to combine bike share or electric scooter programs with public transit.

Green & High-Performance Buildings

- Program and training support from local Universities would help local engineering and manufacturing companies fill positions for skilled trades and advanced machinery operators.
- A lack of knowledge and incentives for home heating companies leads to outdated practices and lower energy efficiency of buildings. There is an opportunity here for training programs and industry-led knowledge exchange.

Renewable Energy Supply & Storage

- Awareness of biogas and the RNG program is outside of traditional farm skills and knowledge. Fortis now has a procurement price cap of \$30/GJ for RNG, which may increase the feasibility for some projects that were previously not viable.
- Distributed energy generation, batteries, and grid infrastructure provide backup power to industrial operations. These technologies can scale efficiently when companies are clustered around industrial land.

Knowledge & Innovation

- Lack of high-speed internet is a barrier for some businesses. The federal and the provincial governments have connectivity infrastructure programs available to internet service providers.
- There is a labour shortage in both entry-level and skilled positions in manufacturing and Information and Communication Technology.
- The structure of funding relationships between Universities and senior government is not optimal for applied research.
- One interviewee highlighted a gap in willingness of businesses to innovate. This may be due to lack of knowledge or a fear of negatively affecting productivity.

Clean Economy in the Fraser Valley

Appendix B: Macro Trends Analysis

Sustainable Resource & Ecosystem Management (Agriculture)

Precision Agriculture and Data-Driven Crop Farm Management

Policy drivers and government programs supporting precision agriculture include:

- The Canadian Agricultural Partnership Canada-BC Agri-Innovation Program¹
- Agricultural Clean Technology Program² (Federal)
- BC Ministry Guidelines and Resources for Farm Mechanization³ (Provincial)

Industry drivers include:

- Enterprise Machine Intelligence and Learning Initiative (EMILI) supercluster in Manitoba accelerating agribusiness through AI and R&D.⁴
- Bell MTS \$500K grant to U of Manitoba for focussed development on Internet of Things (IoT) for agriculture solutions.
- Protein Industries Canada⁵ – Manitoba-based supercluster focussing on plant-based proteins. This initiative is expecting to generate up to \$500M in new economic activity and 4.7K new jobs across Canada, mainly in rural communities.

Bioproducts

Bioproducts represent a large potential in the renewable natural gas space due to B.C.'s abundant agriculture and forestry assets.

Methane from waste potential is 1.3B cf/year, which is almost ½ of Canada's current consumption of 2.5B cf/year.

Biomass to Energy: B.C.'s current production is at roughly 600 MW for pulp and paper and 30 MW for plywood mills, but has a total potential on the order of 2,300 MW.⁶

¹ <https://iafbc.ca/agri-innovation/>

² <http://www.agr.gc.ca/eng/programs-and-services/agricultural-clean-technology-program/>

³ <https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/business-market-development/structures-mechanization/farm-mechanization>

⁴ <http://emilicanada.com/>

⁵ <https://www.proteinindustriescanada.ca/>

⁶ <https://www.cleanenergybc.org/about/clean-energy-sectors/biomass>

The global Bioplastics sector is poised for significant growth as plastic pollution policies come into effect. This includes an EU-wide plastics strategy⁷ as part of the circular economy agenda, and a large-scale research project from Synbiomics⁸ on next-generation green chemistry bioproducts.

Blockchain Applications

The rise of Blockchain technology has led to emerging trends and developments in the agriculture sector.

Cryptocurrencies like Pavo⁹ have been created to allow consumers to purchase directly from farmers, and allow farmers to pre-sell crops under smart forward contracts.

IBM is also using Blockchain for food safety and traceability, a system being used extensively by major global brands like Walmart and Coca-Cola.¹⁰

Blockchain is helping to build trust in the food industry through accurate and timely food recalls, product labelling assurance, and by providing farmers and distributors with real-time commodity market information.

Next-Generation Food Manufacturing

New food manufacturing techniques using 3D printing technology food manufacturing represent opportunities with potential for highly personalized nutrition, on-demand food production, and customization of food supply chain.¹¹

Next-generation food manufacturing is in use for defence and space markets, with new use cases emerging across the spectrum of residential, commercial, and industrial applications.¹²

3D printing is also being used for meat alternatives and non-animal leather for fashion industries.¹³

⁷ http://europa.eu/rapid/press-release_IP-18-5_en.htm

⁸ <http://www.synbiomics.ca/>

⁹ <https://pavocoin.com/>

¹⁰ <https://www.ibm.com/blogs/blockchain/category/blockchain-in-food-safety/>

¹¹ <https://www.sciencedirect.com/science/article/pii/S2351978915010574>

¹² <https://www2.deloitte.com/insights/us/en/focus/3d-opportunity/3d-printing-in-the-food-industry.html>

¹³ <http://modernmeadow.com/>

Mechanization

Mechanization is of prime importance in developing nations to ease the burden of manual labour and dramatically increase the output efficiency of farm lands¹⁴. Tech start-ups like Hello Tractor¹⁵ are enabling farmers in Kenya and Nigeria to rent tractors through a smartphone app.

Advances in AI, sensors, and robotics are facilitating the use of on-farm robot harvesters for crops like bell peppers and strawberries¹⁶.

Technical and mechanical innovation in agricultural storage is a key for reducing spoilage, infestation, and other post-harvest crop loss¹⁷.

Sustainable Resource & Ecosystem Management (Waste & Circular Economy)

Bioeconomy

Several leading jurisdictions have bioeconomy or circular economy roadmaps to transform their economies. This includes B.C.¹⁸, the U.K.¹⁹, Germany²⁰, and Finland²¹.

Canadian initiatives that are part of the global movement to mitigate plastics pollution include the Ocean Plastics Charter²², and the CCME Strategy for Zero Plastic Waste²³.

Waste as a Resource

Relevant policy drivers for utilizing waste as a resource include the Environmental Management Act, Organic Matter Recycling Regulation, and Waste Discharge Regulation.

¹⁴ https://www.researchgate.net/publication/324542258_Current_Status_and_Future_Prospects_of_Agricultural_Mechanization_in_Sub-Saharan_Africa_SSA

¹⁵ <https://www.hellotractor.com/home>

¹⁶ <https://www.nature.com/articles/544s21a>

¹⁷ <https://www.forbes.com/sites/forbestechcouncil/2018/09/20/how-agro-tech-is-helping-farmers-around-the-world/#74167d30b2bf>

¹⁸ <https://www2.gov.bc.ca/gov/content/industry/forestry/supporting-innovation/bio-economy>

¹⁹ <https://www.gov.uk/government/publications/bioeconomy-strategy-2018-to-2030>

²⁰ https://ec.europa.eu/knowledge4policy/publication/national-research-strategy-bioeconomy-2030_en

²¹ <https://www.sitra.fi/en/projects/leading-the-cycle-finnish-road-map-to-a-circular-economy-2016-2025/>

²² <https://g7.gc.ca/en/official-documents/charlevoix-blueprint-healthy-oceans-seas-resilient-coastal-communities/>

²³ https://www.ccme.ca/en/current_priorities/waste/waste/strategy-on-zero-plastic-waste.html

Other industry drivers include China's import ban on contaminated recycling, new technologies that capture CO₂ to cultivate value-added biomass²⁴, and significant opportunities in the remanufacturing sector²⁵.

Canada's National Industrial Symbiosis Program is aimed at redirecting waste from one sector into feedstock for other sectors²⁶.

Designing Waste out of Products

Extended producer responsibility (EPR) is an environmental policy approach in which a producer's responsibility for a product is extended to the post-consumer stage of a product's life cycle. In 2009, the Canadian Council of Ministers of the Environment created a Canada-wide Action Plan for EPR and a Canada-wide Strategy for Sustainable Packaging²⁷.

Industry is also driving innovative approaches to eliminating waste products through Cradle-to-Cradle principles for biological and technical cycles²⁸, emergence of new markets for secondary materials²⁹, increasing the use of repurposed fibres in textile and fashion industries³⁰, and the use of "Biomimicry" design principles³¹.

Advanced Materials

The emergence of 3D printing, nanoparticles, production automation, advanced chemistry are driving the use of advanced materials and innovation with recycled products. Renewable materials like carbon fibre are replacing resource intensive materials like steel and aluminium³². Other materials like pulverized recycled glass are being used as a carbon neutral cement additive³³.

Product-as-a-Service

The success of the SaaS (Software as a Service) business model has paved the way for PaaS (Product as a Service). This shifts the model from "buy-own-use-discard" to "plan-lease-repair-replace"³⁴. For example:

²⁴ <https://www.pondtech.com/>

²⁵ <http://www.ourpositiveplanet.com/how-the-remanufacturing-industry-is-giving-new-life-to-old-products/>

²⁶ <https://nispcanada.ca/>

²⁷ https://www.ccme.ca/en/resources/waste/extended_producer_responsibility.html

²⁸ <https://www.epea.com/cradle-to-cradle/>

²⁹ <https://marketplacehub.org/>

³⁰ <https://www.ellenmacarthurfoundation.org/our-work/activities/make-fashion-circular>

³¹ <https://www.wbdg.org/resources/biomimicry-designing-model-nature>

³² <https://3dfortify.com/composites-replace-traditional-materials/>

³³ <https://www.ellenmacarthurfoundation.org/case-studies/the-circular-economy-and-the-promise-of-glass-in-concrete>

³⁴ <https://circular-impacts.eu/library/1250>

- Michelin Tires leases tires to fleet customers who pay per miles driven.
- Philips Lighting provides commercial and municipal customers with lighting plans, efficient designs, and fixture lease plans.
- Amazon.com offers “textbooks as a service”.

The manufacturing sector is moving towards a PaaS model to nurture and deepen customer relationships³⁵. Sustainability pioneer Interface flooring has employed PaaS for years, resulting in the growth of an ‘ecosystem’ of circular business partners³⁶.

³⁵ <https://www.psfk.com/2017/08/5-future-of-manufacturing-scenarios.html>

³⁶ <https://sustainablebrands.com/brands/interface-1>

Green & Sustainable Transportation

Electrifying Transportation

A suite of provincial policies is driving the electrification of the transportation sector under the broader “CleanBC” climate strategy, which aims to reduce greenhouse gas emissions by 18.9 Mt by 2030. Policy drivers include targets toward zero emission vehicle (ZEV) sales³⁷, point-of-sale incentives through the Clean Energy Vehicle Program³⁸, and funding for commercialization of new services and technologies through the Advanced Research and Commercialization (ARC) Program³⁹.

Electrification of transportation is supported by the continued global trend of battery costs decreasing as much as 65% in the past five years⁴⁰. E-buses are the fastest growing segment of the EV market at 100% growth since 2013⁴¹, with China leading the way.

By increasing design efficiency or reducing manufacturing cost, original equipment manufacturers (OEM) have announced launches of more than 100 new battery EV models by 2024⁴². The trend toward more affordable EV options for consumers is expected to continue.

EasyJet is aiming for a fleet of electric planes for short-haul routes by 2030⁴³, and new EU standards for reducing marine transport emissions is spurring innovation in electric and hybrid marine craft⁴⁴.

Autonomous Vehicles

Autonomous vehicles (AV) are being developed throughout the transportation sector. Self-driving transportation is already used in applications like the Skytrain, Seattle airport, and Toronto LINK Train, and 80% of top OEMs have announced highly autonomous road-ready technology by 2025.

³⁷ <https://news.gov.bc.ca/releases/2018PREM0082-002226>

³⁸ <https://www.cevforbc.ca/clean-energy-vehicle-program>

³⁹ <https://arcbc.ca/about/>

⁴⁰ <https://about.bnef.com/new-energy-outlook/>

⁴¹ <https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/fast-transit-why-urban-e-buses-lead-electric-vehicle-growth>

⁴² <https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/what-a-teardown-of-the-latest-electric-vehicles-reveals-about-the-future-of-mass-market-evs>

⁴³ <https://www.reuters.com/article/easyjet-ceo-electric/easyjet-makes-progress-with-electric-aircraft-plan-idUSL8N1X93FY>

⁴⁴ <https://www.greenbiz.com/article/europe-sails-towards-electrified-shipping-fleets>

Other trends include autonomous heavy-hauling in mining sectors⁴⁵, and China is developing significant capacity for self-driving buses and mass transit⁴⁶. AVs are currently in use for warehouse operations, with ideal on-road applications in “middle mile” solutions where there is the least navigational complexity⁴⁷.

Smart Mobility

Shared mobility has a significant growth opportunity with less than 1% of current passenger miles; in 2017 the market saw US\$32B invested in ridesharing start-ups alone⁴⁸, and connected cars are emerging as key components of an intelligent transportation network.

Cycling is the norm in most EU cities and is growing in North America by 7.5% annually as the economic and health benefits become better understood⁴⁹.

Intelligent mobility is becoming more prevalent in Smart Cities, by enabling users to make informed transportation choices based on real-time situation data⁵⁰, and by coordinating and optimizing the movement of freight and people across multiple modes through intelligent transportation systems⁵¹.

Land-use & Logistics Hubs

In developing countries, rail has become the preferred mode for new transportation infrastructure due to limited land use and high volume potential⁵².

Efficient land use practices encourage density and spatial interaction, often at odds with growth patterns of widely dispersed suburban development⁵³.

Logistics hubs are appearing more frequently due to the significant increase in e-retailing resulting in the need for local distribution points, and apps and other mobile technologies have enabled a proliferation of last-mile solutions⁵⁴.

⁴⁵ <http://www.mining.com/web/caterpillar-rio-tinto-retrofit-cat-trucks-autonomous-operation-marandoo-mine-australia/>

⁴⁶ <https://www.scmp.com/magazines/post-magazine/long-reads/article/2142449/chinas-self-driving-vehicles-track-take-global>

⁴⁷ <https://www.accenture.com/ca-en/insight-autonomous-vehicles>

⁴⁸ <https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/the-automotive-revolution-is-speeding-up>

⁴⁹ <https://www2.deloitte.com/insights/us/en/industry/public-sector/smart-mobility-trends-bike-commuting.html>

⁵⁰ https://www.researchandmarkets.com/research/5zx8ks/future_of_smart

⁵¹ <https://www.information-age.com/intelligent-transportation-smart-cities-123473979/>

⁵² https://transportgeography.org/?page_id=5721

⁵³ <http://parisinnovationreview.com/articles-en/urban-transportation-trends-challenges-and-opportunities>

⁵⁴ <http://www.kennisdclogistiek.nl/nieuws/the-future-of-last-mile-delivery-10-most-important-trends>

Other important trends in logistics and transportation include driverless trucks, the use of Blockchain in logistics to ensure accuracy and capacity monitoring, and Amazon's successful trial of drone delivery⁵⁵.

Renewable Fuels

Biofuels comprised 2.8% of renewable fuels for transport as of 2015 and global ethanol production increased 2.5% in 2017⁵⁶.

Launched at COP22, the Biofuture Platform is a 20-country effort aimed at advancing low-carbon fuels and bioeconomy solutions⁵⁷. Mission Innovation recently announced a Sustainable Biofuels Innovation Challenge to develop ways to produce widely affordable, advanced biofuels for transportation and industrial applications⁵⁸.

BC-based Canfor and Australian-based Licella are developing a biocrude facility at Canfor's Prince George mill with expected output of 500K barrels of biocrude per year⁵⁹, making it one of the largest 2nd generation bio-refineries in the world.

City of Vancouver, US Department of Energy, and Pacific Northwest National Laboratory are partnering on a pilot project on Annacis Island to convert sewage sludge from a wastewater treatment plant into biocrude⁶⁰.

Investment in hydrogen derived from water via electrolysis is growing around the world; if current projects come online in the next two years, cumulative capacity will rise from 55MW in 2017 to over 150MW in 2020⁶¹.

⁵⁵ <https://stfalcon.com/en/blog/post/transportation-industry-trends>

⁵⁶ <http://www.ren21.net/gsr-2018/>

⁵⁷ <http://biofutureplatform.org/>

⁵⁸ <http://mission-innovation.net/our-work/innovation-challenges/sustainable-biofuels/>

⁵⁹ <https://www.licella.com.au/pulp-paper/>

⁶⁰ <https://www.labmanager.com/research-specific-labs/2017/06/pacific-northwest-national-lab-moves-forward-with-sewage-to-fuel-research>

⁶¹ <https://www.iea.org/tcep/energyintegration/hydrogen/>

Green Buildings & Infrastructure

Envelope First Approach

High performance building exteriors result in lower lifetime cost of buildings and enable Net Zero and Passive House design principles. Policies that are driving high performance envelopes include the BC Energy Step Code⁶², the LEED rating system⁶³, and NRCan's High Performance Buildings Program⁶⁴.

Forecast demand for high-performing windows, doors, insulation, air sealing products, and heat recovery ventilation shows promise for sustained business to 2028 and beyond⁶⁵.

Due to improvements in energy efficiency, the International Energy Agency forecasts energy use in buildings to remain flat until 2040 even with 60% additional floorspace being added worldwide⁶⁶.

Healthy Buildings = Productive Occupants

A recent report written for the World Green Building Council illustrates the cost-savings linkages between resource-efficient building design and operation, and from reduced staff turnover and employee productivity⁶⁷. Other research has shown that cognitive function scores increase significantly in green buildings⁶⁸.

The 300/30/3/sqft measure is often used to calculate overhead: \$300 for staffing, \$30 for rent, and \$3 for utilities. This illustrates most office expenses are on labour so small improvements in productivity can have significant financial implications. A report from the National Research Council of Canada states that modest improvements in employee productivity can yield higher cost savings than large improvements in building performance⁶⁹.

Growth of Prefabrication & Modular Construction

CanmetENERGY, a research agency of NRCan, is fostering innovation in housing and construction through a series of government incentives and programs⁷⁰.

⁶² <https://energystepcode.ca/>

⁶³ <https://www.cagbc.org/CAGBC/LEED/CAGBC/Programs/LEED/LEED.aspx>

⁶⁴ <https://www.nrc-cnrc.gc.ca/eng/solutions/collaborative/hpb.html>

⁶⁵

https://www.cagbc.org/CAGBC/Advocacy/Green_Building_in_Canada_Assessing_the_Market_Impacts_Opportunities.aspx

⁶⁶ <https://webstore.iea.org/market-report-series-energy-efficiency-2018>

⁶⁷ <https://www.worldgbc.org/news-media/doing-right-planet-and-people-business-case-health-and-wellbeing-green-building>

⁶⁸ <https://sustainablebrands.com/read/new-metrics/new-study-links-green-buildings-to-higher-cognitive-function>

⁶⁹ <https://nrc-publications.canada.ca/eng/view/object/?id=9cae7920-03d1-459e-ab14-2fef54016a92>

⁷⁰ <https://www.nrcan.gc.ca/energy/efficiency/housing/research/13628>

The Canadian Construction Association created the Lean Construction Institute which encourages continuous improvement and endorses off-site/prefab/modular construction as key for transforming the construction industry⁷¹.

A recent report by KPMG research indicates off-site/modular construction can save up to 7% of total project costs⁷².

Permanent modular construction accounted for 3.18% of the value of new commercial construction in North America in 2016⁷³. The modular construction market is valued at US\$106B in 2017 and is expected to reach US\$157B by 2023⁷⁴.

Advanced Building Controls & Technologies

Buildings are often constructed with key systems already in place (lighting, HVAC, water, security, fire), often with stand-alone controls. Systems Integration and Automation services harmonize and standardize controls, and the market is expected to reach \$981M by 2025, up from \$90M in 2016⁷⁵.

Key trends in building automation include Building2Grid platforms, IoT energy management, AI for asset management, and standardizing cybersecurity⁷⁶. Other emerging trends include the ability to order products from inside a building information model, the integration of 3D laser scans and drone footage to provide 100% accurate base layers, and 3D printing of model sub-components for rapid prototyping or for sharing with manufacturing partners⁷⁷.

Many other digital applications are now being used in construction, such as VR/AR, wearables, drones, cloud computing, and robotics⁷⁸.

Next-Generation Materials & Wood Construction

B.C.'s Wood First Initiative is supporting the growth of value-added wood products and innovation in the built environment⁷⁹.

⁷¹ <http://www.lcicanada.ca/>

⁷² <https://home.kpmg/tr/en/home/insights/2016/04/smart-construction-report.html>

⁷³ <https://news.thomasnet.com/featured/exploring-the-increase-in-modular-construction-demand/>

⁷⁴ <https://www.marketsandmarkets.com/Market-Reports/modular-construction-market-11812894.html>

⁷⁵ <https://www.greentechmedia.com/articles/read/what-does-the-future-of-building-control-look-like#gs.hNvmU9Vl>

⁷⁶ <https://emerj.com/ai-sector-overviews/ai-building-automation-current-applications/>

⁷⁷ <https://www.navigantresearch.com/reports/10-trends-for-intelligent-buildings-in-2017-and-beyond>

⁷⁸ <http://www.constructionworld.org/top-10-construction-technology-trends-2018/>

⁷⁹ <https://www2.gov.bc.ca/gov/content/industry/forestry/supporting-innovation/wood-first-initiative>

Structural material currently accounts for 77% of the global advanced material market and is forecast to be valued at US\$1.37T by 2024⁸⁰.

Novel construction materials are being developed for nearly every building component; highly advanced materials include self-healing concrete, strand rod (carbon fibre) in place of steel cables used for seismic upgrades, hollow bricks with air circulation for in-wall heating and cooling, and GHG-absorbing cement⁸¹.

Brock Commons at UBC is employing various engineered wood technologies and is the tallest building with a wooden structure in the world⁸²

⁸⁰ https://www.researchandmarkets.com/research/43p42r/global_advanced

⁸¹ <https://geniebelt.com/blog/10-innovative-construction-materials>

⁸² <https://www.archdaily.com/879625/inside-vancouvers-brock-commons-the-worlds-tallest-timber-structured-building>

Renewable Power Supply & Storage

Explosive Growth in Renewable Energy Technologies

Clean Energy technology is seeing consistent annual increases accounting for 70% of net additions in 2017, up from 63% in 2016⁸³.

Energy companies traditionally focused on oil and gas are making unprecedented investments in renewables. Shell plans for annual investments of CAD\$1B in renewable energy by 2020, and Statoil plans to invest up to CAD\$16B in renewables by 2030⁸⁴.

China's investments in renewable energy eclipse the rest of the world, with 40% of the global clean energy investment in 2017, representing a value of US\$132B⁸⁵.

Federal policy and funding drivers for renewables include:

- Mission Innovation increasing up to \$775M by 2020⁸⁶
- Low Carbon Economy Fund – \$4.1B to participating provinces and \$500M in project funding⁸⁷
- Green Municipal Fund through FCM worth \$625M⁸⁸
- NRCan Clean Energy Innovation Program – \$49M over three years to 2019⁸⁹

Electrification

From individual sensors to entire cities, the shift toward electrification for communities and industry is a significant part of the low-carbon transition.

We are seeing an increase in individual home energy storage, linked to solar PV supply and EV charging for example.⁹⁰

⁸³ http://www.ren21.net/gsr-2018/chapters/chapter_01/chapter_01/

⁸⁴ <http://cleanenergycanada.org/report/energy-disrupted-tracking-the-energy-revolution-2018/>

⁸⁵ <https://data.bloomberglp.com/bnef/sites/14/2018/01/BNEF-Clean-Energy-Investment-Investment-Trends-2017.pdf>

⁸⁶ <https://www.nrcan.gc.ca/energy/resources/mission-innovation/18612>

⁸⁷ <https://www.canada.ca/en/services/environment/weather/climatechange/pan-canadian-framework/climate-change-plan.html>

⁸⁸ <https://fcm.ca/en/programs/green-municipal-fund>

⁸⁹ <https://www.nrcan.gc.ca/energy/funding/icg/18876>

⁹⁰ <https://www.pv-tech.org/guest-blog/the-future-of-combining-ev-with-pv>

Distributed Energy Systems & Grid Infrastructure

Utility and grid operators are seeing new business models emerging, and disruptive energy technologies are expected to reach key milestones in the next decade⁹¹. Much of this is enabled by energy storage and shift to smart grid technologies that allow better demand and supply of energy.

Smart grid technology specifically is receiving significant investment and has the potential to reduce the projected 2050 demand by up to 24% in parts of the world⁹². The global distributed generation market is also expected to grow annually by 15.5% reaching USD\$483B by 2024.

Energy Storage Revolution

The costs of batteries have declined as much as 65% in the past five years, and the global battery market is expected to hit US\$250 Billion by 2040⁹³.

Digitization of Energy

Digitization can have significant impacts on energy grids and enables technical cascades like Blockchain and distributed generation⁹⁴. Digitization of the energy market is forecast to hit US\$45B by 2025⁹⁵.

The International Energy Agency (IEA) claims digitization is fundamental for transforming electrical utility sectors⁹⁶, and the company ABB suggests digitization of power and water utilities can yield operational efficiency gains of 10% (versus 1-2% without digitization)⁹⁷.

⁹¹ <https://www.pwc.com/ca/en/industries/power-utilities/publications/gaining-momentum-energy-transformation.html>

⁹² https://www.researchandmarkets.com/research/cwqb9b/global_smart

⁹³ <https://about.bnef.com/new-energy-outlook/>

⁹⁴ <https://about.bnef.com/blog/digitalization-energy-systems/>

⁹⁵ <https://about.bnef.com/blog/market-digitalization-energy-sector-grow-64bn-2025/>

⁹⁶ <https://www.iea.org/digital/>

⁹⁷ <http://www.abb.com/cawp/seitp202/88bdc1e521d136b2c125819c00264e3c.aspx>

Knowledge & Innovation

Artificial Intelligence

2017 saw US\$15.2B invested in AI start-ups, a 141% increase over 2016. Of that 48% came from China and 38% from the USA⁹⁸.

In the smart workspaces field, 62% of organizations expect to have AI-powered virtual assistants in the next two years⁹⁹. More than 40% of enterprises will seek to combine AI with robotic process automation (RPA) representing a market valued at US\$1.7B in 2019 and US\$2.9B by 2021.

The market for AI for autonomous vehicles is anticipated to reach \$US10.7B by 2024¹⁰⁰, and the cognitive computing market is expected to reach US\$49.4B by 2025¹⁰¹.

Immersive Experiences

The fastest-growing segment in virtual reality (VR) is healthcare, followed by gaming, media, and communications. The global market for VR is projected to be US\$33B by 2022, representing a growth of 55% annually¹⁰². VR applications in the manufacturing sector are anticipated to increase by 98.9% from 2017 to 2021¹⁰³

Augmented reality (AR) is a relatively new branch of VR used to enhance natural environments and offer perceptually enriched experiences. The VR/AR combined market is forecast to reach US\$94.4B by 2023¹⁰⁴, with the AR share growing at 73%. AR for mobile devices is expected to drive growth faster than the VR market, with AR glasses and headsets set to ship 22.8M units by 2020¹⁰⁵

Digital Platforms

Emerging blockchain use cases include smart contracts, IoT integration, and content streaming load easing¹⁰⁶. Outcomes from the World Economic Forum suggested 10% of global GDP will be stored on

⁹⁸ <https://www.geospatialworld.net/blogs/13-artificial-intelligence-trends-2018/>

⁹⁹ <https://www.dimensiondata.com/zh-hant/insights/technology-trends/digital-workplace-trends-2018>

¹⁰⁰ <https://igniteoutsourcing.com/automotive/artificial-intelligence-in-automotive-industry/>

¹⁰¹ <https://www.grandviewresearch.com/press-release/global-cognitive-computing-market>

¹⁰² <https://www.marketwatch.com/press-release/virtual-reality-market-size-is-projected-to-be-around-us-33-billion-by-2022-2018-08-30>

¹⁰³ https://www.researchandmarkets.com/research/22fw9s/future_of_global

¹⁰⁴ https://www.researchandmarkets.com/research/6w5hbb/global_augmented

¹⁰⁵ <https://www.mordorintelligence.com/industry-reports/augmented-reality-market>

¹⁰⁶ <https://globenewswire.com/news-release/2018/12/18/1668415/0/en/Global-FinTech-Blockchain-Market-Will-Reach-USD-8-311-Million-By-2024-Zion-Market-Research.html>

blockchain by 2027¹⁰⁷. The FinTech-Blockchain market is expected to grow to US\$8.3B by 2024, from US\$207M in 2017¹⁰⁸.

The Internet of Things (IoT) is expected to see business investment reach US\$832B by 2020, and consumer spending reach US\$236B by 2020, resulting in a cumulative total of US\$6T spent on IoT by 2020¹⁰⁹

The cloud computing market is projected to reach US\$206B in 2019, a 17% increase over US\$175B in 2018¹¹⁰. The fastest growing segment within this market is Infrastructure as a Service (IaaS), expected to reach US\$39.5B by 2019.

The big data market was estimated at US\$23.5B in 2015 and forecasted to reach US\$118.5B by 2022¹¹¹

Biotechnology & Advanced Materials

The biotechnology market size was valued at over US\$330B in 2015 and is expected to double to US\$775B by 2024¹¹². Key growth areas are anticipated to be DNA sequencing, recombinant technology, fermentation, tissue engineering, and nanobiotechnology.

Advanced materials include ceramics, glasses, polymers, composites, metals and alloys, and applications include medical devices, automotive, aerospace, electrical/electronics, industrial, and power. The advanced materials market is anticipated to reach US\$102B by 2024¹¹³, and is dominated by 3M which holds a 70% share.

Nano-materials have applications in paints and coatings, adhesives and sealants, electronics, consumer goods, and personal care products. The nano-materials market expected to hit US\$55B by 2022, a 20% annual growth from \$14.7B in 2015¹¹⁴.

¹⁰⁷ <https://www.cio.com/article/3294225/blockchain/5-top-blockchain-trends-of-2018.html>

¹⁰⁸ <https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/blockchain-beyond-the-hype-what-is-the-strategic-business-value>

¹⁰⁹ <https://www.pwc.com/gx/en/industries/tmt/publications/ai-and-iot.html>

¹¹⁰ <https://www.gartner.com/en/newsroom/press-releases/2018-09-12-gartner-forecasts-worldwide-public-cloud-revenue-to-grow-17-percent-in-2019>

¹¹¹ <https://www.marketwatch.com/press-release/big-data-market-2018-global-analysis-industry-demand-trends-size-opportunities-forecast-2023-2018-08-31>

¹¹² <https://www.gminsights.com/industry-analysis/biotechnology-market>

¹¹³ <https://www.transparencymarketresearch.com/pressrelease/advanced-materials-market.htm>

¹¹⁴ <https://www.alliedmarketresearch.com/nano-materials-market>

Additive Manufacturing

The additive manufacturing (AM) market is anticipated to reach US\$20.5B by 2020, with the highest growth expected in tooling components and metal castings.¹¹⁵

Desktop 3D printers sold approximately 278K units in 2015, and by the end of 2018, a total of 529K units are expect to sell. Sales for specialized 3D printers for metal additive manufacturing increased form 983 units in 2016 to 1,768 units in 2017¹¹⁶.

4D Printing is still an emerging technology that allows the components to transform into another shape when exposed to heat, humidity, or any other environmental stimuli. This market is expected to grow by US\$162M per year to 2022, with the main applications in aerospace and defence, healthcare, automotive, construction, clothing, and utilities¹¹⁷.

¹¹⁵ <https://www.statista.com/statistics/284863/additive-manufacturing-projected-global-market-size/>

¹¹⁶ <https://www.forbes.com/sites/tjmccue/2018/06/04/wohlers-report-2018-3d-printer-industry-rises-21-percent-to-over-7-billion/>

¹¹⁷ <https://www.marketresearchfuture.com/reports/4d-printing-market-2692>

Clean Economy in the Fraser Valley

Appendix C: Climate & Cleantech Policy Drivers

Summary of Policy & Program Drivers

Federal Policies and Programs

Paris Agreement	Global Climate Policy to limit temperature rise
Mission Innovation	\$775m in federal clean energy investment
Pan-Canadian Framework	30% reduction of GHG emissions from 2005 levels
Low Carbon Economy Fund	Federal funding to support the Pan-Canadian Framework
Innovation Superclusters Initiative	Digital Technology Supercluster in B.C.
Investing in Canada Infrastructure	\$4b in B.C. infrastructure over 10 years
Mid-Century, Low Emissions Development Strategy	Living document to inform the conversation about how Canada can achieve a long-term, low-carbon economy.
Green Municipal Fund	\$625m FCM program for sustainable community development
Clean Energy Innovation Program	\$49m to support clean energy innovation
Clean Tech Working Group Strategy	Report on options to transition to a low-carbon economy

Provincial Policies and Programs

CleanBC Climate Plan	Provincial climate plan to reduce GHGs by 18.9 Mt by 2030
CleanBC Communities Fund	\$63m green infrastructure fund
BC Energy Step Code	Code for high-efficiency buildings
BC Tech Fund	\$100m for early-stage funding to emerging tech companies
Smart Communities Pilot Project	Grants to help small communities use data and connected tech
Small Business Venture Capital Program	Credit to resident investors who invest in BC cleantech companies
Innovate BC	Several programs to support cleantech growth
Rural Dividend Fund	\$25m/year for projects in communities under 25,000 population
Clean Growth Program for Industry	Fund for large industrial emitters to make operations cleaner
Carbon Neutral Government	Streamlined procurement of clean technologies for public sector
Innovative Clean Energy (ICE) Fund	Fund to support pre-commercial clean energy projects and tech
Regional Adaptation Enhancement Program	BC Agriculture & Food Climate Action Initiative - Fraser Valley Adaptation Strategies

Local Government Policies and Programs

Fraser Valley Regional Growth Strategy	Overarching planning framework for coordinating local and provincial government activities
Solid Waste Management Plan	Management plan for municipal solid waste in the FVRD

Federal Policy & Program Priorities

- **The Paris Agreement:** The Paris Agreement is critical to shaping global climate policy and investment decisions moving forward. Nearly every country in the world has agreed for the first time to take on national commitments to address climate change and reduce GHG emissions. This new Agreement will strengthen the effort to limit the global average temperature rise to well below 2°C and pursue efforts to limit the increase to 1.5°C. The preverbal ‘devil is in the details’ and implications will ultimately be driven by how national governments implement the reductions. The agreement also sent a strong signal to governments and markets on the urgency to implement tools and strategies founded in cleantech aimed at reducing carbon emissions across governments, cities, civil society, the private sector, and financial institutions.¹
- **Mission Innovation:** On the margins of the COP21 Conference, a global commitment to accelerate clean technology investment was also made between the world’s largest economies. *Mission Innovation* will see over 20 countries (including the US, China, India, and much of the European Union) double the amount of public funds invested in clean energy research and development investment over the next five years. The investments are intended to be innovation-focused, seeking to develop transformational clean energy technologies that can be scaled to varying economic and energy market conditions globally. For Canada, the commitment means doubling its 2014-2015 funding of \$387 million for clean energy and clean technology research and development to \$775 million by 2020.²
- **The March 2016 Vancouver Declaration to a Pan-Canadian Framework for Climate Change and Clean Growth:** this agreement signed in Vancouver in 2016 commits First Ministers to work together on the development of a Pan-Canadian Framework on Clean Growth and Climate Change. The overarching goal of the detailed Framework will be to define a path forward to achieve Canada’s 2030 Paris Commitment of a 30% reduction of GHG emissions from 2005 levels. The process to date has been shaped around four key areas, aligned with the FPT working groups formed earlier in 2018. They are:³
 1. Clean Technology, Innovation, and Jobs
 2. Carbon Pricing Mechanisms
 3. Specific Mitigation Opportunities
 4. Adaptation and Climate Resilience
- **Low Carbon Economy Fund:** An important piece of the Pan-Canadian Framework, the \$2 billion Low Carbon Economy Fund is an important part of the Pan-Canadian Framework on Clean Growth and Climate Change (the Framework). The Fund supports the Framework by leveraging investments in projects that will generate clean growth, reduce greenhouse gas emissions, and help meet or exceed Canada's Paris Agreement commitments. The fund is split into two parts, the Low Carbon Economy Leadership Fund which provides \$4.1 billion to provinces and

¹ <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

² <http://mission-innovation.net/our-members/canada/>

³ https://itk.ca/wp-content/uploads/2016/04/Vancouver_Declaration_clean_Growth_Climate_Change.pdf

territories that have adopted the Framework, and the Low Carbon Economy Challenge which has over \$500 million available to fund projects that reduce emissions and generate clean growth in support of the Framework.⁴

- **The 2018 Federal Budget:** Recipients of up to \$950 million in funding through the Innovation Superclusters Initiative were announced, five clusters representing a cross-section of Canadian industries / regions (buildings are not represented):⁵
 - Digital Technology Supercluster – to use bigger, better datasets and cutting-edge applications of augmented reality, cloud computing and machine learning to improve service delivery in the natural resources, precision health and manufacturing sectors. This Supercluster was officially launched in Vancouver on November 27, 2018.
 - Ocean Supercluster – discovering how to use digital technologies to help develop Canada’s off-shore industries.
 - AI-Powered Supply Chain Supercluster – using AI to improve business processes in retail, manufacturing and infrastructure sectors.
 - Advanced Manufacturing Supercluster – to build up next-generation manufacturing capabilities, incorporating technologies like advanced robotics and 3D printing.
 - Protein Innovations Supercluster – to increase Canada’s share of the growing global market for plant-based proteins, primarily by increasing the processing capacity for canola.

Priorities as they pertain to budget quantities going to cleantech, reducing GHG emissions, reducing GHG emissions in buildings:

- To be confirmed: \$1 billion over five years to support the proposed new impact assessment system and Canadian Energy Regulator; increase scientific capacity in federal departments and agencies; implement the changes required to protect water, fish and navigation; and increase Indigenous and public participation.
- **The Low Carbon Leadership Fund** – provided to make buildings more energy efficient, to help industries reduce emissions, and help forestry and agriculture sectors increase stored carbon in forests and soils. The first round of funding agreements was announced in December 2017:⁶
 - BC: \$162 million

⁴ <https://www.canada.ca/en/environment-climate-change/services/climate-change/low-carbon-economy-fund.html>

⁵ <https://www.budget.gc.ca/2018/docs/plan/toc-tdm-en.html>

⁶ https://www.canada.ca/en/environment-climate-change/news/2017/12/low_carbon_economyleadershipfund.html

- AB: Almost \$150 million *This funding may be withdrawn as Alberta withdrew from the federal climate agreement*
 - ON: \$420 million (specifically to support renovating buildings, retrofitting houses, among other projects – *This funding is no longer going to be provided as Ontario withdrew from the federal climate agreement*)
 - QC: Over \$260 (including funding for businesses to retrofit their buildings)
 - NB: \$51 million (specifically to help improve energy efficiency of homes and businesses)
 - NS: \$56 million
- Extends incentives for businesses to invest in clean energy generation / promote the use of energy efficient equipment through tax support, now for property acquired before 2025 (represents an investment of \$123 million over 2017-18 and 2022-23).
 - \$109 million over five years to the Canada Revenue Agency and ECCC to implement, administer and enforce the federal carbon pollution pricing system.
 - Continued infrastructure deployment: Last year's budget announced the allocated investment to electric vehicles (EVs) and alternative transportation fuel infrastructure starting in 2018-2019 of \$30M / year for 4 years, totalizing \$120M, in line with EMC's priorities to pursue the deployment of DCFC in strategic areas, as investment in charging infrastructure is essential for increasing the adoption of EVs. A Zero Emission Vehicle Strategy for Canada has yet to be announced.
- **Investing in Canada Infrastructure Program:** The Liberal government committed to spending \$120 billion on infrastructure over the next 10 years. This quantity is an amalgamation of the spending that was already promised under the previous Conservative administration and the Liberal election promise of putting \$60 billion towards infrastructure in 10 years. As part of a bilateral agreement with the Province, The Canadian government will invest \$3.917 billion in B.C. infrastructure over 10 years in four key areas:⁷
 1. Community, Culture and Recreation Infrastructure
 2. Rural and Northern Communities Infrastructure
 3. Green Infrastructure (includes the CleanBC Communities Fund)
 4. Public Transit
 - **Mid-Century, Low Emissions Development Strategy:** The Strategy heavily references a variety of emissions modelling studies such as the Deep Decarbonization Pathways Project⁴⁴ (DDPP) and provides illustrative scenarios of the potential for emissions improvements from large industrial emitters, transportation, the built environment, electricity generation and transmission, waste, agriculture, and forestry. The mid-century strategy will help inform the pan-Canadian framework, as well as Canada's infrastructure agenda. It also helps to reaffirm Canada's commitment to investing in innovation and clean technologies. The strategy itself does

⁷ <https://www2.gov.bc.ca/gov/content/transportation/funding-engagement-permits/funding-grants/investing-in-canada-infrastructure-program>

not outline any specific policies, but identifies potential abatement opportunities, emerging key technologies, and areas where emissions reductions will be more challenging and will require a policy focus. Some of the key focus areas are:⁸

1. Electricity
 2. Industry
 3. Clean technology
 4. Infrastructure
- **Smart City Challenge:** Led by Infrastructure Canada, the pan-Canadian competition set one prize of \$50 million open to all communities; two prizes of up to \$10 million for communities of 500,00 people and under and one prize of \$5 million open to all communities with populations under 30,000 people. While the competition is now closed, the winners will be announced in Spring of 2019. There are 3 finalists in B.C. including Surrey and Vancouver (joint entry), Greater Victoria, and Richmond.⁹
 - **Green Municipal Fund:** The Green Municipal Fund is a \$625-million program that provides funding and knowledge services to support sustainable community development through the Federation of Canadian Municipalities. The funding focus areas are: sustainable neighbourhood and brownfields action plans; energy efficiency and recovery; transportation and fuel efficiency; water quality and conservation; waste management and diversion; and brownfields. The funding can be used for plans, feasibility studies, pilot projects, and capital projects.¹⁰
 - **Innovation, Science and Economic Development Portfolio:** targeted at creating made-in-Canada innovation clusters, overlaps with FVRD's regional growth pillars.¹¹ Seventeen federal departments and agencies make up the Innovation, Science and Economic Development Portfolio. Together, these organizations are uniquely positioned to further the government's goal of building a knowledge-based economy in all regions of Canada and to advance the government's jobs and growth agenda. Innovation, Science and Economic Development Canada works in partnership with the members of the Innovation, Science and Economic Development Portfolio to leverage resources and exploit synergies in a few specific areas:
 1. Innovation through Science and Technology—helping firms and not-for-profit institutions more rapidly turn ideas into new products and services.
 2. Trade and Investment—encouraging more firms in more sectors to export to more markets, and helping Canadian firms attract a larger share of foreign direct investment.
 3. Growth of Small and Medium-sized Enterprises—providing access to capital, information and services.
 4. Economic Growth of Canadian Communities—fostering new approaches to community economic development, based on community strengths and information infrastructures.
 - **NRCAN Clean Energy Innovation Program:** The Energy Innovation Program received \$49 million over 3 years from April 1, 2016 to March 31, 2019 to support clean energy innovation. Accelerating clean technology research and development is a key component of the

⁸ https://unfccc.int/files/focus/long-term_strategies/application/pdf/canadas_mid-century_long-term_strategy.pdf

⁹ See: <https://www.infrastructure.gc.ca/cities-villes/index-eng.html>

¹⁰ <https://fcm.ca/en/programs/green-municipal-fund>

¹¹ https://www.ic.gc.ca/eic/site/icgc.nsf/eng/h_00022.html

Government of Canada's approach to promoting sustainable economic growth and to supporting Canada's transition towards a low-carbon economy. Clean Energy Innovation key priority areas are: renewable, smart grid and storage systems; reducing diesel use by industrial operators in northern and remote communities; methane and VOC emission reduction; reducing greenhouse gas emissions in the building sector; carbon capture, use and storage; improving industrial efficiency.¹²

- **Clean Technology in Canada's Natural Resources Sectors Discussion Paper:** Natural Resources Canada, in partnership with the Minister of Fisheries and Oceans, the Canadian Coast Guard, and the Minister of Agriculture and Agri-Food has signalled they will redefine their clean technology strategy – particularly as it relates to Canada's commitments under Mission Innovation.¹³
- **Clean Tech Working Group Strategy:** The Pan-Canadian Climate Change and Clean Growth Framework Working Group on Clean Technology, Innovation and Jobs released their final report in September 2016. The report focused on four areas:¹⁴
 1. Building and strengthening early-stage clean technology innovation and research, development and demonstration;
 2. Accelerating clean technology commercialization and growing Canada's commercial capacity in clean technology;
 3. Fostering greater clean technology adoption within Canada; and
 4. Strengthening and sustaining collaboration in support of clean technology and clean growth and creating metrics for success.

Programs and priorities that are in progress / important to be aware of:

- **Infrastructure 'Triple Bottom Line' Screening**
- **Federal Impact Assessment Act** – will impact the development resource extraction projects
- **Building Code Updates** and Incentives
- Provincial alignment with national carbon price
- **Federal Clean Fuel Standard:** the federal government is working to consult with key stakeholders on the development of clean fuel regulations and to enact the standard in 2023¹⁵

¹² <https://www.nrcan.gc.ca/energy/funding/icg/18876>

¹³ http://publications.gc.ca/collections/collection_2016/rncan-nrcan/M134-40-2016-eng.pdf

¹⁴ <https://www.canada.ca/content/dam/eccc/migration/cc/content/6/4/7/64778dd5-e2d9-4930-be59-d6db7db5cbc0/working-20group-20on-20clean-20technology-20innovation-20and-20jobs-20final-20report-20engl....pdf>

¹⁵ <https://www.canada.ca/en/environment-climate-change/services/managing-pollution/energy-production/fuel-regulations/clean-fuel-standard/timelines-approach-next-steps.html>

Provincial Policies and Programs

- **CleanBC Climate Plan:** On December 5th, 2018, the Government of B.C. released its CleanBC climate plan. CleanBC includes initiatives in four focus areas which are all relevant to the Fraser Valley: transportation, buildings, industry, and waste. Across these focus areas of the plan there are goals around increasing the requirements for low carbon fuel standards, increasing the supply of renewable natural gas for industry, expanding the electric vehicle charging network, and helping communities implement organic waste diversion and landfill gas capture.¹⁶
- **CleanBC Communities Fund:** This fund is part of the federal-provincial Investing in Canada Infrastructure Program and supports cost-sharing of infrastructure projects focusing on the management of renewable energy, access to clean-energy transportation, improved energy efficiency of buildings and the generation of clean energy.¹⁷
- **BC Energy Step Code:** This performance-based tool will provide local governments and builders with more tools and opportunities to accelerate energy efficiency and reduce GHG emissions in the built environment. The code will require better building envelopes, higher performing windows, high efficiency mechanical systems that reduce energy consumption through heating and cooling and bring B.C. towards the goal of being net-zero ready by 2032. It will create the opportunity for businesses to shift into knowledge around installation and performance of high efficiency products and potentially bring manufacturing of high-performance building products to areas like the Fraser Valley.¹⁸
- **BC Retrofit Initiative:** The Province is investing \$1.1 billion over the next decade to make social housing more energy efficient, less polluting, safer and cost efficient. The \$400 million retrofit component of the initiative will focus on increasing the use of cleaner energy in 51,000 units of publicly funded and owned social housing.¹⁹

MINISTRY OF JOBS, TRADE AND TECHNOLOGY (JTT)

- **BC Tech Fund:** A \$100 million venture capital fund launched by the Government of British Columbia in 2016. The BC Tech Fund has been established to invest in emerging technology companies in BC across multiple sectors, including Information and Communications Technology (ICT), Digital Media, Clean Tech and Life Science/Healthcare. The BC Tech Fund mandate includes investments in BC-based venture capital funds and BC companies. The BC Tech Fund is focused primarily on investments at the Series A stage and is being managed by Kensington Capital Partners on behalf of the province.²⁰

¹⁶ <https://cleanbc.gov.bc.ca/>

¹⁷ <https://www2.gov.bc.ca/gov/content/transportation/funding-engagement-permits/funding-grants/investing-in-canada-infrastructure-program/green-infrastructure/cleanbc-communities-fund>

¹⁸ <https://energystepcode.ca/>

¹⁹ <https://news.gov.bc.ca/releases/2018PREM0084-002249>

²⁰ <http://www.kcpl.ca/bc-tech-fund/>

- **BC Knowledge Development Fund (KDF):** The KDF contributes to fund equipment and facilities in post-secondary institutions for BC scientists and their students to conduct research. Recent revision of the KDF criteria will contribute to advancing BC's knowledge regarding its environment, including reducing greenhouse gas, protecting the environment and creating innovative clean technologies. Since its inception in 1998, the KDF has committed over \$750 million for over 1300 projects.²¹
- **Smart Communities Pilot Project:** This project was developed to help local governments use data and connected technology to improve services and address community challenges. The one-year pilot project is open to B.C. municipalities and First Nations communities with populations under 30,000. Grants of up to \$40,000 will be provided to as many as four communities. The 2018 call closed in July 2018. The Pilot aligns with the government's mandate to ensure the benefits of technology are felt throughout the province.²²
- **British Columbia's Small Business Venture Capital program:** This program provides a 30% credit to BC resident investors who invest into eligible BC companies or managed funds. The Cleantech Venture Capital portion of the program supports the government's commitment to stimulate investment in the clean technology industry. Businesses must be substantially engaged in the manufacture and processing, or research and development for commercial exploitation, of technologies that do one of the following: increase energy efficiency and conservation; reduce greenhouse gas emissions; reduce the environmental impact of energy production, generation, storage, transmission, delivery, provision or conversion.²³
- **BC Provincial Nominee Program Tech Pilot:** The B.C. technology sector is a major driver of economic growth in the province. As part of the overall Provincial Nominee Program (PNP), the B.C. PNP Tech Pilot works to ensure that the technology sector can attract and retain top talent for sector sustainability and growth. Eligible occupations under the B.C. PNP Tech Pilot include many types of engineers, technicians, programmers, and other occupations that could be leveraged by clean technology companies if the demand for these skills outweighs the domestic availability.²⁴
- **BC Cleantech Scale-Up Program:** B.C. is investing more than \$711,000 over the next three years in the Alacrity Foundation of B.C.'s Cleantech Scale-Up program. The program guides growing companies in generating new international business opportunities and promotes investment in B.C. clean tech companies. B.C.'s support for Alacrity's program matches federal funding from Western Economic Diversification Canada, along with funding contributions from Export Development Canada and Alacrity.²⁵ (Announced April 2018)

MINISTRY OF JOBS, TRADE AND TECHNOLOGY (THROUGH INNOVATE BC)

The following programs are funded by JTT via annual funding to its Crown Corporation, Innovate BC.

²¹ <https://www2.gov.bc.ca/gov/content/governments/about-the-bc-government/technology-innovation/bckd>

²² <https://www2.gov.bc.ca/gov/content/governments/about-the-bc-government/technology-innovation/smart-communities>

²³ <https://www2.gov.bc.ca/gov/content/employment-business/investment-capital/venture-capital-programs/budget-descriptions>

²⁴ <https://www.welcomebc.ca/Immigrate-to-B-C/B-C-Provincial-Nominee-Program/BC-PNP-Tech-Pilot>

²⁵ <https://news.gov.bc.ca/releases/2018JTT0018-000677>

- **Venture Acceleration Program** (Innovate BC): The Venture Acceleration Program (VAP) is a paid structured venture growth program designed to guide, coach and grow ambitious early-stage technology entrepreneurs and effectively grow their technology ventures. The VAP helps entrepreneurs accelerate the process of defining a proven business model based on a set methodology and set of best practices for growing technology companies.

The VAP is delivered by a team of Entrepreneurs in Residence and supported by a province-wide BC Acceleration Network of partners and entrepreneurs. The VAP is funded by JTT via annual funding to its Crown corporation, Innovate BC.²⁶

- Included in the BC Acceleration Network is the **Foresight Clean Tech Accelerator**. Established in 2013, Foresight is Western Canada's first clean technology accelerator that fosters the growth of small and medium size businesses. Foresight nurtures start-up success by providing an ecosystem of mentorship, like-minded entrepreneurs, and industry specific guidance. To get companies to commercialization, Foresight has a program with the Business Development Bank of Canada that provides \$250,000 in financing to promising early stage companies provided it is matched by at least the same in private investment.²⁷
- **New Ventures Competition** (Innovate BC): Innovate BC is the lead partner of the New Ventures Competition, which promotes the growth of early-stage technology companies by providing mentorship, business seminars, networking events, and recognition. It attracts entrepreneurs from a wide range of tech industries including cleantech, ICT, software, bioenergy, agritech, and life sciences.²⁸
- **Ignite Program** (Innovate BC): Ignite provides funding to accelerate the commercialization of new technologies and innovations in the natural resources and applied sciences sectors in BC. The program provides awards of up to \$300,000 to consortia that are conducting research projects that address a significant demonstrated problem faced by industry and will commercialize a proposed innovation within a 3-year timeframe.²⁹

MINISTRY OF FORESTS, LANDS, NATURAL RESOURCE OPERATIONS AND RURAL DEVELOPMENT (FLNR)

- **Clean-tech Innovation Strategy for the Forest Sector:** Forest Product Innovation is FLNR's partner in delivering an annual clean-tech innovation program which funds approximately 20 projects per year. FLNR invests approximately \$3.5M annually which is leveraged with investment from Natural Resources Canada and in some cases industry to a total of \$5-6 million annually to support research and development projects in forest sector, including clean tech projects.³⁰

²⁶ <https://innovatebc.ca/what-we-offer/connect-with-experts/venture-acceleration-program/>

²⁷ <https://foresightcac.com/>

²⁸ <http://www.newventuresbc.com/the-competition/>

²⁹ <https://innovatebc.ca/what-we-offer/get-funding/ignite/>

³⁰ https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/competitive-forest-industry/bc_innovation_strategy_2017-01-18.pdf

- Rural Dividend Fund:** The BC Rural Dividend Fund is providing \$25 million a year to assist rural communities with a population of 25,000 or less to reinvigorate and diversify their local economies. It was developed to recognize both the contribution rural communities have made to B.C.'s economy, and the unique challenges they face to diversify beyond natural resources. The program is focused on supporting worthy projects that help rural communities navigate changes impacting their economies, such as attracting and retaining youth, using innovation to drive economic growth, and developing new and effective partnerships to support shared prosperity. Since 2016/17, BC Rural Dividend Fund has provided over \$2.7 million towards 22 cleantech projects across the province.³¹ See: [Link](#)

MINISTRY OF ENVIRONMENT AND CLIMATE CHANGE STRATEGY

- Clean Growth Strategy:** The provincial government released a long-term clean growth strategy (CleanBC), which was released on December 5th, 2018 (referenced above). Three intentions papers were released in Summer 2018 focusing on transportation, buildings, and industry. More engagement is planned for 2019 and 2020.³²
- Clean Growth Program for Industry:** Announced in Budget 2018, the Clean Growth Program for Industry program partially addresses the competitive impacts of increasing the carbon tax with new incentives and a new fund to offset the cost of making operations cleaner. The Clean Growth Program for Industry directs a portion of B.C.'s carbon tax paid by industry into incentives that encourage them to transition to cleaner operations and reduce emissions. It is designed for regulated large industrial operations, such as: pulp and paper mills, natural gas operations and refineries, and large mines that emit over 10,000 tonnes of GHG emissions per year.³³
- Carbon Neutral Government:** British Columbia is streamlining the procurement of priority clean technologies for municipalities and other public sector organizations through their Carbon Neutral Government program. In addition, the Ministry of Citizens' Services has created a procurement concierge service to connect commercial-ready technology suppliers to government buyers.^{34 35}

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

- Innovative Clean Energy Fund (ICE Fund):** The ICE Fund is a Special Account, funded through a levy on certain energy sales, designed to support the Province's energy, economic, environmental and greenhouse gas reduction priorities, and to advance B.C.'s clean energy sector. Benefits associated with the completed ICE Fund projects include a reduction in

³¹ <https://www2.gov.bc.ca/gov/content/employment-business/economic-development/support-organizations-community-partners/rural-economic-development/rural-dividend>

³² <https://cleanbc.gov.bc.ca/>

³³ <https://engage.gov.bc.ca/app/uploads/sites/391/2018/07/MoE-IntentionsPaper-Industry.pdf>

³⁴ <https://www2.gov.bc.ca/gov/content/environment/climate-change/public-sector/carbon-neutral>

³⁵ <https://www2.gov.bc.ca/gov/content/environment/climate-change/local-governments>

greenhouse gas emissions of over 135,000 tonnes and completed projects have created approximately 262 ongoing jobs.

In March 2017, the ICE Fund has launched a joint call for proposal with Sustainable Development Technology Canada (SDTC). The \$40 million partnership between the Ministry and the SD Tech Fund is to support the development of pre-commercial clean energy projects and technologies. The parties will conduct a joint call over a three-year continuous intake period to seek out clean energy projects and technologies that will mitigate or avoid provincial GHG emissions, including prototype deployment, field testing and commercial-scale demonstration projects in B.C. The call for expression of interest opened in April 2017.³⁶

- **CEV Advanced Research & Commercialization (ARC):** The ARC Program is to support the development of BC companies operating in the Clean Energy Vehicle (CEV/ zero emission vehicle) sector, and to encourage international investment in the CEV sector in BC. It is the intention of the ARC Program to provide reliable and targeted support to build on existing strengths or eliminate barriers for companies in the sector. The program is expected to issue two funding calls of \$675,000 over the next three fiscal years.³⁷
- **Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirement) Act:** Introduced in 2008, Part 2 of the Act establishes renewable fuel content requirements for gasoline and diesel sold in British Columbia: fuel suppliers must ensure that they have a minimum renewable fuel content of five percent (5%) for gasoline and four percent (4%) for diesel, on a provincial annual average basis; and fuel suppliers have the flexibility to vary their blend percentages and can choose where in the province they supply renewable fuel blends, as long as they meet the provincial annual average requirement for renewable fuel content.

Part 3 of the Act establishes low carbon fuel requirements for fuels sold in British Columbia requiring fuel suppliers to progressively decrease the average carbon intensity of their fuels to achieve a 10% reduction in 2020 relative to 2010. Fuel suppliers choose their own approach for compliance with Part 3 requirements by either supplying more low carbon fuels, acquiring credits through a Part 3 Agreement, or trading credits with other suppliers.³⁸

- **Clean Vehicle Program:** Introduced in 2011, the CEV program has committed more than \$71 million to incentivize the sales of battery electric and hydrogen fuel cell vehicles and investment in charging and hydrogen fueling infrastructure. The main areas under the CEV Program are: [CEVforBC vehicle point-of-sale incentives](#), [Charging infrastructure investments](#), [Hydrogen fuelling infrastructure investments](#), Fleet adoption support & incentives, research, training & economic development, [Emotive public outreach & awareness](#).

³⁶ <https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/innovative-clean-energy-solutions/innovative-clean-energy-ice-fund>

³⁷ <https://arcbc.ca/about/>

³⁸ <https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/transportation-energies/renewable-low-carbon-fuels>

- **B.C. ZEV Legislation** (to be introduced spring 2019): This legislation will set targets of 10% ZEV sales by 2025, 30% by 2030, and 100% by 2040, while government will take additional steps to make ZEVs more affordable. a three-point plan to kick-start and fuel the rollout of the ZEV standard: 1) Expanding the size of the province’s electric vehicle direct-current fast-charger (DCFC) network to 151 sites, with 71 already completed or underway and, leveraging federal and private-sector dollars, another 80 in the works; 2) Increasing the provincial incentive program, administered by the New Car Dealers Association of BC, by \$20 million this year to encourage more British Columbians to buy clean energy cars now. This will bring the incentive program up to \$57 million in total; 3) Reviewing the incentive program with an eye to expanding it over time, so buying a ZEV becomes a more affordable option for middle- and lower-income British Columbians.³⁹

MINISTRY OF AGRICULTURE

- **AgriTech Innovation Challenge:** On November 14, 2016, the BC Ministry of Agriculture and Innovate BC hosted the AgriTech Innovation Challenge event, bringing together farmers, industry, innovators, investors, and government. At the event, participants learned about select agrifood sector challenges, in the thematic areas of: improving berry competitiveness, pest management and loss reduction, greenhouse efficiency, nutrient recovery and management. Post-event innovators were given the opportunity to submit proposals for how their solutions mitigate these challenges, and to be considered for funding and other opportunities. This challenge process was made possible through federal and provincial Growing Forward 2 funding.⁴⁰
- **Canadian Agricultural Partnership (CAP) – Innovation Program (BC):** Innovation is one of five CAP Designated Programs Areas. The Innovation Program (BC) is designed to accelerate the pace of innovation along the innovation continuum (research, pilot, and commercialization) to enhance the competitiveness, sustainability, productivity and resilience of the sector, and meets commitments under the Science, Research, and Innovation priority area by investing in projects that may include but are not limited to:
 - Investments in applied science for major sector commodities;
 - Improved support for minor sector commodities and emerging/transformational areas including agri-tech;
 - Enhanced efforts in clean growth, environment and climate change;
 - Accelerating the growth of the sector, particularly in the agrifood and value-added food processing sectors; and,
 - Strengthening knowledge transfer and adoption.

³⁹ <https://news.gov.bc.ca/releases/2018PREM0082-002226>

⁴⁰ <https://agritechinnovation.ca/>

Under the Innovation Program, \$25.8 million in funding is available over five years. The Innovation Program does not specifically support cleantech companies, however, it is anticipated that a number of cleantech companies or projects will be supported by the Program.⁴¹

- **Canada-BC Agri-Innovation Program:** The Canada-BC Agri-Innovation Program allows industry, academia, value-added food processors, retailers and others to access funding for projects involving late-stage research, pilots and demonstrations, as well as the commercialization and adoption of innovative products, technologies and practices for the agriculture, food or agri-products sector. Priority for funding will be given to activities identified to advance innovation and competitiveness in B.C.'s agriculture, food or agri-products sectors, and include:
 - Advancement in plant, animal and food science
 - Energy and waste management
 - New product development and commercialization
 - Improvements in soil, water and air quality
 - Climate change adaptation

Under the Canada-BC Agri-Innovation Program, \$14 million in funding (CAP) is available over five years. The Canada-BC Agri-Innovation Program does not specifically support cleantech companies, however, it is anticipated that a number of cleantech companies or projects will be supported by the Program.⁴²

- **Regional Adaptation and Enhancement Program – BC Agriculture and Climate Change: Fraser Valley Adaptation Strategies (2015).** The plan includes 12 strategies and 28 actions for agriculture to adapt to five priority impact areas: 1) Warmer and drier summer conditions; 2) Increasing precipitation and extreme precipitation events; 3) Changing freshet flood risk; 4) Changes to pests and pollinators; and 5) Greater frequency and intensity of extreme heat events. Over a three-year period six regional projects (and two farm adaptation innovator projects) were undertaken to address the highest priorities identified in the Fraser Valley Adaptation Strategies plan. The regional projects were supported with \$300,365 of seed funding provided through Growing Forward 2 and \$55,634 from contributing partners. The Farm Adaptation Innovator Projects (FAIP) were supported with \$281,476 of Growing Forward 2 funding and \$80,600 in funding from other partners.

MINISTRY OF FINANCE

- **B.C. Scientific Research & Experimental Development Tax Credit Program (SR&ED):** The SR&ED Tax Credit Program is designed to encourage research and development in British Columbia that will lead to new, improved, or technologically advanced products or processes. This tax credit complements the federal SR&ED tax credit. Industry feedback indicates that this is the most important program supporting B.C.'s clean technology sector.⁴³

⁴¹ <http://www.agr.gc.ca/eng/about-us/key-departmental-initiatives/canadian-agricultural-partnership/>

⁴² <http://iafbc.ca/funding-opportunities/innovation/>

⁴³ <https://www2.gov.bc.ca/gov/content/taxes/income-taxes/corporate/credits/scientific-research-development>

MINISTRY OF ADVANCED EDUCATION, SKILLS AND TRAINING

- **Simon Fraser University's Sustainable Energy Engineering Program:** AEST is providing funding in support of a new SFU Surrey sustainable engineering program that will host an additional 320 undergraduate spaces and 120 graduate spaces by 2021-22, expected to result in 140 additional graduates per year by 2023.

The \$126 million five-storey, 15,000-square-metre Sustainable Energy Engineering Building at Simon Fraser University's Surrey campus will allow the university to expand its research in the energy, hydrogen and electricity sectors, in addition to supporting SFU's sustainable-energy engineering degrees. Total provincial start-up funding this year is \$4.4 million and is expected to increase to \$42 million.⁴⁴

⁴⁴ <https://news.gov.bc.ca/releases/2018AEST0008-000046>

Regional Policy & Program Priorities Driving Cleantech

Municipal Policies are set out in municipal Official Community Plans and other policies, links to each plan are provided below and shape the region's planning priorities and opportunities:

1. [Abbotsford Official Community Plan](#)
2. [Chilliwack Official Community Plan](#)
3. [Harrison Hot Springs Official Community Plan](#)
4. [Kent Official Community Plan](#)
5. [Mission Official Community Plan](#)
6. [Hope Official Community Plan](#)

Fraser Valley Regional Growth Strategy: The strategy promotes coordination across the six municipalities in the regional district and guides the vision through 8 key pillars: Collaboration across jurisdictions; economic strength and resiliency through employment and education that grows the region's strengths; living well to promote a high quality of life regardless of age, income or ability; community building to create compact, complete, affordable neighbourhoods across urban and rural settings; ecosystem health to protect water, air, biodiversity; transportation that enables safe and efficient systems that provides variety and reduces impact on air quality; infrastructure and services to provide efficient, sustainable, and cost effective services, and lastly energy and climate change aimed at increasingly energy efficiency, lower costs and reduction of GHG emissions to reduce the region's impact on climate change. Air quality is of particular focus/importance within the RGS.

Solid Waste Management Plan: Looking out to 2026, the Solid Waste Management Plan outlines three significant components, zero waste, mixed waste materials recovery and extended producer responsibility. The biggest challenges the region faces when it comes to waste management is the rate of waste each person produces each year; product designed and composition that do not promote sustainable use or responsible disposal; waste migration; global market conditions that make it difficult for small recycling facilities to survive; proper removal of organics from waste streams; illegal dumping; and the **rejection of incineration as a tool in the zero waste strategy**. The plan commits the FVRD to divert 65% of its waste by 2018; 80% by 2020; and 90% by 2025 through 3 main goals: 1) Reduce waste generation; 2) Maximize diversion and materials recovery; 3) Manage residual waste responsibly.

Clean Economy in the Fraser Valley

Appendix D: Stakeholder Focus Group Summary

Date / Time: January 30, 2019 / 12:30 PM to 4:00 PM

Location: Coast Chilliwack Hotel (Sardis / Hemlock Room)

Address: 45920 First Avenue, Chilliwack, BC V2P 7K1

Objectives

The purpose of this study is to gain a better understanding of the Fraser Valley's existing strengths and gaps as it relates to the clean economy. The Regional Growth Strategy (RGS) includes policies supporting economic strength and resiliency. With provincial and federal governments focusing on the clean economy it is important to ensure that the RGS reflects the region's economic opportunities.

The goal of this Focus Group was to share preliminary findings from Delphi's research on Fraser Valley's clean economy and dive deeper on the opportunities in terms of how the Fraser Valley Regional District (FVRD) can best support local governments and businesses, grow key components of the value chain, and support economic development agencies across the region with their efforts to attract investment and talent.

Please note: The definition adopted by this study for 'clean economy' includes the following sectors: sustainable resource and ecosystem management (including agriculture); green and sustainable transportation solutions; green buildings and industrial energy efficiency; renewable power supply and storage; and knowledge and innovation.

Expected Outcomes for the Focus Group

1. An understanding of the Fraser Valley's existing strengths and weaknesses / gaps as it relates to growing its clean economy.
2. An understanding of the size and possible scope of opportunities and challenges / risks as it relates to growing Fraser Valley's clean economy.
3. Information to support the FVRD's Regional Growth Strategy (RGS) update and other RGS policies and programs, including a "reference guide" for local governments.

Agenda

Start	Item	Lead
12:30	Assemble/Lunch	
13:00	Welcome & Introductions: Setting the stage for a productive and collaborative workshop <ul style="list-style-type: none"> • Introductions • Project objectives and proposed outcomes • Project overview – key activities 	Delphi & FVRD
13:15	Session 1: Clean Economy in the Fraser Valley: Highlights from Delphi's research to date <ul style="list-style-type: none"> • Highlights from the sector profiles • Strengths and weaknesses 	Delphi Presentation
13:45	Breakout 1: Facilitated Discussion on the Fraser Valley's Clean Economy <ul style="list-style-type: none"> • Review of sub-sector profiles: First impressions? Surprises? Gaps? • Review of value chain strengths and weaknesses: First impressions? Surprises? Gaps? 	Facilitated Breakout Discussions
14:30	Break	
14:40	Session 2: Seizing the Clean Economy Opportunities for Fraser Valley <ul style="list-style-type: none"> • Global megatrends and other factors for consideration • Key areas of focus (specific sectors, segments, technologies, value chain expertise, etc.) • Identifying opportunities and risks 	Delphi Presentation
15:00	Breakout 2: Identifying Roles for Growing the Clean Economy Opportunities <ul style="list-style-type: none"> • Explore strategic opportunity areas in line with trends and policy drivers; key challenges, risks and gaps; potential partnerships; infrastructure investments; R&D and innovation needs; etc. • Discuss "Reference Guide" structure and value for local stakeholders 	Facilitated Breakout Discussions
15:45	Report Back & Next Steps	Delphi & FVRD
16:00	Adjourn	

List of Participating Organizations

1. Fraser Valley Regional District
2. Catalyst Agri-Innovations Society
3. District of Kent
4. UFV Digital Innovation Hub
5. City of Chilliwack
6. BC Min of Agriculture
7. Sto:lo Community Futures
8. Chilliwack Economic Partners Corporation (CEPCO)
9. XLRator
10. Redux Nutrition
11. Delphi Group
12. Fortis BC
13. BLDRS Collective Inc.
14. BC Hydro
15. Evolved Consulting

Key Takeaways

The following key takeaways emerged from participant's feedback at each table (detailed notes from each table are below).

General

- There is strong alignment between the region's strengths and assets and the provincial government's CleanBC policy;
- Pockets of clean economy innovation exist across the region and can be mobilized through greater collaboration, cooperation and competition across the region.
- There is a need to gather more data/statistics to better understand what type of jobs people are commuting to and which types of future jobs align with the region's clean economy strengths.
- There is a valuable opportunity to improve and increase communication with First Nation communities to build relationships and partnerships around land use and skills development.

Sustainable Resource Management

- Agriculture and manufacturing are the backbone of the region's economy and is the low hanging fruit that should be focused on for further economic development.
- Developing an agriculture data portal that is open to government, industry and universities can be a key tool in making satellite and GIS data (among others) available to key stakeholders to inform their decision making (i.e. understand where the opportunities and pain points exist across agricultural land).
- Look to the higher value end of the supply chain and make the Fraser Valley a hub of locally sourced, sustainably harvested/processed foods.

Green Buildings

- The BC Energy Step Code could provide more region-wide green building industry growth.

Green and Sustainable Transportation

- The Fraser Valley is well-positioned to serve larger markets including Metro Vancouver and the Cascadia Innovation Corridor;
 - Long term goal could be to establish a centre of excellence via UFV at Abbotsford International Airport.
- Reverse logistics and Smart Mobility solutions could be paired with new development of residential and industrial areas. Because of the limited supply of land, it will be important to redevelop existing land to meet future needs, rather than just build out (e.g. transit-oriented residential development, and clusters of industrial users with smaller footprints).

Renewable Power Supply

- The grid is not currently equipped to handle the anticipated growth in electric vehicle charging infrastructure. This could be a driver for more small-scale RE-generation and storage solutions.

Knowledge and Innovation

- There is an opportunity to build vertically instead of horizontally via technology / the knowledge-based economy and fill the gap in the region's skilled technical workforce;
- It will be important to leverage and attract local expertise to educate and implement new technologies, policies, and projects (e.g. home energy assessments). The government could be more active in linking new policies and incentives to local experts and suppliers.
- There is a need to ensure that information provided to local governments and business around clean economy development is accessible in laymen's terms to ensure the opportunities and resources resonate with key stakeholders.
- UFV is better able to respond to demand for certain skillsets (i.e. data scientists) by receiving explicit demand from the region to UFV, which will help mobilize funds and develop programs i.e. School of Engineering.
- Create a forum with UFV, XLRator and municipalities to strategize around high-tech skilled workers and which skills need targeted training/development.

Breakout Tables

Table 1 Notes

Session 1: Clean Economy in the Fraser Valley – Strengths and Weaknesses

Initial Reactions

Sustainable Resource Management

- Fraser Valley Biogas creating RNG from 20+ farms. The number of farming operations in close proximity is both a current strength and opportunity for further collaboration.
- It is valuable to have a diversity of different energy projects in the portfolio. Most technology can be scaled up as necessary.

Green Buildings

- Relatively affordable housing compared to MV.
- BC Energy Step Code direction from City of Abbotsford.
- Metric Modular building company in Agassiz.
- Population growth/shift from Metro Vancouver as a way to increase knowledge economy and workforce capacity.

Green Transportation

- The process for acquiring grant funding for, and implementation of EV charging infrastructure by municipalities, Stratas, etc.

Renewable Energy

- Some current difficulties with the privately-managed geothermal utility. The residents hooked up to the system are not necessarily supportive because they do not experience the benefits.

Knowledge and Innovation

- There is importance in having local expertise available to educate the implementation of new technologies, policies, and projects (e.g. home energy assessments). The government could do a better job linking new policies and incentives to local experts and suppliers. Alberta government was pointed to as an example of this.
- The table highlighted a gap that exists for a hub of CleanBC-related information for grants, regulations, GHG calculators, and translating it into lay terms.
- Success of knowledge sharing, and quick transition related to asbestos regulation amendments, could serve as a model for future knowledge sharing.

Session 2: Seizing the Clean Economy Opportunities for Fraser Valley

Opportunities by Sector

Sustainable Resource Management

- Five-step-plan for a Fraser Valley Organics Conversion Initiative, including a certified benefits corporation, community-scale digesters.
- Re: cross-border waste and wastewater pollution threats - there is an opportunity to be proactive in finding alternatives to prevent future liability related to air, land, and water pollution crossing the U.S. border.
- New recycling bylaw and feasibility study for a material separation facility. This could result in more circular economy and renewable energy opportunities.
- There is an opportunity from nearby jurisdictions having soil deficiencies that complement the nutrient abundances in the FV (e.g. low phosphorus soils in Cowichan Valley).
- Increased knowledge, insight, and asset management benefits from new reporting requirements in the *Code of Practice for Agricultural Environmental Management*.¹

Green Buildings

- Opportunities for high performance building in new developments involving local suppliers of green building materials.
- More municipalities adopting the BC Energy Step Code could provide more region-wide green building industry growth.

Green Transportation

- Abbotsford International Airport (YXX) facilitates direct connections without having to transit through Metro Vancouver. This applies to both people and goods.
- Potential for hydrogen-based aviation research at YXX. Neighborhood-scale hydrogen could serve as both a source of electricity and a transportation fuel.
- Reverse logistics and Smart Mobility solutions could be paired with new development of residential and industrial areas. Because of the limited supply of land, it will be important to redevelop existing land to meet future needs, rather than just build out. (e.g. transit-oriented residential development, and clusters of industrial users with smaller footprints).

Renewable Energy

- The provincial target for RNG (10-15%) will be a driver of increased innovation and production. Current mix is 0.5%.
- The grid is not currently equipped to handle the anticipated growth in electric vehicle charging infrastructure. This could be a driver for more small-scale RE-generation and storage solutions.

Knowledge and Innovation

- Bringing together knowledge from Canada's new Superclusters - especially the MV Digital Supercluster and the Prairie Protein Supercluster. The EMILI project (Enterprise Machine Intelligence and Learning

¹ <https://www2.gov.bc.ca/gov/content/environment/waste-management/industrial-waste/agriculture>

Initiative) was highlighted: <http://emilicanada.com/vision/>,
<https://www.ic.gc.ca/eic/site/093.nsf/eng/00012.html>

- Advancing Cleantech past the initial R&D investment through to commercial viability. The table thought that Canada does a good job at funding initial R&D but needs to put more investment into commercialization of new technologies.
- Clusters of existing knowledge could be working together more to develop new value-added products for local and export markets.
- Importance of working with/marketing to nearby jurisdictions, especially the West Coast and Cascadia Innovation Corridor.
- Opportunity to re-invigorate under-utilized facilities at UFV and Agassiz. The table thought the current process and priority for research at these facilities was outdated and not enabling innovation.
- Many of the above opportunities could be leveraged by a comprehensive agriculture research and business incubator facility.

Table 2 Notes

Session 1: Clean Economy in the Fraser Valley – Strengths and Weaknesses

Initial Reactions

- Situational awareness is strong.
- Need to address more clearly what the problem is or what is the solution we are working towards?
 - There is an economic opportunity to serve the clean economy and this study/workshop is working to bring more clarity on what that opportunity looks like and which strengths should be focused on.
- Lack of jobs and workforce:
 - There aren't enough jobs to meet the influx of people/works to the Fraser Valley.
 - There is also a current lack of workforce to fill the jobs that do exist.
 - In creating more jobs, the desire is to create more jobs that are based in the clean economy subsectors. The question is which jobs will be needed in the future?
- Data gaps
 - Need more data/statistics to inform decisions and strategies (i.e. more data on who is travelling/commuting where and for which jobs)
- Land
 - Lack of industrial land is a well-known challenge that will demand more creative and strategic land use planning.
- Skilled Workforce
 - There is a gap in the skilled technical workforce that would be needed to develop the region's knowledge/tech economy.
 - Lack of communication between First Nation communities in the Fraser Valley and the municipalities is resulting in missed opportunities around the availability of land
 - There is approx. 3,000 hectares of land owned by First Nations communities that could be used to develop projects and partnerships.
 - There needs to be more collective planning between municipalities

- By striking a balance across being cooperative, collaborative, and competitive, municipalities raise the bar (i.e. attracting businesses like Molson Coors) which can drive or attract more business to relocate to the Fraser Valley.

Strengths

Sustainable Resource Management

- Agriculture is the backbone of the local economy and is the low hanging fruit.
 - It will grow, but it needs to be done sustainably, with as little environmental impact as possible, and the way to achieve this by applying clean tech.
- The region / municipalities need to leverage skills that exist in agriculture and at UFV
- Developing an agriculture data portal open to government, industry and universities can will be a key tool in making satellite and GIS data (among others) available to key stakeholders and inform their decision making (i.e. understand where the opportunities and pain points exist across agricultural land)
- There are valuable skills that exist and can be developed among First Nation communities and can also promote partnerships where First Nations communities can provide land and project partners can bring in training and skills development around new technologies or projects.
- Look to the higher value end o the supply chain and make the Fraser Valley a foodie hub.
 - Note: UFV is limited on what they can study/address food wise, i.e. not allowed to do dairy

Renewable Power Supply

- 20% of power in Canada is produced by First Nations across solar, hydro, geothermal; this means that there is a lot of capacity for production within local First Nation communities but there needs more communication and willingness to collaborate.

Session 2: Seizing the Clean Economy Opportunities for Fraser Valley

Gaps / Challenges / Risks (in line with policy and macro trends)

- Overarching challenge is that government moves slowly and cannot react as quickly as economy and technology does; however, they do have a regulatory responsibility that needs to be acknowledged (i.e. the buck stops with them)
- There is a lack of knowledge/education/literacy around clean economy in the region that needs to be addressed by government.

Innovation and Knowledge

- Lack of Wi-Fi coverage across the region, particularly rural areas and connectivity from the street to homes/businesses, also known as the last mile.
 - The gap around the last mile is rooted in high costs for companies to make the connection and the lack of skilled workforce to install the necessary infrastructure.
 - This is a large gap that will prevent the Fraser Valley, and specifically small businesses, from aligning with many of the key trends across each subsector.
- There is a lack of data scientists in the Fraser Valley (Canada wide as well)
- Risk: the demand for reliable electricity from the grid.
 - The Okanagan is looked to a prime location for data centres because there is a lot of land and a stable electrical grid that can meet the demand.

- In gathering and sharing data, there is a barrier in how much companies / organizations want to share and make open to industry, government, etc.
 - This will need to be addressed in developing tools such as agriculture data portal.

Green Transportation

- The airport has a huge need for tech
 - Bring a centre of excellence via UFV to the airport.
- There is a gap in EV infrastructure, particularly charging stations (both public and residential)
- The capacity to efficiently move goods and people is not there in the region

Opportunities by Sector

- CleanBC is a huge opportunity for business and community growth.

Innovation and Knowledge

- There is an opportunity to collect, organize, manage and analyze the data that is need around land, jobs, skills, etc.
 - This is an area for the region to develop skills and jobs focused in this area (i.e. data scientist)
 - UFV will respond to FVRD/municipalities asking for more data scientists
 - Explicit demand from the region to UFV Will help mobilize funds and develop programs i.e. School of Engineering to create a supply of data scientists and other skillsets that align with the collection, movement and analysis of data.
- In improving Wi-fi coverage, there is advantage that the region is a river region and therefore is flat which makes for better / easier coverage
- Long term opportunity or goal would be to create a partnership between Google, Telus and UFV to develop the infrastructure, skills development and worker supply create a tech hub in the Fraser Valley.
- Call to action: create a forum with UFV, XLRator and municipalities to strategize around high-tech skilled workers and which skills need targeted training/development.
- Developing these programs will require access to capital
 - This will demand creativity around new financing and investment structures to mobilize plans. This will be a key opportunity to develop in line with Clean BC.
- Key opportunity: FVRD as a tech hub based on its key location, quality of life, natural surroundings and affordability. It could be “Silicon Valley done right.” Use case studies such as Toronto and San Jose that have developed strong tech hubs and replicate what they did well and improve on what they didn’t do well.

Sustainable Resource Management

- The low hanging fruit is agriculture and manufacturing
 - The key will be to better understand what will attract talent, retain it and grow it.

Reference Guide

- City of Vancouver Green Economy Advantage report provides a good example for content
- Have a priority list of gaps and investment strategy
- List out conditions required to attract investment / capital / skills

- Look at Ministry of Finance white papers (Dominic Barton) as resources in developing reference guide²
- List out comparative advantages

Table 3 Notes

Session 1: Clean Economy in the Fraser Valley – Strengths and Weaknesses

Initial Reactions

- STEM not surprising, there are academic challenges surrounding this
- Chicken vs. eggs? Where to focus? i.e. coding vs engineering and innovation
- Stronger connection between post secondary and industry needs
 - There is a need for industry demand and co-op opportunities, or mentorship program or else brain drain becomes an issue

Sustainable Resource Management

- Agriculture's characterization needs more detail in the profiles – much more than just biogas
 - Labour and robotics – focus on higher productivity / acre
 - Mix of imported and local innovation taking place
 - Local adoption of innovation by agriculture sector is quite high.
 - Agriculture way ahead on tech over manufacturing
 - Some technology being controlled by mobile devices for example
 - Climate change adaption is at the forefront.
 - Water use efficiencies / infrastructure
 - Pressure on aquifers
 - Improving performance
 - Going vertical
 - Intensification focus
 - Increased productivity
 - Use of hydroponics and aeroponics
 - Greenhouse production
 - However, still need space / land for field crops
- Ag/Urban Interface
 - Close proximity has value/benefits e.g. greenhouses
 - Urban amenities (power, water, labour)
 - Diverse population is key
- Advanced manufacturing (less footprint)
 - Build higher
- How can government help?
 - Re-zonings
 - Encourage thinking outside the box
 - Need to be nimble

² See: <https://ppforum.ca/publications/inclusive-innovation-technology-urban-rural-divide/>

- *Hard when one doesn't own; based on supply, demand and business case.
- Not many brownfields – maybe Mission (formal industrial sites)
- Grid / distribution > resiliency
 - CleanBC new models
- UFV
 - Fuel processing > hydrogen
 - Carbon extraction to biofuels
- Micro reactors, solar PV (residential) and win

Transportation

- Regional connectivity within the region is growing
- 50-year planning (e.g., rail and alternatives)
- Passage movement to hubs; connectors off main roads
 - Ride share – rural component
 - “Last mile connections”
- Access to ports can be a challenge
 - Fraser River as a channel to move goods and people
 - Ferries vs. bridge
- Farmers – need to transport workers
 - Roads can be risky for farm equipment (traffic flow / management)

Infrastructure

- Lack of fibre in more rural communities
- Greyhound gap for shipping goods

Session 2: Seizing the Clean Economy Opportunities for Fraser Valley

Opportunities by Sector

Sustainable Resource Management

- Agriculture Innovation
- Adoption of robotics...factors include:
 - Cost
 - Awareness
 - Profitability to reinvest
 - Must consider long-term planning
 - 15 to 20-year capital re-investment/modernization
 - Dairy – supply management, robotics
 - Greenhouse – Dutch technology/design; structural tech; lighting; nutrients; water
 - Forage crops – more irrigation use; working with agronomists; opportunity to adopt precision agriculture to manage nutrients, water and pests
 - Berry crops – less sophistication
- Opportunity:
 - Food processing

- Precision agriculture: maintaining, innovating, software development, monitoring health and nutrients.
- Risks:
 - Rapid tech evolution
- Forestry Innovation - Wood Products
 - Denbow is doing wood waste recycling and biochar; doing their own R&D.
 - Structurecraft
- Waste Management
 - Collaboration is key for this sector
 - Handling of waste products
 - Contaminants
 - Nutrient separation
 - Water use innovation for industry (including agriculture e.g. berries and vegetables)

Clean Energy

- Solar PV (residential roof top) – particular interest with First Nations
- Wind (potential in the canyon?)
- Storage
- Efficiency upgrades across the system
 - Cooling
 - Shift to heat pumps
- Geothermal (e.g. Pacific Ag Research)
 - High costs associated with this technology
- First Nation leaders have capacity in construction and development of projects:
 - Are there any off grid communities in FVRD? BC Hydro will check but don't think so.

Green Buildings

- Opportunities in windows, materials, prefab
 - Westeck is a local window manufacturer that specializes in steel window production
- Manufacturing potential exists but land constraints for facilities and logistics / distribution
- Access to workforce and markets
- First Nation lands have opportunities as partners
- UFV to facilitate R&D and connections with industry
- Potential for data centres (land, power, fibre, etc.) – BC Hydro interested in this.

Policy Drivers

- Industrial zoning – needs to be flexible
 - Mixed use zoning
- Infill (urban areas) opportunities?

Reference Guide

- Data and profiles detailing existing capacities
- Case studies
- Policies / Drivers
- Trends

- The tech shift will be interesting to follow
- Growth Opportunities in the long term
- Skills / Training (potential here for a Phase 2 to do a deeper dive on the strategy)
 - Entrepreneurs
 - K-12
 - Post-secondary
 - Retraining

FRASER VALLEY REGIONAL DISTRICT
BOARD OF DIRECTORS MEETING
OPEN MEETING MINUTES

Wednesday, May 22, 2019
(Immediately following the FVRHD Board Meeting)
FVRD Boardroom, 45950 Cheam Avenue, Chilliwack, BC

Members Present: Director Jason Lum, City of Chilliwack, Chair
Director Patricia Ross, City of Abbotsford, Vice-Chair
Director Henry Braun, City of Abbotsford
Director Pam Alexis, District of Mission
Director Dennis Adamson, Electoral Area B
Director Wendy Bales, Electoral Area C
Director Kelly Chahal, City of Abbotsford
Director Hugh Davidson, Electoral Area F
Director Bill Dickey, Electoral Area D
Director Taryn Dixon, Electoral Area H
Director Orion Engar, Electoral Area E
Director Leo Facio, Village of Harrison Hot Springs
Director Brenda Falk, City of Abbotsford
Director Carol Hamilton, District of Mission
Director Chris Kloot, City of Chilliwack
Director Dave Loewen, City of Abbotsford
Director Bud Mercer, City of Chilliwack
Director Ken Popove, City of Chilliwack
Director Sylvia Pranger, District of Kent
Director Terry Raymond, Electoral Area A
Director Peter Robb, District of Hope
Director Ross Siemens, City of Abbotsford
Director Al Stobbart, Electoral Area G

Staff Present: Jennifer Kinneman, Acting Chief Administrative Officer
Mike Veenbaas, Director of Financial Services
Tareq Islam, Director of Engineering & Community Services
Margaret-Ann Thornton, Director of Planning & Development
Stacey Barker, Director of Regional Services
Milly Marshall, Director of EA Special Projects
Jaime Reilly, Manager of Corporate Administration
Christina Vugteveen, Manager of Parks Operations
Alison Stewart, Manager of Strategic Planning

Tyler Davis, Support Analyst
Chris Lee, Executive Assistant
Tina Mooney, Executive Assistant to CAO and Board (Recording Secretary)

Also Present: Alternate Director Scott Medlock, District of Hope
Matthew Boyd, Director, Corporate and Strategic Planning, BC Transit
4 Members of the Public

1. CALL TO ORDER

Chair Lum called the meeting to order at 7:17 pm

2. APPROVAL OF AGENDA, ADDENDA AND LATE ITEMS

Moved by MERCER
Seconded by POPOVE

THAT the Agenda, Addenda and Late Items for the Fraser Valley Regional District Board Open Meeting of May 22, 2019 be approved;

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

**CARRIED
All/Unweighted**

3. DELEGATIONS AND PRESENTATIONS

3.1 BC Transit Update and Service Expansion Planning 2020-21

Alison Stewart, Manager of Strategic Planning provided a presentation on *Transit Service Update and Expansion Planning 2020-2021*, highlighting the 2018 ridership for transit Routes 66 (Fraser Valley Express), Route 11 (Chilliwack-Agassiz-Harrison Hot Springs and Route 22 (Hope to Agassiz). She reported on the initiatives undertaken for these routes in 2018 and 2019 initiatives. She also highlighted on the proposed initiatives for 2020-2021, noting that the expansion as proposed by BC Transit may require additional subsidy from taxpayers.

Ms. Stewart concluded that the initiatives will be formalized in a Memorandum of Understanding between the FVRD and BC Transit to initiate the work and that the deadline for final commitment is June 28, 2019.

Discussion ensued around the breakdown of the ridership and there was general consensus for increased transit services. It was noted that it is difficult to request

increased transit services if member municipalities are not willing to financially support the increases.

Questions arose around amending the Establishment Bylaw and the cost and commitment implications for municipal participants.

Moved by ROSS
Seconded by FACIO

THAT the Fraser Valley Regional District Board confirm support in principle for the 2020/2021 expansion initiative to extend the Fraser Valley Express service to TransLink's Lougheed Sky Train station at an annual net cost of \$494,000 subject to further discussions with BC Transit and area service participants regarding timing, costing and service levels;

AND THAT BC Transit and the FVRD undertake more detailed costing analysis relating to the potential 2021-2022 service expansions to:

- North Fraser Valley: subject to public engagement and local government support, implement transit service on the north side of the Fraser River between the District of Kent and District of Mission.
- Agassiz-Harrison and Hope: subject to municipal approval, improve and expand regional services in the eastern Fraser Valley based on items identified in the Transit Future Action Plan.
- Cultus Lake: year-round service subject to local government support.

CARRIED
All/Unweighted

4. BOARD MINUTES & MATTERS ARISING

4.1 Board Meeting - April 25, 2019

Moved by ALEXIS
Seconded by KLOOT

THAT the Minutes of the Fraser Valley Regional District Board Open Meeting of April 25, 2019 be adopted.

CARRIED
All/Unweighted

5. COMMITTEE AND COMMISSION MINUTES FOR INFORMATION AND MATTERS ARISING

The following Commission minutes were provided for information.

- 5.1 **Draft Regional and Corporate Services Committee - May 8, 2019**
- 5.2 **Draft Electoral Area Services Committee - May 8, 2019**
- 5.3 **Internal Affairs Committee - April 24, 2019**
- 5.4 **Draft Internal Affairs Committee - May 2, 2019**
- 5.5 **Draft Recreation, Culture and Airpark Services Commission - April 16, 2019**

6. CORPORATE ADMINISTRATION

- 6.1 **Building Bylaw and BC Building Code Contraventions at 49200 Trans Canada Hwy, Electoral Area A, (PID: 003-318-273) and (PID: 003-318-206)**

Moved by RAYMOND
Seconded by ADAMSON

THAT the Fraser Valley Regional District Board direct staff to file a Notice in the Land Title Office in accordance with Section 57 of the *Community Charter* due to the contraventions of the *Fraser Valley Regional District Building Bylaw No. 1188, 2013* and the *BC Building Code*, at 49200 Trans Canada Hwy Electoral Area A, Fraser Valley Regional District, British Columbia (legally described as That Portion of Legal Subdivision 15 Section 2 Lying Easterly of the – Way of the Canadian Northern Pacific Railway; Township 11 Range 26 West of the 6th Meridian Yale Division Yale District Except Plan H670 (PID: 003-318-273) and Legal Subdivision 16 Section 2 Township 11 Range 26 West of the 6th Meridian Yale Division Yale District Except Plan G670 (PID: 003-318-206).

**CARRIED
All/Unweighted**

- 6.2 **Building Bylaw and BC Building Code Contraventions at 13085 Degraff Road, Electoral Area F, Legally Described as: Lot 14 Section 25 Township 18 East of the Coast Meridian New Westminster District Plan 2782 (PID: 010-712-453)**

Moved by DAVIDSON
Seconded by STOBART

THAT the Fraser Valley Regional District Board direct staff to file a Notice in the Land Title Office in accordance with Section 57 of the *Community Charter* due to the contraventions of the *Fraser Valley Regional District Building Bylaw No. 1188, 2013 and the BC Building Code*, at 13085 Degraff Road Electoral Area F, Fraser Valley Regional District, British Columbia (Legally described as: Lot 14 Section 25 Township 18 East of the Coast Meridian New Westminster District Plan 2782. (PID: 010-712-453).

CARRIED
All/Unweighted

7. FINANCE

7.1 Fraser Valley Regional Library Branch Improvements – Yale & Boston Bar

Moved by ADAMSON
Seconded by RAYMOND

THAT the Fraser Valley Regional District Board approve \$45,000 for FVRL Yale Branch and \$58,000 for FVRL Boston Bar Branch for additional improvements being requested at the Boston Bar Branch.

CARRIED
All/Weighted

8. BYLAWS

8.1 FVRD Cultus Lake Integrated Water Supply and Distribution System Service Area Amendment Bylaw No. 1523, 2019. Electoral Area "H"

Moved by DIXON
Seconded by ROBB

THAT the Fraser Valley Regional District Board adopt the bylaw cited as *Fraser Valley Regional District Cultus Lake Integrated Water Supply and Distribution System Service Area Amendment Bylaw No. 1523, 2019*.

CARRIED
All/Unweighted

8.2 FVRD Cultus Lake Integrated Water Supply and Distribution System Capital Construction Service Area Amendment Bylaw No. 1524, 2019

Moved by DIXON
Seconded by KLOOT

THAT the Fraser Valley Regional District Board adopt the bylaw cited as *Fraser Valley Regional District Cultus Lake Integrated Water Supply and Distribution System Capital Construction Service Area Amendment Bylaw No. 1524, 2019* be adopted

CARRIED
All/Unweighted

8.3 FVRD Emergency Program Regulations Establishment Bylaw No. 1526, 2019

This item was withdrawn.

8.4 FVRD Bylaw No. 1525, 2019 - to amend the Comprehensive Development 1 (CD-1) zone to permit the construction of Enclosed Decks in the Bridal Falls RV Resort located at 53480 Bridal Falls Road, Electoral Area "D".

Moved by DICKY
Seconded by ADAMSON

THAT the Fraser Valley Regional District Board give first reading to the bylaw cited as *Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1525, 2019* to permit the construction of Enclosed Decks in the Bridal Falls RV Resort;

THAT the *Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1525, 2019* be forwarded to Public Hearing;

THAT the Fraser Valley Regional District Board delegate the holding of the Public Hearing with respect to the proposed *Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1525, 2019* to Director Dickey or his alternate in his absence;

THAT Director Dickey or his alternate in his absence, preside over and Chair the Public Hearing with respect to proposed *Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1525, 2019*;

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 *Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1525, 2019* in accordance with the Local Government Act;

AND FURTHER THAT in the absence of Director Dickey, or his alternate in his absence at the time of the Public Hearing with respect to proposed *Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1525, 2019*, 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.

**CARRIED
EAs/Unweighted**

Moved by ENGAR
Seconded by RAYMOND

THAT the Fraser Valley Regional District Board authorize its signatories to execute all documents relating to *Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1525, 2019*

**CARRIED
All/Unweighted**

8.5 FVRD Bylaw No. 1518, 2019 - Rezoning amendment application for 10180 Royalwood Boulevard, Electoral Area "D" to facilitate an increase in lot coverage

Moved by DICKY
Seconded by DAVIDSON

THAT the Fraser Valley Regional District Board give second and third reading to the bylaw cited as *Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1518*.

**CARRIED
EAs/Unweighted**

9. PERMITS

9.1 Application for Development Variance Permit 2018-28 to reduce the rear setback to facilitate the construction of an accessory structure (shed) at #129-14500 Morris Valley Road, Electoral Area "C"

Chair Lum provided an opportunity for the public comments. No comments were offered

Moved by BALES
Seconded by DAVIDSON

THAT the Fraser Valley Regional District Board refuse Development Variance Permit 2018-28 for the property located at #129-14500 Morris Valley Road, Electoral Area C to reduce the rear lot line setback from 7.6 metres (24.9 feet) to 5.0 metres (16.4 feet), clear to sky to facilitate the construction of an accessory structure (shed);

AND THAT the Fraser Valley Regional District Board direct staff to consider zoning regulations related to accessory structures (sheds) in the Private Resort Development (PRD-1) zone at the time that staff are reviewing the consolidated zoning bylaw;

AND FURTHER THAT the Fraser Valley Regional District Board direct staff to take no further bylaw enforcement actions at #129-14500 Morris Valley Road with respect to the shed, provided that the accessory structure (shed) is moved to the proposed location in the application for Development Variance Permit 2018-28 and pending resolution of the PRD-1 accessory structure (shed) zoning regulations in the consolidated zoning bylaw.

**CARRIED
EAs/Unweighted**

9.2 Application for Development Variance Permit 2019-09 to reduce the front lot line setback to permit the re-construction of a residential porch at 35103 North Sward Road, Electoral Area "F"

Chair Lum provided an opportunity for the public comments. No comments were offered

Moved by DAVIDSON
Seconded by STOBART

THAT the Fraser Valley Regional District Board issue Development Variance Permit 2019-09 for 35103 North Sward Road, Electoral Area F, to reduce the front lot line setback from 6.0 metres (19.7 feet) to 2.1 metres (6.9 feet), to facilitate the re-construction of a residential porch, subject to the issuance of an Encroachment Permit from the BC Ministry of Transportation and Infrastructure, and subject to consideration of any comments or concerns raised by the public.

**CARRIED
EAs/Unweighted**

9.3 Application for Development Variance Permit 2019-10 to vary the maximum height and size requirements for an accessory building at 10395 Wildrose Road, Electoral Area "D"

Chair Lum provided an opportunity for the public comments. No comments were offered

Moved by DICKY
Seconded by RAYMOND

THAT the Fraser Valley Regional District issue Development Variance Permit 2019-10 to increase the maximum permitted area of an accessory building from 45 square metres to 58 square metres and to increase the maximum permitted height of an accessory building from 5.0 metres to 5.2 metres, subject to consideration of any comment or concerns raised by the public.

**CARRIED
EAs/Unweighted**

9.4 Application for Development Variance Permit 2019-12 to vary the maximum height and size requirements for an accessory building at 10163 Royalwood Blvd, Electoral Area "D"

Chair Lum provided an opportunity for the public comments. No comments were offered

Moved by DICKY
Seconded by ENGAR

THAT the Fraser Valley Regional District issue Development Variance Permit 2019-12 to increase the maximum permitted area of an accessory building from 45 square metres to 76 square metres and to increase the maximum permitted height of an accessory building from 5.0 metres to 5.3 metres, subject to consideration of any comment or concerns raised by the public.

**CARRIED
EAs/Unweighted**

9.5 Aquadel Crossing Ltd. applied to amend an existing Development Permit (relating to form and character) to permit fencing across common strata property at the development known as Aquadel Crossing, 1885 Columbia Valley Road, Electoral Area "H".

The Acting Chief Administrative Officer confirmed that the opportunity for public comments took place at a previous meeting.

Moved by DIXON
Seconded by DICKEY

THAT the Fraser Valley Regional District Board refuse Development Permit 2019-02.

CARRIED
EAs/Unweighted

10. CONTRACTS, COVENANTS AND OTHER AGREEMENTS

10.1 Animal Control Shelter Lease

Moved by POPOVE
Seconded by ENGAR

THAT the Fraser Valley Regional District Board authorize its signatories to enter into a lease agreement for the continued use of the City of Chilliwack's Animal Control Shelter located at 44860 Wolfe Road in Chilliwack, in the amount of \$40,000 annually for a term of 5 years.

CARRIED
ALL/Weighted

11. OTHER MATTERS

11.1 UBCM Resolution Re: Provincial Response to Homeless Camps on Crown Lands

Moved by ENGAR
Seconded by DIXON

THAT the Fraser Valley Regional District Board forward a resolution on the need for a provincial strategy to address rural homelessness and encampments on Crown land to the Union of BC Municipalities for consideration at its September 2019 convention.

CARRIED
ALL/Unweighted

2. CONSENT AGENDA

12.1 CONSENT AGENDA - FULL BOARD

Moved by PRANGER
Seconded by ALEXIS

THAT the following Consent Agenda items 12.1.1 to 12.1.4 be endorsed:

- 12.1.1 THAT** the Fraser Valley Regional District Board authorize a grant-in-aid in the amount of \$1,100 to the Chilliwack Vedder River Cleanup Society, funded from the 2019 Electoral Area “E” grant-in-aid budget to help offset the costs associated with hosting the Chilliwack Vedder River cleanups on April 13 and September 22 of 2019.
- 12.1.2 THAT** the Fraser Valley Regional District Board approve a grant-in-aid to the Deroche & District Community Association in the amount of \$5,000, to be funded from the 2019 Electoral Area “G” grant-in-aid budget to help offset the costs of building a community tennis court
- 12.1.3 THAT** the Fraser Valley Regional District Board authorize a grant-in-aid in the amount of \$2,500 to the Chilliwack Area Lions Clubs, funded from the Electoral Area “H” grant-in-aid budget, to help offset the costs of the Cultus Lake Pike Minnow Fishing Derby
- 12.1.4 THAT** the Fraser Valley Regional District Board authorize a grant-in-aid in the amount of \$3,500 to the Cultus Lake Community and Events Engagement Committee with the grant being funded from the Electoral Area “H” grant-in-aid budget to help offset the costs of the annual Cultus Lake Day event.

**CARRIED
ALL/Unweighted**

12.2 CONSENT AGENDA - ELECTORAL AREAS

Moved by STOBART
Seconded by DAVISON

THAT the following Consent Agenda item 12.2.1 be endorsed:

- 12.2.1 THAT** the application for a two (2) lot subdivision within the Agricultural Land Reserve for the property located at 1385 Frost Road, Electoral Area “H”, be forwarded to the Agricultural Land Commission for consideration with the following comments from the FVRD Board.

The subject property under the ownership of the applicant over the past few years has lost the appearance of a viable farming operation and the lands appear to be degraded. The property also no longer has farm status. If the Agricultural Land Commission is considering the approval of the two lot subdivision as proposed, the FVRD Board recommends that the ALC holds the property owner accountable to invest in the property to resume viable farming operations;

AND FURTHER THAT the Agricultural Land Commission consider the staff report dated May 8, 2019 under file number 3015-20 2019-05

**CARRIED
EAs/Unweighted**

13. ADDENDA ITEMS/LATE ITEMS

None.

14. REPORTS FROM COMMITTEE MEETINGS - FOR INFORMATION (14.1 and 14.2)

The following reports were provided for information only.

14.1 Report regarding 'Island 22 Regional Park - Bike Skills Park Upgrades' - May 2019 RACS

14.2 Bill 18 - 2018 Local Government Statutes Amendment Act, 2018 - Housing Needs Reports - May 2019 RACS

Discussions ensued about the benefits of collaborating with the FVRD, highlighting the importance of member municipalities and electoral areas working together to share data to complete their respective reports for their areas.

15. ITEMS FOR INFORMATION AND CORRESPONDENCE (15.1 and 15.2)

The following items were provided for information only:

15.1 Fraser Basin Council - Fraser Valley Update, May 2019

15.2 Squamish-Lillooet Regional District Update - April 2019

16. REPORTS BY STAFF

None.

17. REPORTS BY BOARD DIRECTORS

Director Robb introduced the District of Hope's Alternate Director Scott Medlock.

Director Facio thanked those that participated in the successful Lower Mainland Local Government Association (LMLGA) Conference that was recently held in Harrison Hot Springs and thanked the committee for all their hard work.

Director Raymond thanked the FVRD Board Members that presented at LMLGA.

18. PUBLIC QUESTION PERIOD FOR ITEMS RELEVANT TO AGENDA

None.

19. RESOLUTION TO CLOSE MEETING

Moved by FACIO
Seconded by KLOOT

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 to Section 90 of the *Community Charter* and to consider matters pursuant to:

- Section 90(1)(a) of the *Community Charter* - personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the regional district or another position appointed by the regional district;
- Section 90(1)(c) of the *Community Charter* - labour relations or other employee relations;
- Section 90(1)(e) of the *Community Charter* - the acquisition, disposition or expropriation of land or improvements, if the Board considers that disclosure could reasonably be expected to harm the interests of the regional district;
- Section 90(1)(g) of the *Community Charter* - litigation or potential litigation affecting the regional district;
- Section 90(1)(i) of the *Community Charter* – the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose; and
- Section 90(2)(b) of the *Community Charter* - the consideration of information received and held in confidence relating to negotiations between the regional district and a provincial government or the federal government or both, or between the provincial government or the federal government or both and a third party.

The Open Meeting recessed at 8:15 p.m.

**CARRIED
ALL/Unweighted**

20. RECONVENE OPEN MEETING

The Open Meeting reconvened at 10:01 p.m.

21. RISE AND REPORT OUT OF CLOSED MEETING

None.

22. ADJOURNMENT

Moved by ALEXIS
Seconded by KLOOT

THAT the Fraser Valley Regional District Board Open Meeting of May 22, 2019 be adjourned at 10:01 p.m.

**CARRIED
ALL/Unweighted**

MINUTES CERTIFIED CORRECT:

.....
Chair Jason Lum

.....
Corporate Officer / Deputy

FRASER VALLEY REGIONAL DISTRICT

REGIONAL AND CORPORATE SERVICES COMMITTEE

OPEN MEETING MINUTES

Tuesday, June 11, 2019

9:00 am

FVRD Boardroom, 45950 Cheam Avenue, Chilliwack, BC

Members Present: Director Jason Lum, City of Chilliwack, Chair
Director Pam Alexis, District of Mission
Director Bill Dickey, Electoral Area D
Director Orion Engar, Electoral Area E
Director Leo Facio, Village of Harrison Hot Springs
Director Ken Popove, City of Chilliwack
Director Sylvia Pranger, District of Kent
Director Terry Raymond, Electoral Area A
Director Peter Robb, District of Hope
Director Al Stobbart, Electoral Area G

Regrets: Director Henry Braun, City of Abbotsford
Director Patricia Ross, City of Abbotsford

Staff Present: Jennifer Kinneman, Acting Chief Administrative Officer
Mike Veenbaas, Director of Financial Services/Chief Financial Officer
Jaime Reilly, Manager of Corporate Administration/Corporate Officer
Suzanne Gresham, Director of Corporate Initiatives
Stacey Barker, Director of Regional Services
Alison Stewart, Manager of Strategic Planning
Christina Vugteveen, Manager of Parks
Janice Mikuska, Manager of Human Resources
David Urban, Manager of Outdoor Recreation Planning
Kristy Hodson, Manager of Financial Operations
Micha Gutmanis, Environmental Services Coordinator
Melissa Geddert, Planning Technician (Strategic Planning)
Matthew Fang, Network Analyst I
Deanne Bozek, Departmental Secretary, Regional Services
Chris Lee, Executive Assistant (Recording Secretary)

Also Present: Rick Green, South Fraser Community Rail (*as per item 3.1*)
Britt Gardner (*as per item 3.1*)
Lee Lockwood (*as per item 3.1*)
Roy Mufford (*as per item 3.1*)
John Vissers (*as per item 3.1*)

1. CALL TO ORDER

Chair Lum called the meeting to order at 9:00 a.m.

2. APPROVAL OF AGENDA, ADDENDA AND LATE ITEMS

Moved By FACIO

Seconded By ALEXIS

THAT the Agenda, Addenda and Late Items for the Regional and Corporate Services Committee Open Meeting of June 11, 2019 be approved;

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

CARRIED

3. DELEGATIONS AND PRESENTATIONS

3.1 Rick Green, South Fraser Community Rail

Rick Green of South Fraser Community Rail gave a comprehensive PowerPoint presentation relating to *Community Rail South of the Fraser on the InterUrban Corridor*, highlighting the worsening traffic congestion on Highway #1 and the costs and environmental impact resulting from this 'bottleneck'. He outlined the proposal for a hydrogen-powered light rail from Surrey to Chilliwack and highlighted on the benefits of this proposition, emphasizing that the population is growing exponentially in the Fraser Valley and we need transportation to support this growth.

Mr. Green requested the Committee's support to approach BC Transit Board to obtain their support on this initiative and to request them to hold public engagement meetings between Surrey and Chilliwack to gauge the support of the public. He added that ideally it would be beneficial also to get TransLink on board on this initiative.

DICKEY/ROBB

THAT the proposal provided by South Fraser Community Rail with respect to *Community Rail South of the Fraser on the InterUrban Corridor* be referred to staff to report back for further discussion at an upcoming Board meeting.

CARRIED

4. MINUTES/MATTERS ARISING

4.1 Minutes of the Regional and Corporate Services Committee Open Meeting - May 8, 2019

Moved By FACIO

Seconded By STOBART

THAT the Minutes of the Regional and Corporate Services Committee Open Meeting of May 8, 2019 be adopted.

CARRIED

5. CORPORATE ADMINISTRATION

No Items.

6. FINANCE

No Items.

7. REGIONAL PROGRAMS AND SERVICES

7.1 ENVIRONMENTAL SERVICES

No Items.

7.2 REGIONAL PARKS

7.2.1 Updated FVRD Parks Closure Policy

Moved By RAYMOND
Seconded By ALEXIS

THAT the Fraser Valley Regional District Board adopt the updated *Parks Closure Policy*.

CARRIED

7.3 STRATEGIC PLANNING AND INITIATIVES

7.3.1 Fraser Valley Regional District Clean Economy Study

It was reported that staff will provide a presentation on the *Fraser Valley Regional District Clean Economy Study* at the upcoming June Board meeting.

Moved By ROBB
Seconded By PRANGER

THAT the Fraser Valley Regional District Board receive the *Fraser Valley Regional District Clean Economy Study*;

AND THAT staff be directed to create a companion resource guide for local governments, First Nations and stakeholders to serve as a tool to support clean economy opportunities.

CARRIED

7.3.2 Proposed UBCM Resolution - Provincial Response to Homeless Camps on Crown Lands

It was noted that the handling of addictions when dealing with the homelessness issue is critical and this should be emphasized to the Province.

Moved By FACIO
Seconded By ENGAR

THAT the Fraser Valley Regional District Board forward a resolution on the need for a provincial strategy to address rural homelessness and encampments on Crown land to the Union of BC Municipalities for consideration at its September 2019 convention;

AND THAT the resolution shall be as follows:

RURAL HOMELESSNESS: CROWN LAND ENCAMPMENTS

WHEREAS Homelessness is a challenge facing both urban and rural communities;

AND WHEREAS electoral areas have the least ability to address homelessness, in that they are by their very nature remote from health, social, police and other services and the minimal tax bases cannot support the hard and soft infrastructure required to address homelessness;

AND WHEREAS the province's response to homeless encampments on Crown land has been inconsistent or ad-hoc in nature, sometimes relocating encampments without taking into account impacts on rural communities and regional district resources;

THEREFORE IT BE RESOLVED that the province of British Columbia through its newly established Office of Homelessness Coordination within the Ministry of Poverty Reduction and Social Development develop a rural homelessness strategy to address what is clearly a gap in the province's response to homelessness.

CARRIED

7.4 OUTDOOR RECREATION AND PLANNING

No Items.

8. ADDENDA ITEMS/LATE ITEMS

No items.

9. REPORTS BY STAFF

None

10. REPORTS BY DIRECTORS

Director Facio reported that Sasquatch Days will be taking place at the Harrison Hot Springs this coming weekend and extended invitation to all to attend.

11. PUBLIC QUESTION PERIOD FOR ITEMS RELEVANT TO AGENDA

None

12. RESOLUTION TO CLOSE MEETING

Moved By PRANGER

Seconded By ALEXIS

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 Open Meeting recessed at 9:46 a.m.

13. RECONVENE OPEN MEETING

The Open Meeting reconvened at 10:01 a.m.

14. RISE AND REPORT OUT OF CLOSED MEETING

None

15. ADJOURNMENT

Moved By ALEXIS

Seconded By FACIO

THAT the Regional and Corporate Services Committee Open Meeting of June 11, 2019 be adjourned.

CARRIED

The Regional and Corporate Services Committee Open Meeting adjourned at 10:02 a.m.

MINUTES CERTIFIED CORRECT:

.....
Director Jason Lum, Chair

DRAFT

FRASER VALLEY REGIONAL DISTRICT

ELECTORAL AREA SERVICES COMMITTEE

OPEN MEETING MINUTES

Tuesday, June 11, 2019

1:30 pm

FVRD Boardroom, 45950 Cheam Avenue, Chilliwack, BC

Members Present: Director Bill Dickey, Electoral Area D, Chair
Director Terry Raymond, Electoral Area A
Director Dennis Adamson, Electoral Area B
Director Wendy Bales, Electoral Area C
Director Orion Engar, Electoral Area E
Director Hugh Davidson, Electoral Area F
Director Al Stobbart, Electoral Area G
Director Taryn Dixon, Electoral Area H

Staff Present: Jennifer Kinneman, Acting Chief Administrative Officer
Mike Veenbaas, Director of Financial Services/Chief Financial Officer
Jaime Reilly, Manager of Corporate Administration/Corporate Officer
Suzanne Gresham, Director of Corporate Initiatives
Tareq Islam, Director of Engineering & Community Services
Margaret-Ann Thornton, Director of Planning & Development
Milly Marshall, Director of EA Special Projects
Graham Daneluz, Deputy Director of Planning & Development
Reg Dyck, Manager of EA Emergency Services
Janice Mikuska, Manager of Human Resources
Kristy Hodson, Manager of Financial Operations
Trina Douglas, Manager, Contracted Services
Katelyn Hipwell, Planner I
Andrea Antifaef, Planner I
Julie Mundy, Planning Technician
Gavin Luymes, Student (EA Planning)
Matthew Fang, Network Analyst I
Deanne Bozek, Departmental Secretary, Regional Services
Chris Lee, Executive Assistant (Recording Secretary)

Also Present: Kevin Sass (*as per item 3.1*)
Andy Ibditzon (*as per item 3.1*)
Ken Howsan (*as per item 3.1*)

1. CALL TO ORDER

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

2. APPROVAL OF AGENDA, ADDENDA AND LATE ITEMS

Moved By ADAMSON

Seconded By ENGAR

THAT the Agenda for the Electoral Area Services Committee Open Meeting of June 11, 2019 be amended with the addition of the following:

- Item 11.1 EASC Strategic Priorities Session
- Item 11.2 EASC Meeting

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

AND THAT the Agenda, Addenda and Late Items, as amended, be approved.

CARRIED

3. DELEGATIONS AND PRESENTATIONS

3.1 Hemlock Valley Home Owners

Kevin Sass, Andy Ibditzon and Ken Howsan of Hemlock Valley spoke to concerns with emergency response for medical care in Hemlock Valley, emphasizing the importance of initiating emergency procedures right away for medical issues. The delegation noted that it was critical to engage fire services and requested the Committee's support to implement the first responder model for Hemlock Valley.

Staff reported that the best direction would be to adopt the first responder model and that they have been in contact with the Hemlock Valley Fire Department and BCEHS to advocate to have this model put in place.

Chair Dickey thanked the delegation for their presentation.

4. MINUTES/MATTERS ARISING

4.1 Minutes of the Electoral Area Services Committee Meeting - May 8, 2019

Moved By ADAMSON

Seconded By RAYMOND

THAT the Minutes of the Electoral Area Services Committee Open Meeting of May 8, 2019 be adopted.

CARRIED

4.2 Draft Cultus Lake Advisory Planning Commission - May 15, 2019

The draft Cultus Lake Advisory Planning Commission minutes of May 15, 2019 was provided for information.

5. CORPORATE ADMINISTRATION

No Items.

6. FINANCE

6.1 2018 Electoral Area Annual Development Cost Charge Report

The *2018 Electoral Area Annual Development Cost Charge Report* was provided for information.

6.2 Grant-In-Aid Request – Spuzzum First Nation, Electoral Area “B”

Moved By ADAMSON

Seconded By ENGAR

THAT the Fraser Valley Regional District Board authorize a grant-in-aid in the amount of \$1,500 to Spuzzum First Nation, funded from the 2019 Electoral Area “B” grant-in-aid budget, to help fund the outfitting of their Elders shelter with benches and tables to help bring the community together.

CARRIED

6.3 Grant-In-Aid Request – Sunshine Valley Ratepayers Association, Electoral Area “B”

Discussion ensued regarding funding of administrative costs, as well as the Electoral Area Grant in Aid policy and procedure.

Moved By ADAMSON

Seconded By STOBART

THAT the Fraser Valley Regional District Board authorize a grant-in-aid in the amount of \$11,200 to the Sunshine Valley Ratepayers Association, funded from the 2019 Electoral Area “B” grant-in-aid budget, to help offset the costs of equipment rental for river cleanup, community garden beds, a community composter, hosting a Canada Day celebration, website migration, and hosting Heritage Day.

CARRIED

7. ENGINEERING & UTILITIES

7.1 FVRD Hatzic Prairie Water Supply and Distribution System Service Area Amendment Bylaw No. 1519, 2019, Electoral Area “F”

Moved By DAVIDSON

Seconded By ADAMSON

THAT the Fraser Valley Regional District Board consider giving first, second and third readings to the bylaw cited as *Fraser Valley Regional District Hatzic Prairie Water Supply and Distribution System Service Area Amendment Bylaw No. 1519, 2019*.

CARRIED

8. PLANNING, BUILDING INSPECTION AND BYLAW ENFORCEMENT

8.1 Application for Development Variance Permit 2019-07 to vary the size of an accessory building for a detached garage at 10180 Royalwood Boulevard, Electoral Area “D”

Moved By STOBART

Seconded By RAYMOND

THAT the Fraser Valley Regional District Board issue Development Variance Permit 2019-07 to increase the size of an accessory building from the maximum permitted area of 45 square metres to 64 square metres, to facilitate the

construction of a detached garage at 10180 Royalwood Boulevard, Area "D", subject to the consideration of any comments or concerns raised by the public.

CARRIED

8.2 Application for Development Variance Permit 2019-13 to reduce the setback from a well for an aquaculture building at 12443 Stave Lake Road, Electoral Area "F"

Moved By DAVIDSON

Seconded By ADAMSON

THAT the Fraser Valley Regional District issue Development Variance Permit 2019-13 to vary the minimum setback requirement of aquaculture structures to existing wells at 12443 Stave Lake Road from 30.0m metres to 0.0 metres subject to consideration of any comments or concerns raised by the public.

AND THAT the Fraser Valley Regional District Board authorize its signatories to execute all legal instruments associated with this application, including a Section 219 restrictive covenant advising future property owners that the agricultural and domestic water supply intake is within 30.0 metres of aquaculture structures and that the management of the water supply must be consistent with the Standard Operating Procedure prepared by the applicant as well as with the recommendations of the Hydrogeological Report, and to include regular tests of the water to provide warning of possible contamination.

CARRIED

8.3 Application for Development Variance Permit 2019-14 to vary the maximum height and size requirements for an accessory building at 10394 Parkwood Drive, Electoral Area "D"

Moved By STOBART

Seconded By ENGAR

THAT the Fraser Valley Regional District Board issue Development Variance Permit 2019-14 to increase the maximum permitted area of an accessory building from 45 square metres to 107 square metres and to increase the maximum permitted height of an accessory building from 5.0 metres to 7.5 metres, subject to consideration of any comments or concerns raised by the public.

CARRIED

8.4 Application for Development Variance Permit 2019-15 to reduce the front lot line setback at 58161 Fancher Road, Electoral Area "B"

Moved By ADAMSON

Seconded By ENGAR

THAT the Fraser Valley Regional District Board issue Development Variance Permit 2019-15 for 58161 Fancher Road, Electoral Area B to reduce the front lot line setback from 25 feet (7.6 metres) to 10 feet (3.05 metres), clear to sky, to facilitate the construction of a residence and a residential accessory building, subject to consideration of any comments or concerns raised by the public.

CARRIED

8.5 Application for Development Variance Permit 2019-16 to reduce the interior side lot line setback for the construction of a wheelchair ramp at #78-14550 Morris Valley Road, Electoral Area "C" (River Reach Estates)

Moved By BALES

Seconded By DAVIDSON

THAT the Fraser Valley Regional District Board issue Development Variance Permit 2019-16 to reduce the setback from the interior side lot line from 2.1 metres to 1.0 metres, clear to sky to facilitate the construction of a wheelchair ramp at #78-14550 Morris Valley Road, Area "C", subject to the consideration of any comments or concerns raised by the public.

CARRIED

8.6 Policy - Secondary Dwellings in the Electoral Areas

Katelyn Hipwell, Planner I provided a presentation with respect to the *Policy for Secondary Dwellings in the Electoral Areas*, outlining the project timeline, context, framework and purpose of the *Policy*. She reported that the *Policy* considered the process of implementation, levels of service requirements, form and design requirements and other considerations. It was noted that the *Policy* will assist the Board in pursuing bylaw amendments and evaluating applications to allow for Secondary Dwellings.

Committee members raised questions regarding the opportunity and qualifications for short-term rentals and secondary dwellings. It was noted for smaller parcels there were servicing limitations and the capacity of community sewer and water systems have to be taken into consideration.

Moved By BALES
Seconded By RAYMOND

THAT the Fraser Valley Regional District Board adopt the policy titled *Secondary Dwellings in the Electoral Areas*.

CARRIED

9. ELECTORAL AREA EMERGENCY SERVICES

No Items.

10. OTHER MATTERS

10.1 Electoral Areas Animal Control Regulation Amendment Bylaw No. 1531, 2019

Moved By DIXON
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 Electoral Areas Dangerous and Aggressive Dog Regulation Amendment Bylaw No. 1531, 2019*.

CARRIED

10.2 Proposed UBCM Resolution - Provincial Response to Homeless Camps on Crown lands

Moved By ENGAR
Seconded By RAYMOND

THAT the Fraser Valley Regional District Board forward a resolution on the need for a provincial strategy to address rural homelessness and encampments on Crown land to the Union of BC Municipalities for consideration at its September 2019 convention;

AND THAT the resolution shall be as follows:

RURAL HOMELESSNESS: CROWN LAND ENCAMPMENTS

WHEREAS Homelessness is a challenge facing both urban and rural communities;

AND WHEREAS electoral areas have the least ability to address homelessness, in that they are by their very nature remote from health, social, police and other

services and the minimal tax bases cannot support the hard and soft infrastructure required to address homelessness;

AND WHEREAS the province's response to homeless encampments on Crown land has been inconsistent or ad-hoc in nature, sometimes relocating encampments without taking into account impacts on rural communities and regional district resources;

THEREFORE IT BE RESOLVED that the province of British Columbia through its newly established Office of Homelessness Coordination within the Ministry of Poverty Reduction and Social Development develop a rural homelessness strategy to address what is clearly a gap in the province's response to homelessness.

CARRIED

11. ADDENDA ITEMS/LATE ITEMS

11.1 Electoral Area Services Committee Strategic Priorities Session

It was proposed that an Electoral Area Services Committee Strategic Priorities Session be scheduled in July 2019 to discuss and prioritize the work plan for Electoral Areas.

11.2 Electoral Area Services Committee Special Meeting

It was proposed that an Electoral Area Services Committee Special Meeting be scheduled prior to the June 25, 2019 Board meeting.

12. REPORTS BY STAFF

None

13. REPORTS BY ELECTORAL AREA DIRECTORS

Director Engar reported on the Residents Association meeting and the marathon scheduled for August 17 in the Chilliwack River Valley.

Director Dixon reported on the OCP meeting, an aggressive dog issue, the Pikeminnow Derby, Cultus Lake Day and Cultus Lake markets, Canada Day celebrations, Soap Box Derby and on the Emergency Planning Session that took place on May 24.

Director Adamson reported on the Yale Strawberry Social, the RiverMonsters swim meet last weekend and on the Tashme Museum gaining a lot of visits from schools.

Director Stobbart reported on the Deroche Farmers Market, update on the meeting hall building and the Deroche tennis course.

Director Raymond reported on an evacuation plan for Area A and Canada Day celebrations.

Director Davidson reported on an upcoming meeting with Community Living BC, the Mission Folk Music Festival and his attendance at the FCM conference.

Director Bales reported on her attendance at the *'Resilient Waters: Managing Floods for All'* seminar and her attendance at the FCM conference.

Director Dickey reported that staff did a great job on the OCP review.

14. PUBLIC QUESTION PERIOD FOR ITEMS RELEVANT TO AGENDA

None

15. ADJOURNMENT

Moved By RAYMOND

Seconded By ADAMSON

THAT the Electoral Area Services Committee Open Meeting of June 11, 2019 be adjourned.

CARRIED

The Electoral Area Services Committee Open Meeting adjourned at 2:38 p.m.

MINUTES CERTIFIED CORRECT:

.....
Director Bill Dickey, Chair

**FRASER VALLEY REGIONAL DISTRICT
BOARD OF VARIANCE
OPEN MEETING MINUTES**

Friday, May 24, 2019
1:00 pm
FVRD Boardroom, 45950 Cheam Avenue, Chilliwack, BC

Present: Bronwyn Punch, Chair
Philip Craven, Vice Chair
John De Jong, Board Member

Staff Present: Graham Daneluz, Deputy Director of Planning and Development
Jaime Reilly, Secretary to the Board of Variance
Andrea Antifaeff, Planner I
Chris Lee, Executive Assistant (Recording Secretary)

Also Present: Dave Leask, Applicant
Marge Glasson, Vice President, Sun-Dorn Holdings Ltd.

1. CALL TO ORDER

Chair Punch called the meeting to order at 1:05 p.m.

2. APPROVAL OF AGENDA, ADDENDA AND LATE ITEMS

Moved By DE JONG
Seconded By CRAVEN

THAT the Agenda, Addenda and Late Items for the Board of Variance Hearing of May 24, 2019 be approved;

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

CARRIED

3. COMMENTS BY SECRETARY TO BOARD OF VARIANCE AND STAFF

Ms. Reilly, Secretary to the Board of Variance stated that the Hearing is with respect to an application brought forward pursuant to Sections 540 and 531 of the *Local Government Act* requesting the Board to permit a structural alteration or addition to a non-conforming structure (addition of roof over deck on an existing home) for the property located at #37-9053 Shook Road, Electoral Area "G".

Andrea Antifaeff, Planner I provided an overview of the application by way of a PowerPoint Presentation. The following points were highlighted in the presentation:

- Registered property owner is Sun-Dorn Holdings Ltd. and the applicant is Dave Leask;
- The application is for construction of a roof over an existing deck at the rear of the property located at #37-9053 Shook Road;
- The applicant has provided the following reasons for hardship:
 - To be able to use the deck year round (area is too hot in summer and too wet in the off season);
 - To provide a place for children to play outside;
 - To provide a covered area large enough for family dinners and birthdays;
 - To protect the deck from rot and algae; and
 - For safety reasons to prevent people from slipping on a wet deck.
- Development of the site is consistent with residential use and meets zoning bylaw siting regulations;
- Footprint is not increasing as deck already exists;
- All neighbours within a 30 metre radius of the property have been notified;
- Intent of the bylaw is that non-conforming uses will cease at the end of the natural life cycle of a single family dwelling.

4. DELIBERATION BY BOARD OF VARIANCE - #37-9053 Shook Road, Electoral Area "G"

In response to questions raised, the applicant confirmed that the property is his primary residence and that an engineered deck is envisaged. Members of the Board of Variance deliberated on the hardships raised by the applicant and concluded that the lack of a covered deck to the property would cause undue hardship to the applicant and his family due to limited seasonal use and safety reasons.

5. PUBLIC QUESTION PERIOD FOR ITEMS RELEVANT TO THE AGENDA

None

6. DECISION OF BOARD OF VARIANCE

The Board of Variance was in agreement that the applicant would experience hardship without the proposed addition of a covered deck to his dwelling and spoke in favour of the Board of Variance application, resulting in the following motion:

DE JONG/CRAVEN

THAT the Board of Variance grant approval under Section 540(c) of the *Local Government Act* for an exemption from Section 531(1) of the *Local Government Act* to permit a structural alteration to an existing legally non-conforming single family dwelling

to accommodate the addition of a roof over the existing deck to the property located at #37-9053 Shook Road, Electoral Area G.

CARRIED

7. ADJOURNMENT

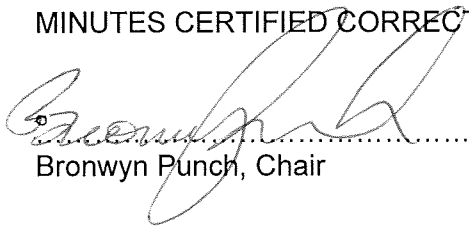
Moved By CRAVEN
Seconded By DE JONG

THAT the Board of Variance Hearing of May 24, 2019 be adjourned.

CARRIED

The Board of Variance Hearing adjourned at 1:20 p.m.

MINUTES CERTIFIED CORRECT:



.....
Bronwyn Punch, Chair

**FRASER VALLEY REGIONAL DISTRICT
INTERNAL AFFAIRS COMMITTEE
OPEN MEETING MINUTES**

Wednesday, May 22, 2019
5:00 pm
Kingston Meeting Room
4th Floor, FVRD, 45950 Cheam Avenue, Chilliwack, BC

Members Present: Director Jason Lum, City of Chilliwack
Director Kelly Chahal, City of Abbotsford
Director Bill Dickey, Electoral Area D
Director Bud Mercer, City of Chilliwack

Staff Present: Jennifer Kinneman, Acting Chief Administrative Officer
Jaime Reilly, Manager of Corporate Administration/Corporate Officer

1. CALL TO ORDER

The meeting was called to order at 5:19pm

2. APPROVAL OF AGENDA, ADDENDA AND LATE ITEMS

Moved by DICKY
Seconded by CHAHAL

THAT the Agenda, Addenda and Late Items for the Internal Affairs Committee Open Meeting of May 22, 2019 be approved;

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

CARRIED

3. APPROVAL OF MINUTES /MATTERS ARISING

3.1 Open Internal Affairs Committee Meeting Minutes - May 2, 2019

Moved by DICKY
Seconded by CHAHAL

THAT the Minutes of the Internal Affairs Committee Open Meeting of May 2, 2019 be adopted.

CARRIED

4. RESOLUTION TO CLOSE MEETING

Moved by CHAHAL

Seconded by DICKEY

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 to Section 90 of the *Community Charter* and to consider matters pursuant to:

- Section 90(1)(a) of the *Community Charter* - personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the Regional district or another position appointed by the Regional District;
- Section 90(1)(c) of the *Community Charter* - labour relations or other employee relations;
- Section 90(1)(g) of the *Community Charter* - litigation or potential litigation affecting the Regional District; and
- Section 90(1)(i) the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose.

CARRIED

The open meeting was recessed at 5:21pm

The open meeting was reconvened at 6:38pm

5. RISE AND REPORT

None.

6. ADJOURNMENT

Moved by DICKY
Seconded by CHAHAL

THAT the Internal Affairs Committee Open Meeting of May 22, 2019 be adjourned.

CARRIED

The open meeting was adjourned at 6:38pm.

MINUTES CERTIFIED CORRECT:

.....
Director Bud Mercer, Chair

CULTUS LAKE ADVISORY PLANNING COMMISSION OPEN MEETING MINUTES

Wednesday, May 15, 2019
12:00 pm
Meeting Room 224, 2nd Floor, FVRD
45950 Cheam Avenue, Chilliwack, BC

Members Present:

Darcy Bauer, Chair
Larry Payeur
Joe Lamb
Taryn Dixon, Director, Electoral Area H
David Renwick (*arrived at 12:04pm*)

Regrets:

Casey Smit

Staff Present:

Graham Daneluz, Deputy Director of Planning and Development
Jaime Reilly, Manager of Corporate Administration
Kristin Webb, Planning Assistant
Tracey Heron, Planning Assistant

Also Present:

Bonny Bryant, Chief Administrative Officer, Cultus Lake Park Board
Kurt Houlden with respect to Item 6.3.
Four members of the public.

1. CALL TO ORDER by Staff

Ms. Reilly called the meeting to order at 12:02 p.m.

2. ELECTION OF CULTUS LAKE ADVISORY PLANNING COMMISSION CHAIR by Staff

Ms. Reilly called for nominations for the position of Advisory Planning Commission Chair.

Mr. Lamb nominated Mr. Bauer.

Mr. Bauer accepted the nomination.

Ms. Reilly called for nominations for the position of Advisory Planning Commission Chair a second and third time.

There being no further nominations, Ms. Reilly declared Mr. Bauer acclaimed as the APC Chair.

3. ELECTION OF CULTUS LAKE ADVISORY PLANNING COMMISSION VICE CHAIR by Staff

Ms. Reilly called for nominations for the position of Advisory Planning Commission Vice Chair.

Mr. Lamb nominated Mr. Payeur.

Mr. Payeur accepted the nomination.

Ms. Reilly called for nominations for the position of Advisory Planning Commission Vice Chair a second and third time.

There being no further nominations, Ms. Reilly declared Mr. Payeur acclaimed as the APC Vice Chair.

4. APPROVAL OF AGENDA, ADDENDA AND LATE ITEMS

Noted that the order of the Agenda would be varied so that Item 6.3 was discussed prior to 6.1 to accommodate Mr. Holden's schedule.

PAYEUR/LAMB

THAT the Agenda, Addenda and Late Items for the Cultus Lake Advisory Planning Commission Meeting of May 15, 2019 be approved;

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

Carried

5. MINUTES/MATTERS ARISING

5.1 Cultus Lake Advisory Planning Commission - September 19, 2018

PAYEUR/LAMB

THAT the Minutes of the Cultus Lake Advisory Planning Commission of September 19, 2018 be adopted.

Carried

6. NEW BUSINESS

Item 6.3 was heard at this time.

6.3 Update of Cultus Lake South Policies: Area E/H OCP

Director Dixon introduced Kurt Houlden, Principal at KDH Management Consultants, who is currently working on the Official Community Plan for Area "H."

Mr. Houlden then gave an update on the draft OCP, noting that the edits to the document were minor and included: the removal of multi-family dwellings from the South Cultus area and the desired re-designation of the commercial lot. It was noted that a community open house is scheduled for June 8, 2019, and that the projected completion date was estimated for the end of September 2019.

6.1 Residential Parking Policy

Discussion ensued surrounding the requirements for two parking spaces per lease lot. Concerns were raised around waterfront lots and lots which do not have access on both sides of the property.

It was noted that two upcoming development variance permit applications are recommended to proceed while issues around residential parking are addressed.

RENWICK/PAYEUR

THAT staff be requested to prepare a report outlining mapping of residential lots affected by the zoning bylaw requirements for two parking spaces per lease lot;

AND THAT the report outline options on how to best address the challenges with the residential parking spaces.

Carried

6.2 Issues Arising from Imperial to Metric Conversion

Discussion ensued regarding the rounding of decimals from three places to two and the impacts to square footage on small lots. Presentation by Mr. Daneluz compared the existing zoning bylaw with the new draft bylaw highlighting the differences in requirements for setbacks and height.

PAYEUR/RENWICK

THAT staff be requested to prepare a report outlining options on how to best address rounding issues arising from imperial to metric conversion issues.

Carried

7. OTHER MATTERS

Discussion ensued regarding the possibility of using electronic signatures to sign APC Minutes in the future in order for Minutes to be published in a timely manner.

A question was raised by a member of the public regarding evacuation routes and traffic issues in Area "H". Director Dixon highlighted work currently being undertaken by the FVRD with respect to emergency routes. It was also noted by staff that there is a traffic study to better understand traffic congestion in the Cultus Lake area over the summer period.

Comments were offered regarding the importance of community fire awareness.

A question was raised about Plan Cultus, approval of minutes and imposed fees.

8. ADJOURNMENT

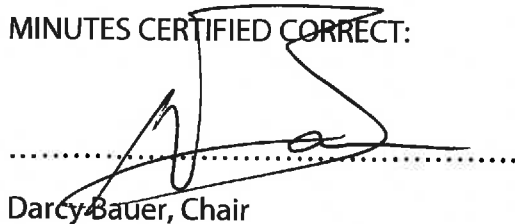
RENWICK/LAMB

THAT the Cultus Lake Advisory Planning Commission Meeting of May 15, 2019 be adjourned.

Carried

The Cultus Lake Advisory Planning Commission Open Meeting adjourned at 1:11pm

MINUTES CERTIFIED CORRECT:

A handwritten signature in black ink, appearing to read 'Darcy Bauer', is written over a horizontal dotted line. The signature is stylized and cursive.

Darcy Bauer, Chair

FRASER VALLEY REGIONAL DISTRICT

RECREATION, CULTURE & AIRPARK SERVICES

SPECIAL MINUTE

by special vote pursuant to B.C. Reg. 41/91
as amended by B.C. Reg. 17/98

MOTION FOR CONSIDERATION:

THAT the Recreation, Culture and Airpark Services Commission recommend to the Fraser Valley Regional District Board that it consider giving three readings and adoption to the *Fraser Valley Regional District Hope and District Recreation Centre Fees and Other Charges Amendment Bylaw No. 1529, 2019*.

CARRIED

I, Jennifer Kinneman, Acting Chief Administrative Officer declare as follows:

1. The Recreation, Culture & Airpark Services Commission has informed me that giving three readings and adoption to *Fraser Valley Regional District Hope and District Recreation Centre Fees and Other Charges Amendment Bylaw No. 1529, 2019* to be urgent and that calling a regular or special meeting to conduct the voting is impractical.
2. I have made all reasonable attempts to communicate the matter to be voted on, by telephone, email or in person, to each Commissioner entitled to vote and have recorded each Commissioner's vote.
3. I have informed the Chair of the results of the voting.

Dated: May 17, 2019

Jennifer Kinneman
Acting Chief Administrative Officer

I, Terry Raymond, Chair, declare that the vote has passed.

Dated: May 17, 2019

Director Terry Raymond
Chair
Recreation, Culture & Airpark
Services Commissioner

Recording of Votes

Director Terry Raymond, Electoral Area A	Yes
Director Dennis Adamson, Electoral Area B	Yes
Mayor Peter Robb, District of Hope	Yes
Hilary Kennedy Member at Large, District of Hope	Yes
Commissioner Dianne Davies, Member at Large, Electoral Area B	Yes
Commissioner Shanon Fischer, Member at Large, District of Hope	Yes
Commissioner Peter Adamo, Member at Large, Electoral Area B	Yes

Total votes possible	7
Total number of votes recorded	7
Total votes required to carry resolution	4
Total votes recorded in affirmative	7
Opposed	--

To: CAO for the Fraser Valley Regional District Board

Date: 2019-06-25

From: Mike Veenbaas, Director of Financial Services

File No: 6800-01

Subject: Electoral Area A & B Heritage Conservation Service – Tashme Museum Kindergarten Schoolhouse Project

RECOMMENDATION

THAT the Fraser Valley Regional Board support a contribution of \$55,000 from the Electoral Area A & B Heritage Conservation Service Area for the Tashme Museum Kindergarten Schoolhouse Project, subject to the imposition of a ten year covenant.

STRATEGIC AREA(S) OF FOCUS

Support Healthy & Sustainable Community
Provide Responsive & Effective Public Services

PRIORITIES

Priority #4 Tourism

BACKGROUND

Sunshine Valley, formerly named Tashme, is an unincorporated settlement and former Japanese Canadian internment camp located on the Crowsnest Highway between the District of Hope and the entrance to Manning Park. Located just outside the 100 mile “quarantine” zone from which all Japanese Canadians were removed during World War II, it was the largest camp of its kind in Canada, housing 2,400 people on the site. Over the course of many years the remains of the internment camp have gradually been replaced, demolished or simply disappeared.

Today very little remains of the internment camp, however, a museum has been established in the former butcher shop of the camp to commemorate and mark the place where this part of Canada’s history happened. In 2017 Directors Adamson and Raymond, through the Electoral Area A and B Heritage Conservation Service Area, provided funding support to help in the development of the museum.

DISCUSSION

The Tashme Museum has the opportunity to further develop their site with the addition of the Kindergarten Schoolhouse Project. The schoolhouse is one of eight buildings which still exists in

Sunshine Valley today and which was used during Tashme from 1942-1946. The addition of the schoolhouse to the museum site will allow for dedicated classroom space for students during field trips and much needed additional exhibit space for the museum. The addition will also allow for two full disability accessible washrooms and a small food prep/museum storage area.

NHK Japan (public broadcaster in Japan) will be on site July 8th filming a mini-documentary on the history of Tashme, the Tashme Museum and the relocation/restoration of the kindergarten schoolhouse project.

A project budget, pictures of the kindergarten schoolhouse and pictures of the Tashme Museum are included with this report as attachments.

Directors Adamson and Raymond are in full support of this funding contribution from the Heritage Conservation Service Area.

COST

The Heritage Conservation Service Area was established to generate funding from Electoral Areas A & B to ensure items of historical significance in these communities can be maintained and/or renewed. A set level of taxation is collected each year and put aside in an account for projects such as the Tashme Museum. Sufficient funding exists in this account to cover the funding recommendation.

CONCLUSION

A funding request has been received from Tashme Museum to continue with the development of the Kindergarten Schoolhouse Project. Directors Adamson and Raymond, representing the two electoral areas that fund this service area, are in full support of this request.

COMMENTS BY:

Jennifer Kinneman, Acting Chief Administrative Officer

Reviewed and supported.

Thursday June 13th, 2019

Fraser Valley Regional District

Mr. Mike Veenbass - Director of Finance

Mr. Dennis Adamson - FVRD Area B Director

Please accept this letter in consideration of releasing available funding towards the relocation and restoration of the Tashme Kindergarten schoolhouse project earlier than scheduled.

Unfortunately, due to later than expected material and labour supplier quotes, I was not able to comfortably and adequately supply my estimate budget for this project until a few days after the known deadline instructed by Mr. Adamson. I sincerely apologize for the late admittance.

I hope you can consider my request of releasing the available funding earlier due to the shedules and preparations I have secured with labourers, tradesmen and a volunteer workforce I now have in place to start the last week of June into the first week of July. I initially assumed that the funding would have been available eariler, but of course, I take full repsonsibility of the delay.

I am hoping to have the kindergarten schoolhouse moved and in location onto the current Tashme Museum property before July 8th. NHK Japan has scheduled to be onsite for a couple of days, starting on July 8th to film a mini-documentary on the history of Tashme and the Tashme Museum, and the relocation and restoration of the kindergarten schoolhouse is one of the major topics of the documentary.

The kindergarten schoolhouse was originally built in the realy 1930's as a bunkhouse during the 14 Mile Ranch - Trite's Ranch dairy farm years. The building was then converted in the Tashme kindergarten schoolhouse in 1942. The building was also used as the Anglican Church for Sunday services. The kindergarten schoolhouse is one of the eight buildings which still exists in Sunshine Valley today which was used during Tashme from 1942- 1946. The building has tremendous historical value as there are quite a few Tashme seniors who I personally know who attended kindergarten here in Tashme.

Due to the Japanese - Canadian internment history officially added to grades 5, 6 and 10 Social Studies in the BC school curriculum this past September, the Tashme Museum has receive a tremendous amount of interest from teachers throughout the Fraser Valley and the lower mainland. We have hosted over 175 field trip students since September, and are scheduled to host approximately 80 more students before school end.

The addition of the schoolhouse to the Tashme Museum is a much needed space. The schoolhouse will be the dedicated classroom area for students during field trips and much needed additional exhibit space for the museum. This addition will let us have two full disability accessible washrooms and a small food prep and museum storage area. The relocation and restoration of this building is the utmost importance due to the current location and condition of the building.

I must once again humbly thank you the FVRD's past, present and future support of the Tashme Museum. We could not have accomplished what we have without your support and trust.

Sincerely,
Ryan Ellan - Founder/Curator
Sunshine Valley Tashme Museum

SUNSHINE VALLEY TASHME MUSEUM

Sunshine Valley Tashme Museum - Tashme Kindergarten Schoolhouse Relocation & Resoration Esimated Project Budget

LINE	DESCRIPTION	PRICE
1	FVBS - HOPE RONA MISC MATERIALS - ESTIMATE 225448/4 (SEE ATTACHED DOCUMENT)	\$7118.39
2	HOME HARDWARE SUPPLIES - 2,200 SQ FT HEMLOCK SHIPLAP BOARDS (INTERIOR)	\$1500.00
3	HOME HARDWARE SUPPLIES - 4,650 SQ FT CUSTOM CUT DROP SIDING (EXTERIOR)	\$4300.00
4	CONSTRUCTION OF 16' X 56' FLOOR FOR SCHOOLHOUSE - VERN CARTER CONSTRUCTION (MATERIAL)	\$5000.00
5	CONSTRUCTION OF 16' X 56' FLOOR FOR SCHOOLHOUSE - VERN CARTER CONSTRUCTION (LABOUR)	\$2500.00
6	CONSTRUCTION OF 8' X 12' CONNECTING CORRIDOR TO SCHOOLHOUSE - VERN CARTER CONSTRUCTION (MATERIAL)	\$2500.00
7	CONSTRUCTION OF 16' X 56' FLOOR FOR KINDERGARTEN SCHOOLHOUSE - VERN CARTER CONSTRUCTION (LABOUR)	\$2000.00
8	35,000 LB CRANE SERVICE TO MOVE SCHOOLHOUSE (IF NEEDED)	\$3000.00
9	40 YARD DEMOLITION BIN RENTAL	\$1000.00
10	ESTIMATED PLUMBING MATERIALS + SUPPLIES - INCLUDING INSTALLATION	\$2200.00
11	ESTIMATED ELECTRICAL SERVICE MATERIALS + SUPPLIES	\$1200.00
12	ESTIMATED ELECTRICAL SERVICE INSTALLATION LABOUR	\$1000.00
13	ELECTRICAL INSPECTION (BC SAFETY AUTHORITY)	\$375.00
14	LIGHT FIXTURES, BULBS AND SUPPLIES	\$1200.00
15	ELECTRIC HOTWATER TANK	\$600.00
16	500 GALLON SEPTIC TANK (HOLDING TANK)	\$800.00
17	6 - 30" X 96" FOLDING BANQUET TABLES + 40 FOLDING CHAIRS (COSTCO)	\$3000.00
18	MICROWAVE OVEN	\$400.00
19	ELECTRIC COOKING STOVE / OVEN	\$600.00
20	ALARM SERVICE EQUIPMENT + SUPPLIES (INSTALLATION INCLUDED IN ELECTRICAL LABOUR)	\$600.00
21	ORIGINAL WINDOW RESTORATION LABOUR AND SUPPLIES	\$500.00
22	PROPANE SERVICE INSTALLATION (1000 LB TANK + FIRST FILL)	\$3000.00
23	PROPANE FURNACE FOR SCHOOLHOUSE	\$1200.00
24	WASHROOM FIXTURES (PAPER TOWL, TOILET PAPER, SOAP DISPENSERS)	\$600.00
25	WASHROOM VENTING / ELECTRICAL SERVICE + SUPPLIES	\$600.00
26	OVERHEAD PROJECTION SYSTEM (PROJECTOR + SCREEN)	\$1200.00
27	55" TV + WALL MOUNT	\$900.00
28	STANDARD REFRIGERATOR	\$600.00
	TOTAL	\$49,493.39
29	36 SEAT TASHME MUSEUM THEATRE (OPTIONAL) ESTIMATED COST ONLY	\$5000.00
LINE	IN-KIND DONATIONS INCLUDING VOLUNTEER LABOUR.	PRICE
1	3 SINK INDUSTRIAL STAINLESS STEEL COUNTER WITH PLUMBING	\$1200.00
2	BIGFOOT BOULDER CO. (BOBCAT + BACKHOE SERVICE) SITE EXCVATION AND PREP WORK	\$8000.00
3	MANUAL LABOUR (4 PERSONS)	\$10,000.00
4	TOOLS + MISC SUPPLIES	\$2000.00
5	SASQUATCH SIGN CO. (MISC WALL DISPLAYS, EXHIBIT CONSTRUCTION AND INSTALLATION)	\$4000.00
	TOTAL	\$25,200.00

1st shot is how the museum look as of today.
Replica Tashme shack and the original RCMP building to the right.



2nd shot is where I am planning on relocating the kindergarten schoolhouse.
It will be located behind the main museum building but connected through a corridor from main museum building.



3rd and 4th shot is how the Kindergarten schoolhouse house looks this morning.

We have already start prep work and some demolition that needed to be removed from the area.



5th shot is distance from the kindergarten schoolhouse to the museum property.
Roughly 250 feet.









To: CAO for the Fraser Valley Regional District Board

Date: 2019-06-25

From: Mike Veenbaas, Director of Financial Services

File No: 1880-20

Subject: 2018 Fraser Valley Regional District Statement of Financial Information

INTENT

This report is intended to advise the Regional Board of information pertaining to the 2018 Statement of Financial Information. Staff is not looking for a recommendation and has forwarded this information should members want more clarification to discuss the item further.

STRATEGIC AREA(S) OF FOCUS

Provide Responsive & Effective Public Services

BACKGROUND

Section 376 of the Local Government Act, Section 168 of the Community Charter and Section 2 of the Financial Information Act require that a statement of financial information for the previous year be prepared and presented to the Board by June 30th.

The Statement of Financial Information (SOFI) includes a number of components:

- a schedule of remuneration, allowances and expenses paid to board members for the purpose of carrying out the duties of office;
- a schedule of remuneration and expenses paid to employees earning more than \$75,000, along with a consolidated total of all remuneration paid to all other employees;
- a schedule of grants-in-aid awarded by the Regional District in 2018;
- a schedule of guarantee and indemnity agreements entered into;

- a schedule of severance agreements initiated in the year; and
- a schedule listing all suppliers paid more than \$25,000, along with a consolidated total of all payments made to suppliers for goods and services.

These schedules are prepared in accordance with the requirements noted in the FIA regulations. As such, SOFI schedules are based on when payments were made rather than the accrual basis normally used for financial statement presentation. This results in differences between consolidated totals from the SOFI report and the 2018 Financial Statements.

DISCUSSION

When reviewing SOFI, specifically the Schedule of Remuneration and Expenses for Employees, it is important to note a few key items:

- Remuneration includes salary/wages in addition to any vacation payouts, and taxable allowance and benefits such as employer paid life insurance, AD&D insurance and provincial medical services premiums.
- Expenses include conference registration and related travel, professional memberships, education/training opportunities and inter-regional travel reimbursed to the employee.

In comparing the 2018 SOFI to the 2017 information, some items to note are:

- Total board remuneration and expenses for 2018 reflect the adjustments to remuneration levels following the review completed by the Board in 2017.
- Total employee remuneration for 2018 increased over 2017 due to a combination of a general 1.9% increase in union negotiated wage rates, a few temporary positions tied to specific projects, increased volumes/services provided in electoral areas requiring an increase in staffing and provincially paid overtime incurred during Emergency Operation Centre activation. Expenses attributed to employees has increased from \$132,000 to \$143,000.
- The Schedule of Grants-In-Aid and Schedule of Payments to Suppliers for 2018 closely resemble the levels seen in 2017.

COST

There are no costs associated with preparing this report. All payments reported in the Statement of Financial Information have been expensed in 2018.

CONCLUSION

As part of the Financial Information Act, the Regional District produces a Statement of Financial Information itemizing certain types of payments. This is being presented to the Board for information and will also be posted on the Regional District's website.

COMMENTS BY:

Jennifer Kinneman, Acting Chief Administrative Officer

Reviewed and supported.



Statement of Financial Information Year Ended December 31, 2018

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Schedule of Remuneration and Expenses for Elected Officials
For the year ended December 31, 2018

Elected Official	Area Represented	Remuneration	Expenses	Total
Adamson, Dennis	Yale/ Dogwood Valley/ Sunshine Valley/ Laidlaw/ Choate/ Othello/ Spuzzum (Area B)	30,440	10,012	40,452
Alexis, Pamela	District of Mission	12,243	553	12,795
Bales, Wendy	Hemlock Valley/ Harrison Mills/ Lake Errock/ Morris Valley (Area C)	4,683	1,854	6,537
Barkman, Les	Alternate Director - City of Abbotsford	176	40	216
Boucher, Ray	McConnell Creek/ Hatzic Prairie (Area F)	25,367	6,402	31,768
Braun, Henry	City of Abbotsford	15,443	-	15,443
Buckley, John	Alternate Director - Village of Harrison Hot Springs	352	67	419
Chahal, Kelly	City of Abbotsford	12,085		12,085
Davidson, Hugh	McConnell Creek/ Hatzic Prairie (Area F)	4,683	1,130	5,813
Dickey, William	Popkum/ Bridal Falls (Area D)	40,587	5,817	46,404
Dixon, Taryn	Cultus Lake - Columbia Valley - Lindell Beach (Area H)	30,440	8,598	39,038
	Alternate Director - Boston Bar / North Bend / Canyon Alpine (Area A)	352		352
Dufresne, Robert	Chilliwack River Valley (Area E)	30,440	6,523	36,963
Engar, Orion	Village of Harrison Hot Springs	12,085	704	12,789
Facio, Leo	City of Abbotsford	2,211		2,211
Falk, Brenda	City of Chilliwack	10,071		10,071
Gaetz, Sharon	City of Abbotsford	10,071	302	10,373
Gill, Mohindar	District of Mission	2,035	101	2,136
Hamilton, Carolyn	Alternate Director - District of Mission	176		176
Hawes, Randy	District of Mission	10,071	661	10,731
Hinds, James	Alternate Director - Yale/ Dogwood Valley/ Sunshine Valley/ Laidlaw/ Choate/ Othello/ Spuzzum (Area B)	352	79	431
Kassian, Walter	City of Chilliwack	2,035		2,035
Kloot, Chris	City of Abbotsford	12,085		12,085
Loewen, Dave	City of Chilliwack	34,146	6,471	40,617
Lum, Jason	Alternate Director District of Kent	176	51	227
McNary, David	City of Chilliwack	1,859		1,859
Mercer, Gary	Hemlock Valley/ Harrison Mills/ Lake Errock/ Morris Valley (Area C)	25,367	10,489	35,855
Niemi, Alec	City of Chilliwack	2,211	730	2,941
Popove, Ken	District of Kent	2,211		2,211
Pranger, Sylvia	Boston Bar / North Bend / Canyon Alpine (Area A)	30,440	9,834	40,274
Raymond, Terry	District of Hope	1,859	239	2,098
Robb, Peter	City of Abbotsford	18,925	7,444	26,369
Ross, Patricia	Alternate City of Chilliwack	176		176
Shields, Jeff	City of Abbotsford	12,085		12,085
Siemens, Ross	Alternate Director District of Kent	176		176
Spaeti, Susan	City of Chilliwack	11,781		11,781
Stam, Chuck	Nicomien Island/ Deroche/ Dewdney/ Hatzic Island/ Portion of Sumas Mtn (Area G)	33,987	9,191	43,178
Stobbs, Allen	District of Kent	10,071	393	10,464
Van Laerhoven, John	District of Hope	10,071	741	10,812
Vickor, Wilfred	City of Chilliwack	10,343	20	10,363
Waddington, Samuel				
Total Remuneration and Expenses for Elected Officials		\$ 474,367	\$ 88,443	\$ 562,810

The Regional District provides a group accident insurance policy to all Board members, alternates, Commissioners, and Board of Variance members. The premium for this policy was \$1,000.00 for 2018.

The Regional District has not entered into any contracts with a current Board member or a person who was a Board member at any time during the six months prior to December 31, 2018 in which such person has a direct or indirect pecuniary interest.

Prepared pursuant to the Financial Information Regulation, Schedule 1, section 6(2), (3), (4), (5), and (6)

Schedule of Remuneration and Expenses for Employees
For the year ended December 31, 2018

Employee	Position	Remuneration (Note 1)	Expenses (Note 2)	Total
Barker, Stacey	Deputy Director of Regional Programs	111,547	6,148	117,695
Bennett, David	Planner II	83,071	1,047	84,118
Castle, Jody	Manager of Recreation Services	90,361	1,252	91,613
Chan, Sterling	Manager of Engineering & Infrastructure	95,843	376	96,218
Daneluz, Graham	Deputy Director of Electoral Area Planning	111,874	4,248	116,121
Douglas, Trina	Manager of Contract Services	81,379	516	81,895
Dyck, Reginald	Manager of Electoral Area Emergency Services	94,359	4,684	99,044
Gipps, Paul	Chief Administrative Officer	216,898	8,974	225,872
Gresham, Suzanne	Director of Corporate Initiatives	158,458	3,074	161,532
Hayward, Velda	E911 Dispatcher (Fire)	93,623		93,623
Hodson, Kristy	Manager of Financial Operations	102,200	2,658	104,858
Islam, Tareq	Director of Engineering Services	166,409	2,433	168,842
Kinneman, Jennifer	Manager of Communications	100,471	3,481	103,952
Lilley, Lance	Planner II	81,647	60	81,707
Lindenhoff, Peter	E911 Dispatcher (Fire)	87,087		87,087
Marshall, Milly	Director of Electoral Area Special Projects	86,463	324	86,786
McDonald, Steven	Utilities Technician II	76,371	825	77,195
Mikuska, Janice	Manager of Human Resources & Safety Services	101,802	2,593	104,396
Morrison, Jessica	Policy Analyst - First Nations Relations	75,888	3,059	78,946
Philp, Dave	Manager of E911 & Information Technology	96,538	2,809	99,347
Pitkethly, Barclay	Director of Regional Programs	141,784	6,839	148,623
Reilly, Jaime	Manager of Corporate Administration	106,429	2,306	108,735
Roblin, David	Manager of Operations	96,738	2,187	98,925
Sigurdson, Shannon	GIS Technician III	75,170		75,170
Stewart, Alison	Manager of Strategic Planning & Initiatives	97,322	2,221	99,543
Swartz, Adam	GIS Technician III	75,501	17	75,519
Thornton, Margaret-Ann	Director of Planning & Development	144,920	1,173	146,093
Urban, David	Manager of Outdoor Recreation Planning	91,502	843	92,344
Veenbaas, Michael	Chief Financial Officer	139,627	3,351	142,978
Vugteveen, Christina	Manager of Park Operations	99,694	2,231	101,925
Subtotal		3,180,976	69,728	3,250,704
Consolidated total of other employees earning less than \$75,000		4,654,436	73,420	4,727,856
Total Remuneration and Expenses for Employees		\$ 7,835,412	\$ 143,148	\$ 7,978,560

Reconciliation:

Schedule of Remuneration for Elected Officials and Alternate Directors	\$	474,367
Schedule of Remuneration for Employees		7,835,412
Subtotal	\$	8,309,780
Variance	(Note 3)	\$ 1,278,463
Total Personnel Costs as per consolidated financial statements	\$	9,588,243

- Note 1:** Remuneration includes vacation payouts as well as taxable allowances and benefits such as employer paid life insurance, AD&D insurance and provincial medical services premiums.
- Note 2:** Expenses includes conference registration & travel, professional memberships, education/training and inter-regional travel.
- Note 3:** The schedules of remuneration are based on actual payments made during 2018. This figure differs significantly from the expenses recorded in the financial statements which are reported on an accrual basis and include all wages and benefits accruing to staff.

Prepared pursuant to the Financial Information Regulation, Schedule 1, section 6(2), (3), (4), (5), and (6)



Schedule of Grants-In-Aid
For the year ended December 31, 2018

Electoral Area A

Boston Bar North Bend Enhancement Society	2,000
Boston Bar North Bend Bowling Association	1,000
Boston Bar North Bend May Days Committee	2,000
	\$ 5,000

Electoral Area B

Fraser Canyon Hospice Society	3,800
Scenic 7 BC Co-operative Marketing Partnership	500
Sunshine Valley Ratepayer Association	9,200
Hope & District Arts Council	3,000
Royal Canadian Legion Branch 228	2,000
1st Hope Scouting	2,000
Coquihalla Elementary School PAC	1,670
Hope Search & Rescue	1,000
Yale & District Historical Society	500
Hope River Monsters Swim Club	2,400
	\$ 26,070

Electoral Area C

Deroche Farmers Market	1,500
Hemlock Valley Homeowners Association	3,000
Sts'ailes Community School	2,000
Fraser Valley Bald Eagle Festival	2,000
Lake Errock Community Association	2,500
Deroche Elementary School	2,500
Deroche Elementary School PAC	2,000
Deroche & District Community Association	2,000
Eagle Point Social Club	1,000
Sts'ailes Christmas Committee	350
	\$ 18,850

Electoral Area D

Popkum Ratepayers Association	400
Popkum Volunteer Fire Department	500
	\$ 900

Electoral Area E

Chilliwack Vedder River Cleanup Society	1,100
Chilliwack Community Arts Council	850
Post Creek Ratepayers Association	3,000
	<hr/>
	\$ 4,950

Electoral Area F

McConnell Creek Farmers Institute	5,000
Fraser Valley Toy Run	1,000
Hatzic Prairie Recreation Commission	5,000
	<hr/>
	\$ 11,000

Electoral Area G

Deroche Elementary School PAC	3,000
Deroche Farmers Market	1,000
Dewdney Elementary School PAC	3,000
	<hr/>
	\$ 7,000

Electoral Area H

Cultus Lake Pike Minnow Derby - Chilliwack Area Lions Clubs	2,500
Columbia Valley Ratepayers Association	4,000
Cultus Lake Volunteer Fire Department	1,000
Columbia Valley Volunteer Fire Department	1,000
Cultus Lake Events Committee (c/o Park Board)	2,000
	<hr/>
	\$ 10,500

Other Agencies

WildsafeBC	15,000
Elizabeth's Wildlife Centre	5,000
	<hr/>
	\$ 20,000

Total

\$ 104,270

Prepared pursuant to the Financial Information Regulation, Schedule 1, Section 7(2)



**Schedule of Guarantee and Indemnity Agreements
For the year ended December 31, 2018**

The Fraser Valley Regional District has not given any guarantees or indemnities under the Guarantees and Indemnities Regulation.

Prepared pursuant to the Financial Information Regulation, Schedule 1, section 5



Schedule of Severance Agreements
For the year ended December 31, 2018

During the year ended December 31, 2018, the Fraser Valley Regional District did not enter into any severance agreements with employees.

Prepared pursuant to the Financial Information Regulation, Schedule 1, section 6 (7), (8)



Schedule of Payments to Suppliers
For the year ended December 31, 2018

Supplier Name	Amount
ACTIVE NETWORK LTD (THE)	41,383
ADS BOBCAT SERVICES	51,543
ALERT AGRI DISTRIBUTION INC	55,233
ARDEN CONSULTING ENGINEERS LTD	26,110
BC COMMUNICATIONS INC	84,442
BC COMMISSIONAIRES	645,063
BC HYDRO	487,288
BC TRANSIT	1,479,180
BLACK PRESS GROUP LTD	62,625
BOSTON BAR AREA 'A' LANDFILL SOCIETY	58,829
BRAD'S CONTRACTING	55,522
CB HDD TRENCHLESS CIVIL CONSTRUCTION LTD.	135,503
CDW CANADA INC	119,152
CEL-COM SYSTEMS LTD.	61,589
CITY OF ABBOTSFORD	148,790
CITY OF CHILLIWACK	278,682
CLIMATE CONTROL SYSTEMS INC.	35,064
GHD LIMITED	107,730
COTTONWOOD VETERINARY CLINIC	29,728
CULTUS LAKE PARK BOARD	40,559
COMMERCIAL AQUATIC SUPPLIES	45,055
DEARDEN SHAWN	44,760
DIAMOND HEAD TREE CARE	28,641
DISTRICT OF HOPE	79,467
EMERGENCY COMMUNICATIONS FOR BC	587,524
ERIC'S DONE RITE RENOS	108,704
ESSO - IMPERIAL OIL	122,865
FEDERATION OF CANADIAN MUNICIPALITIES	93,979
FH FORESTRY LTD	237,981
FINNING INTERNATIONAL INC.	316,232
FIRST CLASS WASTE SERVICES INC.	142,767
FORTIS BC - NATURAL GAS	40,321
FRASER VALLEY AGGREGATES LTD	33,160

Supplier Name	Amount
FRONTIER POWER PRODUCTS LTD.	30,034
GEOOPTIMIZE INC	32,550
METRO VANCOUVER REGIONAL DISTRICT	482,930
GROUPHEALTH GLOBAL BENEFIT SOLUTIONS	408,187
GUILLEVIN INTERNATIONAL INC.	47,152
HUB FIRE ENGINES & EQUIPMENT LTD	27,402
I.C.B.C. - C/O BARTON INSURANCE	98,156
IDEAL YARD CARE LTD.	72,023
IMANAGE LLC	36,261
KELMOR ENTERPRISES CHILLIWACK LTD	70,245
KERR WOOD LEIDAL ASSOCIATES LTD.	32,654
KINGFISHER NATCO	257,893
KIRKPATRICK AUTO & FLEET REPAIR	35,748
KONICA MINOLTA BUSINESS SOLUTIONS (CANADA)	25,299
KPMG LLP T4348	185,129
KTI LIMITED	31,327
LACEY DEVELOPMENTS LTD.	61,654
LAKESIDE AUTOMATION INC	181,444
LIDSTONE & COMPANY	68,108
LOEWEN PAVING	101,640
MERTIN CHEVROLET CADILLAC BUICK GMC LTD.	81,343
MERTIN NISSAN	25,679
MICROSERVE V8205	334,038
MINISTER OF FINANCE - FOREST LANDS & NRO	46,594
MORROW BIO SCIENCE LTD	384,185
MUD BAY DRILLING CO. LTD.	43,726
MUIRHEAD MICHELLE	135,140
MUNICIPAL INSURANCE ASSOCIATION OF BC	108,052
MUNICIPAL PENSION PLAN	1,095,854
NEIL SMITH CONSTRUCTION LTD	147,321
NEOPOST CANADA LTD.	27,998
NUTECH FACILITY SERVICES LTD	36,498
OMNI INDUSTRIAL INC.	327,111
PETRO VALUE PRODUCTS CANADA INC	91,317
PIONEER BUILDING SUPPLIES LTD.	100,377
PITEAU ASSOCIATES ENGINEERING LTD	83,494
PJS SYSTEMS INC.	85,004
PLANETWORKS CONSULTING	48,886
RECEIVER GENERAL FOR CANADA - PAYROLL DED	367,889

Supplier Name	Amount
RECTEC INDUSTRIES INC	38,747
MINISTER OF FINANCE - REVENUE SERVICES OF BC	56,463
RH2O NORTH AMERICA INC	283,452
RITE WAY FENCING INC	53,038
ROCKY MOUNTAIN PHOENIX	88,654
SCHOLS PLACING AND FINISHING LTD.	46,708
SCHUBERT PLUMBING & HEATING	105,478
SHAW CABLESYSTEMS GP	33,509
SKYE CONSULTING LTD	27,195
SOURCE OFFICE FURNISHINGS	26,802
SOUTHERN IRRIGATION	28,326
STI STEELTEC INDUSTRIES LTD.	32,803
STROHMAIERS EXCAVATING LTD	287,067
SUPERIOR PROPANE INC.	44,563
SUPREME PAVING LTD.	111,930
TELUS COMMUNICATIONS (B.C.) INC.	118,849
TELUS MOBILITY	45,224
TELUS SERVICES INC	41,197
TEMPEST DEVELOPMENT GROUP	219,003
THURBER ENGINEERING LTD	37,799
T&N UNITY	315,188
TCG TUNNELING COMPANY INC	207,448
URBAN SYSTEMS LTD.	338,074
VADIM COMPUTER MANAGEMENT GROUP LTD	114,955
VALLEY WASTE & RECYCLING INCORPORATED	146,931
VILLAGE WEST DEVELOPMENTS	146,127
WADE & ASSOCIATES LAND SURVEYING LTD.	27,799
WOLSELEY WATERWORKS GROUP - BC REGION	496,483
WORKSAFEBC - WORKERS' COMPENSATION BOARD OF BC	87,774
YEOMAN SERVICES INC	1,469,279
YORKE RON	81,659
Total of Aggregate Payments to Suppliers exceeding \$25,000	16,900,339
Total of payments to suppliers under \$25,000	3,420,537
Total of payments to suppliers for purposes of grants or contributions	464,968
Total Payments for the Provision of Goods & Services	\$ 20,785,844

Reconciliation of Payments to Suppliers to the Financial Statements

The schedule of payments to suppliers is reported on a cash basis and therefore the total will differ significantly from the expenses in the consolidated financial statements which are reported on an accrual basis, resulting in timing differences.

Prepared pursuant to the Financial Information Regulation, Schedule 1, Section 7



Statement of Financial Information Approval

The undersigned represents the Management and Board of Directors of the Fraser Valley Regional District, which at the June 25, 2019 meeting of the Regional Board, approved the statements and schedules included in this 2018 Statement of Financial Information, produced under the *Financial Information Act*.

Jason Lum
Chair

Mike Veenbaas, CPA, CMA
Chief Financial Officer

Date

Date

Prepared pursuant to the Financial Information Regulation, Schedule 1, Section 9

To: CAO for the Regional and Corporate Services Committee

Date: 2019-05-09

From: Stacey Barker, Director of Regional Services

File No: 3920-20

Subject: Animal Control Regulation Amendment Bylaw No. 1527, 2019

RECOMMENDATION

THAT the Fraser Valley Regional District consider giving three readings and adoption to the bylaw cited as *Fraser Valley Regional District Animal Control Regulation Amendment Bylaw No. 1527, 2019*.

STRATEGIC AREA(S) OF FOCUS

Provide Responsive & Effective Public Services

BACKGROUND

The Fraser Valley Regional District's (FVRD) Animal Control Regulation Bylaw No. 1206, 2013 outlines the regulatory requirements for the control and care of dogs within the City of Abbotsford, the City of Chilliwack, the District of Mission, the District of Kent, and the Village of Harrison Hot Springs. Recommendations for amending this bylaw arise from time to time in order to provide updates, clarifications, or distinctions.

DISCUSSION

When issued a fine for a contravention under the Animal Control regulatory bylaw, one is given the opportunity to dispute the ticket by presenting their case to an independent adjudicator. This mechanism is facilitated through the Upper Fraser Valley Bylaw Adjudication System. Animal Control Officers have been present on a few occasions when the lack of clarity of certain terms in the bylaw has resulted in a ticket not being upheld. In some cases due to the lack of penalty it resulted in the dog owner continuing with unsafe practices.

Therefore, through the proposed amendment, clarity has been added to several contraventions that support the intent of the ticket so that there is a better chance of a ticket being upheld. These changes will provide greater clarity to the dog owner, the Screening Officers, the Adjudicators, and public in general. This will also assist staff with clarity on the evidence they are required to gather.

Also in the proposed amendment, staff has separated out the section of the bylaw that refers to dogs that kill other dogs. This allows for the implementation of greater fines for attacks that result in mortality.

The management of aggressive dogs, specifically in transport or transition between house and vehicle, has also been clarified. Now, if an aggressive dog is leaving its enclosure or house to be put into a vehicle, or from its house to its enclosure, it must be muzzled. Also, if the aggressive dog is in a vehicle it must be muzzled. Unfortunately, situations have occurred where an aggressive dog during transition to a vehicle or an enclosure has escaped, or while in a vehicle has jumped out of the window.

The proposed amendment also provides for a greater time period for an owner to prepare an appeal if their dog has been designated as “aggressive” under the bylaw. During this time period dog owners must still abide by the restrictions, but the extra time will allow dog owners the ability to gather information and have all questions addressed by Animal Control, allowing them a reasonable period to submit an appeal.

Lastly, the proposed amendment clarifies the FVRD’s ability to regulate aviaries and apiaries. The FVRD can only regulate the presence of animals within these structures and not the structures themselves. It also allows the FVRD the ability to intervene when someone is hording or breeding certain animals within their home that are not necessarily being kept in an aviary.

Proposed amendments to Bylaw No. 1206, 2013 are summarized in the following table:

Section	Amendment	Rationale
B	Add a definition for “aggressively pursue or harass”	Clarification
B	Add an additional clause to the definition of an “enclosure” so that a house may be considered as an enclosure	Clarification
15	Change <i>Guide Animal Act</i> to <i>Guide Dog and Service Dog Act</i>	Update
16, 17, 18, 36, 39	Change “permit or allow” to “ must ensure”	Clarification
17	Separate out “kill” from “attack, bite, kill or cause injury” and have it added as its own prohibition.	To allow for greater fines for attacks that result in mortality.
23	Change the period of time dog owners can appeal an aggressive dog designation from 10 days to 30 days.	To allow more time for dog owners who wish to submit an appeal.
24	Amend the language so it reflects the concurrent amendment to the definition of “enclosure” to include a house.	Update
35	Amend the language from prohibiting “an aviary or apiary, except as permitted pursuant to all applicable zoning and other regulations” to prohibiting “animals typically requiring the presence of an aviary or apiary...”	To provide consistency that the bylaw is intended to regulate animals, not structures (with the exception of enclosures).

A follow-up amendment to the *Fraser Valley Regional District Bylaw Offence Notice Enforcement Bylaw No. 1415, 2017* will be brought forward to a subsequent Board meeting. This amendment will reflect the proposed changes to Section 17 of this animal control bylaw that relate to higher penalties that may be issued following a dog attack that has resulted in death to another dog.

COST

n/a

CONCLUSION

The proposed amendments will provide greater clarity for enforcement officers and the public, will allow additional time for dog owners receiving notice of an aggressive dog designation to prepare and submit an appeal, and will allow for greater fines to be issued for dogs that attack and kill another dog compared to one that simply bites or causes an injury.

COMMENTS BY:

Mike Veenbaas, Director of Financial Services

No further financial comments.

Jennifer Kinneman, Acting Chief Administrative Officer

Reviewed and supported.

FRASER VALLEY REGIONAL DISTRICT

BYLAW NO. 1527, 2019

A bylaw to amend the regulations established by Animal Control Regulation
Bylaw No. 1206, 2013 for the Sub-Regional Animal Control Service Area

WHEREAS the Board of Directors of the Fraser Valley Regional District ("the Board") has deemed it advisable to amend *Fraser Valley Regional District Animal Control Regulation Bylaw No. 1206, 2013*, as amended.

THEREFORE the Board enacts as follows:

1) CITATION

This bylaw may be cited as the *Fraser Valley Regional District Sub-Regional Animal Control Regulations Amendment Bylaw No. 1527, 2019*.

2) ENACTMENTS

That Fraser Valley Regional District Bylaw No. 1206, 2013 be amended by:

1. Adding the following definition under Part B - INTERPRETATION:
"aggressively pursue or harass" means to persistently or repeatedly annoy or chase a person, a vehicle, or a domestic animal in what may be perceived as an aggressive manner or with intent to cause injury;
2. Under Part B – INTERPRETATION, adding the following clause at the end of the definition of "enclosure":
"For the purpose of this bylaw, an enclosure also includes a house from which the dog is not able to escape and is not able to cause injury to a person or animal located outside of the house."
3. Under Section 15, replacing "Guide Animal Act" with "Guide Dog and Service Dog Act";
4. Under Section 16, replacing "A dog owner must not permit or allow the dog to howl or bark" with "A dog owner, must ensure the dog does not howl or bark:";

5. Deleting Section 17 and replacing it with the following:

"A dog owner must ensure the dog:

 - a) is not at large;
 - b) does not trespass on private property or within a public area defined by local zoning and other regulations as an area where dogs are not permitted;
 - c) is kept under the immediate control of a competent person whenever the dog is on private land and is not sufficiently contained, either by a fence and a gate, an enclosure, or another effective containment mechanism;
 - d) excluding designated off-leash areas, is not in a public place unless the dog is kept on a leash not exceeding three metres in length and is under the immediate control of a competent person;
 - e) does not attack, bite, or cause injury to a person or domestic animal;
 - f) does not aggressively pursue or harass a person, a vehicle, or a domestic animal; or
 - g) does not kill a person or domestic animal."
6. Deleting Section 18 and replacing it with the following:

"The owner of a dog must ensure the dog does not defecate in a public place or on private property other than property owned or occupied by the dog owner, without immediately removing the excrement and disposing of it in a sanitary manner."
7. In Section 23, replacing "within 10 days" to "within 30 days";
8. Deleting Section 24 a) and 24 b) and replacing them with the following:

"The owner of an aggressive dog must:

 - a) keep the dog securely confined in an enclosure; or
 - b) ensure the dog is:
 - i. on a leash not exceeding three metres in length;
 - ii. under the immediate care and control of a competent person; and
 - iii. muzzled to prevent it from biting a person or other animal."
9. Deleting Section 35 and replacing it with the following:

"A person must ensure that, any livestock or poultry or animals typically requiring the presence of an aviary or apiary are not kept on any real property, except as permitted pursuant to all applicable zoning and other regulations."

10. Deleting Section 36 and replacing it with the following:

"An owner of livestock or poultry must ensure the livestock or poultry is not on public land or on the lands or premises of any person other than the owner, without consent of the landowner."

11. Deleting Section 39 and replacing it with the following:

"A person must ensure any species individual or any exotic animal is not at large."

3) **SEVERABILITY**

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 _____

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) **CERTIFICATION**

I hereby certify that this is a true and correct copy of *Fraser Valley Regional District Sub-Regional Animal Control Regulations Amendment Bylaw No. 1527, 2019* as adopted by the Board of Directors of the Fraser Valley Regional District on the _____

Dated at Chilliwack, BC this _____

Corporate Officer/Deputy

To: CAO for the Electoral Area Services Committee

Date: 2019-06-11

From: Stacey Barker, Director of Regional Services

File No: 3920-20

Subject: Electoral Area Animal Control Regulation Amendment Bylaw No. 1531, 2019

RECOMMENDATION

THAT the Fraser Valley Regional District Board consider giving three readings and adoption to the bylaw cited as *Fraser Valley Regional District Electoral Areas Dangerous and Aggressive Dog Regulation Amendment Bylaw No. 1531, 2019*.

STRATEGIC AREA(S) OF FOCUS

Provide Responsive & Effective Public Services

BACKGROUND

The Fraser Valley Regional District's (FVRD) *Electoral Areas Dangerous and Aggressive Dog Regulation Bylaw No. 1247, 2013* outlines the regulatory requirements for the designation and control of dangerous and aggressive dogs within Electoral Areas D, E, G, and H. Recommendations for amending this bylaw arise from time to time in order to provide clarifications, administrative updates, and continuity with related bylaws.

DISCUSSION

The bylaw describes how aggressive dogs are to be properly contained and cared for to ensure public safety. If violations of the bylaw are identified, fines may be issued. Owners of aggressive dogs receiving these tickets may dispute the ticket by presenting their case to an independent adjudicator facilitated through the Upper Fraser Valley Bylaw Adjudication System. Animal Control Officers have been present on a few occasions when the lack of clarity of certain terms in the bylaw has resulted in a ticket not being upheld. In some cases it resulted in the dog owner continuing with unsafe practices.

Through the proposed amendments, clarity has been added to so that there is a better chance of a ticket being upheld and public safety ensured. These changes will provide greater clarity to the dog owner, to the Screening Officers, to the Adjudicators, and to the public in general. This will also assist staff with clarity on the evidence they are required to gather. Also in the proposed amendment staff

has separated out the section of the bylaw that refers to dogs that kill other dogs, allowing for the implementation of greater fines for attacks that result in mortality.

The management of aggressive dogs, specifically in transport or transition between house and vehicle, has also been clarified. Unfortunately, situations have occurred where an aggressive dog during transition to a vehicle or an enclosure has escaped, or while in a vehicle has jumped out of the window. The proposed changes make it clear that if an aggressive dog is leaving its enclosure or house to be put into a vehicle, or is being moved from its house to its enclosure, it must be muzzled. Also, if the aggressive dog is in a vehicle it must be muzzled.

The proposed amendment also provides for a greater time period for an owner to prepare an appeal if their dog has been designated as aggressive under the bylaw. During this time period dog owners must still abide by the restrictions, but the extra time will allow dog owners the ability to gather information and have all questions addressed by Animal Control prior to submitting the appeal.

Lastly, the proposed amendments modernize the bylaw so it remains consistent with the updated terminology and requirements utilized within the FVRD's regulatory bylaw that applies within member municipalities (Bylaw #1206, 2013). These changes include clarifying definitions and providing housekeeping amendments to remove specific citation of Sections in legislation.

Proposed amendments to Bylaw No. 1247, 2013 are summarized in the following table:

Section	Amendment	Rationale
B	Clarify the definition of "aggressive dog" to remove potential confusion with use of the term "while running at large"	Clarification
B	Add a definition for "aggressively pursue or harass"	Clarification
B	Amend the definition of "animal control officer" to provide a more thorough description	Update
B	Clarify the definition of "at large" to better define where a dog might be located to be considered as at large	Clarification
B	Update the definition of "Chief Animal Control Officer" to reflect the legal purposes of this position	Update
B	Add a more complete description of an "enclosure" so better describes a structure where an aggressive dog can be held	Clarification and Update
B	Add a definition of "impound" to reduce possible uncertainty	Clarification
1	Separate out "kill" from "attack, bite, kill or cause injury" and have it added as its own prohibition.	To allow for greater fines for attacks causing death
2	Change the period of time dog owners can appeal an aggressive dog designation from 10 days to 30 days.	To allow more time for owners to submit an appeal
6	Amend the language so it reflects the concurrent amendment to the definition of "enclosure" to include a house.	Update
18, 21, 23	Remove unnecessary references to specific sections within the Community Charter or the Local Government Act	Update

A follow-up amendment to the *Fraser Valley Regional District Bylaw Offence Notice Enforcement Bylaw No. 1415, 2017* will be brought forward to a subsequent Board meeting. This amendment will reflect the proposed changes to Section 1 of this animal control bylaw that relate to higher penalties that may be issued following a dog attack that has resulted in death to another dog.

COST

n/a

CONCLUSION

The proposed amendments provide greater clarity for enforcement officers and the public, will allow additional time for dog owners receiving notice of an aggressive dog designation to prepare and submit an appeal, will allow for greater fines to be issued for dogs that attack and kill another dog compared to one that simply causes an injury, and updates the bylaw definitions to remain consistent with the FVRD's Animal Control Regulation Bylaw No. 1206, 2013.

COMMENTS BY:

Mike Veenbaas, Director of Financial Services

No further financial comments.

Jennifer Kinneman, Acting Chief Administrative Officer

Reviewed and supported.

FRASER VALLEY REGIONAL DISTRICT

BYLAW NO. 1531, 2019

A bylaw to amend the regulations for dangerous and aggressive dogs in electoral areas

WHEREAS the Board of Directors of the Fraser Valley Regional District ("the Board") has deemed it advisable to amend *Fraser Valley Regional District Electoral Areas D, E, and H Dangerous and Aggressive Dog Regulation Bylaw No. 1247, 2013*, as amended.

THEREFORE the Board enacts as follows:

1) CITATION

This bylaw may be cited as the *Fraser Valley Regional District Electoral Areas Dangerous and Aggressive Dog Regulation Amendment Bylaw No. 1531, 2019*.

2) ENACTMENTS

That Fraser Valley Regional District Bylaw No. 1247, 2013 be amended by:

1. In Part B – INTERPRETATION, under the "**aggressive dog**" definition, deleting Sections ii and iii and replacing them with the following:
 - ii. a dog that has bitten, killed, or caused injury to a domestic animal while in a public place, on limited common property, or while on private property other than property owned or occupied by the person responsible for the dog;
 - iii. a dog that, while at large, has aggressively pursued or harassed a person, a vehicle, or a domestic animal;
2. In Part B – INTERPRETATION, adding the following definition:

"aggressively pursue or harass" means to persistently or repeatedly annoy or chase a person, a vehicle, or a domestic animal in what may be perceived as an aggressive manner or with intent to cause injury;
3. In Part B – INTERPRETATION, deleting the definition of "**Animal Control Officer**" and replacing it with the following:

"Animal Control Officer" means:

 - i. an employee, officer, or agent designated by the Board, or peace officers, for purposes of Section 321 of the *Local Government Act, RSBC 2015, Ch. 1* [the "*Local Government Act*"] and Section 49 of the *Community Charter, SBC 2003, Ch. 26* [the "*Community Charter*";]

- ii. the Chief Animal Control Officer as defined elsewhere in this bylaw; or
 - iii. persons designated as bylaw enforcement officers under S. 415 of the *Local Government Act*; Section 264 of the *Community Charter*; Section 1 of the *Local Government Bylaw Notice Enforcement Act, SBC 2003, Ch 60*; and Section 3(f) *BC Reg. 425/2003 [Community Charter Bylaw Enforcement Ticket Regulation]* for purposes of enforcing regional district bylaws with respect to the regulation of animals;
- 4. In Part B – INTERPRETATION, deleting the definition of “**at large**” and replacing it with the following:

“**at large**” means an animal that is in a public place or on private property other than the premises of the owner, while not contained or not on a leash under direct and continuous control by a person;
- 5. In Part B – INTERPRETATION, deleting the definition of “**Chief Animal Control Officer**” and replacing it with the following:

“**Chief Animal Control Officer**” means an animal control officer or designate, designated by the Board for purposes of Section 321 of the *Local Government Act* and Section 49 of the *Community Charter*;
- 6. In Part B – INTERPRETATION, deleting the definition of “**enclosure**” and replacing it with the following:

“**enclosure**” means a structure that satisfies each of the following criteria:

 - i. is comprised of wire or steel mesh, designed to prevent the entry of a child or the escape of a dog;
 - ii. has a secure top attached to all sides of the enclosure;
 - iii. is of at least 1.8m in height;
 - iv. has a concrete floor, or has sides which are embedded no less than 60cm into the ground;
 - v. has a self-closing gate that can be locked;
 - vi. forms a confined area with no sides in common with a perimeter fence; and
 - vii. meets any necessary requirements for an accessory structure contained within any applicable bylaws or other regulations.
 - viii. For the purpose of this bylaw, an enclosure also includes a house from which the dog is not able to escape and is not able to cause injury to a person or animal located outside of the house.
- 7. In Part B – INTERPRETATION, adding the following definition:

“**impound**” means the seizing or capturing of an animal by an Animal Control Officer;

8. Deleting Section 1 and replacing it with the following:

"A dog owner must ensure the dog:

- a) does not attack, bite, or cause injury to a person or domestic animal;
- b) does not aggressively pursue or harass a person, a vehicle, or a domestic animal; or
- c) does not kill a person or domestic animal."

9. Deleting Section 2 and replacing it with the following:

"An animal control officer may seize any dog that is alleged to have been or is found in contravention of Section 1 or Section 6 of this Bylaw."

10. In Section 5, replacing "within 10 days" to "within 30 days";

11. Deleting Sections 6 a) and 6 b) and replacing them with the following:

"6. The owner of an aggressive dog must:

- a) keep the dog securely confined in an enclosure at all times; or
- b) ensure the dog is:
 - i. on a leash not exceeding three metres in length;
 - ii. under the immediate care and control of a competent person; and
 - iii. muzzled to prevent it from biting a person or other animal."

12. In Sections 18, 21, and 23, deleting all references to specific sections of the *Community Charter* and the *Local Government Act* and replacing them with "the *Community Charter*" and/or "the *Local Government Act*";

3) **SEVERABILITY**

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 _____

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) CERTIFICATION

I hereby certify that this is a true and correct copy of *Fraser Valley Regional District Electoral Areas Dangerous and Aggressive Dog Regulation Amendment Bylaw No. 1531, 2019* as adopted by the Board of Directors of the Fraser Valley Regional District on the

Dated at Chilliwack, BC this

Corporate Officer/Deputy

To: CAO for the Fraser Valley Regional District Board

Date: 2019-06-25

From: Andrea Antifaeff, Planner I

File No: 3360-23 2019-01

Subject: Zoning amendment application for 10180 Royalwood Boulevard, Electoral Area "D" to facilitate an increase in lot coverage

RECOMMENDATION

THAT proposed *Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1518, 2019* be adopted.

STRATEGIC AREA(S) OF FOCUS

Provide Responsive & Effective Public Services

BACKGROUND

Proposal Description

The purpose of Bylaw No. 1518, 2019 is to rezone the property located at 10180 Royalwood Boulevard from Suburban Residential-2 (SBR-2) to Suburban Residential-3 (SBR-3) to facilitate an increase in lot coverage from 25% (SBR-2) to 40% (SBR-3) for the proposed construction of a single family dwelling and detached garage.

A public hearing was held on May 9, 2019 and second and third readings were completed on May 22, 2019. Following second and third reading there were no outstanding items to be provided in conjunction with the rezoning. The FVRD Board may now consider of adoption of *Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1518, 2019*.

Attached for information:

Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1518, 2019

PROPERTY DETAILS	
Electoral Area	D
Address	10180 Royalwood Boulevard

PID	030-594-235		
Folio	733.06644.261		
Lot Size	0.27 acres		
Owner	Dekoff, Lorne & Lorrie	Agent	n/a
Current Zoning	Suburban Residential 2 (SBR-2)	Proposed Zoning	Suburban Residential 3 (SBR-3)
Current OCP	Suburban Residential (SR)	Proposed OCP	No change
Current Use	Vacant Land	Proposed Use	Residential (SFD)
Development Permit Areas	n/a		
Hazards	n/a		
Agricultural Land Reserve	No		

ADJACENT ZONING & LAND USES

North	^	Suburban Residential 2 (SBR-2), Single Family Homes
East	>	Country Residential (CR), Single Family Homes
West	<	Suburban Residential 2 (SBR-2), Single Family Homes
South	v	Suburban Residential 2 & 3, Single Family Homes

NEIGHBOURHOOD MAP



PROPERTY MAP



DISCUSSION

Development Variance Permit

The owners of the property have also applied for a Development Variance Permit to increase the maximum size of an accessory building from 45 square metres (484.4 square feet) to 64 square metres (688.9) square feet to allow for the construction of a detached garage. The development variance permit is also requested in addition to the zoning amendment and will be considered after consideration of the adoption of the zoning bylaw.

COST

The application fee of \$2,500.00 has been paid by the applicant.

CONCLUSION

Staff recommend that proposed *Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1518, 2019* be adopted.

OPTIONS

Option 1 – Adopt (Staff Recommendation)

Purpose:

To adopt the bylaw as drafted based upon the information received. Staff recommend proceeding with Option 1.

Implications:

Timeline	This option provides for the bylaw to be adopted.
Additional Process	No additional process or public consultation is provided for the review of the application.
Considerations	The bylaw will be adopted.

Resolution for consideration:

THAT proposed *Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1518, 2019* be adopted.

Option 2- Refer to Staff

Purpose:

To refer the bylaw back to EASC for further discussion and to a new public hearing.

Implications:

Timeline	This option provides for further review by the EASC. This discussion may result in new information being discussed and as such a new public hearing would be required.
Additional Process	Further consideration by the EASC will add to the approval timeline. A new public hearing will add time to the approval timeline.
Considerations	Any additional changes to the application would be possible with a new reading of the revised bylaw.

Resolution for consideration:

THAT proposed *Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1518, 2019* be referred to the Electoral Area Services Committee for further consideration.

Option 3 – Defer

Purpose:

To defer a decision to future Board meeting.

Implications:

Timeline	This option provides for further time to review the application by the Board members prior to consideration.
Additional Process	Additional time is added to the development process timeline.
Considerations	In the interim, no new information may be received by the Board members.

Resolution for consideration:

THAT a decision with respect to the proposed *Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1518, 2019* be deferred to the next regular meeting of the Fraser Valley Regional District Board [or other date].

Option 4 - Refuse

Purpose: To refuse the proposal.

Implications:

Timeline	This option stops the rezoning application.
Additional Process	If the applicants wish to proceed without amending the proposal, they must wait six (6) months to reapply with the same application.
Considerations	The applicant will have to reapply or amend the development plans. A new bylaw process will be triggered.

Resolution for consideration:

THAT *Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1518, 2019* not be give any further readings and the application be refused.

COMMENTS BY:

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

Margaret Thornton, Director of Planning & Development: Reviewed and supported.

Mike Veenbaas, Director of Financial Services: No further financial comments.

Jennifer Kinneman, Acting Chief Administrative Officer: Reviewed and supported.

FRASER VALLEY REGIONAL DISTRICT

Bylaw No. 1518, 2019

A Bylaw to Amend the Zoning for Electoral Area D

WHEREAS the Fraser Valley Regional District Board of Directors ("the Board") has deemed it advisable to amend *Zoning Bylaw [No. 75] for Electoral Area D, 1976 of the Regional District of Fraser Cheam*;

THEREFORE the Board enacts as follows:

1) **CITATION**

This bylaw may be cited as *Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1518, 2019*.

2) **MAP AMENDMENT**

- a) That the zoning map which accompanies and is part of *Zoning Bylaw [No. 75] for Electoral Area D, 1976 of the Regional District of Fraser Cheam*, be amended by rezoning the lands described as:

Lot 2 Section 1 Township 3 Range 29 West of the Sixth Meridian New Westminster District
Plan EPP72713

(P.I.D. 030-594-235),

comprising 0.27 acres, more or less,

and as outlined in heavy black outline and cross-hatched on Zoning Amendment Map Schedule 1518-A, from the Suburban Residential 2 (SBR-2) zone to the Suburban Residential 3 (SBR-3) zone, as shown on Map Schedule 1518-A.

- b) That the map appended hereto as Zoning Amendment Map Schedule 1518-A showing such amendments is an integral part of this bylaw.

3) **SEVERABILITY**

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	25 th day of April, 2019
PUBLIC HEARING WAS HELD THIS	9 th day of May, 2019
READ A SECOND TIME THIS	22 nd day of May, 2019
READ A THIRD TIME THIS	22 nd day of May, 2019
APPROVED BY THE MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE THIS	30 th day of April, 2019
ADOPTED THIS	day of

Chair/Vice Chair

Corporate Officer/Deputy

5) CERTIFICATION

I hereby certify the foregoing to be a true and correct copy of *Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1518, 2019* as read a third time/adopted by the Board of Directors of the Fraser Valley Regional District on the day of .

Dated at Chilliwack, B.C. this day of

Corporate Officer/ Deputy

FRASER VALLEY REGIONAL DISTRICT BYLAW NO. 1518, 2019
Zoning Amendment Map Schedule 1518-A



This is map 1 of 1 constituting Zoning Amendment Map Schedule 1518-A, attached to and forming part of Fraser Valley Regional District Electoral Area D Zoning Amendment Bylaw No. 1518, 2019.

To: CAO for the Electoral Area Services Committee

Date: 2019-06-11

From: Katarina Duke, Engineering & Community Services Technologist

File No: 3920-20

Subject: Fraser Valley Regional District Hatzic Prairie Water Supply and Distribution System Service Area Amendment Bylaw No. 1519, 2019

RECOMMENDATION

THAT the Fraser Valley Regional District Board consider giving first, second and third readings to the bylaw cited as *Fraser Valley Regional District Hatzic Prairie Water Supply and Distribution System Service Area Amendment Bylaw No. 1519, 2019*

STRATEGIC AREA(S) OF FOCUS

Provide Responsive & Effective Public Services

DISCUSSION

Staff have received a validated petition from one property owner requesting that the boundaries of the Hatzic Prairie Water Supply and Distribution System Service Area be amended and extended to include their property.

COST

No costs to the FVRD.

The property owner is to be responsible for the cost of installing a service connection to their property. Additionally the property owner must pay a one-time Capital Improvement Connection Fee of \$2,273.74 prior to connecting to the system. All costs have been paid in full by property owner.

COMMENTS BY:

Tareq Islam, Director of Engineering & Community Services Reviewed and supported.

Mike Veenbaas, Director of Financial Services Reviewed and supported.

Jennifer Kinneman, Acting Chief Administrative Officer

FRASER VALLEY REGIONAL DISTRICT

BYLAW NO. 1519, 2019

**A bylaw to amend the boundaries of the Hatzic Prairie Water
Supply and Distribution System Service Area**

WHEREAS the Fraser Valley Regional District Board of Directors ("the Board") has been petitioned to amend and extend the boundary of the Hatzic Prairie Water Supply and Distribution System Service Area established by Bylaw No. 0837, 2007;

THEREFORE the Board of Directors of the Fraser Valley Regional District enacts as follows:

1) CITATION

This bylaw may be cited as *Fraser Valley Regional District Hatzic Prairie Water Supply and Distribution System Service Area Amendment Bylaw No. 1519, 2019*.

2) ENACTMENTS

- a) *Fraser Valley Regional District Hatzic Prairie Water Supply and Distribution System Service Area Establishment Bylaw No. 0837, 2007*, is hereby amended by extending the boundaries of the Service Area to include the property shown on Schedule 1519-A attached to and forming an integral part of this bylaw.
- b) Schedule A to Bylaw No. 0837, 2007 is hereby replaced by Schedule 1519-B, attached to and forming an integral part of this bylaw. The amended boundaries of the service area shall be those portions of Electoral Area F as shown on Schedule 1519-B.
- c) That the provisions of all bylaws that are now in effect with regard to the establishment and amendment of the Hatzic Prairie Water Supply and Distribution System Service Area shall henceforth apply to those lands outlined on Schedule 1519-B of this bylaw.

3) SEVERABILITY

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

CERTIFICATION AS TO SUFFICIENCY
AND VALIDITY OF PETITIONS this

24th day of May, 2019

READ A FIRST TIME 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

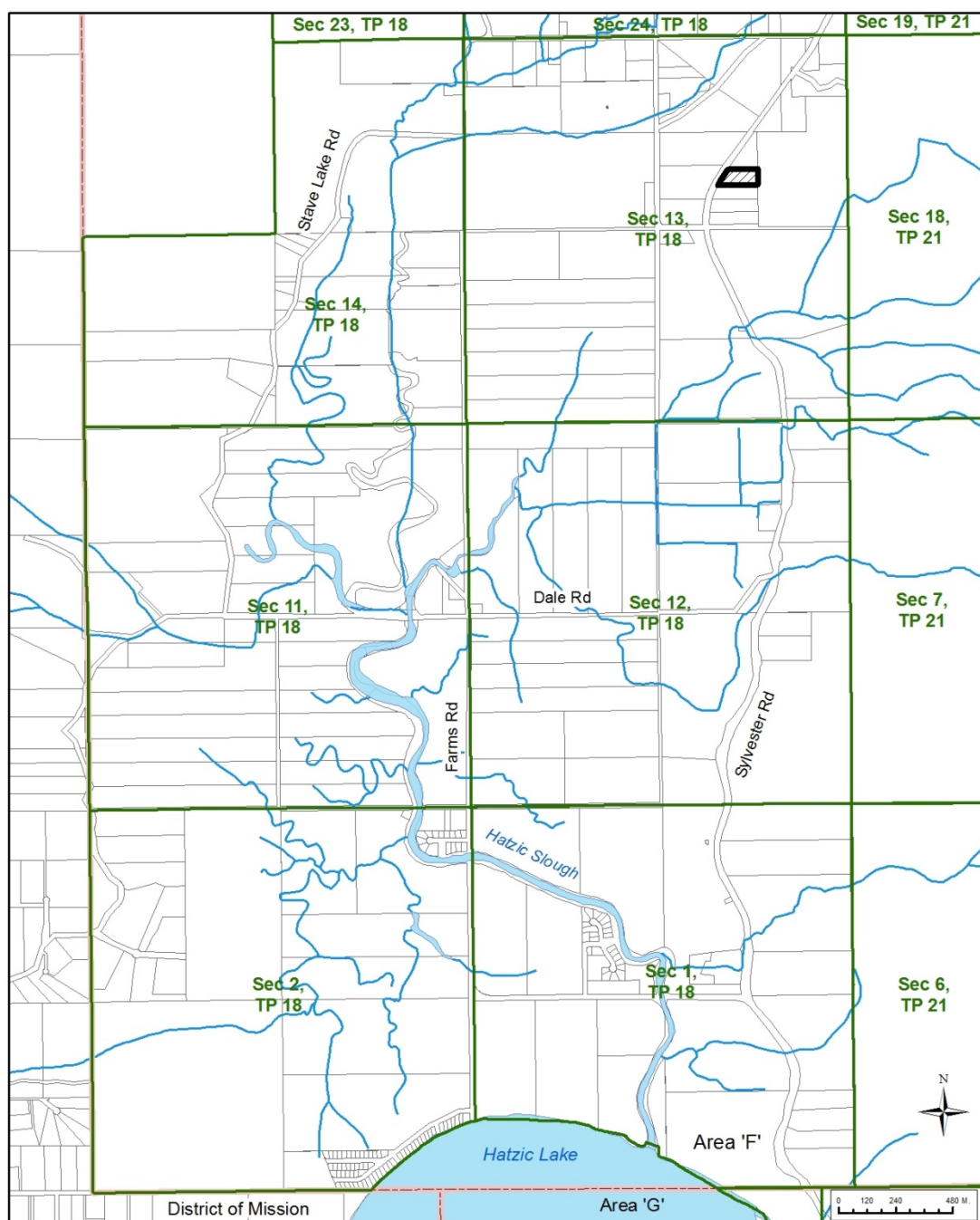
5) CERTIFICATION

I hereby certify the foregoing to be a true and correct copy of *Fraser Valley Regional District Hatzic Prairie Water Supply and Distribution System Service Area Amendment Bylaw No. 1519, 2019* as adopted by the Fraser Valley Regional District Board on the

Dated at Chilliwack, BC this

Corporate Officer/Deputy

FRASER VALLEY REGIONAL DISTRICT BYLAW NO. 1519, 2019
Schedule 1519-A



Map Reference: 92G019.4.3, 4.4 & 92G029.2.1, 2.2

March 28, 2019

Land District: New Westminster District

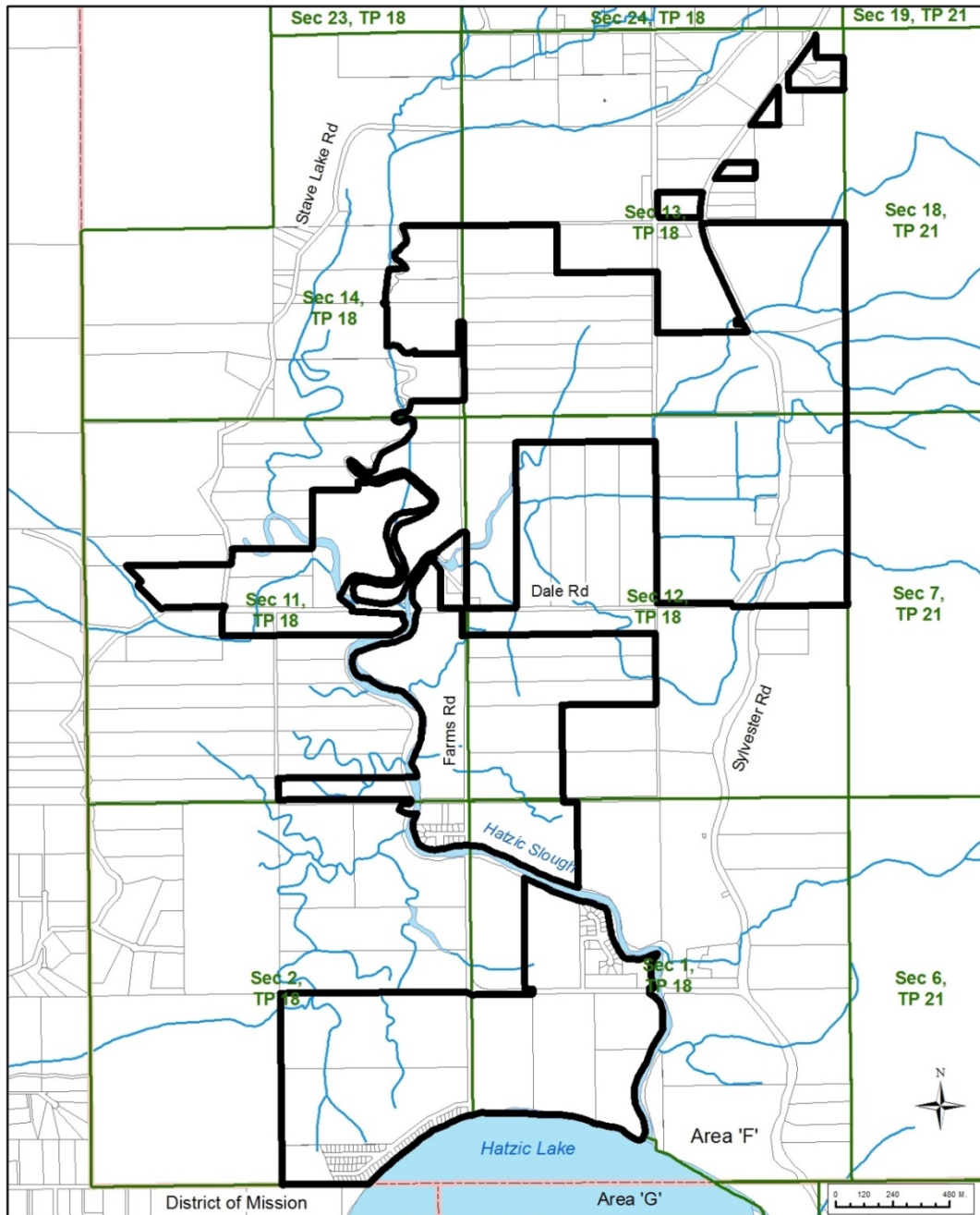
Land title Office: New Westminster

LEGEND

Area to be added to the Fraser Valley Regional District Hatzic Prairie Water Supply and Distribution System Service Area.

This is map 1 of 1 constituting Schedule 1519-A attached to and forming part of *Fraser Valley Regional District Hatzic Prairie Water Supply and Distribution System Service Area Amendment Bylaw No. 1519, 2019*.

FRASER VALLEY REGIONAL DISTRICT BYLAW NO. 1519, 2019
Schedule 1519-B



Map Reference: 92G019.4.3, 4.4 & 92G029.2.1, 2.2
 Land District: New Westminster District
 Land title Office: New Westminster

March 28, 2019

LEGEND



Boundaries of the Fraser Valley Regional District Hatzic Prairie Water Supply and Distribution System Service Area as amended.

This is map 1 of 1 constituting Schedule 1519-B attached to and forming part of *Fraser Valley Regional District Hatzic Prairie Water Supply and Distribution System Service Area Amendment Bylaw No. 1519, 2019*.

To: CAO for the Fraser Valley Regional District Board

Date: 2019-06-25

From: Mike Veenbaas, Director of Financial Services

File No: 3920-20/1528, 2019

Subject: Regional District Board Remuneration – Bylaw 1528, 2019

RECOMMENDATION

THAT the Fraser Valley Regional District Board consider giving three readings and adoption to the bylaw cited as *Fraser Valley Regional District Directors Remuneration Bylaw No. 1528, 2019*.

STRATEGIC AREA(S) OF FOCUS

Provide Responsive & Effective Public Services

BACKGROUND

At the April 25th, 2019 Regional Board meeting a motion was passed directing Staff to adjust remuneration levels for all Board Directors to achieve wage parity with remuneration levels prior to the elimination of the Municipal Officer's Expense Allowance Exemption.

DISCUSSION

Staff have prepared a new remuneration bylaw in response to Board direction and changes in the income tax legislation.

Specifically, the new bylaw does two things:

- removes the language allocating 1/3 of the remuneration as being considered an expense allowance and therefore not subject to income taxation;
- adjusts the percentages used to determine the remuneration rates in relation to the FVRD regional representative wage of \$57,004 (average wage of a full time worker as determined by Statistics Canada).

COST

The financial impact of the adjusted remuneration levels will be funded from the Regional Administration (\$33,000) and Electoral Area Administration (\$27,000) service budgets.

CONCLUSION

As directed by the Regional Board, Staff have prepared a new remuneration bylaw with updated language and position remuneration rate percentages to adjust for the changes in the income tax legislation surrounding the municipal expense allowance exemption.

COMMENTS BY:

Jennifer Kinneman, Acting Chief Administrative Officer

Reviewed and supported.

FRASER VALLEY REGIONAL DISTRICT

BYLAW NO. 1528, 2019

A bylaw to provide for the remuneration of Board and Board Committee Members

WHEREAS the Fraser Valley Regional District Board of Directors ("the Board") deems it advisable to adopt a bylaw that provides for the payment of remuneration and expenses to Regional District Board Directors and their Alternates and Chairs of Standing Committees of the Regional District Board.

THEREFORE the Board enacts as follows:

1) CITATION

This bylaw may be cited as *Fraser Valley Regional District Directors Remuneration Bylaw No. 1528, 2019*.

2) ENACTMENTS

- a) Each Director of the Fraser Valley Regional District Board and their Alternate, shall receive annual remuneration as set out in Schedule 1528-A of this Bylaw, attached hereto and forming an integral part of this bylaw, for fulfilling their respective duties and roles. This remuneration shall be received on a bi-weekly basis except for Alternate Directors whose remuneration shall be received on a monthly basis.
- b) Directors are entitled to receive a per diem for meals, incidentals and other expenses as outlined in the Fraser Valley Regional District Travel and Expense Policy, as amended from time to time.

3) REPEAL

Fraser Valley Regional District Board and Committee Members Remuneration Bylaw No. 1446, 2017 and any amendments thereto are hereby repealed.

4) SEVERABILITY

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.

5) READINGS AND ADOPTION

READ A FIRST TIME 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

6) CERTIFICATION

I hereby certify that this is a true and correct copy of *Fraser Valley Regional District Directors Remuneration Bylaw No. 1528, 2019* as adopted 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. 1528, 2019
Schedule 1528-A

Annual Remuneration

Annual Remuneration rates shall be calculated at the stated percentage of the FVRD regional representative wage from average wage of a full time worker as determined by Statistics Canada.

	<u>Amount</u>	<u>Effective Year</u>
<u>Remuneration base rate</u>		
Board Director – All Directors	23.3%	2019
<u>Add-on Remuneration rates</u>		
Board Director – Electoral Area	36.2%	2019
Board Chair	43.3%	2019
Board Vice Chair	13.3%	2019
Electoral Area Services Committee Chair	19.8%	2019
Electoral Area Services Committee Vice Chair	4.0%	2019
Standing Committee Chair	3.4%	2019

Alternate Director rates

Alternate Director (per meeting attended)	\$176
-------------------------------------------	-------

Remuneration shall be reviewed effective January 1, the year following general local elections and corrected accordingly.

On an annual basis, Board remuneration is to be increased based on the British Columbia Consumer Price Index.

CORPORATE REPORT

To: CAO for the Recreation, Culture & Airpark Services Commission

Date: 2019-05-17

From: Mike Freimark, Assistant Manager

File No: 3920-20/1529, 2019

Subject: Hope and District Recreation Centre Fees and Other Charges Amendment Bylaw

RECOMMENDATION

THAT the Recreation, Culture & Airpark Services Commission recommend to the Fraser Valley Regional District Board that it consider giving three readings and adoption to the Fraser Valley Regional District Hope and District Recreation Centre Fees and Other Charges Amendment Bylaw No. 1529, 2019.

STRATEGIC AREA(S) OF FOCUS

Support Healthy & Sustainable Community

BACKGROUND

The Hope and Area Recreation Centre is funded through a variety of methods including tax requisition, room and building rentals, general admission, and fees for programming. The rates and fees for the Recreation Centre are regularly reviewed by staff to ensure that cost recovery is appropriate and sufficient and that fees are attributed to new programs.

Staff have determined that the fees for some of the regular aquatics programs are not comparable to other recreation centres of similar size or proximity. An increase for the FoodSafe course is also recommended as the private instructor rate has increased since the last time the course was offered.

The remaining fees included in this amendment are for new programs that will be offered for the first time in Summer 2019. Individual registration fees for new programs are determined through a standardized formula: private instructor cost plus 30% for administration and room rental, divided by the expected minimum participants.

DISCUSSION

Staff have recently conducted a review of similar size and structured facilities that offer similar programs (see document attached). As a result of this review staff is recommending that the following increases be made to aquatic programs effective September 1, 2019:

- Red Cross Preschool Swim Lessons increase from \$30.00 to \$45.00
- Private Swim Lessons increase from \$15.00 to \$20.00 per lesson

- Ten (10) private lesson package be discounted to include ten lessons for the price of 8 (\$16.00 per lesson)
- Semi-Private Swim Lessons increase from \$12.00 to \$15.00 per person per lesson

Rate Adjusted Programs	Previous Rate	New Rate
8 – Red Cross Preschool Swim Lessons (30 mins per lesson)	\$30.00	\$45.00
Private Swim Lesson – 30 mins	\$15.00	\$20.00
Private Swim Lesson – 10 lesson package	\$120.00	\$160.00
Semi-Private Swim Lesson – 30 mins	\$12.00 <i>per person</i>	\$15.00 <i>per person</i>
Semi-Private Swim Lesson – 30 mins	\$12.00 <i>per person</i>	\$15.00 <i>per person</i>

New programs for summer include Extreme Teen Night, Gymnastics Day Camps, Stay Safe, Intro to Rock Climbing (1 hour), and Intro to Kayaking and Kickboxing.

New Programs	
Extreme Teen Night	\$20.00
Gymnastics Camp - Day Rate	\$35.00
Gymnastics Camp – Half Day - Week Rate	\$80.00
Gymnastics Camp – Full Day - Week Rate	\$150.00
KickBoxing (youth, teen, and adult)	\$104.00
Intro to Rock Climbing (1 hr)	\$10.00
Intro to Kayaking	\$60.00
Stay Safe (youth 9-15 years)	\$30.00
Stay Safe Manual	\$10.00

CONCLUSION

Staff are recommending that the rates and fees bylaw be amended as listed above. The increase in swim lessons will be advertised in the summer program guide, however, the changes will not be effective until September 1, 2019 to allow effective communication with patrons. The previous rates for swim lessons will be applicable for the summer season.

COMMENTS BY:

Stacey Barker, Director of Regional Services

Reviewed and supported.

Mike Veenbaas, Director of Financial Services

Not available for comment.

Jennifer Kinneman, Acting Chief Administrative Officer

Reviewed and supported.

FRASER VALLEY REGIONAL DISTRICT

BYLAW NO. 1529, 2019

A bylaw to amend the Hope and District Recreation Centre Fees and Other Charges

WHEREAS the Board of Directors of the Fraser Valley Regional District ("the Board") has deemed it advisable to amend *Fraser Valley Regional District Hope and District Recreation Centre Fees and Other Charges Bylaw No. 0895, 2008* as amended.

THEREFORE the Board, in open meeting assembled, enacts as follows:

1) CITATION

This bylaw may be cited as the *Fraser Valley Regional District Hope and District Recreation Centre Fees and Other Charges Amendment Bylaw No. 1529, 2019*.

2) ENACTMENTS

That Fraser Valley Regional District Bylaw No. 0895, 2008 be amended by deleting Schedule A in its entirety and substituting with Schedule A attached hereto and forming an integral part of this bylaw.

3) SEVERABILITY

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 _____

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) CERTIFICATION

I hereby certify that this is a true and correct copy of *Fraser Valley Regional District Hope and District Recreation Centre Fees and Other Charges Amendment Bylaw No. 1529, 2019* as adopted by the Board of Directors of the Fraser Valley Regional District on the

Dated at Chilliwack, BC this

Corporate Officer/Deputy

FRASER VALLEY REGIONAL DISTRICT BYLAW NO. 1529, 2019**Schedule A****Hope and District Recreation Centre Fees and Other Charges**

Drop In Admissions -Pool/Gym/Arena (GST & PST Included)	
Adult	\$5.00
Child	\$2.25
Senior	\$4.50
Super Senior (80+)	Free
Student	\$4.00
Youth	\$3.75
Family	\$9.00
Other Groups	\$2.00
Extra Child	\$1.00
Shower	\$2.25
Family 50% off Sundays	\$4.50
Toonie Wednesdays	\$2.00
50% Off Fridays to 5:00pm	50% off single admissions
Senior Monday to 5:00pm	\$2.00
Last Hour Swim or Gym	\$3.25
School Group Student Rate (swim/skate) min. 40 students	\$2.10

Membership Rates (GST & PST Included)	
Adult Membership Rates	
10 Pass	\$42.50
20 Pass	\$79.50
1 Month	\$50.75
1 Month All Inclusive	\$69.25
3 Month	\$115.50
3 Month All Inclusive	\$157.00
6 Month	\$211.00
6 Month All Inclusive	\$278.00
1 Year	\$400.00
1 Year All Inclusive	\$511.00
Senior Membership Rates	
10 Pass	\$38.00
20 Pass	\$71.25
1 Month	\$45.25
1 Month All Inclusive	\$63.75
3 Month	\$100.75
3 Month All Inclusive	\$142.25

Membership Rates (GST & PST Included) con't	
Senior Membership Rates con't	
6 Month	\$162.50
6 Month All Inclusive	\$229.25
1 Year	\$302.25
1 Year All Inclusive	\$413.00
Family Membership Rates	
10 Pass	\$77.50
20 Pass	\$147.00
1 Month	\$102.50
3 Month	\$231.00
6 Month	\$412.00
1 Year	\$807.50
Child Membership Rates	
10 Pass	\$17.50
20 Pass	\$ 33.25
1 Month	\$ 15.75
3 Month	\$ 36.00
6 Month	\$ 63.75
1 Year	\$ 118.25
Youth Membership Rates	
10 Pass	\$ 31.50
20 Pass	\$ 58.75
1 Month	\$ 36.00
3 Month	\$ 80.50
6 Month	\$ 144.25
1 Year	\$ 265.25
Student Membership Rates	
10 Pass	\$ 33.25
20 Pass	\$ 62.75
1 Month	\$ 38.75
1 Month All Inclusive	\$ 57.25
3 Month	\$ 86.00
3 Month All Inclusive	\$ 127.50
6 Month	\$153.50
6 Month All Inclusive	\$ 220.00
1 Year	\$ 283.75
1 Year All Inclusive	\$394.50

Arena Rates (GST & PST Included)	
55+ Drop In Hockey	\$10.00
Adult Shinny Hockey	\$3.00
Parent and Tot Skate	Drop In Fee
Casual Hockey Day Rate	\$3.00
Student Casual Hockey	\$3.00
Youth Casual Hockey	\$3.00
Family (2 Adult 3 Children)	\$9.00
Helmet Rental	\$2.25
Skate rental	\$3.00
Skate rental (School Rates)	\$2.25
Skate sharpening	\$5.50
Adult Ice Rental - Non Prime Time/hr	\$153.00
Adult Ice Rental - Prime Time/hr	\$162.00
Early Bird/hr	\$55.50
Youth Ice/hr	\$74.00
Youth Ice 1/2 sheet/hr	\$74.00
Arena Dry Floor – Adult/hr	\$41.50
Arena Dry Floor – Youth/hr	\$23.00

Facility Rental Rates (GST & PST Included)	
Meeting Room – Non-Profit/hr	\$10.00
Meeting Room – Commercial/hr	\$24.50
Meeting room - Day Rate	\$55.50
Mezzanine – Non-Profit/hr	\$20.25
Mezzanine – Commercial/hr	\$26.00
Mezzanine – Day Rate (Max. 10 hours – between 6:00am and 12:00am)	\$101.50
Conference Room – Non-Profit/hr	\$64.75
Conference Room – Commercial/hr	\$83.25
Conference Room – Day Rate (Max. 10 hours – between 6:00am and 12:00am)	\$323.50
Dry Floor & Mezzanine – Day Rate (Max. 10 hours – between 6:00am and 12:00am)	\$800.00
Lane Rental/hr	\$14.00
Pool Rental/hr	\$143.25
Locker Rental/month	\$3.00

Equipment Rentals (GST & PST Included)	
Set Up and Takedown Fee /hr	\$28.30
LED Sign - Day Rate	\$20.00
LED Sign - Week Rate	\$110.00
LED Sign - Month Rate	\$400.00
Projector	\$50.00
Projector Screen	\$25.00
TV w VCR or DVD	\$10.00
Microphone	\$10.00
Sound System (amp)	\$25.00
Sound System (sound board)	\$25.00
Folding Table <i>(Applies to External Rental Contract Only)</i>	\$10.00
Folding Chair <i>(Applies to External Rental Contract Only)</i>	\$3.00
Coffee Service (10 Cups)	\$10.00
Kitchen Use – Non-Profit/hr Rate	\$12.00
Kitchen Use – Commercial/hr	\$20.00
Kitchen Use – Non-Profit Day Rate <i>(Max. 10 hours – between 6:00am and 12:00am)</i>	\$50.00
Kitchen Use – Commercial Day Rate <i>(Max. 10 hours – between 6:00am and 12:00am)</i>	\$80.00
Tablecloth Rental (per cloth)	\$10.00

Dan Sharrers Aquatic Centre Rates (GST & PST Included)	
One parent & tot swim lesson with 6 month vaccination	Free
Open Water Diving	\$350.00
Stroke & Endurance for Adults 1/2hr private	\$15.00
Stroke & Endurance for Adults 1/2 hr semi-private	\$12.00
Assistant Water Safety Instructor	\$325.00
Water Safety Instructor	\$345.00
Lifesaving Instructor	\$260.00
National Lifeguard Service	\$250.00
Canadian Swim Patrol	\$50.00
Introduction to Scuba Diving (Youth)	\$90.00
Introduction to Scuba Diving (Adult)	\$120.00
Junior Lifeguard Club	\$50.00
Bronze Star	\$50.00
Bronze Medallion or Cross	\$120.00
8 – Red Cross Preschool Swim Lessons – 1/2 hr	\$45.00
8 – Red Cross Level 1-6 Swim Lessons – 1/2 hr	\$45.00

Dan Sharrers Aquatic Centre Rates (con't)	
8 – Red Cross Level 7-10 Swim Lessons – 45 min	\$60.00
8 – Adult/Senior Swim Lessons – 1/2 hr	\$45.00
Private Swim Lesson – 1/2 hr	\$20.00
Discount *10 Lessons for the price 8	\$160.00
Semi-Private Swim Lesson – 1/2 hr	\$15.00

Personal Training (GST & PST Included)	
One Hour Personal Training	\$50.00
5 – 1 Hour Personal Training Sessions	\$200.00
10 – 1 Hour Personal Training Sessions	\$380.00
1 – 1 Hour Semi-Private Sessions (per person)	\$30.00
5 – 1 Hour Semi-Private Sessions (per person)	\$160.00
10 – 1 Hour Semi-Private Sessions (per person)	\$300.00
Health/Fitness Consultation	\$36.00
Strength Starter Private	\$55.00
Fitness Evaluation	\$74.00
Body Composition	\$20.00
Strength Trainer Private	\$217.00
Strength Trainer Semi-Private	\$123.00
Food & Nutrition Analysis	\$75.00

DSAC – Program Rates (GST & PST Included)	
Childcare Programs	
Day Camp (Pro-D, Summer, Winter, etc.)	\$29.50
Day Camp – Week Rate	\$118.00
Day Camp - 9 Week Rate	\$824.50
Day Camp - 10 Week Rate	\$940.00
Day Camp - 2nd Child Week Rate	\$110.00
Day Camp - 3rd Child Week Rate	\$103.25
Day Camp - 4th Child Week Rate	\$96.00
Childminding	\$4.00
Busing (Day Camp field trips)	\$15.00
Child Programs	
Parent & Strollers	\$5.00
Merry Music	\$75.00
Survivor Academy for Kids	\$30.00
Christmas Tree Decoration Making	\$5.00
Cookie Decorating	\$5.00
Crafty Kids	\$20.00
Teen Night	\$15.00

Extreme Teen Night	\$20.00
Girls Night Out	\$10.00
Clay Sculpting	\$30.00
Rainbow Loom Meet Ups	\$2.00
Kids PJ Party	\$5.00
DIW Sewing	\$30.00
Yoga for Youth	\$20.00
Children's Active Playtime	\$2.00
Learn to Crochet	\$50.00
Tots Skating	\$40.00
Tots Soccer	\$20.00
Movie Night	\$3.25
Pee Wee Gym	\$2.00
Pool Party	\$3.25
Tykes T-Ball	\$25.00
Baby Sign Language	\$115.00
Teddy Bear Storytime and Skate	\$1.00
Infant Massage	\$60.00
Rhythmic Gymnastics – 45 min	\$130.00
Pumpkin Carving Night	\$2.00 + \$5.00/pumpkin
Princess Tea Party	\$5.00
Skate board camp	\$30.00
Music Together	1 st Child \$165.00 2 nd Child \$105.00
Parent & Tot Gymnastics	\$80.00
Gymnastics Camp - Day Rate	\$35.00
Gymnastics Camp – Half Day Week Rate	\$80.00
Gymnastics Camp – Full Day Week Rate	\$150.00
KickBoxing	\$104.00
Outdoor Movie Nights	
Popcorn	\$2.00
Coffee	\$1.50
Hot Chocolate	\$1.50
Hot Dogs	\$3.00
Youth Programs	
Birthday Party - 12 kids (birthday cake not included)	\$143.25
Birthday Party - up to 16 kids	\$180.25
Birthday Party - up to 20 kids (includes mezzanine rental)	\$232.75
Dive In Movie Nights	\$3.25
Night Basketball	\$30.00
Tween Dances	\$5.00
Cooking (Jr. Chefs, Cakes Cookies & Cupcakes, etc)	\$40.00

Indoor Soccer	\$30.00
Beginner Guitar Lessons	\$130.00
Bike Skills Camp	\$50.00
Swim & Play	\$7.50
Home Alone Program	\$10.00
Stay Safe (youth 9-15 years)	\$30.00
Stay Safe Manual	\$10.00
Rhythmic Gymnastics – 60 min	\$140.00
Mad Scientists	\$40.00
Wipe Out Nights	Drop In Fee
Make your own Henna Tattoo	\$12.00
Tri-Out Triathlons	\$20.00
Skate Board Camp	\$50.00
Painting Party (8+ years)	\$30.00
Springers & Twisters Gymnastics	\$80.00
Brazilian Jiu-Jitsu	\$75.00
Gymnastics Camp - Day Rate	\$35.00
Gymnastics Camp – Half Day Week Rate	\$80.00
Gymnastics Camp – Full Day Week Rate	\$150.00
Kickboxing	\$104.00
Student/Adult Programs	
Youth/Teen Camp (register for 3 or more camps and save 10%)	
Try Out Slackling	\$15.00
Try Out Rock Climbing	\$50.00
Intro to Rock Climbing (one (1) hour)	\$10.00
Ultimate Frisbee League	\$30.00
Competitive Swim Camp	\$150.00
Try Out Stand Up Paddleboarding	\$40.00
Try Out Stand Up Paddleboard Yoga	\$40.00
Food Safe	\$90.00
Self Defense	\$15.00
Beginner Digital Photography	\$150.00
Osteofit	\$40.00
Bike Skills for Adults	\$250.00
Baby Signs Parent Workshop	\$25.00
Raw Foods	\$50.00
Adult Cooking	\$60.00
Winter Driving Skills	\$115.00
Drop In Sports	\$2.00
Chair Yoga	\$40.00
Cake/Cookie Decorating	\$60.00
Jewelry Designing – Ring Making	\$45.00

Jewelry Designing	\$55.00
Belly Dancing	\$50.00
Tai Chi	\$60.00
Kayaking	\$130.00
Pool Kayak Nights (per session)	\$12.50
Give it a Whirl – Intro to Kayaking	\$60.00
Rec League Sports	\$40.00
Rec League- Basketball	\$20.00
Spanish Lessons	\$97.50
Puppy School	\$160.00
Canine Obedience Training	\$175.00
Bath and Body Product Making Workshop	\$12.00
Chocolate Making Workshop	\$40.00
Beginners Knitting	\$40.00
Beginners Crochet	\$40.00
Adult Swim Nights (19+ Last hour price)	\$3.25
Painting Parties (19+ years and up)	\$45.00
Pre-Natal Yoga	\$50.00
Outdoor Distraction Dog Class	\$125.00
Creative Dance	\$6.00/Class (\$24 per month)
Brazilian Jiu-Jitsu (<i>Teen, 12-18 yrs</i>)	\$75.00
Brazilian Jiu-Jitsu (<i>Adult 19+, 1.5 hours</i>)	\$90.00
Kickboxing	\$104.00
First Aid Programs	
First Aid Skills for Seniors (CPR-A)	\$35.00
Lifesaving Society Emergency First Aid	\$80.00
Lifesaving Society Standard First Aid	\$150.00
Lifesaving Society Standard First Aid <i>Recertification</i>	\$75.00
Lifesaving Society CPR-C & AED	\$75.00
Lifesaving Society CPR-C & AED <i>Recertification</i>	\$50.00
Lifesaving Society Emergency Childcare First Aid	\$75.00
Red Cross Babysitting Course	\$65.00
Red Cross People Saver 5-6 yrs	\$15.00
Red Cross People Saver 7-8 yrs	\$ 15.00
Red Cross People Saver 9-10 yrs	\$ 20.00
Red Cross People Saver 11-12 yrs	\$ 20.00

Miscellaneous (GST & PST Included)	
Photocopying	\$0.15
Brochure Ad 1/2 page	\$150.00
Brochure Ad 1/4 Page	\$100.00
Brochure Ad Full Page	\$300.00
8 ft. Dasher Board Ad	\$900.00

Dasher Board Ad (price per foot)	\$120.00
NSF Charge	\$25.00

Field Rentals (GST & PST Included)	
Single Use - per game	\$10.00
League - Adult - per team	\$50.00
League - Youth per team	\$25.00
T-Ball	\$0.00
Tournament - per team	\$25.00

Resale Products (GST & PST Included)	
Other Products - Arena	
Hockey Laces 84"x120"	\$7.50
Hockey Laces 72"	\$5.75
Hockey Tape - Clear	\$4.50
Hockey Tape - Black	\$5.00
Hockey Tape - White	\$4.50
Skate Guards	\$8.00
Whistles	\$10.00
Referee Whistle	\$15.00
Hockey Puck	\$2.50
Visor Anti Fog	\$8.00
Mouth Guards	\$8.00
Pro Wrap	\$4.50
Roller Skate Security Deposit	\$40.00
Roller Skate Rental - Day	\$3.00
Roller Skate Rental - Month	\$10.00
Swimmers 32lbs +	\$2.25
Swimmer 24-34 lbs	\$2.25
Swimmers 16-26 lbs	\$2.25
Gabbys Swim Diapers	\$8.00
Float Bands	\$3.00
AWSI Manual	\$98.00
Swim Cap	\$7.00
Macks Ear Plugs	\$3.50
Nose Clip	\$3.00
Shampoo	\$2.00
Conditioner	\$2.00
Arnica Oil	\$5.00
Healing Salve	\$7.00
Towel	\$10.00
Sweat Towel	\$3.00
Aqua Socks	\$12.25
Headphones	\$15.00
First Aid & CPR Manual	\$30.00
Babysitters Manual	\$18.00
ChildCare First Aid Manual	\$22.50
Technoflex JR	\$15.50
Speedo Hydrospeck JR	\$15.50
Speedo Sengar JR	\$11.00
Technoflex JR Rocket	\$21.25

Other Products – Aquatics	
Speedo Vanquisher JR	\$13.75
Speedo HydrospeX	\$16.75
Technoflex 4.0	\$16.50
Speedo Vanquisher	\$16.75
Speedo Splasher	\$5.75
Speedo Sengar	\$13.50
Other Products - Birthday Party	
Hot Dogs	\$1.50
Extra Pizza	\$20.00
Extra Cake	\$35.00
Extra Juice	\$1.00

**FRASER VALLEY REGIONAL DISTRICT
FACILITIES RATES AND FEES SURVEY as of April 2019**

AQUATIC PROGRAMS	Hope	Chilliwack	Abbotsford	Kent	Summerland	Salmon Arm	Merritt	Mission	Saltspring	Castlegar	Average	Variance
Private Swim Lessons	\$15	\$28	\$31	\$27	\$20		\$18	\$27	\$21	\$22	\$23	-8.15
Semi Private Swim Lessons	\$12	\$23	\$23	\$18	\$15		\$13	\$19	\$16	\$14	\$17	-4.97
Swim Lessons - Preschool (30 minutes)	\$30	\$46	\$52	\$46	\$36	\$59	\$33	\$46	\$49	\$45	\$44	-14.16

To: CAO for the Electoral Area Services Committee

Date: 2019-06-11

From: Andrea Antifaeff, Planner I

File No: 3090-20-2019-07

Subject: Application for Development Variance Permit 2019-07 to vary the size of an accessory building for a detached garage at 10180 Royalwood Boulevard, Electoral Area D

RECOMMENDATION

THAT the Fraser Valley Regional District Board issue Development Variance Permit 2019-07 to increase the size of an accessory building from the maximum permitted area of 45 square metres to 64 square metres, to facilitate the construction of a detached garage at 10180 Royalwood Boulevard, Area "D", subject to the consideration of any comments or concerns raised by the public.

STRATEGIC AREA(S) OF FOCUS

Provide Responsive & Effective Public Services

BACKGROUND

The owners of the property have made an application for a Development Variance Permit (DVP) in order to increase the size of an accessory building as outlined in *Zoning By-law for Electoral Area "D", 1976 of the Regional District of Fraser-Cheam*.

PROPERTY DETAILS			
Electoral Area		D	
Address		10180 Royalwood Boulevard	
PID		030-594-235	
Folio		733.06644.261	
Lot Size		0.27 acres	
Owner	Dekoff, Lorne & Lorrie	Agent	Les Daase (Platin Homes Ltd.)
Current Zoning	Suburban Residential 2 (SBR-2)	Proposed Zoning	(Active Rezoning: ZON0062 - SBR-3)
Current OCP	Suburban Residential (SR)	Proposed OCP	No change
Current Use	Vacant land	Proposed Use	Residential & Accessory Residential

Development Permit Areas	6-D RAR (N/A)
Hazards	N/A
Agricultural Land Reserve	No

ADJACENT ZONING & LAND USES

North	^	Suburban Residential 2 (SBR-2), Single Family Homes
East	>	Country Residential (CR), Single Family Homes
West	<	Suburban Residential 2 (SBR-2), Single Family Homes
South	v	Suburban Residential 2 & 3, Single Family Homes

NEIGHBOURHOOD MAP



PROPERTY MAP



DISCUSSION

The property owners are proposing to construct a single family dwelling and a detached garage at 10180 Royalwood Boulevard. The proposed detached garage exceeds the maximum permitted size of an accessory building.

The proposed size variance is unlikely to affect neighbouring properties as the siting of the detached garage is proposed for the rear of the property. The single storey detached garage conforms to all setbacks of the SBR-3 zone and is not to be used for residential use (Appendix A – Site Plan).

Zoning Amendment

The property owners have also requested to rezone the property at 10180 Royalwood Boulevard from Suburban Residential-2 (SBR-2) to Suburban Residential-3 (SBR-3) to facilitate an increase in lot coverage from 25% (SBR-2) to 40% (SBR-3). The rezoning is required as the lot coverage is a density provision that can only be increased by rezoning, and not a variance. The proposed rezoning will accommodate the total area of both the residence and detached garage. If the zoning amendment is adopted then the property owners will be able to proceed with the proposed construction of the detached garage.

Variance Requested – DVP 2019-07

Application Rationale

The applicant advises that reasons for the variance are: 1. the proposed detached garage is located in the northeast corner of the property not directly visible from Royalwood Boulevard; and, 2. the proposed detached garage will be meeting all required setbacks.

Size of Accessory Building Variance

The owners have requested an increase in the maximum size of the accessory building of 19 square metres (204.5 square feet). This would increase the maximum permitted size of an accessory building from 45 square metres (484.4 square feet) to 64 square metres (689 square feet), a 42% increase.

Maximum Size of Accessory Buildings	
Permitted (Zoning)	45 square metres (484.4 square feet)
Proposed	64 square metres (689 square feet)
Requested Variance	19 square metres (204.5 square feet)

If the variance is not granted the applicant could construct a smaller detached garage which complies with zoning regulations.

DVP Summary for Electoral Area D for Accessory Structure Size

The variance is consistent with DVP's which have been issued in the past. The table below summarizes past DVP applications in Electoral Area D (SBR-2 and SBR-3 zones) to increase the allowable size of accessory residential buildings.

Civic Address	Permit Number	Conditions of Permit	Approved/ Denied
10-10200 Gray Road	DVP 1995-10	Increase size to 98 m ² (117% increase)	Approved
6-10200 Gray Road	DVP 1996-05	Increase size to 66.9 m ² (48.6% increase)	Approved
18-10200 Gray Road	DVP 1998-04	Increase size to 76.2 m ² (69% increase)	Approved
11-10200 Gray Road	DVP 2002-01	Increase size to 80.27 m ² (72% increase)	Approved
4-10200 Gray Road	DVP 2002-04	Increase size to 125.4 m ² (179% increase)	Approved
3-10200 Gray Road	DVP 2003-06	Increase size to 74.3 m ² (65% increase)	Approved
10211 Parkwood Drive	DVP 2012-02	Increase size to 50m ² (11% increase)	Approved

10391 Parkwood Drive	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 Road	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 Drive	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 Drive	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 Caryk's Road	DVP 2019-05	Increase size to 53.5m ² (19% increase)	Approved
10395 Wildrose Drive	DVP 2019-10	Increase size to 58 m ² (29% increase)	Approved
10163 Royalwood Blvd	DVP 2019-12	Increase size to 76m ² (69% increase)	Approved

Zoning Bylaw Review

A comprehensive review of all zoning bylaws in the Electoral Areas is currently underway. This review includes analysis of recent development variance permits to determine if revised zoning bylaw provisions, including the maximum size of accessory building is warranted.

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 be given an opportunity to provide written comments or attend the Board meeting 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 seven (7) letters of support have been submitted (Appendix C).

COST

The application fee of \$350.00 has been paid by the applicant.

CONCLUSION

Staff recommend that the FVRD Board issue the Development Variance Permit to increase the size of an accessory building at 10180 Royalwood Boulevard.

The proposed size variance is unlikely to affect neighbouring properties as the siting of the detached garage is proposed for the rear of the property. The single storey detached garage conforms to all setbacks of the SBR-3 zone and is not to be used for residential use (Appendix A – Site Plan).

Option 1 – Issue (Staff Recommendation)

Staff recommend that the Fraser Valley Regional District Board issue Development Variance Permit 2019-07 to increase the size of an accessory building from the maximum permitted area of 45 square metres to 64 square metres, to facilitate the construction of a detached garage at 10180 Royalwood Boulevard, Area "D", 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 2019-07 for the property located at 10180 Royalwood Boulevard, Electoral Area D.

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 2019-07 for the property located at 10180 Royalwood Boulevard, Electoral Area D to FVRD Staff.

COMMENTS BY:

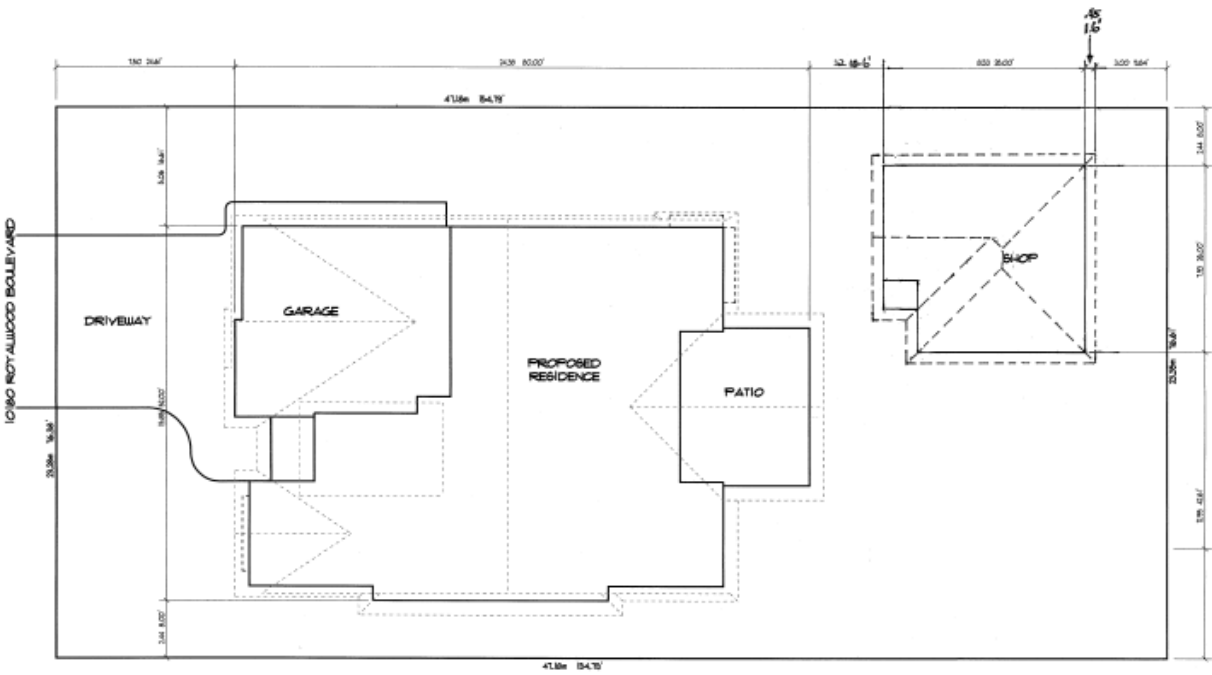
Graham Daneluz, Deputy Director of Planning & Development: Reviewed and supported.

Margaret Thornton, Director of Planning & Development: Reviewed and supported.

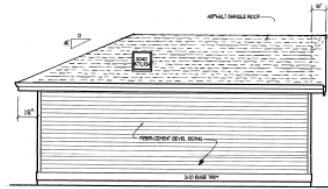
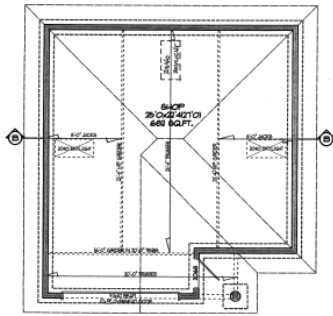
Mike Veenbaas, Director of Financial Services: No further financial comment.

Jennifer Kinneman, Acting Chief Administrative Officer: Reviewed and supported.

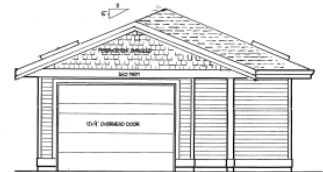
Appendix A
Site Plan



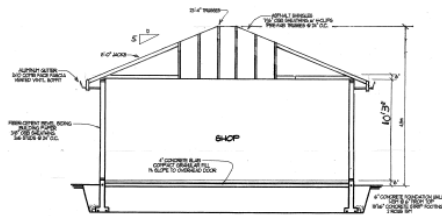
Appendix B Construction Drawings



LEFT ELEVATION



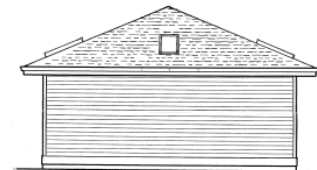
FRONT ELEVATION



CROSS SECTION B-B



RIGHT ELEVATION



REAR ELEVATION

Appendix C
Letters of Support

Support Letter

Date: MARCH 14 / 2019

We are in support of the property located at 10180 Royalwood Blvd, rezoning to SBR-3 and being granted a Development Variance Permit to vary the size of an Accessory Building from 45 square meters to 64 square meters.

Name: DEREVLÉAM ROMEO

Address:

Signature: 

Support letter can be emailed to:
arrange pickup

to

Thank you

Megan

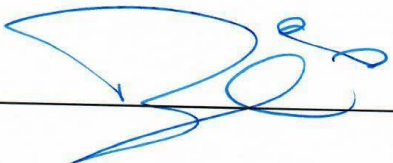
Support Letter

Date: March 14/19

We are in support of the property located at 10180 Royalwood Blvd, rezoning to SBR-3 and being granted a Development Variance Permit to vary the size of an Accessory Building from 45 square meters to 64 square meters.

Name: Derek Corneale

Address: _

Signature: 

Support letter can be emailed to:
arrange pickup

to

Thank you
Megan

Support Letter

Date: March 15/19

We are in support of the property located at 10180 Royalwood Blvd, rezoning to SBR-3 and being granted a Development Variance Permit to vary the size of an Accessory Building from 45 square meters to 64 square meters.

Name: Brad Klaassen

Address:

Signature: 

Support letter can be emailed to:
arrange pickup

to

Thank you

Megan

Support Letter

Date: MARCH 18 / 2019.

We are in support of the property located at 10180 Royalwood Blvd, rezoning to SBR-3 and being granted a Development Variance Permit to vary the size of an Accessory Building from 45 square meters to 64 square meters.

Name: ROGER Y GAIL SIEMENS

Address:

Signature: 

Support letter can be emailed to:
arrange pickup

to

Thank you

Megan

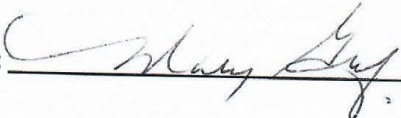
Support Letter

Date: MARCH 22, 2019.

We are in support of the property located at 10180 Royalwood Blvd, rezoning to SBR-3 and being granted a Development Variance Permit to vary the size of an Accessory Building from 45 square meters to 64 square meters.

Name: MARY GRAF

Address:

Signature: 

Support letter can be emailed to:
arrange pickup

to

Thank you

Megan

Support Letter

Date: 3/14/2019

We are in support of the property located at 10180 Royalwood Blvd, rezoning to SBR-3 and being granted a Development Variance Permit to vary the size of an Accessory Building from 45 square meters to 64 square meters.

Name: Tyson Kennedy

Address: _

-

-

-

Signature: Tyson Kennedy

Digitally signed by Tyson Kennedy
DN: cn=Tyson Kennedy, o=Safetek
Emergency Vehicles Ltd., ou,
email=tkennedy@firetrucks.ca, c=CA
Date: 2019.03.14 11:21:51 -07'00'

Support letter can be emailed to: |
arrange pickup

to

Thank you

Megan

**T & N Unity
PO Box 355
Agassiz, BC V0M 1A0**

February 26, 2019

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

Re: Lot 2 – Variance Permit

Dear Mr. David Bennett,

We are in support of Lorne Dekhoff's application for a Variance Permit for his accessory building proposed on Lot 2 – 10180 Royalwood Blvd.

Yours truly,



Natalie teBrinke



Trevor teBrinke



FRASER VALLEY REGIONAL DISTRICT DEVELOPMENT VARIANCE PERMIT

Permit No. Development Variance Permit 201907

Folio No. 733.06644.261

Issued to: Lorne & Lorrie Dekoff

Address:

Applicant: Lorne & Lorrie Dekoff

Site Address: 10180 Royalwood Boulevard, 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 2 SECTION 1 TOWNSHIP 3 RANGE 29 WEST OF THE SIXTH MERIDIAN NEW WESTMINSTER
DISTRICT PLAN EPP72713
030-594-235

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 26 Section 2602.2 Building Dimensions (b) Size of Accessory Buildings (Maximum)

The maximum area of an accessory building is increased from 45 square metres (484.4 square feet) to 64 square metres (689 square feet).

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".

GENERAL TERMS AND CONDITIONS

1. This Development Variance Permit is issued Pursuant to Part 14 – Division 9 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 Section 524 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 developers 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.
-

SECURITY DEPOSIT

As a condition of the issuance of this Permit, and pursuant to Section 502 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: \$ <N/A> .
 (b) the deposit of the following specified security: \$ <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 2019-07. 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> DAY OF <MONTH>, <YEAR>

Chief Administrative Officer / Deputy

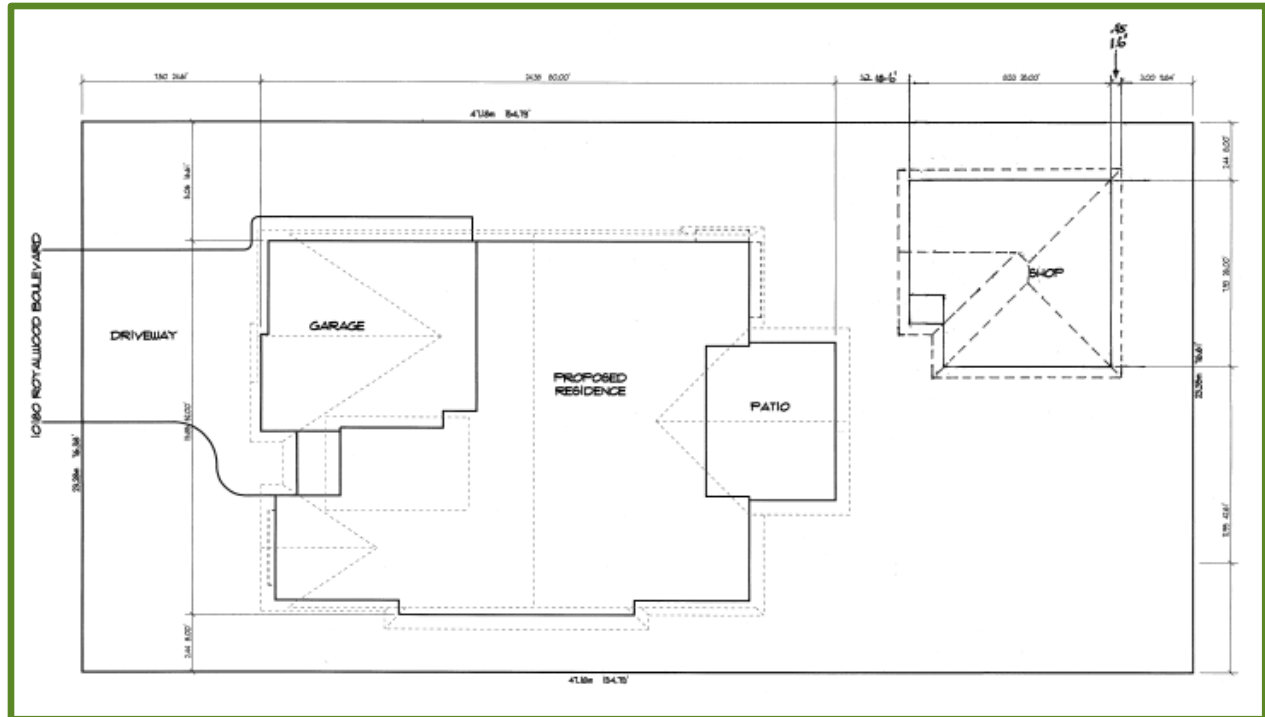
THIS IS NOT A BUILDING PERMIT

DRAFT

DEVELOPMENT VARIANCE PERMIT 2019-07
SCHEDULE "A"
Location Map



DEVELOPMENT VARIANCE PERMIT 2019-07
SCHEDULE "B"
Site Plan



SCHEDULE A-4

Permit Application

I / We hereby apply under Part 14 of the *Local Government Act* for a;

☒ Development Variance Permit

☐ Temporary Use Permit

☐ Development Permit

An Application Fee in the amount of \$ 350.00 as stipulated in FVRD Application Fees Bylaw No. 1231, 2013 must be paid upon submission of this application.

Civic Address 10180 Royalwood Blvd PID 030-594-235

Legal Description Lot 2 Block 1 Section 3 Township 29 Range EPP72713 Plan

The property described above is the subject of this application and is referred to herein as the 'subject property.' This application is made with my full knowledge and consent. I declare that the information submitted in support of the application is true and correct in all respects.

Owner's
Declaration

Name of Owner (print) Lorne Dekoff	Signature of Owner 	Date Feb 18, 2019
Name of Owner (print) Lorrie Dekoff	Signature of Owner 	Date Feb 18, 2019

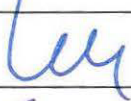

Owner's
Contact
Information

Office Use Only	Date <u>Feb 20 2019</u>	File No.
	Received By <u>Andrea</u>	Folio No. <u>733. 06644. 261</u>
	Receipt No. <u>8016/4</u>	Fees Paid: \$ <u>350.00</u>

Agent

I hereby give permission to Les Daase to act as my/our agent in all matters relating to this application.

Only complete this section if the applicant is NOT the owner.

Signature of Owner 	Date Feb 18, 2019
Signature of Owner 	Date Feb 18, 2019

Agent's contact information and declaration

Name of Agent Les Daase		Company Platin Homes Ltd
Address PO Box 2569. Stn Sardis Main		City Chilliwack
Email les@platinhomes.ca		Postal Code V2R 1A8
Phone	Cell	Fax

I declare that the information submitted in support of this application is true and correct in all respects.

Signature of Agent 	Date Feb 18, 2019
------------------------------------------------------------------------------------------------------	-----------------------------

Development Details

Property Size .110 Present Zoning SBR2

Existing Use Vacant lot, proposing to build residence

Proposed Development Detached (Accessory) Building

Proposed Variation / Supplement Increase the allowable size from 45 m2 to 63.36 m2

(use separate sheet if necessary)

Reasons in Support of Application Detached (accessory) building is in the Northeast corner of the property, not directly visible from Royalwood Blvd. The accessory building is located 2.44 m set back from the side lot line and 3.00 m set back from the rear lot line.

The accessory building, backs up to the rear property line of the adjacent Building Lots off of Caryks Rd. and therefore primarily visible only from the rear of any adjoining properties

Page 2 of 4

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:

yes
☐

no
☒

30 metres of the high water mark of any water body

yes
☐

no
☒

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.

Contaminated Sites Profile

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

yes
☐

no
☒

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
☐

I 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.

To: CAO for the Electoral Area Services Committee

Date: 2019-06-11

From: Julie Mundy, Planning Technician

File No: 3090-20 - 2019-13

Subject: Application for Development Variance Permit 2019-13 to reduce the setback from a well for an aquaculture building at 12443 Stave Lake Road, Electoral Area "F"

RECOMMENDATION

THAT the Fraser Valley Regional District issue Development Variance Permit 2019-13 to vary the minimum setback requirement of aquaculture structures to existing wells at 12443 Stave Lake Road from 30.0m metres to 0.0 metres subject to consideration of any comments or concerns raised by the public.

AND THAT the Fraser Valley Regional District Board authorize its signatories to execute all legal instruments associated with this application, including a Section 219 restrictive covenant advising future property owners that the agricultural and domestic water supply intake is within 30.0 metres of aquaculture structures and that the management of the water supply must be consistent with the Standard Operating Procedure prepared by the applicant as well as with the recommendations of the Hydrogeological Report, and to include regular tests of the water to provide warning of possible contamination.

STRATEGIC AREA(S) OF FOCUS

Support Environmental Stewardship

Provide Responsive & Effective Public Services

PRIORITIES

Priority #2 Air & Water Quality

BACKGROUND

Miracle Springs Inc. has made an application for a variance to *Dewdney-Alouette Regional District Land Use and Subdivision Regulation Bylaw No. 559-1992* in order to reduce the required setback from proposed aquaculture structures to already existing wells on the property at 12443 Stave Lake Road.

The applicant was previously issued a Development Variance Permit to reduce the setback requirements aquaculture buildings to a well, which has subsequently expired. The applicant wishes to proceed with the original aquaculture construction plans, and has re-applied for the same variance. The applicant is currently operating an existing fish farm that has been in operation for a number of years on the subject property.

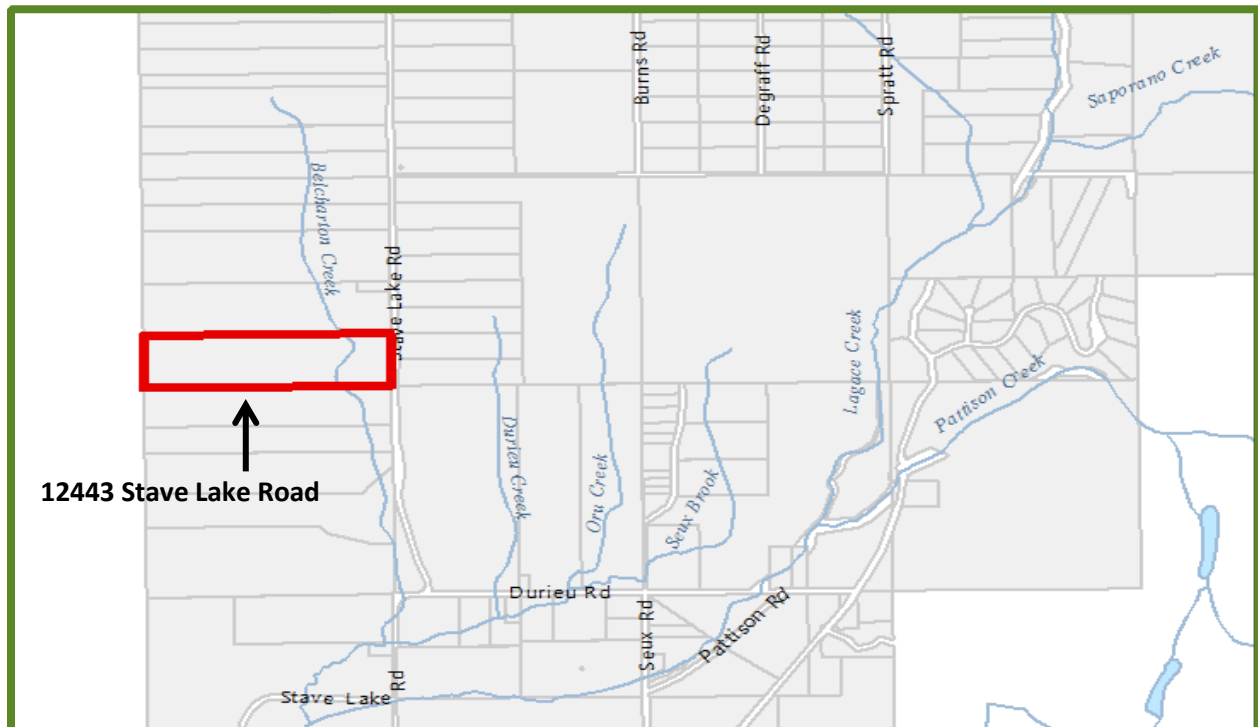
PROPERTY DETAILS

Electoral Area	F
Address	12443 Stave Lake Road
PID	013-394-291
Folio	775.02288.000
Lot Size	40 acres (16.18 ha)
Owner	Miracle Springs Inc. (D. Sampson / M. Cuning)
Current Zoning	Rural 3 (R-3). Aquaculture Use = Permitted
Current OCP	Limited Use (LU)
Current Use	Residential
Development Permit Areas	DPA 1-F and DPA 2-F
Hazards	High Hazard (HH) and Potential Hazard (PH) for Dff (Mb). Known Debris Hazard Occurrences.
Agricultural Land Reserve	N

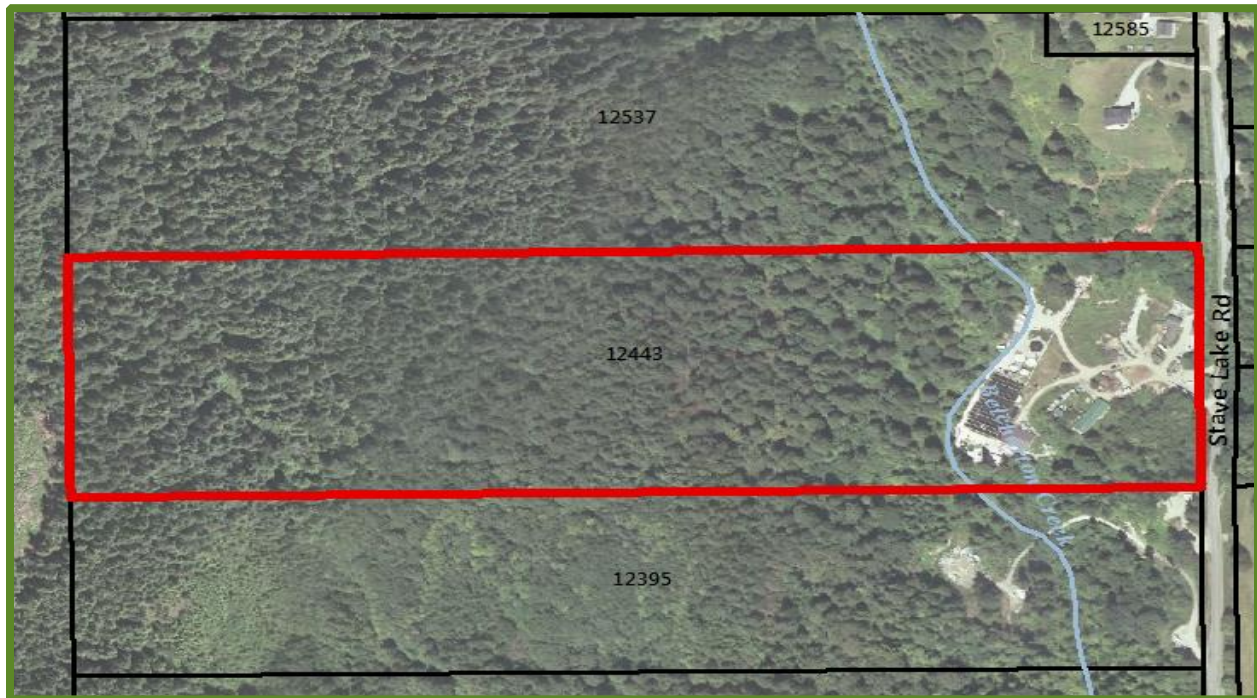
ADJACENT ZONING & LAND USES

North	^	Rural 3 (R-3), Single-Family Homes
East	>	Upland Agriculture (A-1) / ALR, Single-Family Homes
West	<	Rural 3 (R-3), Crown Land
South	v	Rural 3 (R-3), Single-Family Home

NEIGHBOURHOOD MAP



PROPERTY MAP



DISCUSSION

Development Variance Permit 2016-04

Miracle Springs Inc. was issued a Development Variance Permit (DVP 2016-04) in November 2016 to reduce the setback from an aquaculture building to an existing well from 30.0 metres to 0.0 metres. The variance expired in 2018 due to inactivity, and the applicants have re-applied for the same variance in order to proceed with their original plans to construct several aquaculture buildings.

Construction Proposal

The applicant identified two separate phases of construction which will see the construction of three separate structures on the property as part of the fish farm expansion.

Phase 1

Mechanical Building:

- Footprint area of approximately 55m²
- Enclosure over Well #2

Juvenile System:

- Footprint area of approximately 725m²
- Containing fish tanks

Phase 2

Grow Out System (Addition)

- Footprint area of approximately 1,780m²
- Enclosure of Well #1
- Containing Fish Tanks

There are two existing wells on the property that will be enclosed within the proposed structures (refer to site plan, Appendix A).

Zoning Requirements

Section 412 (8) of the *Dewdney-Alouette Regional District Land Use and Subdivision Regulation Bylaw No. 559-1992* states that any building or structure to be used for the keeping of cattle, other livestock, and manure pits must be sited at least 30.0 metres from any lot line, well, sandpoint, watercourse, or dwelling unit. The proposal involves the construction of an aquaculture building and mechanical building which will enclose the existing wells located on the property, thereby reducing the setback to 0.0 metres. A variance of the zoning bylaw is required to authorize the proposed construction.

The applicant has provided a Standard Operating Procedure (SOP) outlining biosecurity measures and required maintenance for the on-site wells to ensure that the water sources are not contaminated and to ensure the safety and health of the water for domestic and agricultural purposes.

Provincial Regulations Pertaining to Wells and Domestic Water Supply Intakes

The *Health Hazards Regulation* of the *Public Health Act* requires that a person who controls a well installed after July 20, 1917 must ensure that the well is located at least 30 metres from any probable source of contamination. While the *Regulation* does not define “probable source of contamination”, Fraser Health staff have confirmed that typically, a “probable source of contamination” refers to septic system effluent, manure piles or anything else that could contaminate drinking water if exposed to the drinking water source”.

The Dewdney-Alouette Regional District Land Use and Subdivision Regulation Bylaw No. 559-1992 is consistent with the *Health Hazards Regulation*.

Comments from Provincial Agencies

Marc Zubel, Regional Manager of the Drinking Water Program, Fraser Health, provided the following comments:

- The SOP covers the main concern of preventing contamination of the water supply.
- In this particular case, it appears that the wells are secured and properly sealed, and the SOP for well management is reasonable - water quality in the well should be adequately protected
- Bacteriological water quality testing on a regular basis (at least once per month) is advisable to ensure that water quality conditions remain good and water is potable for domestic use.

In light of these comments, staff determined that further confirmation was required by a certified professional in order to conclusively determine that the SOP is adequate to ensure the proposal is compliant with the *Health Hazards Regulation* and that the reduced setback does not create a probable source of contamination to the water source.

Certified Professional Review and Analysis

The applicant engaged Hemerra Envirochem Inc. to perform an assessment of the SOP and to provide an opinion on the potential risks to the groundwater resource aquifer based on proximity to the

proposed agricultural structures and uses. FVRD received a Hydrogeological Report dated September 28, 2016 from Gerry Papini, P. Geo and Senior Hydrogeologist, of Hemmera Envirochem Inc. (attached in full, Appendix "B"). A summary of the comments provided in the report are below:

- The well's construction, the depth of the screened aquifer, and the presence of substantial clay layer overlying the screened aquifer indicate that the contamination of the screened aquifer from potential contamination sources at ground surface is improbable.
- The 30 metre setback of a well from an agricultural activity (per the Zoning Bylaw) is not considered to provide any incremental protection to the groundwater resource respecting the construction and proposed use of well #1 and Well #2.
- [The applicant] has developed a Standard Operating Procedure (SOP) for well management incorporating access control, water sampling and routine monitoring to facilitate protection of the groundwater resource.
- It is Hemmera's opinion that the 30 metre setback be waived for the proposed use of Well #1 and Well #2, and that the enclosure and use of the wells according to the proposed design does not present a hazard to the groundwater resource at this property.

Considering the comments provided from Fraser Health in addition to the professional review of the proposal and SOP prepared by the applicant, staff recommend the operator take the following steps to protect the groundwater resource at the property:

- Ensure biosecurity measures are taken and maintained around all wells on the subject property, in accordance with the Standard Operating Procedure (SOP).
- Ensure the supply wells are operated and maintained in accordance with the *Groundwater Protection Regulation*.
- Conduct regular (quarterly) bacteriological testing of the well water to provide a warning of possible contamination, in accordance with the SOP.

Restrictive Covenant

A restrictive covenant was offered by the property owner at the time of the previously issued DVP to advise future property owners that the agricultural and domestic water supply intake is within 30.0 metres of aquaculture structures and that the management of the water supply must be consistent with the Standard Operating Procedure prepared by the applicant as well as with the recommendations of the Hydrogeological Report, and to include regular tests of the water to provide warning of possible contamination. The primary benefit of the covenant is to situate responsibility for protecting the well with the property owners and the registered professional. If the current variance request is approved, the covenant will require minor amendments.

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 attend the Regional Board meeting 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 no comments have been received.

COST

The application fee of \$350 has been paid by the applicant.

CONCLUSION

Siting agricultural/aquaculture buildings a specified distance from a well is meant to reduce the risk of potential contamination to a water source. The setback distance is generalized to be applicable in wide range of scenarios, and does not consider the specific type of activity taking place, nor the potential risk of contamination from a specific activity. The applicant engaged an environmental consultant (Hemmera) to assess potential risks to the groundwater aquifer based on the proximity of the proposed aquaculture activities. Hemmera provided the professional opinion that contamination to the ground water is improbable based on existing site conditions, and that the 30 metre setback will not provide incremental protection to the groundwater resource. A third-party regulatory body (Fraser Health Authority) has reviewed and accepted the Hemmera report which includes a Standard Operating Procedure for on-site well management and maintenance.

Staff are satisfied with the outcome of the environmental review for the proposed works and recommend that Development Variance Permit 2019-13 be issued by the Fraser Valley Regional District Board, subject to any comments or concerns from the public.

Option 1 – Issue (Staff Recommendation)

Staff recommend that the Fraser Valley Regional District Board issue Development Variance Permit 2019-13 to reduce the setback from an aquaculture structure to an existing well from 30.0 metres to 0.0 metres at 12443 Stave Lake Road, Electoral Area "F", 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 2019-13 for the property at 12443 Stave Lake Road, Electoral Area F.

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 2019-13 for the property at 12443, Electoral Area F to FVRD Staff.

COMMENTS BY:

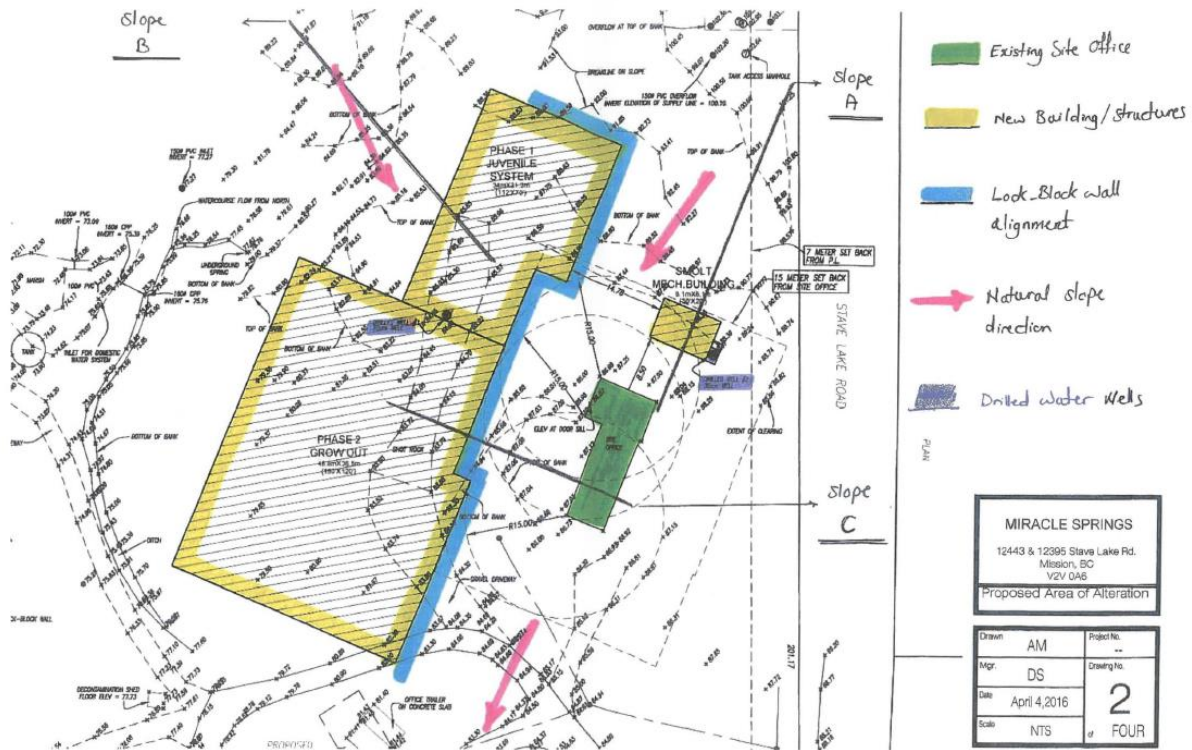
Graham Daneluz, Deputy Director of Planning & Development: reviewed and supported

Margaret Thornton, Director of Planning & Development: reviewed and supported

Mike Veenbaas, Director of Financial Services: No further financial comment.

Jennifer Kinneman, Acting Chief Administrative Officer: Reviewed and supported.

Appendix A Site Plan



Appendix B
Hydrogeological Report
Prepared by: Gerry Papini, Hemmera Envirochem Inc, September 26, 2016

FVRD
CCT 04 2016
FARMING DEPT.



Hemmera Envirochem Inc.
18th Floor, 4730 Kingsway
Burnaby, BC V5H 0C6
T: 604.669.0424
F: 604.669.0430
hemmera.com

September 28, 2016
File: 2030-001.01

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

Attn: Katelyn Hipwell

Dear Katelyn,

Re: Groundwater Protection: Miracle Springs, Mission, BC

Further to our conversation regarding use of groundwater supply wells to supply the expansion of the fish farm facilities at the Miracle Springs property (12443 & 12395 Stave Lake Road), Hemmera Envirochem Inc. (Hemmera) is pleased to provide an opinion on potential risks to the groundwater resource aquifer based on proximity to the proposed farming activities. The purpose of this letter is to provide assurance to the Fraser Valley Regional District (FVRD) and Fraser Health Authority that the use of two production wells for the proposed expansion at the Miracle Springs will not present a contamination risk for the groundwater resource.

Use of the groundwater resource must comply with the Groundwater Protection Regulation (B.C. Reg. 152/2016, June 10, 2016), the Health Hazards Regulation (B.C. Reg. 41/2016, February 29, 2016), (HHR) and the FVRD Bylaw No. 559, Area "G" Part 400: 8b. Fish farming is considered agricultural land use. Section 8(1)a of the HHR requires that a groundwater well be located "30 m from any probable source of contamination". For the purposes of this letter, we assume that agricultural activities are a potential source of contamination. The Groundwater Protection Regulation (GPR) provides requirements for well construction, operation, maintenance and deactivation / decommissioning.

1.0 EXISTING INFORMATION

Hemmera was provided with background information regarding the proposed fish farm expansion, the production well construction, and use of supply wells. We summarize the background information from the proponent and drilling contractor as follows:

- Two buildings are planned northeast of the existing fish pens and west of the Stave Lake Road. Phase 1 is a 34 m x 21.3 m slab-on-grade construction (Attachment 1 Drawing No. 2 Proposed Area of Alteration) with nearby 9.1 m x 6.1 m slab-on-grade mechanical building (Smolt Mech. Building – see Drawing No. 2).

- Water from two existing groundwater supply wells: Well #1 – Well ID 41521 and Well #2 – Well ID 41522 (see Drawing No. 2) will be used to provide the additional facilities with water (and Well #2 will continue to provide potable water to two dwellings).
- Well # 1 is 12-inch (30 cm) diameter, 156-foot (48 m) deep with casing installed to 136 feet (42 m) and a 20 foot (6 m), (100 slot) screen installed to the bottom of the hole. The well screen is set in sand and gravel (the screened aquifer). Thin surficial sand is underlain by approximately 30 feet (9 m) of clay. The static water level is 7 feet (2 m) from surface. The drilling contractor rated the well production at >500 GPM (>32 L/s), but this rate has not been verified by pump testing (Attachment 2);
- Well #2 is an 8-inch diameter, 198-foot (60 m) deep well with casing installed to 171 feet (52 m) and 80-slot screen to the bottom of the borehole. The well screen is set in sand and gravel (the screened aquifer). Surficial sand, clay and gravel is underlain by approximately 60-foot (18 m) thick of clay. The water level was reportedly artesian at the time of drilling. The drilling contractor rated the well production at >200 GPM (> 13 L/s) but this rate has not been verified by pump testing (Attachment 2).
- Both wells will be enclosed within the building limits (see Drawing No. 2). Access to Well # 1 will be restricted by provision of a chain-link cage (2.5 m x 2.5 m x 6 m) and encapsulating concrete wall (see Attachment 3 – Standard Operating Procedure, Rev 1).
- We understand that the well casings are currently above ground and that there are no plans to construct a well pit in the future.

2.0 GROUNDWATER PROTECTION

The intent of the HHR is to protect the groundwater resource from potential contamination. At Miracle Springs, the groundwater resource is protected from potential contamination by the following barriers or conditions:

1. The buildings are slab-on-grade design such that any spillage of chemicals or other hazardous material would be contained within the facility and unlikely to infiltrate the ground;
2. The wells will be enclosed within a dedicated building or locked enclosure safe-guarding them from accidental damage or tampering;
3. The wells are constructed according to the GPR with grouted-in steel casing extending above ground surface and to a depth below a clay layer (aquitard);
4. The screened aquifer is confined at depth with artesian (flowing) conditions reported, implying that groundwater is discharging to surface in the area. Contamination of the screened aquifer is implausible in this setting.

3.0 CONCLUSIONS

The well's construction, the depth of the screened aquifer, and the presence of a substantial clay layer overlying the screened aquifer indicate that contamination of the screened aquifer from potential contamination sources at ground surface is improbable. The 30 m setback of a well from an agricultural

activity (Fraser Valley Regional District Bylaw No. 559, Area "G" Part 400: 8b) is not considered to provide any incremental protection to the groundwater resource respecting the construction and proposed use of Well #1 and Well #2.

Miracle Springs has developed a Standard Operating Procedure (SOP) for well management incorporating access control, water sampling and routine monitoring to facilitate protection of the groundwater resource. In addition to the SOP, the supply wells will need to be operated and maintained in accordance with the GPR.

It is Hemmera's opinion that the 30 m setback be waived for the proposed use of Well #1 and Well #2, and that enclosure and use of the wells according to the proposed design does not present a hazard to the groundwater resource at this property.

Prepared by:
Hemmera Envirochem Inc.

Reviewed by:
Hemmera Envirochem Inc.



A handwritten signature in black ink, appearing to read "G. Papini".

Gerry Papini, P.Geo.
Senior Hydrogeologist
604.669.0424 (176)
gpapini@hemmera.com

A handwritten signature in black ink, appearing to read "Gabriel Viehweger".

Gabriel Viehweger, P.Geo.
Senior Hydrogeologist
604.669.0424 (232)
gviehweger@hemmera.com

Cc: Dan Sampson
Upcountry Properties Group
380 – 233 W 1st Street, North Vancouver, BC V7M 1B3

ATTACHMENT 1
Drawing No. 2 Proposed Area of Alteration



PLAN

MIRACLE SPRINGS			
12443 & 12395 Stave Lake Rd. Mission, BC V2V 0A6			
Proposed Area of Alteration			
Drawn	AM	Project No.	--
Mgr.	DS	Drawing No.	2
Date	April 4, 2016		
Scale	NTS		of FOUR

ATTACHMENT 2
Water Well Records

Phone: (604)857-2266
Toll free: 1-866-857-2266
Fax: (604)857-2267

WATER WELL RECORD

OWNER: MIRACLE SPRINGS	DATE: OCTOBER 15, 2015
ADDRESS: BOX 500 – 233 WEST 1ST	SITE ADDRESS: STAVE LAKE ROAD
NORTH VANCOUVER, BC V7M 1B3	MISSION, BC
PHONE: 604-209-2373	

Date Begun:	SEPTEMBER 22, 2015	
Date Completed:	OCTOBER 5, 2015	
Hole Diameter:	12	Inch
Surface casing:		
Dia: 20"	39	Feet
Drive shoe:	YES	
MEASUREMENTS	FROM	
GROUND LEVEL:		
Stick-Up:	4	Feet
Bottom of Casing:	136'6"	Feet
Hole Depth:	156	Feet
Open Hole: From:		Feet
To:		Feet
SCREENS:		
Number of Screens:	1	
Slot Size:		
Slot 100	Slot	
Slot	Slot	
Screen Length:	20	Feet
	11	Inch
Top at: 135 Feet	1	Inch
Bottom At: 156 Feet		Inch
K. Packer: YES	Riser:	NO
B. Bottom: YES		
WELL		
COMPLETION:		
Rate:	500+	GPM
Pump Setting:	130	Feet
Static Water Level:	7	Feet
Develop:	11 ½	Hours

[illegible]

SITE LEGAL DESCRIPTION:

WELL I.D.
41521

Rig No: 11	Rotary: YES
	Cable:
Driller:	GEORGE PATERSON
Helper:	CHAD ROBERTSON
	MATT DAVIS

NAME: MIRACLE SPRINGS
NUMBER: 5269-11
SHOULD BE PUMP TESTED FOR EXACT GPM

Phone: (604)857-2266
Toll free: 1-866-857-2266
Fax: (604)857-2267

WATER WELL RECORD

OWNER: UPCOUNTRY LEASEHOLDS LTD	DATE: NOVEMBER 4, 2015
ADDRESS: BOX 500 – 233 WEST 1ST	SITE ADDRESS: 12395 STAVE LAKE ROAD
NORTH VANCOUVER, BC	MISSION, BC
PHONE: 604-987-1230 EXT 222	

[illegible]**SITE LEGAL DESCRIPTION:**

NAME: MIRACLE SPRINGS
NUMBER: 5300-11
IP TESTED FOR EXACT GPM

ATTACHMENT 3
Standard Operating Procedure – Well Management

	MIRACLE SPRINGS INC. <i>Standard Operating Procedure</i>	Page: 1 of 3 Revision: 1
TITLE: Well Management		
ISSUE DATE: May 12, 2016		
APPROVED BY: Miracle Springs Management		

WELL MANAGEMENT

1. Rationale

Biosecurity procedures must be maintained around all wells to ensure that the water sources are not contaminated. This is to ensure the safety and health of the water for domestic and agricultural purposes. This Standard Operating Procedure ensures that Miracle Springs Inc. adheres to guidelines specified by the Canadian Food Inspection Agency Animal Health Compartmentalization Program for the introduction and release of water of a known health status.

2. Scope

This procedure applies to all employees, visitors, suppliers and contractors accessing the Miracle Springs Inc. site. It is intended for all well water sources on site.

3. Definitions

4. Responsibilities

Miracle Springs Inc. General Manager is responsible for:

- Review and approval of Miracle Springs Standard Operating Procedures (Wendy Vandersteen, Mike Cuning, Dan Sampson);
- Ensuring that personnel are aware of and understand the procedure;
- Taking action if procedures are not followed.

Miracle Springs Inc. Operations Manager is responsible for:

- Ensuring that the procedure is being followed on a daily basis.

All Miracle Springs Inc. Personnel that work with fish are responsible for:

- Familiarizing themselves with this procedure;
- Obtaining training for this procedure prior to conducting it unsupervised.

5. Equipment and Supplies

- Water sampling bottles

6. Safety Concerns

No safety concerns.

	MIRACLE SPRINGS INC. <i>Standard Operating Procedure</i>	Page: 2 of 3 Revision: 1
TITLE: Well Management		
ISSUE DATE: May 12, 2016		
APPROVED BY: Miracle Springs Management		

7. Approved Procedure

- There are three wells on site (Well #1 - 41880, Well #2 - 41521, and Well #3 - 41522), all drilled by the same contractor (Field Drilling Contractors Ltd.), a driller licensed by the British Columbia Ground Water Association (the well reports are kept on file).
- Well #1 will be located within the new aquaculture system building, Well #2 is between the staff house and road, and Well #3 is on the adjacent property.

7.1 Routine water sampling

- Water is sampled from each well at least quarterly, and sent to Exova for analysis (complete drinking water analysis). Refer to Water Quality Monitoring SOP in Miracle Springs Inc. Biosecurity Manual.

7.2 Restricted Access

- Each well is securely sealed to prevent any access.
- There will be a cage built around Well #1 within the building. This cage will be 2.5m x 2.5m x 6m high and constructed from chain link.
- A 0.6m concrete wall will surround the well to restrict ingress of any water around the well casing from the surrounding aquaculture system.
- The cage will remain locked at all times. Only the Operations Manager and the General Manager will have key access to this enclosure.
- Any service contractors will be supervised by the Operations Manager or the General Manager will working on or near the wells.

7.3 Routine Monitoring

- Each well will be inspected weekly to check the integrity of the seals around the well head. Inspections will check for signs of cracks, water leaks, or other indications of compromised biosecurity. Visual inspections will be recorded on the Well Inspection Record Sheet.
- Well #1 in the enclosed cage will be visually inspected two times per day to ensure that the enclosure remains securely locked. This will be noted on the relevant Daily Husbandry Sheet for the recirculating aquaculture system.

	MIRACLE SPRINGS INC. <i>Standard Operating Procedure</i>	Page: 3 of 3 Revision: 1
TITLE: Well Management		
ISSUE DATE: May 12, 2016		
APPROVED BY: Miracle Springs Management		

8. Contingency Plan

If compromised biosecurity is detected, a water sample will be collected immediately and sent for complete drinking water analysis.

9. Non-conformances

Any staff determined to be improperly following this procedure will be reported to the General Manager. Staff will first receive a warning and subsequently may require retraining or dismissal.

10. Forms and Record Keeping

Records to be completed or filed include:

- Well Inspection Records
- Well Maintenance Records
- Daily Husbandry Records

When records have been updated, please file them appropriately. At the end of each day, the records are stored in the Staff Room at the Record Station in the Daily Record Collection file. The manager will collect the records on a weekly basis and they will be digitally entered into a spreadsheet for further analysis. The original records will be stored for a minimum of two years.

11. References

REVISION LOG

Revision Date	Authority	Reviser	Revision Details



FRASER VALLEY REGIONAL DISTRICT DEVELOPMENT VARIANCE PERMIT

Permit No. Development Variance Permit 2019-13 **Folio No.** 775.02288.000

Issued to: Miracle Springs Inc. No. BC0066304

Address: 380-233 West 1st Street, North Vancouver

Applicant: Dan Sampson

Site Address: 12443 Stave Lake Road, Electoral Area F

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:

SOUTH HALF OF THE SOUTH HALF OF THE NORTH EAST QUARTER SECTION 23 TOWNSHIP 18
NEW WESTMINSTER DISTRICT

PID: 013-394-291

LIST OF ATTACHMENTS

Schedule "A": Location Map

Schedule "B": Site Plan

Schedule "C": Hydrogeological Report, prepared by Gerry Papini of Hemmera Envirochem Inc., and dated September 28, 2016

AUTHORITY TO ISSUE

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

BYLAWS SUPPLEMENTED OR VARIED

Dewdney-Alouette regional District Land Use and Subdivision Regulation Bylaw No. 559-1992 is **varied** as follows:

Section 412 (8) is varied by reducing the setback from a building keeping livestock, to a sandpoint or well from 30.0 metres to 0.0 metres.

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. A building permit shall be issued by the Fraser Valley Regional District prior to any construction on the property.
 5. Management of the on-site water supply must be in accordance with the recommendations of the Hydrogeological Report dated September 28, 2016 and the Standard Operating Procedure developed by Miracle Springs., including
 - Access control
 - Regular water sampling
 - Routine monitoring
 6. The water supply wells must be operated and maintained in accordance with the Provincial Acts and Regulations, including the *Health Hazards Regulation*, and the *Ground Water Protection Regulation*.
-

GENERAL TERMS AND CONDITIONS

1. This Development Variance Permit is issued Pursuant to Part 14 – Division 9 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 Section 524 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 developers 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.
-

SECURITY DEPOSIT

As a condition of the issuance of this Permit, and pursuant to Section 502 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: \$ <N/A> .
(b) the deposit of the following specified security: \$ <N/A> .

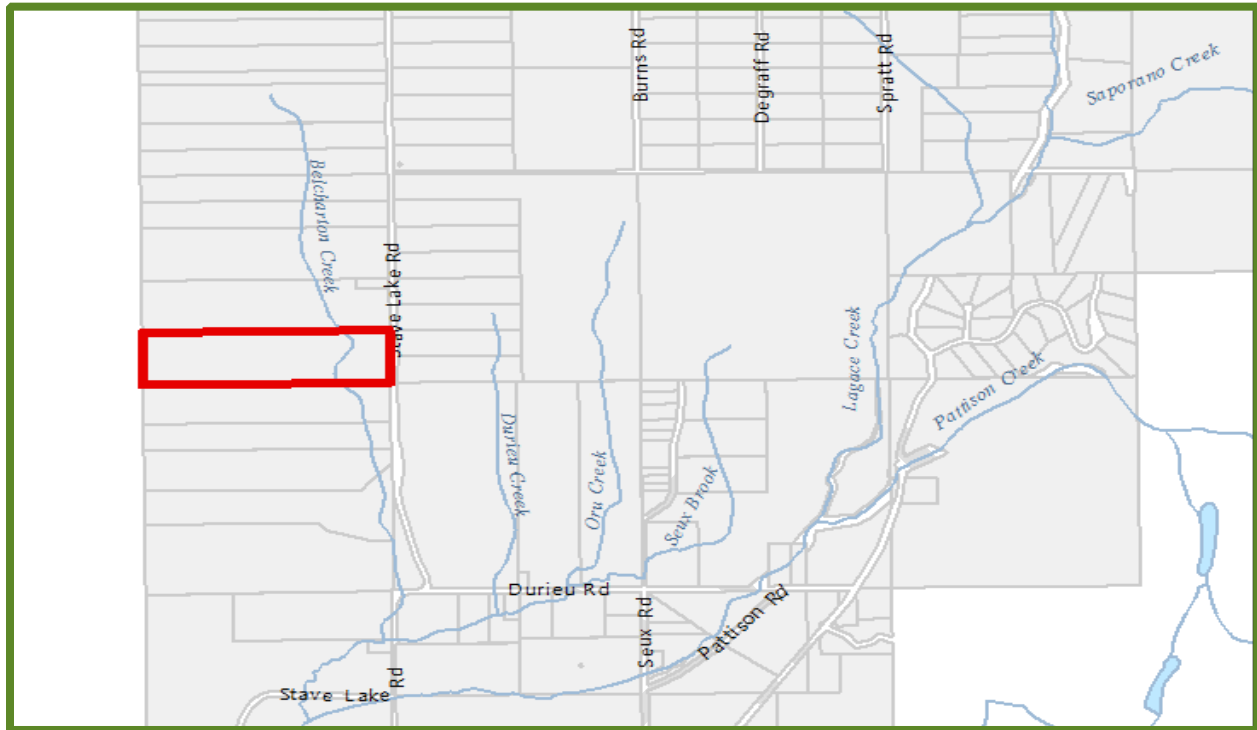
Note: The Regional District shall file a notice of this permit in the Land Title Office stating that the land described in the notice is subject to Development Variance Permit Number 2019-13. The notice shall take the form of Appendix I attached hereto.

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

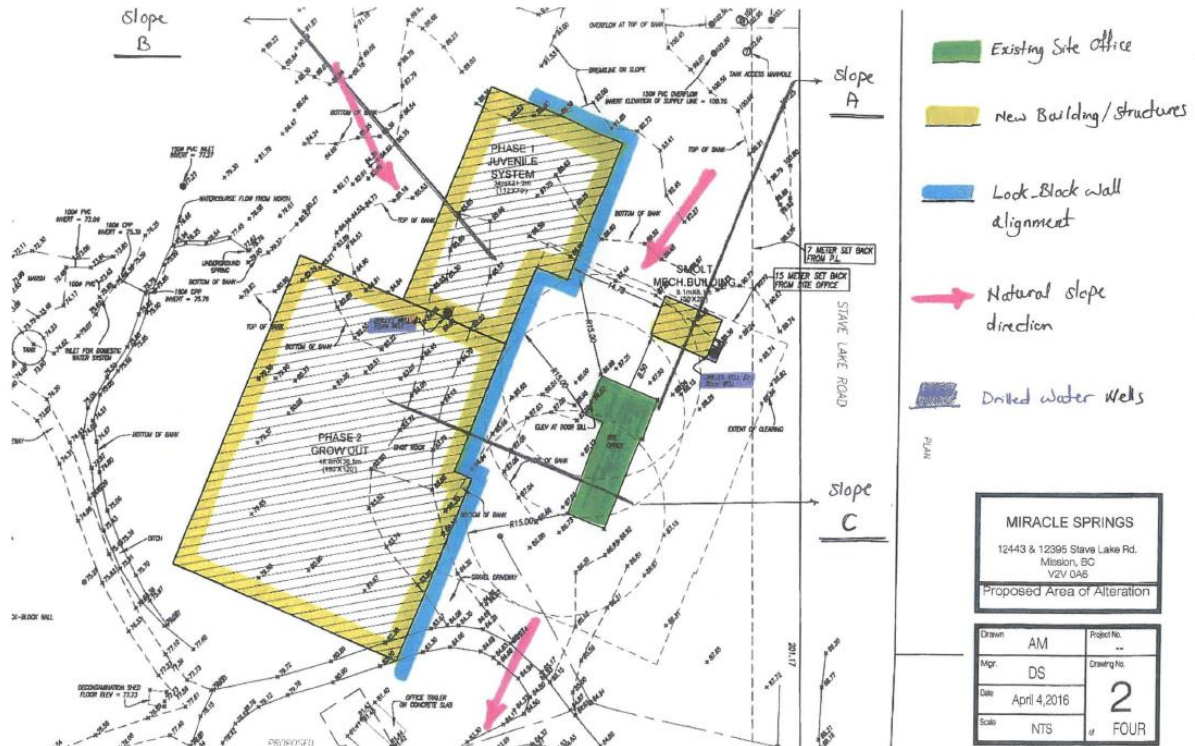
Chief Administrative Officer / Deputy

THIS IS NOT A BUILDING PERMIT

DEVELOPMENT VARIANCE PERMIT 2019-13
SCHEDULE "A"
Location Map



DEVELOPMENT VARIANCE PERMIT 2019-13
SCHEDULE "B"
Site Plan



DEVELOPMENT VARIANCE PERMIT 2019-13 SCHEDULE "C"

Hydrogeological Report

Prepared by: Gerry Papini, Hemmera Envirochem Inc, September 26, 2016



Hemmera Envirochem Inc.
18th Floor, 4730 Kingsway
Burnaby, BC V5H 0C6
T: 604.669.0424
F: 604.669.0430
hemmera.com

September 28, 2016
File: 2030-001.01

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

Attn: Katelyn Hipwell

Dear Katelyn,

Re: Groundwater Protection: Miracle Springs, Mission, BC

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3.0 CONCLUSIONS

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Upcountry Properties Group.
Miracle Springs – Groundwater Protection Assessment

- 3 -

Hemmera
September 2016

activity (Fraser Valley Regional District Bylaw No. 559, Area "G" Part 400: 8b) is not considered to provide any incremental protection to the groundwater resource respecting the construction and proposed use of Well #1 and Well #2.

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Prepared by:
Hemmera Envirochem Inc.

Reviewed by:
Hemmera Envirochem Inc.



A handwritten signature in black ink, appearing to read "G. Papini".

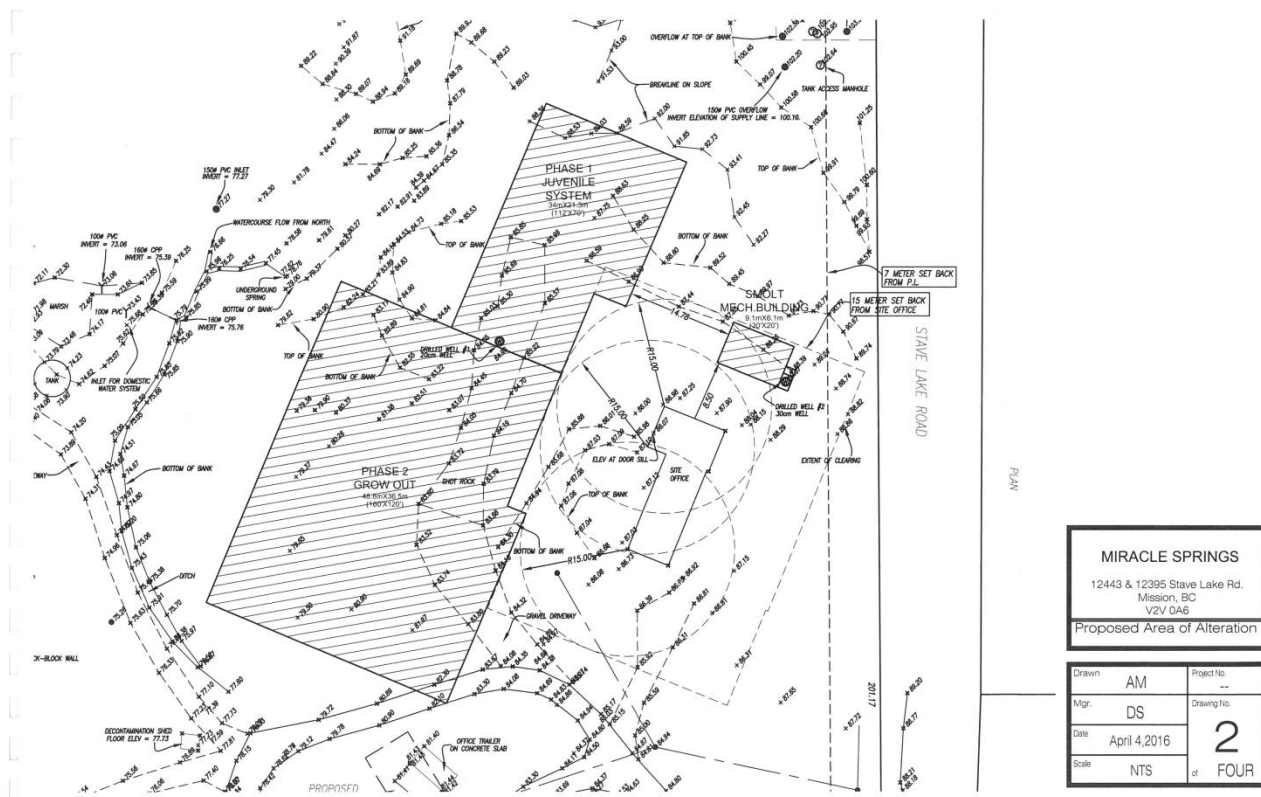
Gerry Papini, P.Geo.
Senior Hydrogeologist
604.669.0424 (176)
gpapini@hemmera.com

A handwritten signature in black ink, appearing to read "Gabriel Viehweger".

Gabriel Viehweger, P.Geo.
Senior Hydrogeologist
604.669.0424 (232)
gviehweger@hemmera.com

Cc: Dan Sampson
Upcountry Properties Group
380 – 233 W 1st Street, North Vancouver, BC V7M 1B3

ATTACHMENT 1
Drawing No. 2 Proposed Area of Alteration

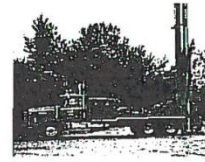


ATTACHMENT 2
Water Well Records

FIELD DRILLING CONTRACTORS LTD

**P. O. Box 841
25320 Fraser Highway
Aldergrove, BC V4W 2V1**

Phone: (604)857-2266
Toll free: 1-866-857-2266
Fax: (604)857-2267



WATER WELL RECORD

OWNER: UPCOUNTRY LEASEHOLDS LTD	DATE: NOVEMBER 4, 2015
ADDRESS: BOX 500 – 233 WEST 1 ST	SITE ADDRESS: 12395 STAVE LAKE ROAD
NORTH VANCOUVER, BC	MISSION, BC
PHONE: 604-987-1230 EXT 222	

Date Begun:	OCTOBER 28, 2015		FROM	TO	WELL LOG DESCRIPTION
Date Completed:	NOVEMBER 3, 2015		0	1	GRAVEL
Hole Diameter:	8	Inch	1	15	BROWN STICKY SILT CLAY & SANDS, ODD STONE
Surface casing:			15	33	GRAY SILTY GRAVELS
Dia: 12" + 10"	19' + 41'	Feet	33	41	HARD GRAY CLAY
Drive shoe:	YES		41	62	HARDER GRAY CLAY
MEASUREMENTS	FROM		62	88	SOFTER GRAY CLAY
GROUND LEVEL:			88	95	SOFT GRAY CLAY, ODD STONE
Stick-Up:	2	Feet	95	118	FINE SILTY SAND, SOME GRAVEL
Bottom of Casing:	171'11"	Feet	118	185	W.B. SANDS & GRAVEL
Hole Depth:	182'11"	Feet	185	198	FINER GRAY SANDS
Open Hole: From:		Feet			
To:		Feet			
SCREENS:					
Number of Screens:	2				
Slot Size:					
Slot 80	Slot	80			
Slot	Slot				
Screen Length:	12	Feet			
	11	Inch			
Top at: 170 Feet		Inch			
Bottom At: 182 Feet	11	Inch			
K. Packer: YES	Riser:	2FT			
B. Bottom: YES					
WELL					
COMPLETION:					
Rate:	200+	GPM			
Pump Setting:	165	Feet			
Static Water Level:	0+-	Feet			
Develop:	4	Hours			

Rig No: 11	Rotary: YES
	Cable:
Driller:	GEORGE PATERSON
Helper:	CHRIS PATON

SITE LEGAL DESCRIPTION:

WELL I.D.
41522

NAME: MIRACLE SPRINGS
NUMBER: 5300-11
SHOULD BE PUMP TESTED FOR EXACT GPM

ATTACHMENT 3
Standard Operating Procedure – Well Management

	MIRACLE SPRINGS INC. <i>Standard Operating Procedure</i>	Page: 1 of 3 Revision: 1
TITLE: Well Management		
ISSUE DATE: May 12, 2016		
APPROVED BY: Miracle Springs Management		

WELL MANAGEMENT

1. Rationale

Biosecurity procedures must be maintained around all wells to ensure that the water sources are not contaminated. This is to ensure the safety and health of the water for domestic and agricultural purposes. This Standard Operating Procedure ensures that Miracle Springs Inc. adheres to guidelines specified by the Canadian Food Inspection Agency Animal Health Compartmentalization Program for the introduction and release of water of a known health status.

2. Scope

This procedure applies to all employees, visitors, suppliers and contractors accessing the Miracle Springs Inc. site. It is intended for all well water sources on site.

3. Definitions

4. Responsibilities

Miracle Springs Inc. General Manager is responsible for:

- Review and approval of Miracle Springs Standard Operating Procedures (Wendy Vandersteen, Mike Cuning, Dan Sampson);
- Ensuring that personnel are aware of and understand the procedure;
- Taking action if procedures are not followed.

Miracle Springs Inc. Operations Manager is responsible for:

- Ensuring that the procedure is being followed on a daily basis.

All Miracle Springs Inc. Personnel that work with fish are responsible for:

- Familiarizing themselves with this procedure;
- Obtaining training for this procedure prior to conducting it unsupervised.

5. Equipment and Supplies

- Water sampling bottles

6. Safety Concerns

No safety concerns.

	MIRACLE SPRINGS INC. <i>Standard Operating Procedure</i>	Page: 2 of 3 Revision: 1
TITLE: Well Management		
ISSUE DATE: May 12, 2016		
APPROVED BY: Miracle Springs Management		

7. Approved Procedure

- There are three wells on site (Well #1 - 41880, Well #2 - 41521, and Well #3 - 41522), all drilled by the same contractor (Field Drilling Contractors Ltd.), a driller licensed by the British Columbia Ground Water Association (the well reports are kept on file).
- Well #1 will be located within the new aquaculture system building, Well #2 is between the staff house and road, and Well #3 is on the adjacent property.

7.1 Routine water sampling

- Water is sampled from each well at least quarterly, and sent to Exova for analysis (complete drinking water analysis). Refer to Water Quality Monitoring SOP in Miracle Springs Inc. Biosecurity Manual.

7.2 Restricted Access

- Each well is securely sealed to prevent any access.
- There will be a cage built around Well #1 within the building. This cage will be 2.5m x 2.5m x 6m high and constructed from chain link.
- A 0.6m concrete wall will surround the well to restrict ingress of any water around the well casing from the surrounding aquaculture system.
- The cage will remain locked at all times. Only the Operations Manager and the General Manager will have key access to this enclosure.
- Any service contractors will be supervised by the Operations Manager or the General Manager will working on or near the wells.

7.3 Routine Monitoring

- Each well will be inspected weekly to check the integrity of the seals around the well head. Inspections will check for signs of cracks, water leaks, or other indications of compromised biosecurity. Visual inspections will be recorded on the Well Inspection Record Sheet.
- Well #1 in the enclosed cage will be visually inspected two times per day to ensure that the enclosure remains securely locked. This will be noted on the relevant Daily Husbandry Sheet for the recirculating aquaculture system.

	MIRACLE SPRINGS INC. <i>Standard Operating Procedure</i>	Page: 3 of 3 Revision: 1
TITLE: Well Management		
ISSUE DATE: May 12, 2016		
APPROVED BY: Miracle Springs Management		

8. Contingency Plan

If compromised biosecurity is detected, a water sample will be collected immediately and sent for complete drinking water analysis.

9. Non-conformances

Any staff determined to be improperly following this procedure will be reported to the General Manager. Staff will first receive a warning and subsequently may require retraining or dismissal.

10. Forms and Record Keeping

Records to be completed or filed include:

- Well Inspection Records
- Well Maintenance Records
- Daily Husbandry Records

When records have been updated, please file them appropriately. At the end of each day, the records are stored in the Staff Room at the Record Station in the Daily Record Collection file. The manager will collect the records on a weekly basis and they will be digitally entered into a spreadsheet for further analysis. The original records will be stored for a minimum of two years.

11. References

REVISION LOG

Revision Date	Authority	Reviser	Revision Details

SCHEDULE A-4

Permit Application

I / We hereby apply under Part 14 of the *Local Government Act* for a;

☒ Development Variance Permit

☐ Temporary Use Permit

☐ Development Permit

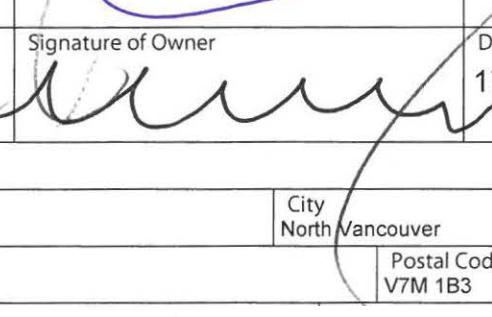
An Application Fee in the amount of \$ 350.00 as stipulated in FVRD Application Fees Bylaw No. 1231, 2013 must be paid upon submission of this application.

Civic Address 12443 Stave Lake Rd, Mission, BC V2V 0A6 PID 013-394-291

Legal Description Lot 18 Block S1/2 of S1/2 of NE1/4, Section 23, Township 18, NWLD

The property described above is the subject of this application and is referred to herein as the 'subject property.' This application is made with my full knowledge and consent. I declare that the information submitted in support of the application is true and correct in all respects.

Owner's Declaration

Name of Owner (print) Dan Sampson	Signature of Owner 	Date 17-04-2019
Name of Owner (print) Mike Cuning	Signature of Owner 	Date 17-04-2019

Owner's Contact Information

Address 380 - 233 W 1st Street	City North Vancouver	Postal Code V7M 1B3
Cell		

Office Use Only	Date April 30, 2019	File No. 775-02288-000
	Received By JM	Folio No. 3090-20 2019-13
	Receipt No. 8543/5	Fees Paid: \$ 350

Agent

I hereby give permission to _____ to act as my/our agent in all matters relating to this application.

Only complete this section if the applicant is NOT the owner.

Signature of Owner	Date
Signature of Owner	Date

Agent's contact information and declaration

Name of Agent		Company
Address		City
Email		Postal Code
Phone	Cell	Fax

I declare that the information submitted in support of this application is true and correct in all respects.

Signature of Agent	Date
--------------------	------

Development Details

Property Size 40 ACRES Present Zoning R-3

Existing Use LAND BASED AQUACULTURE

Proposed Development EXPANSION OF TROUT FARM WITH CONSTRUCTION OF R.A.S. RECIRCULATING AQUACULTURE SYSTEM BUILD OUT

Proposed Variation / Supplement FISH FARM IS 100% DEPENDANT ON WATER.

WE WOULD LIKE TO BUILD RIGHT UP TO WELL HEAD

(use separate sheet if necessary)

Reasons in Support of Application WE BELIEVE CONSTRUCTION OF THE BUILDINGS WOULD HAVE MUCH LESS ENVIRONMENTAL IMPACT BUILT CLOSE TO THE WELLS, ON A FLAT AREA OF THE SITE RATHER THAN BUILD CLOSE TO BELCHARTON CREEK & PUMP WATER BOTH UP AND DOWN THE SLOPE.

Agent

I hereby give permission to _____ to act as my/our agent in all matters relating to this application.

Only complete this section if the applicant is NOT the owner.

Signature of Owner	Date
Signature of Owner	Date

Agent's contact information and declaration

Name of Agent		Company
Address		City
Email		Postal Code
Phone	Cell	Fax

I declare that the information submitted in support of this application is true and correct in all respects.

Signature of Agent	Date
--------------------	------

Development Details

Property Size 16.18 hectares (40 acres) Present Zoning Rural 3 (R-3)

Existing Use Aquaculture Use

Proposed Development Construct a R.A.S. building to farm fish

Proposed Variation / Supplement On setback of well

(use separate sheet if necessary)

Reasons in Support of Application _____

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:

yes
☐

no
☒

30 metres of the high water mark of any water body

yes
☐

no
☒

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.

Contaminated Sites Profile

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

yes
☐

no
☒

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
☐

I don't know
☒

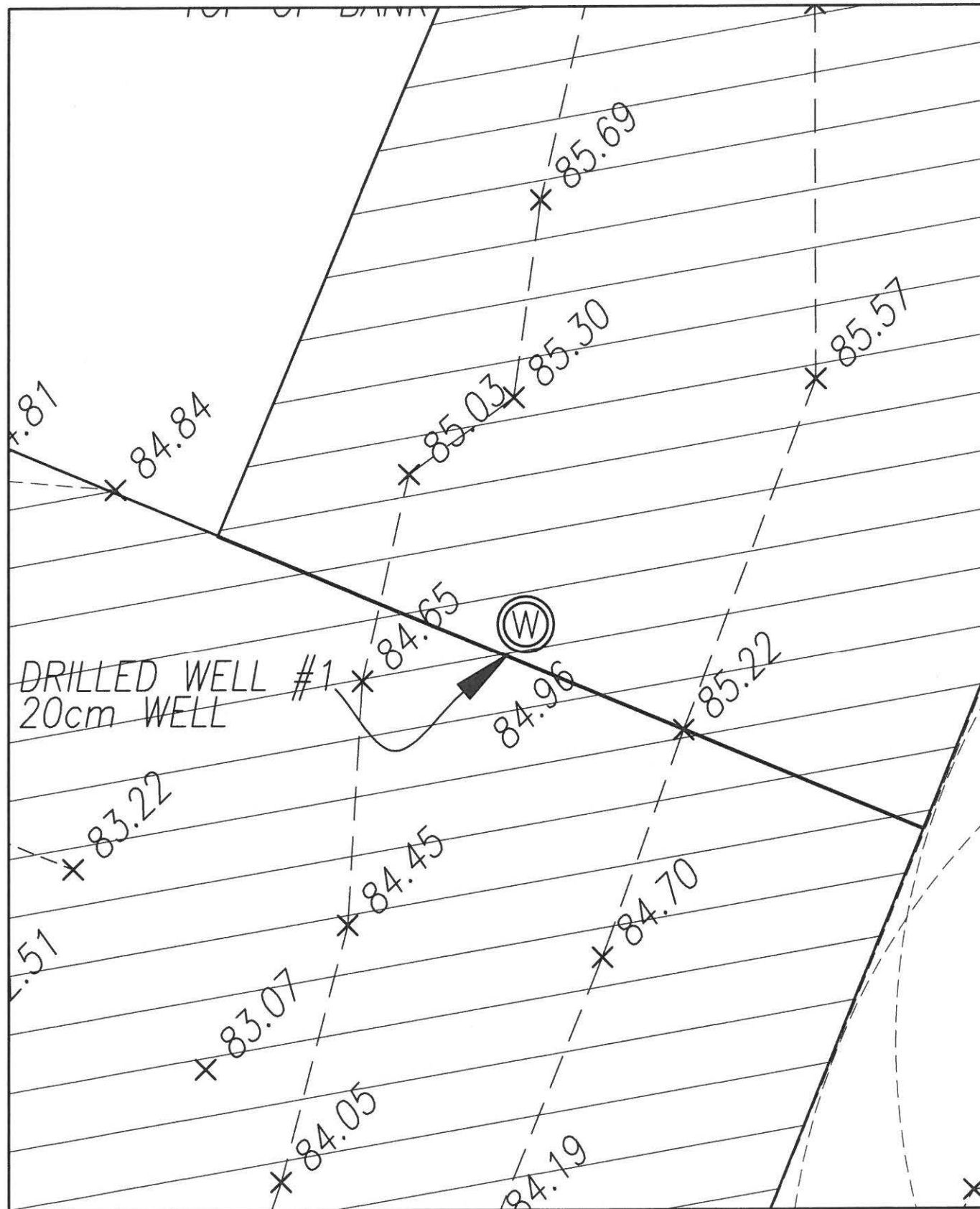
If you responded 'yes' or 'I don't know' you may be advised to contact the Archaeology Branch of the Ministry of Tourism, Sport and the Arts for further information.

Required Information

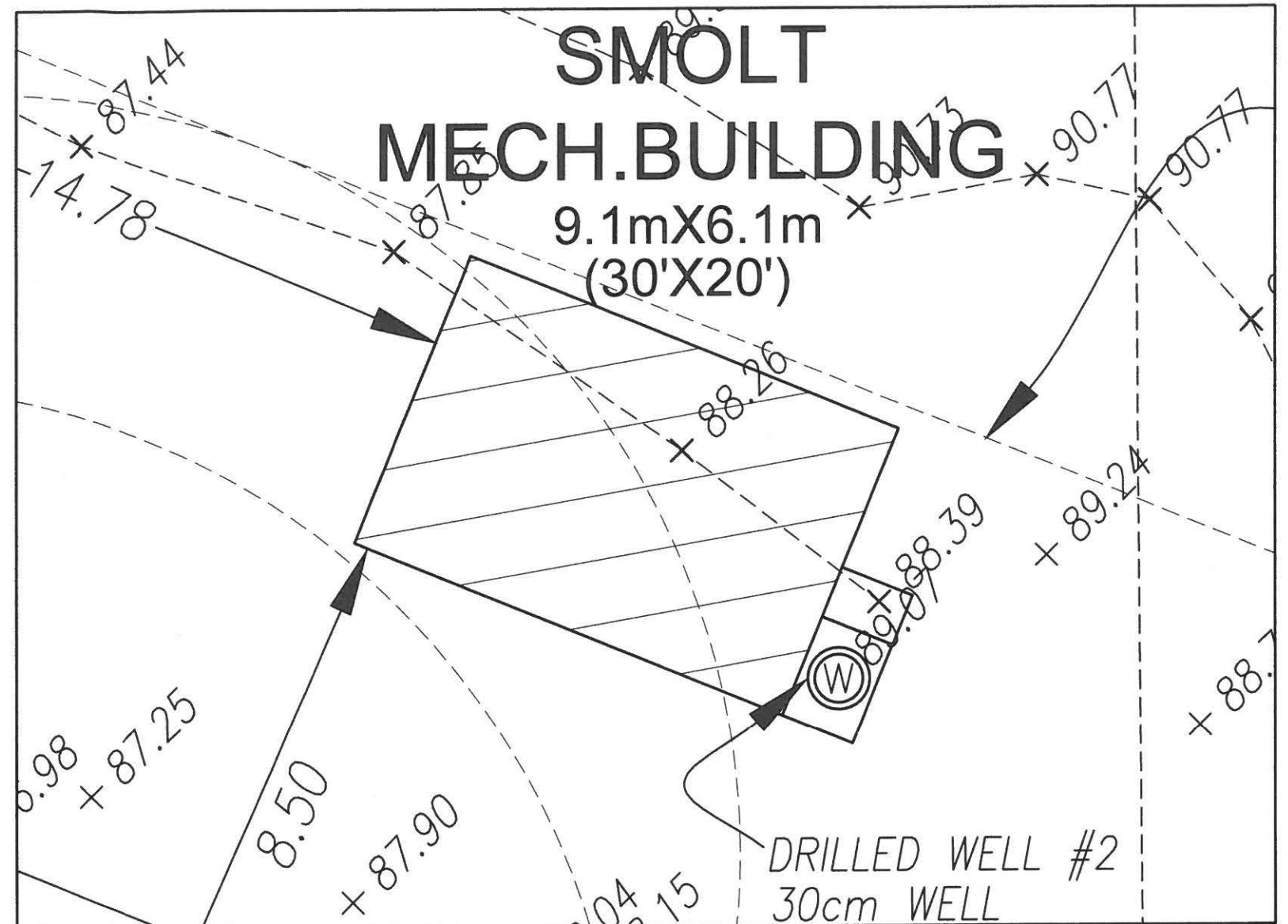
When providing Application Forms to the applicant, Regional District staff shall indicate which of the following attachments are required for this application. **Additional information may also be required at a later date.**

	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: _____	X		Location and dimensions of existing buildings & setbacks to lot lines, rights-of-ways, easements
	X		Location and dimensions of proposed buildings & setbacks to lot lines, rights-of-ways, easements
	X		Location of all water features, including streams, wetlands, ponds, ditches, lakes on or adjacent to the property
	X		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
	x		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 Plan			Location, quantity, size & species of existing & proposed plants, trees & turf
			Contour information (_____ metre contour intervals)
Same scale as site plan			Major topographical features (water course, rocks, etc.)
			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@fvrld.ca.



1 WELL #1
3 Scale: NTS



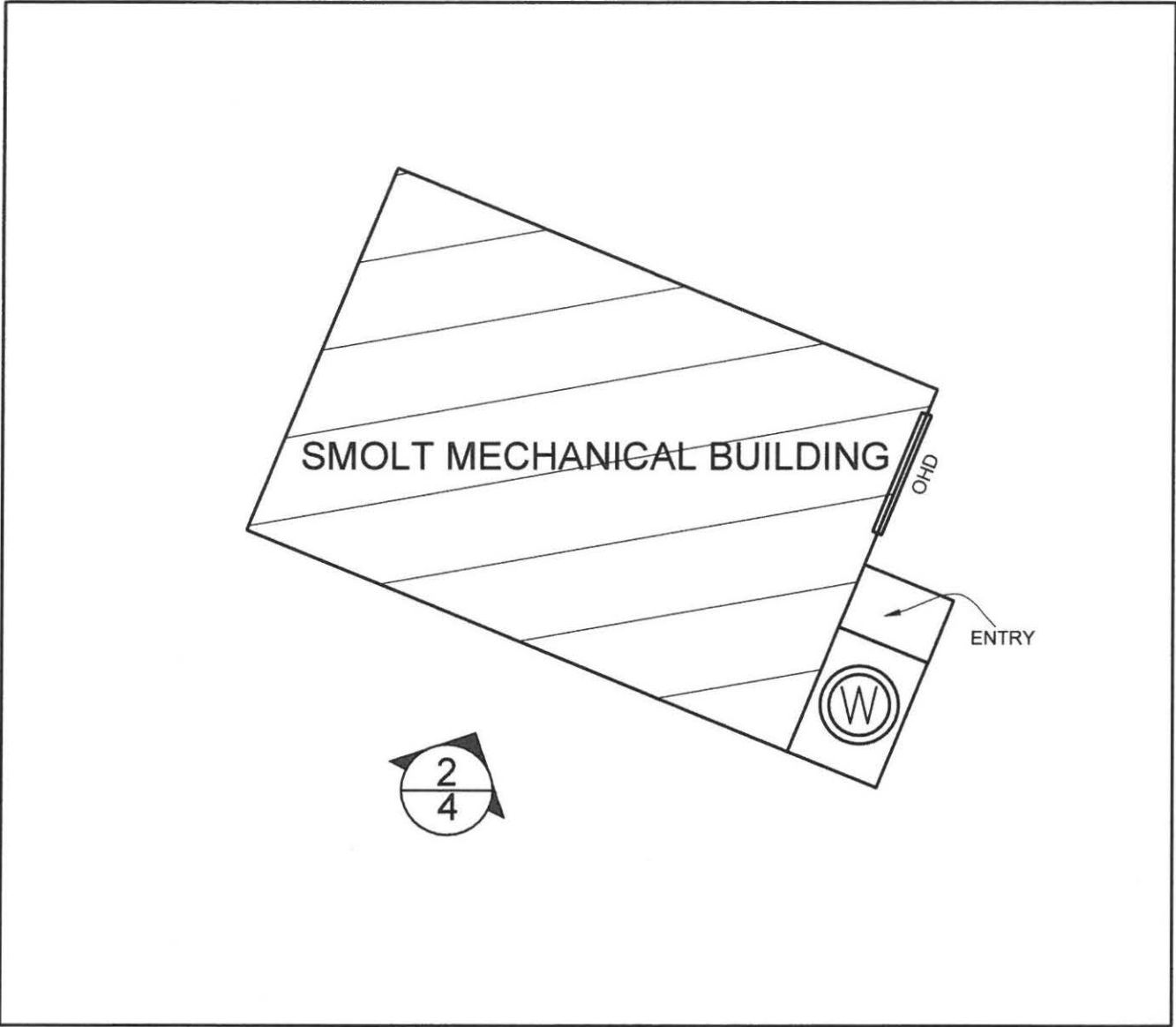
2 WELL #2 BIO-SECURE SEPARATION COMPARTMENT
3 Scale: NTS

MIRACLE SPRINGS

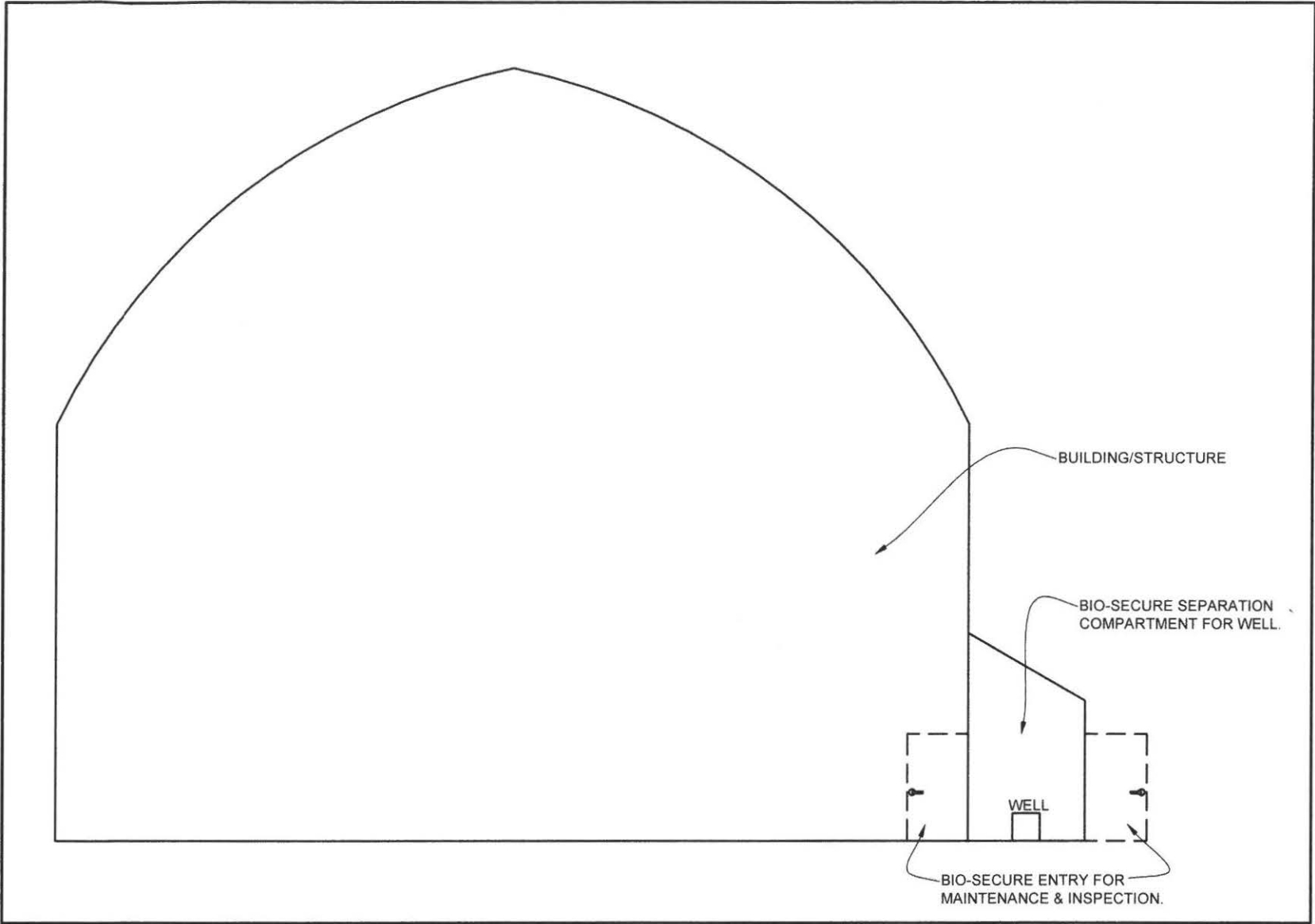
12443 & 12395 Stave Lake Rd.
Mission, BC
V2V 0A6

Well Setbacks

Drawn	AM	Project No.	--
Mgr.	DS	Drawing No.	3
Date	April 4, 2016	of	FOUR
Scale	NTS		



1 BIO-SECURE SEPARATION COMPARTMENT
Scale: NTS



2 ELEVATION: BIO-SECURE SEPARATION COMPARTMENT
Scale: NTS

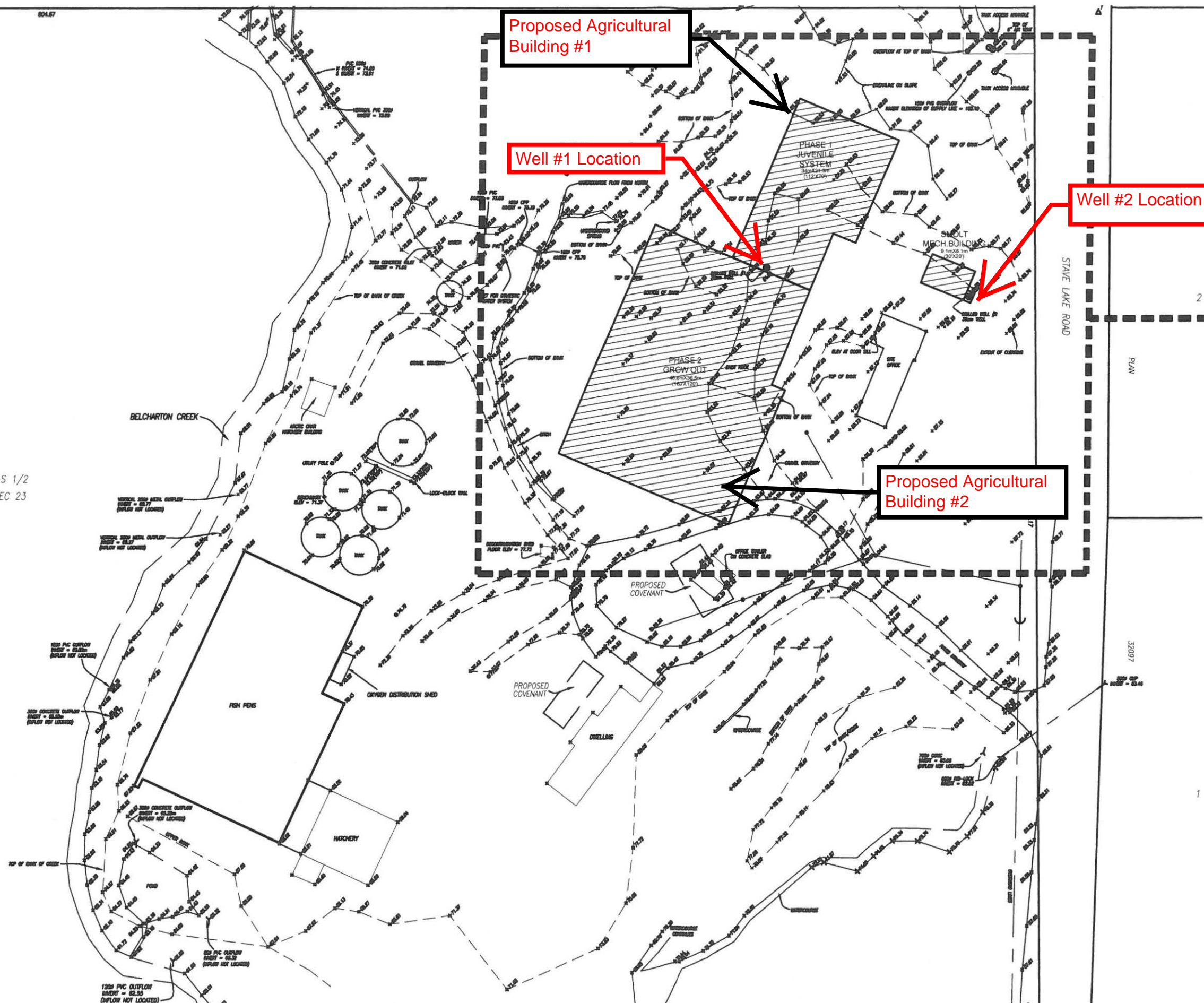
MIRACLE SPRINGS

12443 & 12395 Stave Lake Rd.
Mission, BC
V2V 0A6

**BIO-SECURE SEPARATION
COMPARTMENT FOR WELL**

Drawn	AM	Project No.	--
Mgr.	DS	Drawing No.	4 of FOUR
Date	April 4, 2016		
Scale	NTS		

S 1/2 OF S 1/2
NE 1/4 SEC 23

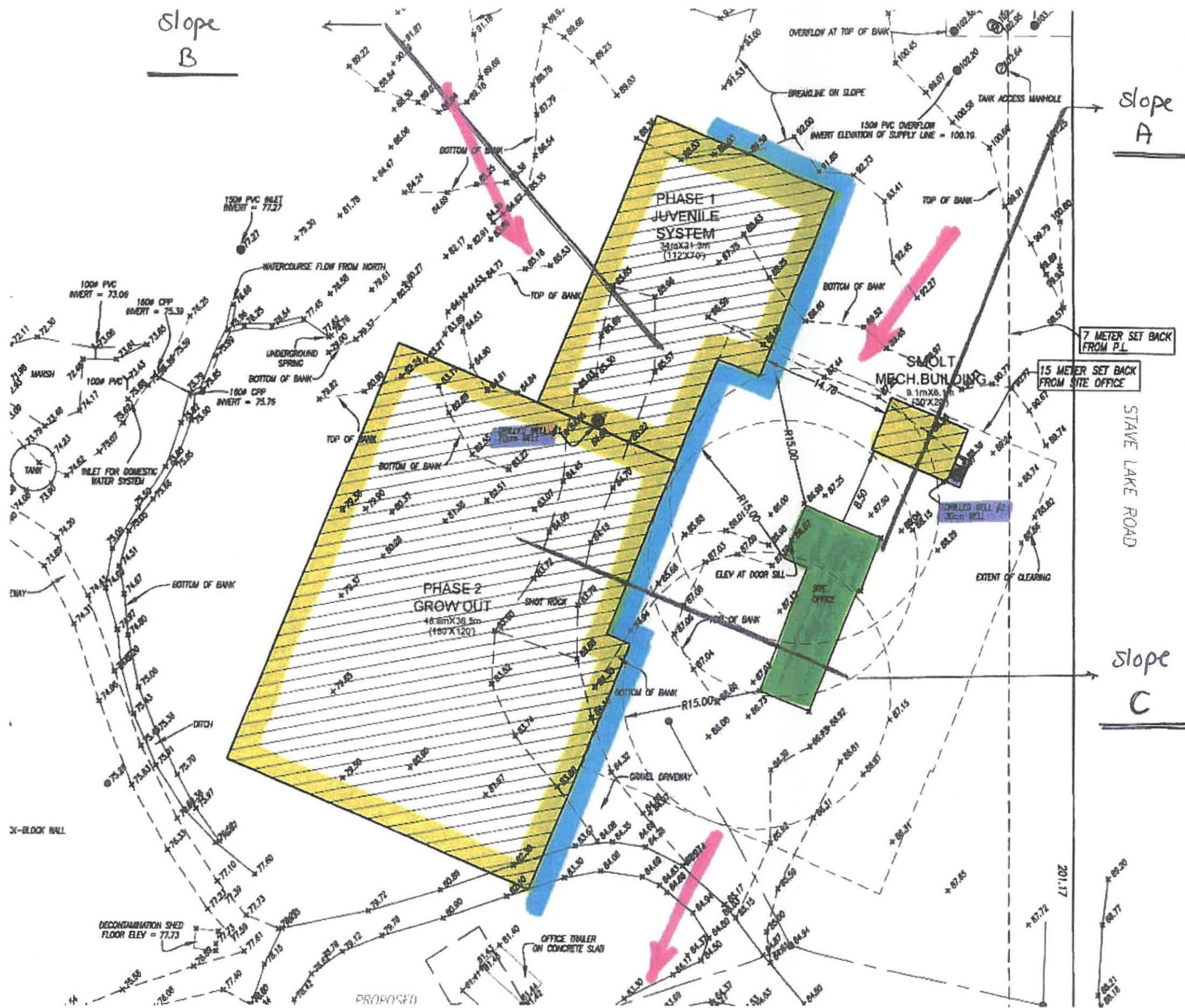


MIRACLE SPRINGS

12443 & 12395 Stave Lake Rd.
Mission, BC
V2V 0A6

Site Plan

Drawn	AM	Project No.	---
Mgr.	DS	Drawing No.	1
Date	April 4, 2016		
Scale	NTS	of	FOUR



- Existing Site Office
- New Building/structures
- Lock-Block wall alignment
- Natural slope direction
- Drilled water wells

MIRACLE SPRINGS
 12443 & 12395 Stave Lake Rd.
 Mission, BC
 V2V 0A6
 Proposed Area of Alteration

Drawn	AM	Project No.	--
Mgr.	DS	Drawing No.	2
Date	April 4, 2016		
Scale	NTS		of FOUR

To: CAO for the Electoral Area Services Committee

Date: 2019-06-11

From: Julie Mundy, Planning Technician

File No: 3090-20 2019-14

Subject: Application for Development Variance Permit 2019-14 to vary the maximum height and size requirements for an accessory building at 10394 Parkwood Drive, Electoral Area D

RECOMMENDATION

THAT the Fraser Valley Regional District Board issue Development Variance Permit 2019-14 to increase the maximum permitted area of an accessory building from 45 square metres to 107 square metres and to increase the maximum permitted height of an accessory building from 5.0 metres to 7.5 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 have made an application for a Development Variance Permit (DVP) to increase the maximum permitted area and height 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	10394 Parkwood Drive		
PID	027-327-621		
Folio	733.06754.000		
Lot Size	0.272 acres (11,848 sq ft)		
Owner	Chris Murphy/Karla Haynes	Agent	
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	Accessory Residential
Development Permit Areas	DPA 6-D – Riparian areas		
Agricultural Land Reserve	No		

ADJACENT ZONING & LAND USES		
North	^	Suburban Residential 2 (SBR-2), Single Family Dwelling
East	>	Country Residential (CR); Single Family Dwelling
West	<	Suburban Residential 2 (SBR-2), Single Family Dwelling
South	v	Suburban Residential 2 (SBR-2), Single Family Dwelling

CHEAM 1

Old Yale Rd

W Vile

Parkwood Dr

Rutley Rd

Royalwood Blvd

Carys Rd

Parkrose Wynd

Greenspace

10394

DISCUSSION

The property owners are proposing to construct a detached accessory building which exceeds 1) the maximum allowable size and 2) the maximum allowable height for an accessory building under the Zoning Bylaw for Electoral Area D. The property is approximately 11,800 square feet (0.27 acres) in size, and has a single family dwelling and a partially constructed accessory building on the property.

Height and Size Variance

The proposed building will be 36 x 32 feet with a total area of 1152 square feet (107 square metres). The owners are seeking a size variance of 667.6 square feet (62 square metres), which is 138% larger than is permitted in the zoning bylaw.

Maximum Size of Accessory Buildings	
Permitted (zoning)	45.0 square metres (484.4 sq feet)
Proposed	107 square metres (1152 sq feet)
Requested Variance	62 square metres (667.6 sq feet)

The proposed garage will have a total height of 7.5 metres (24.6 feet). The owners are seeking a height variance of 2.5 metres (8.2 feet), which is 50% taller than is permitted in the zoning bylaw.

Height of Accessory Buildings	
Permitted (zoning)	5.0 metres (16.4 feet)
Proposed	7.5 metres (24.6 feet)
Requested Variance	2.5 metres (8.2 feet)

Reasons for variance

The applicant advises the reason for the variance is to enable the construction of a building with sufficient room to accommodate hobbies. The property owners are car racing enthusiasts who have multiple vehicles (2 drag race cars, 2 classic cars, and 1 motorcycle) that require indoor storage. The building will enable the vehicles to be stored out of sight, and will accommodate an oversize hoist for working on the vehicles.

The garage will be located at the rear of the property which looks primarily onto an unconstructed Ministry of Transportation and Infrastructure right-of-way, and the raised side of Highway 9. The applicant states the building will help to provide greater privacy and to block noise from the highway.

If the size and height variance is not granted, the applicant could construct a smaller, shorter, structure that complies with the zoning regulation.

Bylaw Enforcement & Planning Requirements

Construction on the building (foundation and framing) was started without the benefit of a building permit. Consequently, the property is in bylaw contravention. The property owners are working with FVRD on this matter, and have advised they will submit a building permit application pending the outcome of the Development Variance Permit.

Commercial automotive repair is not a permitted use on the property. A condition of the development variance permit will be to prohibit commercial uses within the accessory building.

All access to the property will be from Parkwood Drive. There is to be no vehicular access to Highway 9 from the unconstructed road allowance. The proposed structure will meet both the property line setbacks for an accessory building and the site coverage requirements set out in the zoning bylaw.

Zoning Bylaw Review

There have been a number of DVP applications relating to the size of accessory sheds in Popkum. The maximum allowable area for an accessory building in the Popkum residential zones is being reviewed as part of the Electoral Areas Zoning Bylaw Consolidation project. Staff anticipate drafting a memo to the Electoral Area Services Committee about acceptable community standards for accessory buildings to help inform this work.

DVP Summary for Electoral Area D for the Size of Accessory Structures

Although, the size variance request is among the largest of all variance requests in Electoral Area D, several larger accessory buildings have been approved in the past. The height request is the largest variance request in Electoral Area D to date.

The following tables summarize past DVP applications in Electoral Area D (SBR-2 and SBR-3 zones) to increase the allowable size and the allowable height of an accessory residential building.

DVP for Size of Accessory Buildings			
Civic Address	Permit Number	Conditions of Permit	Approved/ Denied
10-10200 Gray Road	DVP 1995-10	Increase size to 98 m ² (117% increase)	Approved
6-10200 Gray Road	DVP 1996-05	Increase size to 66.9 m ² (48.6% increase)	Approved
18-10200 Gray Road	DVP 1998-04	Increase size to 76.2 m ² (69% increase)	Approved
11-10200 Gray Road	DVP 2002-01	Increase size to 80.27 m ² (72% increase)	Approved
4-10200 Gray Road	DVP 2002-04	Increase size to 125.4 m ² (179% increase)	Approved
3-10200 Gray Road	DVP 2003-06	Increase size to 74.3 m ² (65% increase)	Approved
10211 Parkwood Drive	DVP 2012-02	Increase size to 50m ² (11% increase)	Approved
10391 Parkwood Drive	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 Road	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 Drive	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 Drive	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 Road	DVP 2019-05	Increase size to 53.5m ² (19% increase)	Approved
10395 Wildrose Drive	DVP 2019-10	Increase size to 58 m ² (29% increase)	Approved
10163 Royalwood Blvd	DVP 2019-12	Increase size to 76m ² (69% increase)	Approved

DVP for Height of Accessory Buildings			
Civic Address	Permit Number	Conditions of Permit	Approved/ Denied
10-10200 Gray Road	DVP 1995-10	Increase height to 5.8m (16% increase)	Approved
6-10200 Gray Road	DVP 1996-05	Increase height to 5.4 m (8% increase)	Approved
18-10200 Gray Road	DVP 1998-04	Increase height to 7.4m (48% increase)	Approved
11-10200 Gray Road	DVP 2002-01	Increase height to 5.3 m (7% increase)	Approved
4-10200 Gray Road	DVP 2002-04	Increase height to 5.8m (16% increase)	Approved
9949 Parkwood Drive	DVP 2004-05	Increase height to 5.28m (6% increase)	Approved
10391 Parkwood Drive	DVP 2013-05	Increase height to 5.8 m (16% increase)	Approved
9974 Llanberis Way	DVP 2013-13	Increase height to 7.0 m (40% increase)	Approved
52622 Woodgrove Place	DVP 2014-12	Increase height to 5.9 m (18% increase)	Approved
16-10200 Gray Road	DVP 2014-17	Increase height to 7.3 m (46% increase)	Approved
52672 Parkrose Wynd	DVP 2016-13	Increase height to 6.5 m (30% increase)	Denied
52672 Parkrose Wynd	DVP 2016-15	Increase height to 6.35 m (27% increase)	Denied
10104 Parkwood Drive	DVP 2016-19	Increase height to 6.0 m (20 % increase)	Approved
10161 Parkwood Drive	DVP 2017-05	Increase height to 6.1 m (22% increase)	Approved
10338 Wildrose Drive	DVP 2017-19	Increase height to 5.7 m (14% increase)	Approved
52725 Parkrose Wynd	DVP 2017-20	Increase height to 6 m (20% increase)	Approved
10191 Caryks Road	DVP 2019-05	Increase height to 7.3 m (46% increase)	Approved
10395 Wildrose Drive	DVP 2019-10	Increase height to 5.2 m (4% increase)	Approved
10163 Royalwood Blvd	DVP 2019-12	Increase height to 5.3 m (6% 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 attend the Board meeting to state their comments. FVRD staff have encouraged 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 from adjacent property owners. The letters of support do not include details about the size and height of the proposed building, however, the size of the finished building is currently visible to the neighbours.

COST

The application fee of \$350 has been paid by the applicant.

CONCLUSION

Staff recommend Development Variance Permit 2019-14 be issued by the Fraser Valley Regional District Board, subject to any further comments or concerns raised by the public.

Several letters of support have been submitted with DVP application indicating there is neighbourhood acceptance of the proposed structure.

Option 1 – Issue (Staff Recommendation)

Staff recommend that the Fraser Valley Regional District Board issue Development Variance Permit 2019-14 to increase the size of an accessory building from the maximum permitted area of 45 square metres to 107 square metres, and to increase the height of an accessory building from 5.0 metres to 7.5 metres for a detached garage at 10394 Parkwood Drive, Electoral Area “D”, 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 2019-14 for the property at 10394 Parkwood Drive, Electoral Area D.

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 2019-14 for the property at 10394 Parkwood Drive, Electoral Area D to FVRD Staff.

COMMENTS BY:

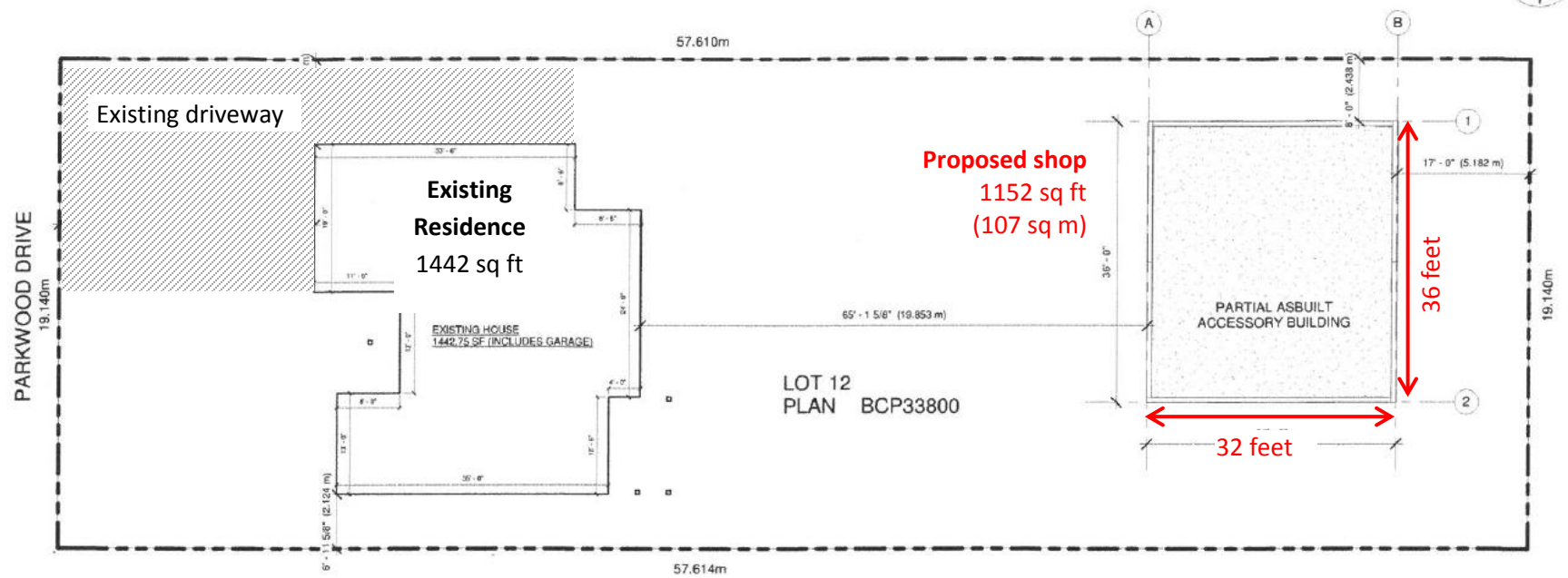
Graham Daneluz, Deputy Director of Planning & Development: Reviewed & supported

Margaret Thornton, Director of Planning & Development: Reviewed & supported

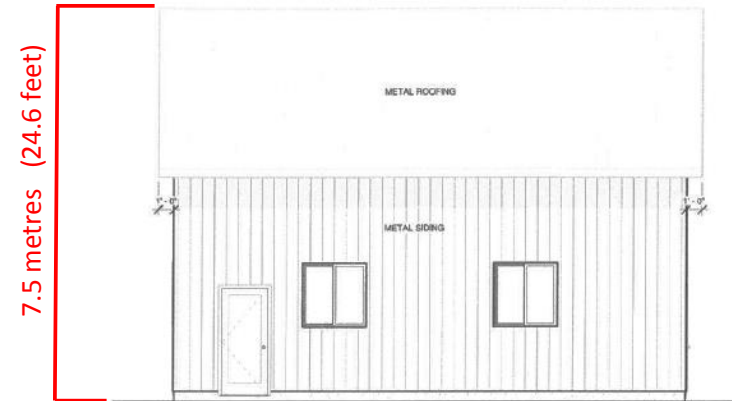
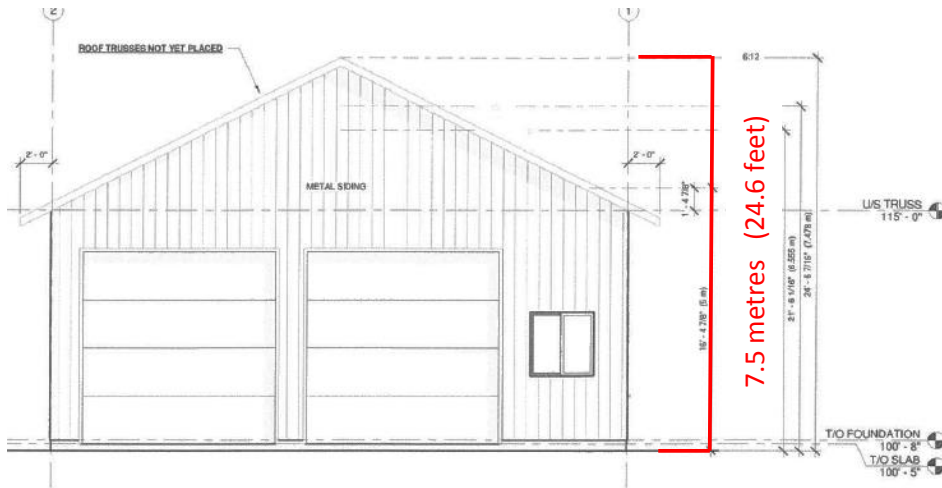
Mike Veenbaas, Director of Financial Services: No further financial comment.

Jennifer Kinneman, Acting Chief Administrative Officer: Reviewed and supported.

Appendix A – Site Plan



Appendix B – Proposed Building Plans



**Appendix C –
Letters of Support**

To our neighbours of 10394 Parkwood Dr.

March 19, 2016 10:05 AM

Re: Intent to build a shop.

We have applied to the District to build a shop in our backyard. The shop will be used for hobbies and housing our race car and Jr dragster.

Due to the size of the shop we have been asked to notify our neighbours and get approval from you by signing this letter of our intent.

If you would please sign the letter and also list your address we would be grateful.

Thank-you for your consideration,

Karla Haynes & Chris Murphy

Mike Chamberlin

Printed Name

[Signature]

Signature

10391 Parkwood dr

Address

VOX 141

To our neighbours of 10394 Parkwood Dr.

March 19, 2016 10:05 AM

Re: Intent to build a shop.

We have applied to the District to build a shop in our backyard. The shop will be used for hobbies and housing our race car and Jr dragster.

Due to the size of the shop we have been asked to notify our neighbours and get approval from you by signing this letter of our intent.

If you would please sign the letter and also list your address we would be grateful.

Thank-you for your consideration,

Karla Haynes & Chris Murphy

Willem Jan Kersten

Printed Name

[Signature]

Signature

10435 Rutley RD

Address

Rosedale BC

V0X1X1

To our neighbours of 10394 Parkwood Dr.

March 19, 2016 10:05 AM

Re: Intent to build a shop.

We have applied to the District to build a shop in our backyard. The shop will be used for hobbies and housing our race car and Jr dragster.

Due to the size of the shop we have been asked to notify our neighbours and get approval from you by signing this letter of our intent.

If you would please sign the letter and also list your address we would be grateful.

Thank-you for your consideration,

Karla Haynes & Chris Murphy

John Giesbrecht

Printed Name

JG Giesbrecht

Signature

10401 Parkwood dr

Address

Box 286 Rosedale Bc

Vox - 1x0

To our neighbours of 10394 Parkwood Dr.

March 19, 2016 10:05 AM

Re: Intent to build a shop.

We have applied to the District to build a shop in our backyard. The shop will be used for hobbies and housing our race car and Jr dragster.

Due to the size of the shop we have been asked to notify our neighbours and get approval from you by signing this letter of our intent.

If you would please sign the letter and also list your address we would be grateful.

Thank-you for your consideration,

Karla Haynes & Chris Murphy

Maurizio + Christine Caselli

Printed Name

Chris Caselli M. Caselli

Signature

10404 Parkwood Dr

Address

Rosedale, BC

VOX 1 X 1



FRASER VALLEY REGIONAL DISTRICT DEVELOPMENT VARIANCE PERMIT

Permit No. Development Variance Permit 2019-14 **Folio No.** 733.06754.000

Issued to: Christopher Murphy & Karla Haynes

Address: 10394 Parkwood Drive, Electoral Area D

Applicant: same

Site Address: 10394 Parkwood Drive, 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 12 SECTION 1 TOWNSHIP 3 RANGE 29 WEST OF THE 6TH MERIDIAN
NEW WESTMINSTER DISTRICT PLAN BCP33800
PID: 027-327-621

LIST OF ATTACHMENTS

Schedule "A": Location Map

Schedule "B": Site Plan & Building Plans

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:

1. Division 23 Section 2302.3 (a) (ii): the maximum height of an accessory building is increased from 5.0m (16.4 ft) to 7.5m (24.6 ft).
 2. Division 23 Section 2302.3 (b): the maximum area of an accessory building is increased from 45 square metres (484 sq.ft) to 107 square metres (1152 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. A building permit shall be issued by the Fraser Valley Regional District prior to any construction on the property.
5. Commercial uses, including commercial automotive repair, shall not be permitted within any residential accessory building.

GENERAL TERMS AND CONDITIONS

1. This Development Variance Permit is issued Pursuant to Part 14 – Division 9 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 Section 524 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 developers 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.

SECURITY DEPOSIT

As a condition of the issuance of this Permit, and pursuant to Section 502 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: \$ <N/A> .
 (b) the deposit of the following specified security: \$ <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 2019-14. 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> DAY OF <MONTH>, <YEAR>

Chief Administrative Officer / Deputy

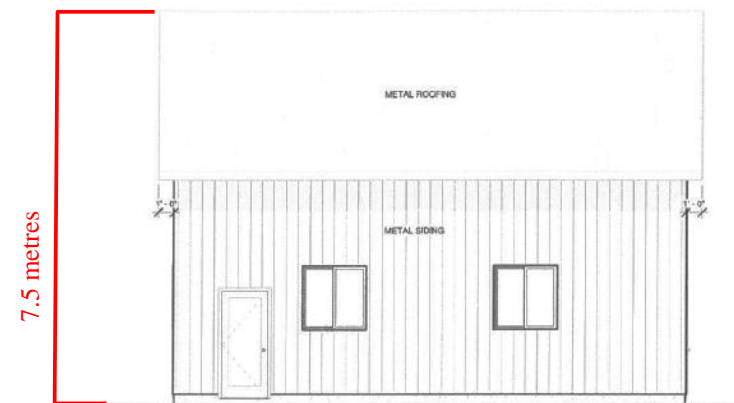
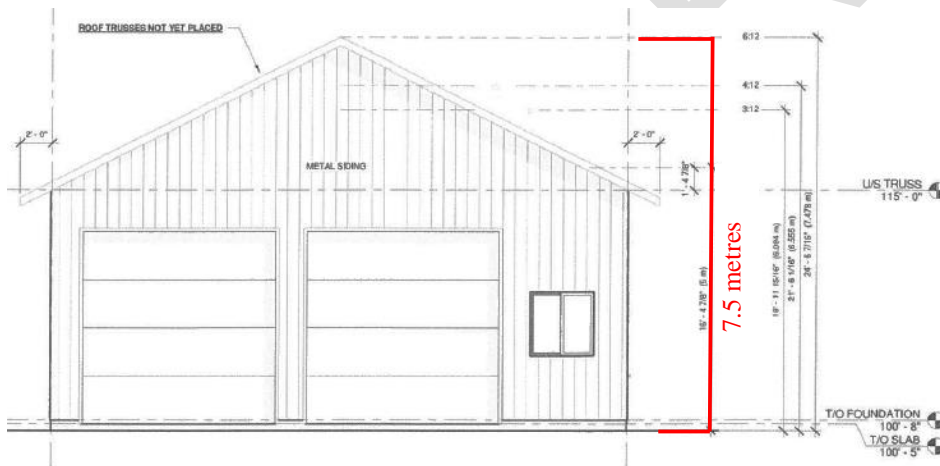
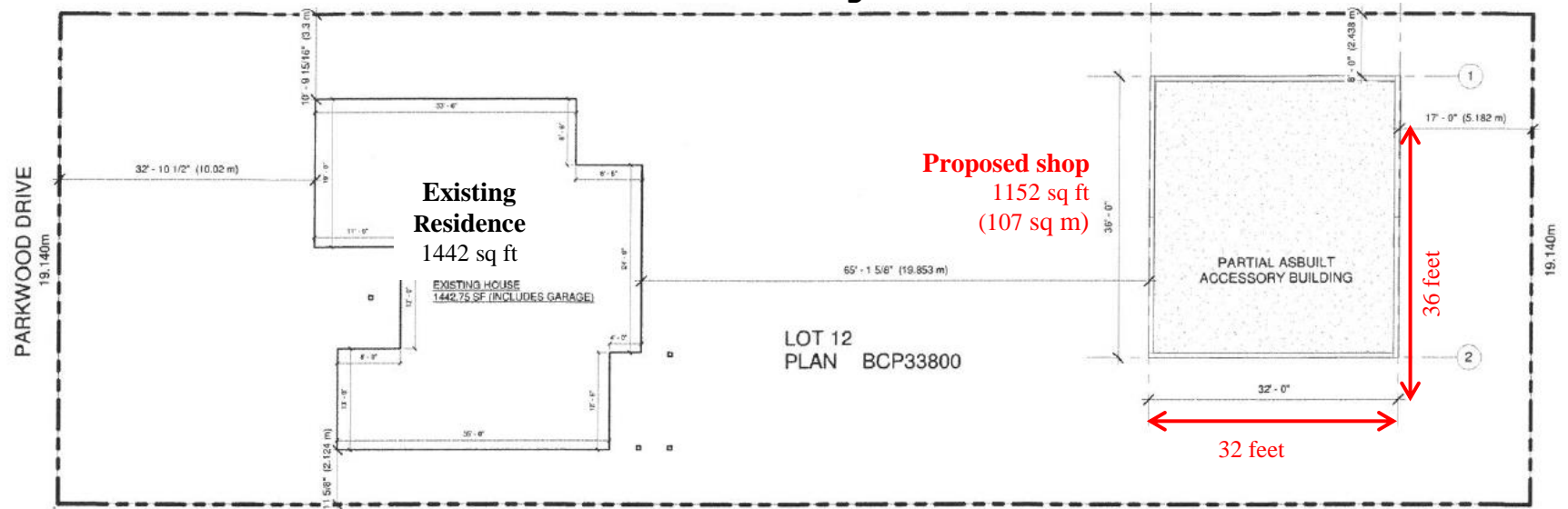
THIS IS NOT A BUILDING PERMIT

DRAFT

DEVELOPMENT VARIANCE PERMIT 2019-14 SCHEDULE "A" Location Map



DEVELOPMENT VARIANCE PERMIT 2019-14
SCHEDULE "B"
Site Plan & Building Plans



DRAFT



45950 Cheam Avenue
Chilliwack, BC V2P 1N6
604-702-5000 | 1-800-528-0061

For Office Use Only
Do not write in the space below

Fraser Valley Regional District

Receipt: 8647/3 May 14, 2019
Dated: May 14, 2019 01:46:32 PM
Station: EA SERVICE/CASH2

1 PLANNING DVP - 10394 PARKWOOD 350.00

Total 350.00

CASH CHRIS MURPHY - 10394 P -350.00

Receipt

Date 2019.05.14

Received from Chris Murphy

Description of Payment and GL Code _____

DVP application

10394 Parkwood Drive.

GST #89221 4750 RT0001

White - Cashier | Yellow - Customer

SCHEDULE A-4

Permit Application

I / We hereby apply under Part 14 of the Local Government Act for a;

☒ Development Variance Permit

☐ Temporary Use Permit

☐ Development Permit

An Application Fee in the amount of \$350.00 as stipulated in FVRD Application Fees Bylaw No. 1231, 2013 must be paid upon submission of this application.

Civic
Address

10394 Parkwood Dr. PID 009-370-58

Legal
Description

Lot _____ Block _____ Section _____ Township _____ Range _____ Plan _____

The property described above is the subject of this application and is referred to herein as the 'subject property.' This application is made with my full knowledge and consent. I declare that the information submitted in support of the application is true and correct in all respects.

Owner's
Declaration

Name of Owner (print) <u>Chris Murphy</u>	Signature of Owner <u>[Signature]</u>	Date <u>05/14/2019</u>
Name of Owner (print) <u>Karla Haynes</u>	Signature of Owner <u>[Signature]</u>	Date <u>05/14/2019</u>

Owner's
Contact
Information

Address <u>10394 Parkwood Dr.</u>	City <u>Rosedale</u>
-----------------------------------	----------------------

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

Agent

I hereby give permission to _____ to act as my/our agent in all matters relating to this application.

Only complete this section if the applicant is NOT the owner.

Signature of Owner	Date
Signature of Owner	Date

Agent's contact information and declaration

Name of Agent		Company
Address		City
Email		Postal Code
Phone	Cell	Fax

I declare that the information submitted in support of this application is true and correct in all respects.

Signature of Agent	Date
--------------------	------

Development Details

Property Size _____ Present Zoning _____

Existing Use _____

Proposed Development Detached Garage -

Proposed Variation / Supplement To Vary The height of an

accessory structure to 7.5 M

To Vary the size of the accessory structure to 107 M²

Reasons in Support of Application

I/we are car/racing enthusiasts. We

have 2 Drag Race cars, a motorcycle, and 2 classic cars. We cannot store them all or work on them currently since prohibited. They have been vandalized & broken into in the driveway/space. There is a height to put in, that is the over height request.

Page 2 of 4

all at one location at home and Allow Space To work on them.
and Store parts in the Mezzanine Areas this is why I have asked
for over height and size Amendments, I have gone to All related
to the matter neighbors and chatted regarding this in full detail and all
overwhelmingly signed agreement sheets provided. Additionally there
is a short totally undeveloped/overgrown/unusable Access Road
on the backside of the rear fence. Our entire backyard view is of,
the raised up AGASSIZ Hwy, A partially built Mobile home/hoose,
the entire Rear 1/3 of the yard is unusable due to the elevated
rocks and land it encompasses. It due to being taller would help block
out never ending semi's, cars, and trucks visually and their noise as
well. The proposed building is A very Nice Steel Frame colored.
NONCOMBUSTIBLE building. So In closing please grant us
variance of 3 metres setback from rear fence, over height and
over square footage. Thank you! Regards Chris Murphy

\$
Family

**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:

yes
☐

no
☐

30 metres of the high water mark of any water body

yes
☐

no
☐

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.

**Contaminated
Sites Profile**

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

yes
☐

no
☐

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
☐

I don't know
☐

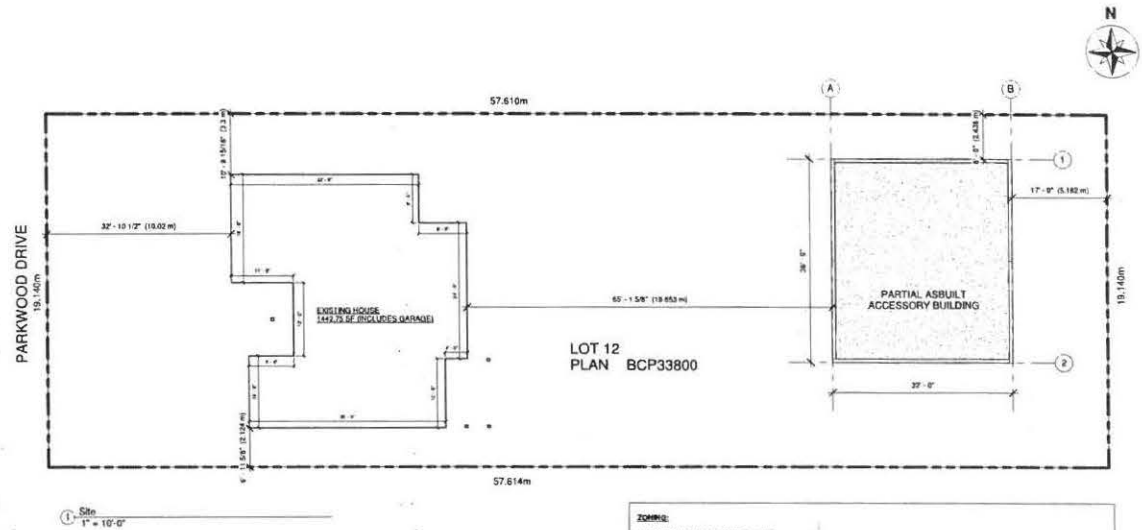
If you responded 'yes' or 'I don't know' you may be advised to contact the Archaeology Branch of the Ministry of Tourism, Sport and the Arts for further information.

Required Information

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
At a scale of:			North arrow and scale
1: _____			Dimensions of property lines, rights-of-ways, easements
			Location and dimensions of existing buildings & setbacks to lot lines, 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 Plan			Location, quantity, size & species of existing & proposed plants, trees & turf
Same scale as site plan			Contour information (_____ metre contour intervals)
			Major topographical features (water course, rocks, etc.)
			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@fvr.ca.



ZONING:		
FRASER VALLEY REGIONAL DISTRICT		
CIVIC ADDRESS: 10394 PARKWOOD DRIVE, ROSEDALE BC		
ELECTORAL AREA: 0		
ZONE: SRR 2 (SUBURBAN RESIDENTIAL)		
LOT SIZE: 0.379 ACRES		
LEGAL DESCRIPTION: LOT 12, PLAN BCP33800, SECTION 1, TOWNSHIP 3, RANGE 28, MERIDIAN 1W, NEW WESTMINSTER LAND DISTRICT		
ACCESSORY BUILDING	PERMITTED	ASBUILT/PROPOSED
MAX LOT COVERAGE	25%	21.30% PRINCIPAL BLDG: 1443.75sf + ACCESSORY BLDG: 1152sf = 2594.75sf
MAX LOT COVERAGE		2594.75 sf / 0.272 ACRES (11448 sf) = 21%
SIDE SETBACK	0.9m	2.43m
REAR SETBACK	3.0m	5.18m
BUILDING HEIGHT	5.0m	7.47m
SIZE OF ACCESSORY BLDG	45sf (414 sf)	107sf (1152 sf) SEE ELEVATION

MR. CHRIS MURPHY

PARTIAL ASBUILT ACCESSORY BUILDING

**CHEAM BUILDING
& DESIGN**

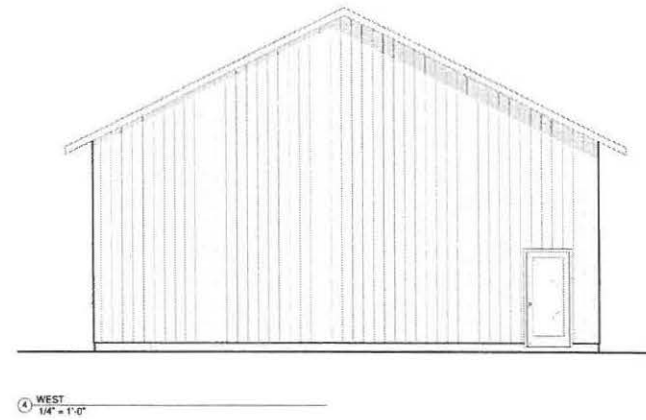
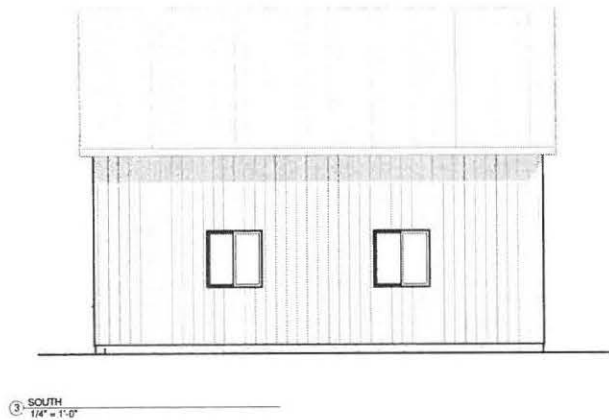
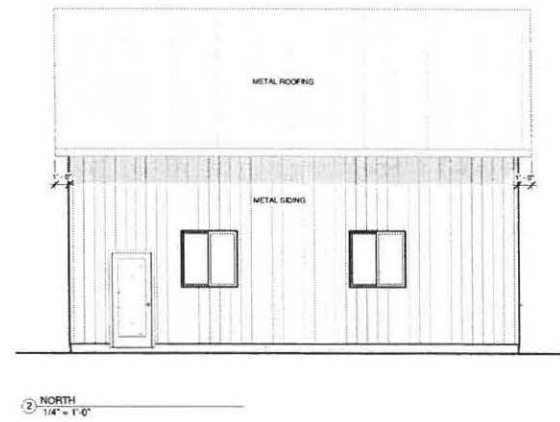
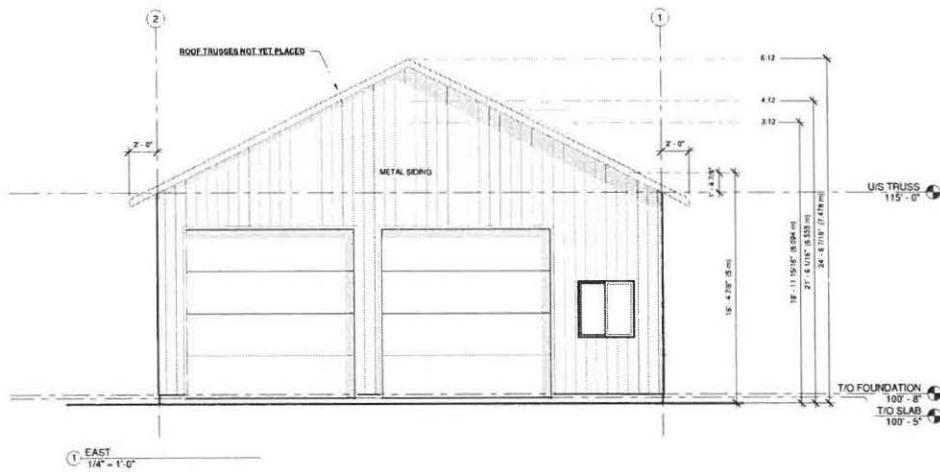
Bus: 604-798-8900
Email: cheamdbd@telus.net
6777 Walker Road, Agassiz, BC V0M 1A4

Date: 12/18/17
Scale: As indicated
Drawn By: DV
Checked By: RV

Date:	Issue/Revision
MAY 7, 2018	PARTIAL ASBUILT FOR PERMIT DRAWINGS

Site Plan
Mr. Chris Murphy
Partial Asbuilt Accessory Building
10394 Parkwood Drive, Rosedale BC

A1.0



**CHEAM BUILDING
& DESIGN**

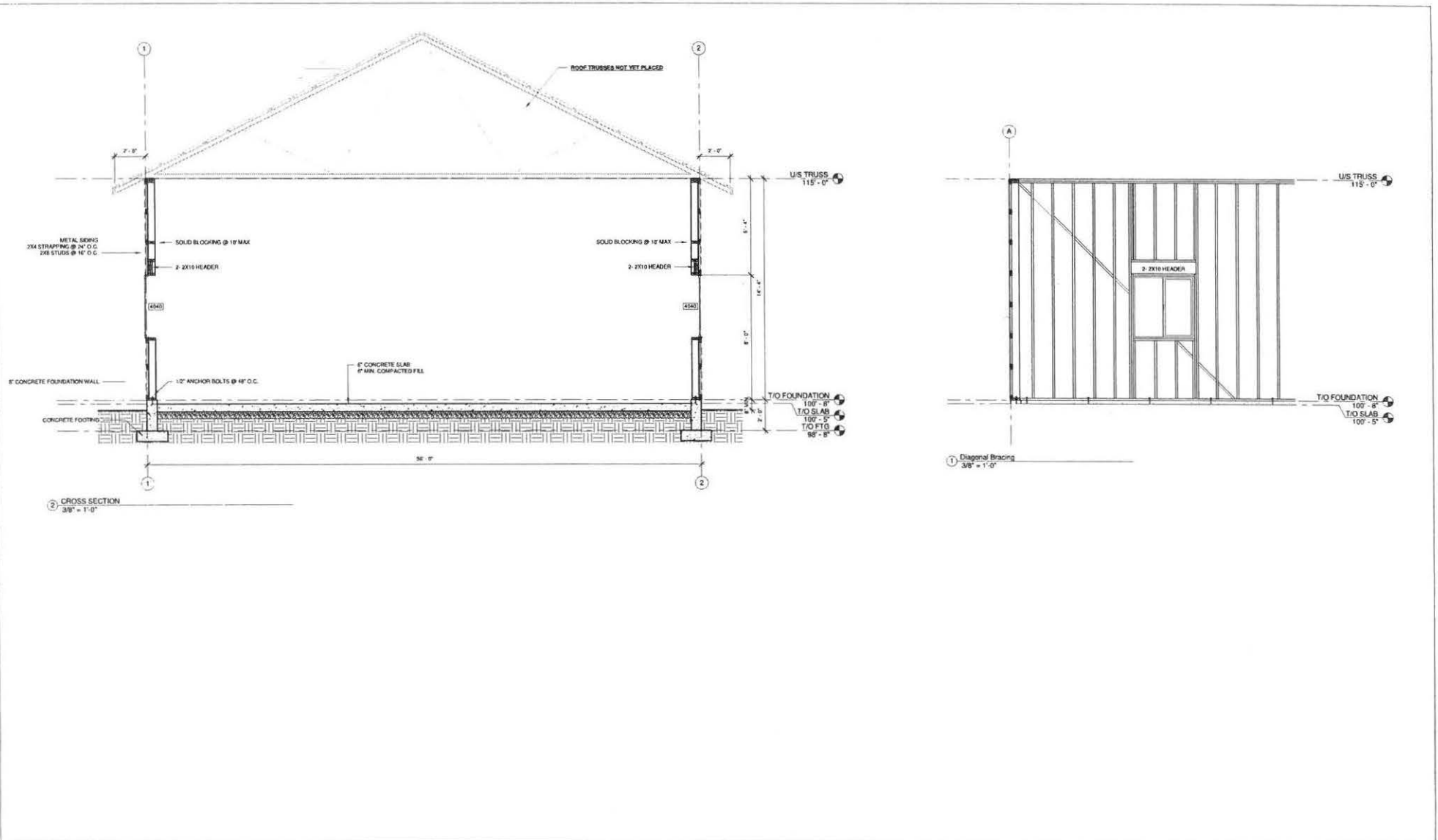
Bus: 604-798-8900
Email: cheamdbd@telus.net
6777 Walker Road, Agassiz, BC V0M 1A4

Date: 05/07/19
Scale: 1/4" = 1'-0"
Drawn By: DV
Checked By: RV

Date:	Issue/Revision
MAY 7, 2019	PARTIAL ASSEMBLY FOR PERMIT DRAWINGS

Elevations
Mr. Chris Murphy
Partial Asbuilt Accessory Building
10394 Parkwood Drive, Rosedale BC

A3.0



CHEAM BUILDING & DESIGN

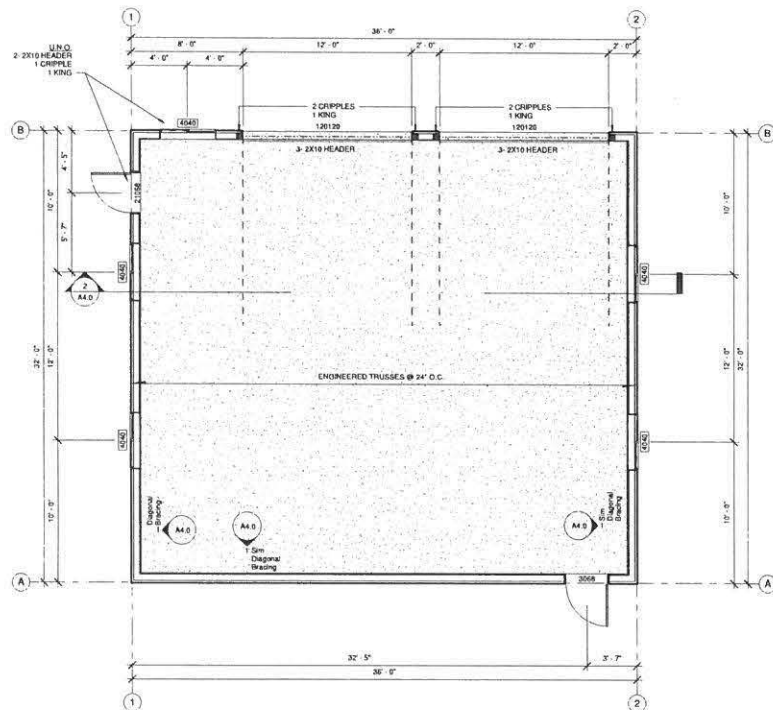
Bus: 604-798-8900
Email: cheambd@telus.net
6777 Walker Road, Agassiz, BC V0M 1A4

Date: 05/07/19
Scale: 3/8" = 1'-0"
Drawn By: DV
Checked By: RV

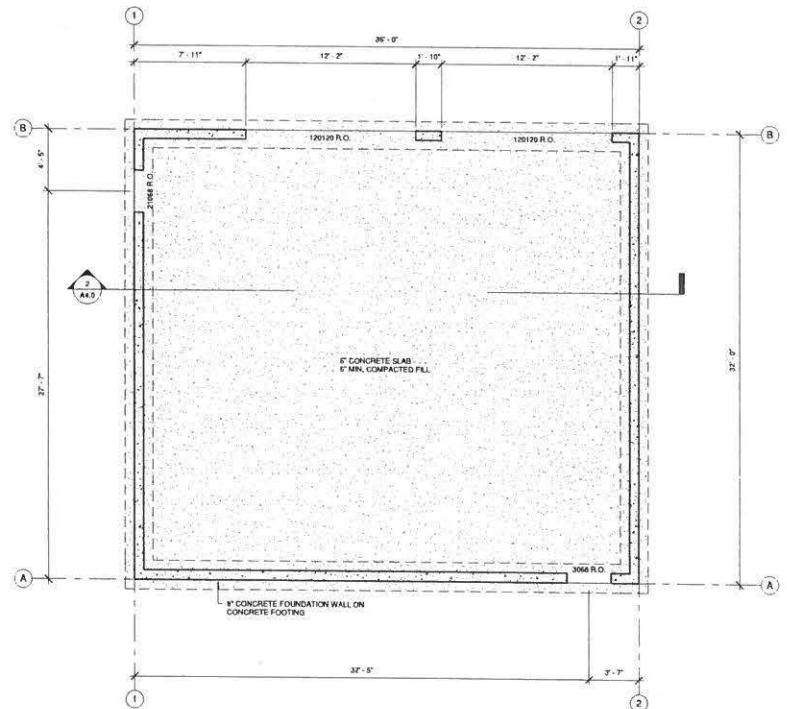
Date:	Issue/Revision
MAY 7, 2019	PARTIAL ASBUILT FOR PERMIT DRAWINGS

Sections & Details
Mr. Chris Murphy
Partial Asbuilt Accessory Building
10394 Parkwood Drive, Rosedale BC

A4.0



1. TO FOUNDATION
1/4" = 1'-0"



2. TO FTR
1/4" = 1'-0"

**CHEAM BUILDING
& DESIGN**

Bus: 604-798-8900
Email: cheamdbd@telus.net
6777 Walker Road, Agassiz, BC V0M 1A4

Date: 05/07/19
Scale: 1/4" = 1'-0"
Drawn By: DV
Checked By: RV

Date:	Issue/Revision
MAY 7, 2019	PARTIAL ASBUILT FOR PERMIT DRAWINGS

Floor & Foundation Plans

Mr. Chris Murphy
Partial Asbuilt Accessory Building
10394 Parkwood Drive, Rosedale BC

A2.0

To: CAO for the Electoral Area Services Committee

Date: 2019-06-11

From: Julie Mundy, Planning Technician

File No: 3090-20 2019-15

Subject: Application for Development Variance Permit 2019-15 to reduce the front lot line setback at 58161 Fancher Road, Electoral Area B

RECOMMENDATION

THAT the Fraser Valley Regional District Board issue Development Variance Permit 2019-15 for 58161 Fancher Road, Electoral Area B to reduce the front lot line setback from 25 feet (7.6 metres) to 10 feet (3.05 metres), clear to sky, to facilitate the construction of a residence and a residential accessory building, 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 have applied for a Development Variance Permit to reduce the front lot line setback for a residence and residential accessory building (workshop) as outlined in *Zoning Bylaw for Electoral Area 'C', 1977 of the Regional District of Fraser-Cheam*.

PROPERTY DETAILS			
Electoral Area	B		
Address	58161 Fancher Road		
PID	023-616-148		
Folio	732.06218.600		
Lot Size	2.152 acres		
Owner	Marius & Catharina Van De Pol	Agent	
Current Zoning	Agricultural (Ag-1)	Proposed Zoning	No change
Current OCP	Agricultural (Ag)	Proposed OCP	No change
Current Use	Vacant	Proposed Use	No change
Development Permit Areas	5-BC Riparian Area		
Hazards	Wahleach Creek Alluvial Fan, Fraser River Floodplain		
Agricultural Land Reserve	No		

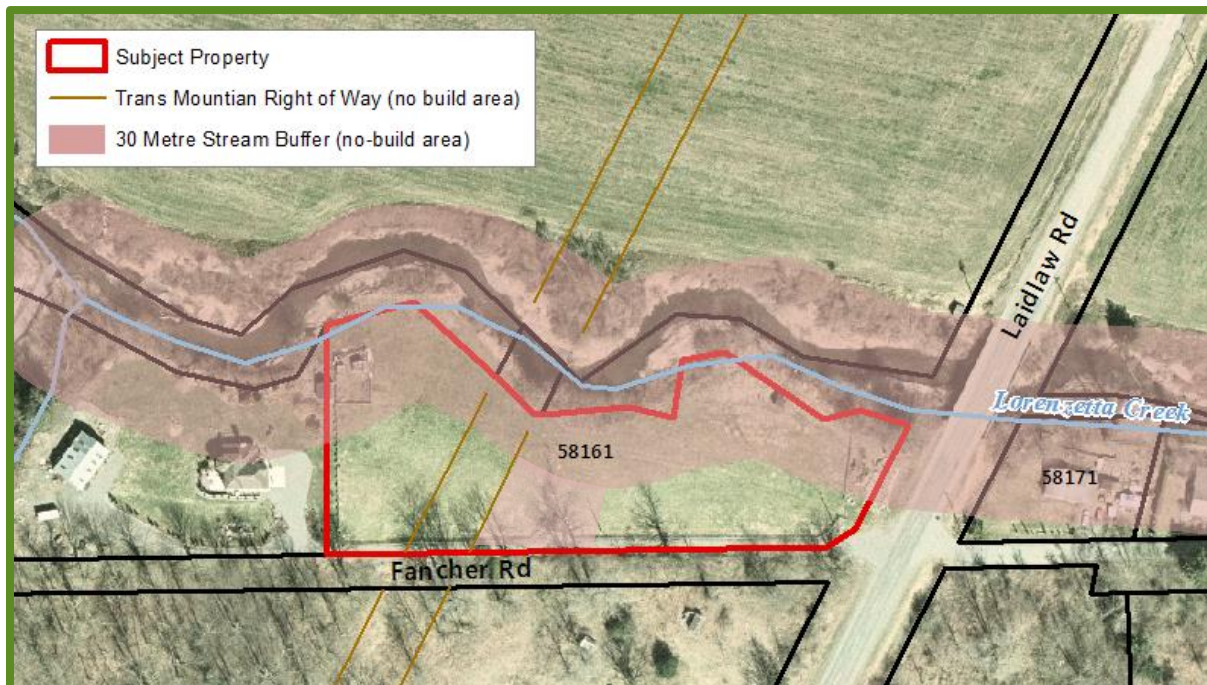
ADJACENT ZONING & LAND USES

North	^	Agricultural (Ag-1); Agriculture
East	>	Agricultural (Ag-1); Creek, Forest
West	<	Agricultural (Ag-1); Agriculture, Single-family Dwelling
South	v	Campground Holiday Park (CHP); Agriculture, Forest

NEIGHBOURHOOD MAP



PROPERTY MAP



DISCUSSION

The property owner is planning to construct a single family residence and an associated workshop at 58161 Fancher Road, Electoral Area B. The property is located to the south of Lorenzetta Creek and is currently bare land.

Property Description & Reasons for the Variance

Although the property is 2.1 acres in size, there is a relatively small building envelope due to required setbacks and an existing right-of-way.

The Fraser Valley Regional District Floodplain Management Bylaw 0681, 2005 requires all construction to be setback 30.0 metres from the natural boundary of Lorenzetta Creek. This setback greatly reduces the buildable area of the property area. The property is also constrained by a Trans Mountain right-of-way. The map above shows the approximate location of the creek setback and the right-of-way.

Variance Request

The applicant is seeking a relaxation of 15 feet (4.57 metres) from the required front lot line setback, reducing the setback requirements from 25 feet (7.62 metres) to 10 feet (3.05 metres).

Front Lot Line Setback	
Required (zoning)	25 feet (7.62 metres)
Proposed	10 feet (3.05 metres)
Requested Variance	15 feet (4.57 metres)

The applicant advises the variance will enable the construction of house (approximately 2,160 square feet) and a 1000 square foot shop / garage outside of the Lorenzetta Creek setback, while adhering to FVRD Floodplain Management Bylaw requirements.

If the variance is not granted, the applicant could construct a smaller house, however, the building size will be limited. Appendix A shows the proposed site plan, with the requested 3.05 metre setback, and the established 7.62 metre setback.

Ministry of Transportation and Infrastructure

The subject property can be accessed via Laidlaw Road and Fancher Road. As there is secondary road access to the property, the *Transportation Act* allows for a setback of 3.0 metres from the road right-of-way. The Ministry of Transportation and Infrastructure (MOTI) has confirmed a 3.0 metre setback from Fancher Road is acceptable to them, and no additional MOTI permits are required.

Hazard Assessment & Building Permit Requirements

The property is located within the Wahleach Creek Alluvial Fan and the Fraser River Floodplain. As part of the building permit application process, the property owners have obtained a site specific geohazard assessment to address any hazards on the property. The report includes building recommendations for

flood and scour protection that will be reviewed as part of the building permit application process. Building permit applications have been submitted for the construction of the house and shop (BP14632 and BP014674).

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 be given the opportunity to provide written comments or attend the Board meeting 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 no letters of support or objection have been submitted.

COST

The \$350 application fee has been paid by the applicant.

CONCLUSION

The property owners are attempting to site their buildings in a safe location that complies with the FVRD floodplain management bylaw. Staff recommend that the FVRD Board issue Development Variance Permit 2019-15 to reduce the front lot line setback.

Option 1 – Issue (Staff Recommendation)

Staff recommend that the Fraser Valley Regional District Board issue Development Variance Permit 2019-15 to reduce the front lot line setback from 25 feet (7.62 metres) to 10 feet (3.05 metres), clear to sky, to facilitate the construction of a residence and a residential accessory building at 58161 Fancher Road, Electoral Area B, 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 2019-15 for the property at 58161 Fancher Road, Electoral Area B.

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 2019-15 for the property at 58161 Fancher Road, Electoral Area B to FVRD Staff.

COMMENTS BY:

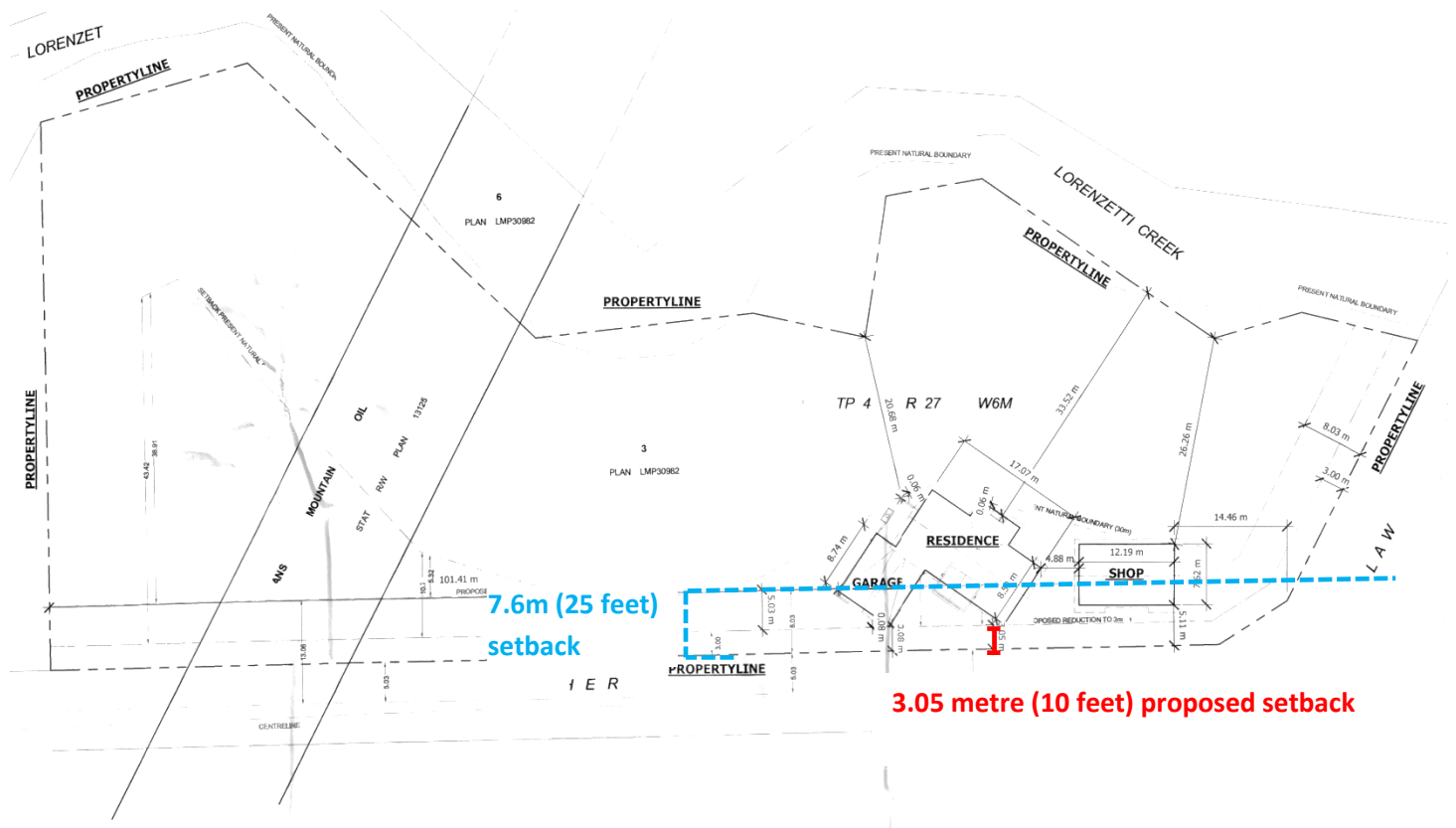
Graham Daneluz, Deputy Director of Planning & Development: Reviewed & supported

Margaret Thornton, Director of Planning & Development: Reviewed & supported

Mike Veenbaas, Director of Financial Services: No further financial comment.

Jennifer Kinneman, Acting Chief Administrative Officer: Reviewed and supported.

Appendix A Site Plan





FRASER VALLEY REGIONAL DISTRICT DEVELOPMENT VARIANCE PERMIT

Permit No. Development Variance Permit 2019-15 **Folio No.** 732.06218.600

Issued to: Marius & Catharina Van De Pol

Address:

Applicant: Brad Klaassen

Site Address: 58161 Fancher Road, Electoral Area B

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 3 SECTION 19 TOWNSHIP 4 RANGE 27 WEST OF THE SIXTH MERIDIAN
NEW WESTMINSTER DISTRICT PLAN LMP30982
PID: 023-616-148

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 'C', 1977 of the Regional District of Fraser-Cheam is **varied** as follows:

Division 4, Section 4.03 Setbacks

- (a) Highway: is varied by reducing the setback from 25 feet (7.62 m) to the right-of-way boundary to 10 feet to the right-of-way boundary for the construction of a single family dwelling and a residential accessory building.
-

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. BP014632 and BP014647.

GENERAL TERMS AND CONDITIONS

1. This Development Variance Permit is issued Pursuant to Part 14 – Division 9 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 Section 524 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 developers 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.

SECURITY DEPOSIT

As a condition of the issuance of this Permit, and pursuant to Section 502 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: \$ <N/A> .
 (b) the deposit of the following specified security: \$ <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 2019-15. 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> DAY OF <MONTH>, <YEAR>

Chief Administrative Officer / Deputy

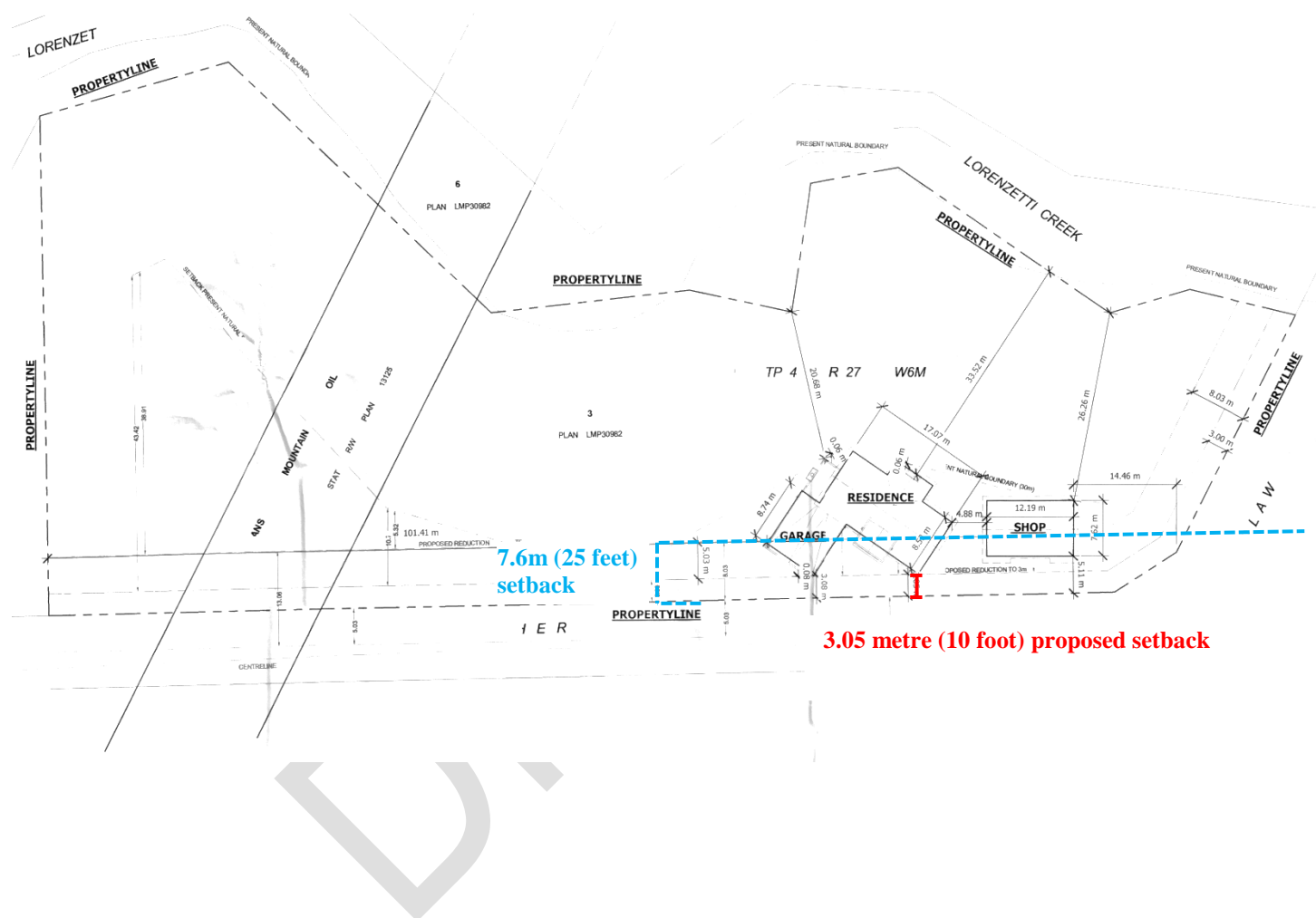
THIS IS NOT A BUILDING PERMIT

DRAFT

DEVELOPMENT VARIANCE PERMIT 2019-15
SCHEDULE "A"
Location Map



DEVELOPMENT VARIANCE PERMIT 2019-15 SCHEDULE "B" Site Plan





45950 Cheam Avenue
Chilliwack, BC V2P 1N6
604-702-5000 | 1-800-528-0061

Receipt

Date May 14 2019

Received from Brad Klassen Brazen Const.

Description of Payment and GL Code _____

BP Application

58161 Funcher Rd 150

Shop

DVP Application 350

For Office Use Only Do not write in the space below

Fraser Valley Regional District

Receipt: 8647/1 May 14, 2019
Dated: May 14, 2019 09:06:56 AM
Station: EA SERVICE/CASH2

1 PLANNING DVP APPLICATION - LOT 350.00
1 BUILDING PERMIT BP APPLICATION 150.00
PAID BY: VISA

SCHEDULE A-4

Permit Application

I / We hereby apply under Part 14 of the *Local Government Act* for a;

☒ Development Variance Permit

☐ Temporary Use Permit

☐ Development Permit

An Application Fee in the amount of \$ 350 as stipulated in FVRD Application Fees Bylaw No. 1231, 2013 must be paid upon submission of this application.

Civic Address Lot 3 Fandherd PID 023-616-148

Legal Description Lot 3 Block _____ Section 19 Township 4 Range 27 Plan LMP 30982

The property described above is the subject of this application and is referred to herein as the 'subject property.' This application is made with my full knowledge and consent. I declare that the information submitted in support of the application is true and correct in all respects.

☒ Owner's Declaration

Name of Owner (print) <u>Marius Van De Pol</u>	Date <u>May 7/19</u>
Name of Owner (print) <u>Catharina Van De Pol</u>	Date <u>May 7/19</u>

☒ Owner's Contact Information

Address		City <u>Chilliwack</u>
Email		Postal Code
Phone	Cell	Fax

Office Use Only	Date <u>May 14, 2019</u>	File No.
	Received By	Folio No.
	Receipt No.	Fees Paid: \$

Agent

I hereby give permission to Brad Klaassen to act as my/our agent in all matters relating to this application.

Only complete this section if the applicant is NOT the owner.

Signature of _____	Date <u>May 7/19</u>
Signature of _____	Date <u>May 7/19</u>

Agent's contact information and declaration

Name of Agent <u>Brad Klaassen</u>		Company <u>Brazen Construction Ltd</u>	
Address <u>10153 Royalwood Blvd</u>		City <u>Rosedale</u>	
Email _____		Phone <u>VOX</u> _____	
Phone _____	Cell <u>6</u> _____	Fax _____	

_____ is true and correct in all respects.

Signature of Agent <u>[Signature]</u>	Date <u>May 7/19</u>
------------------------------------------	-------------------------

Development Details

Property Size _____ Present Zoning _____

Existing Use Bareland

Proposed Development Build single family dwelling plus shop

Proposed Variation / Supplement Because of the 30m setback from the creek we would like to minimize the setback from Fancher rd to 3.05m at the closest point Kevin from high M.O.T. has no issue with it.
(use separate sheet if necessary)

Reasons in Support of Application We do not have a lot of buildable area on this huge lot because of the creek setbacks and the Pipeline along the back of the Property

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:

yes ☒ no ☐

30 metres of the high water mark of any water body

yes ☐ no ☐

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.

Contaminated Sites Profile

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

yes ☐ no ☒

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 ☒ I 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.

Required Information

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 At a scale of: 1: _____	✓		Reduced sets of metric plans
	✓		North arrow and scale
	✓		Dimensions of property lines, rights-of-ways, easements
	✓		Location and dimensions of existing buildings & setbacks to lot lines, 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 Plan Same scale as site plan			Location, quantity, size & species of existing & proposed plants, trees & turf
			Contour information (_____ metre contour intervals)
			Major topographical features (water course, rocks, etc.)
			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@fvr.ca.

To: CAO for the Electoral Area Services Committee

Date: 2019-06-11

From: Andrea Antifaeff, Planner I

File No: 3090-20-2019-16

Subject: Application for Development Variance Permit 2019-16 to reduce the interior side lot line setback for the construction of a wheelchair ramp at #78-14550 Morris Valley Road, Electoral Area C (River Reach Estates)

RECOMMENDATION

THAT the Fraser Valley Regional District Board issue Development Variance Permit 2019-16 to reduce the setback from the interior side lot line from 2.1 metres to 1.0 metres, clear to sky to facilitate the construction of a wheelchair ramp at #78-14550 Morris Valley Road, Area "C", subject to the consideration of any comments or concerns raised by the public.

STRATEGIC AREA(S) OF FOCUS

Provide Responsive & Effective Public Services

BACKGROUND

The owners of the property have made an application for a Development Variance Permit (DVP) in order to reduce the setback from the interior side lot line as outlined in *Zoning By-law for Electoral Area "F", 1978, of the Regional District of Fraser-Cheam*.

PROPERTY DETAILS			
Electoral Area	C		
Address	#78-14550 Morris Valley Road		
PID	026-415-836		
Folio	776.06731.278		
Lot Size	6938 square feet		
Owner	William & Ronaye Perfitt	Agent	N/A
Current Zoning	Private Resort Residential Development (PRD-1)	Proposed Zoning	No change
Current OCP	Resort Residential (RR)	Proposed OCP	No change

Current Use	Residential	Proposed Use	No change
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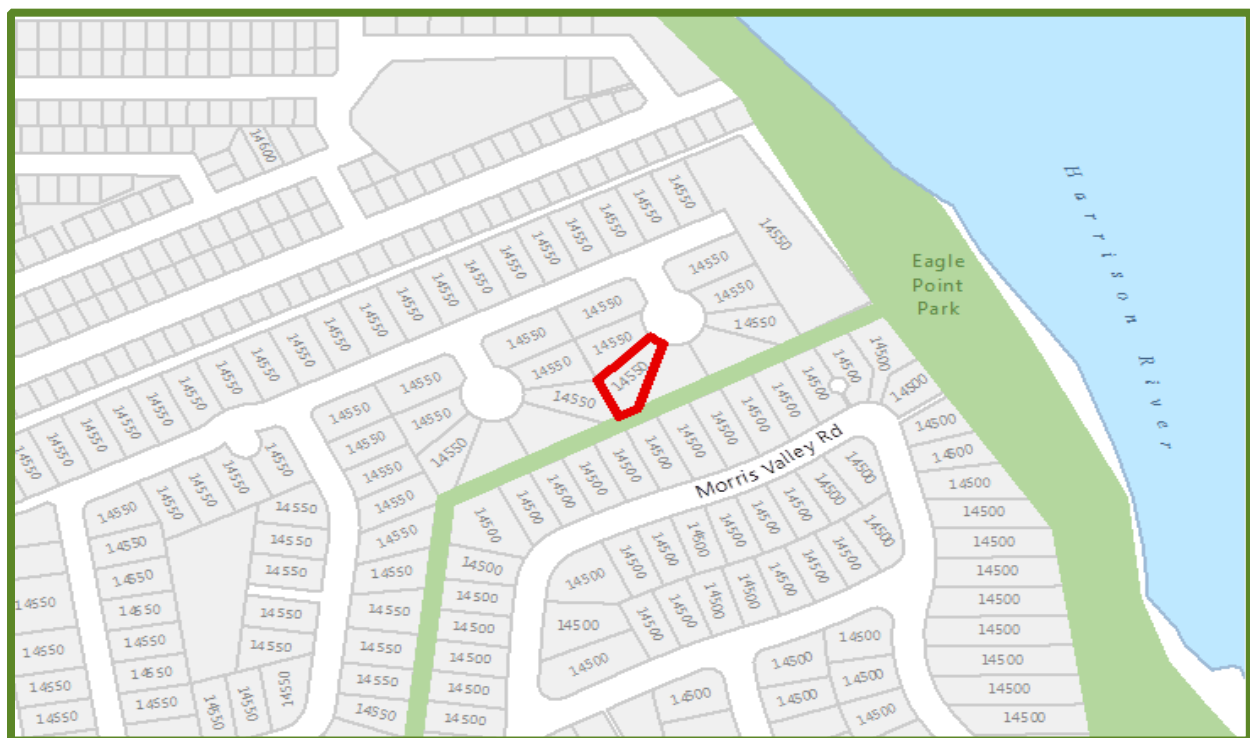
Development Permit Areas 1-C Geotechnical; 2-C Sensitive Habitat Resources & 3-C Riparian Areas

Agricultural Land Reserve No

ADJACENT ZONING & LAND USES

North	^	Private Resort Residential Development (PRD-1); Single-family residences
East	>	Private Resort Residential Development (PRD-1); Single-family residences
West	<	Private Resort Residential Development (PRD-1); Single-family residences
South	v	Private Resort Residential Development (PRD-1); Single-family residences

NEIGHBOURHOOD MAP



PROPERTY MAP



DISCUSSION

The owners of the property have made an application to construct a wheelchair ramp at #78-14550 Morris Valley Road, located in Rivers Reach Estates in Morris Valley. The wheelchair ramp does not meet the minimum setback requirements along the interior side lot line as stipulated by the applicable zoning bylaw.

The proposed wheelchair ramp is 1.2 metres (4 feet) in width and 6.7 metres (22 feet) in length and will be attached to an existing deck, which conforms to all setbacks (see Appendix A - Site Plan and B – Elevation Drawings).

Building staff have reviewed the site plan and there are no Building Code concerns regarding the separation distances between the proposed wheelchair ramp and the neighbouring property.

Variance Requested – DVP 2019-16

Application Rationale

The applicants advise that the reasons in support of the variance are that they have mobility challenges and a wheelchair ramp is required for access to the single family dwelling.

Interior Side Lot Line Setback Variance

The owners are seeking a 1.1 metre (3.6 foot) relaxation to the required interior side lot line setback, reducing the setback requirement from 2.1 metres (6.9 feet) to 1.0 metre (3.3 feet).

Interior Lot Line Setback	
Permitted (Zoning)	2.1 metres (6.9 feet)
Proposed	1.0 metre (3.3 feet)
Requested Variance	1.1 metres (3.6 feet)

Statutory Building Scheme

The subject property has a statutory building scheme registered on the property title (BX568505) which outlines specific design requirements for all single family homes within the strata development.

The applicants will be required to provide proof that they have attained the strata council's approval for the design as part of their building permit application.

Neighbourhood Notification and Input

All property owners within 30 metres of the property and the Strata will be notified by the FVRD of the development variance permit application and be given the opportunity to provide written comments or attend the Board meeting to state their comments. FVRD staff encourage the applicant to advise neighbouring property owners, residents and the Strata of the requested variance in advance of the mail-out notification. To date no letters of support or objection have been submitted. No comments from the Strata have been provided to date.

COST

The application fee of \$350.00 has been paid by the applicant.

CONCLUSION

Staff recommend that the FVRD Board issue Development Variance Permit 2016-16 to reduce the interior side lot line setback for the construction of a wheelchair ramp at #78-14550 Morris Valley Road. The variance is not anticipated to negatively affect the surrounding properties.

Option 1 – Issue (Staff Recommendation)

Staff recommend that the Fraser Valley Regional District Board issue Development Variance Permit 2019-16 to reduce the setback from the interior side lot line from 2.1 metres to 1.0 metres, clear to sky to facilitate the construction of a wheelchair ramp at #78-14550 Morris Valley Road, Area "C", 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 2019-16 for the property located at #78-14550 Morris Valley Road, Electoral Area C.

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 2019-16 for the property located at #78-14550 Morris Valley Road, Electoral Area c to FVRD Staff.

COMMENTS BY:

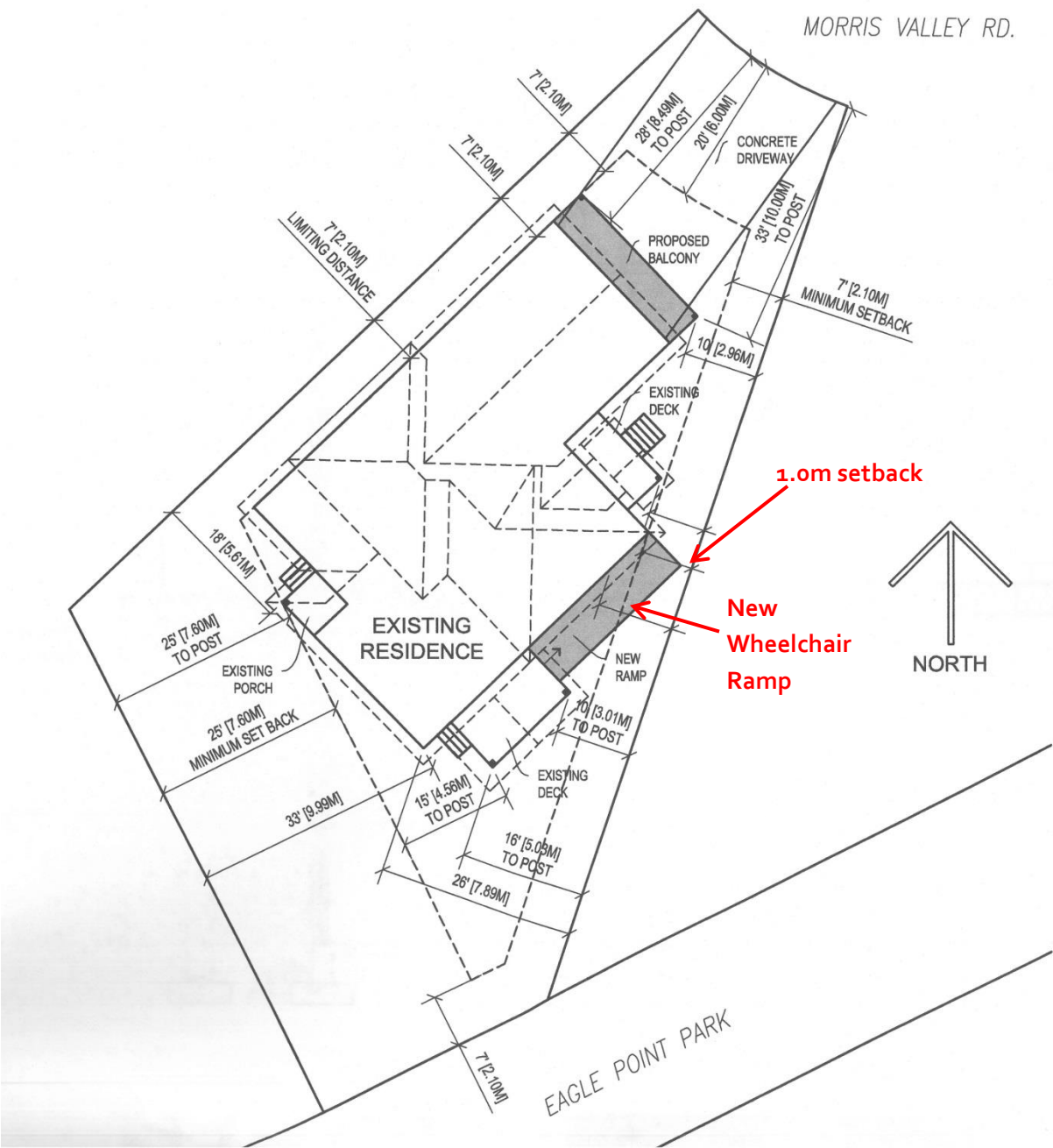
Graham Daneluz, Deputy Director of Planning & Development: Reviewed and supported.

Margaret Thornton, Director of Planning & Development: Reviewed and supported.

Mike Veenbaas, Director of Financial Services: No further financial comments.

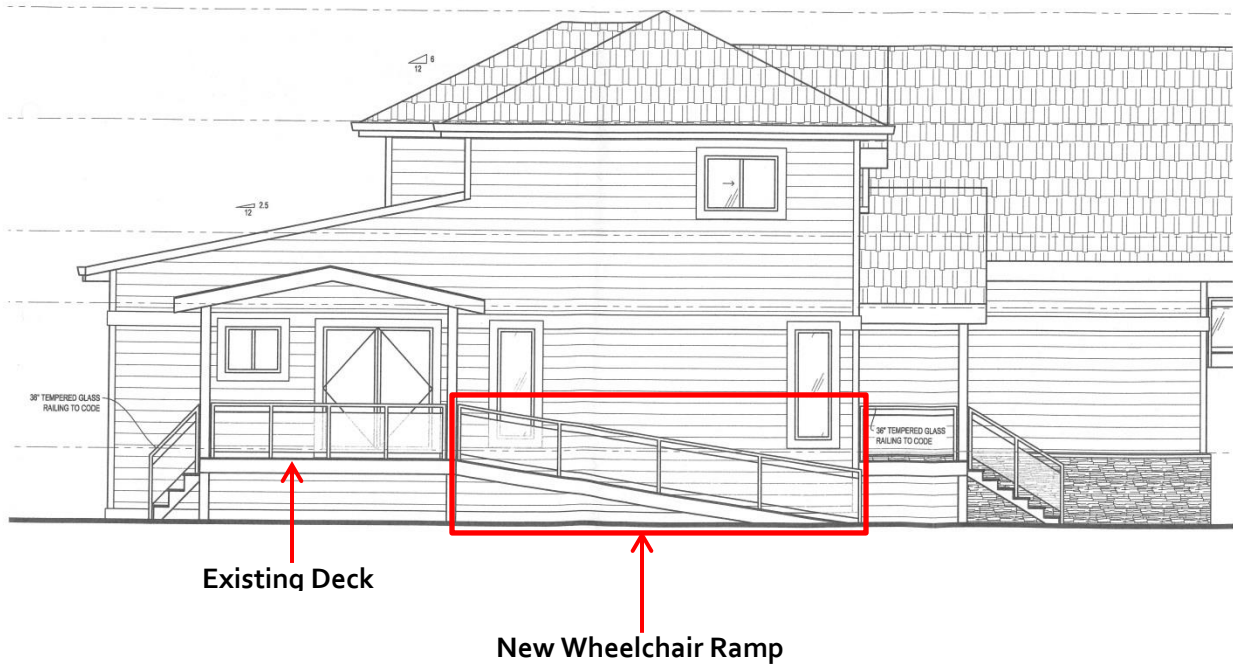
Jennifer Kinneman, Acting Chief Administrative Officer: Reviewed and supported.

Appendix A
Site Plan



Appendix B
Elevation Drawing

RIGHT ELEVATION
SCALE: 1/4"=1'-0"





FRASER VALLEY REGIONAL DISTRICT DEVELOPMENT VARIANCE PERMIT

Permit No. Development Variance Permit 2019-16 **Folio No.** 776.06731.278

Issued to: William & Ronaye Perfitt

Address:

Applicant: William & Ronaye Perfitt

Site Address: #78-14550 Morris Valley Road, Electoral Area "C"

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:

STRATA LOT 78 SECTION 35 TOWNSHIP 3 RANGE 30 WEST OF THE SIXTH MERIDIAN NEW
WESTMINSTER DISTRICT STRATA PLAN BCS1493 TOGETHER WITH AN INTEREST IN THE COMMON
PROPERTY IN PROPORTION TO THE UNIT ENTITLEMENT OF THE STRATA LOT AS SHOWN ON FORM V
026-415-836

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 F, 1978, of the Regional District of Fraser-Cheam is **varied** as follows:
Section 1703

1. Strata Lot Setbacks
 - (c) Interior side strata lot line from 2.1 metres to 1.0 metres.
-

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. 014504.

GENERAL TERMS AND CONDITIONS

1. This Development Variance Permit is issued Pursuant to Part 14 – Division 9 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 Section 524 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 developers 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.

SECURITY DEPOSIT

As a condition of the issuance of this Permit, and pursuant to Section 502 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: \$ N/A.
 (b) the deposit of the following specified security: \$ 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 2019-16. The notice shall take the form of Appendix I attached hereto.

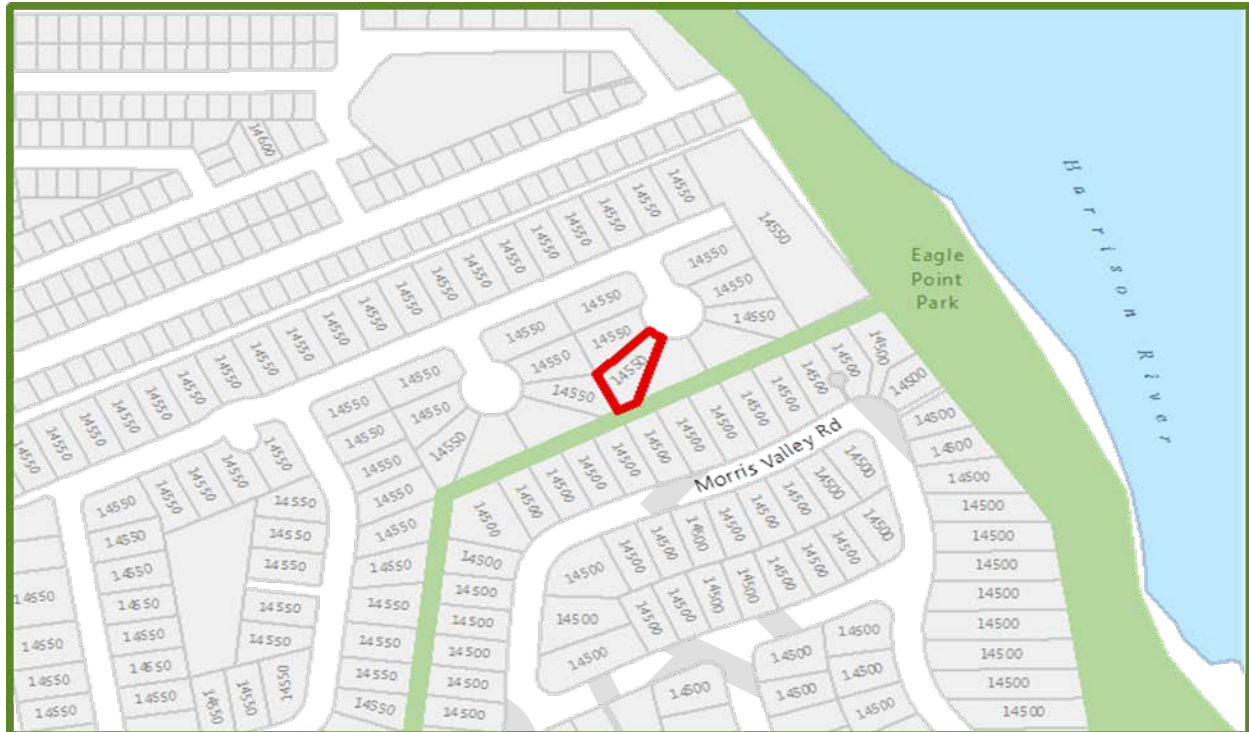
AUTHORIZING RESOLUTION PASSED BY THE BOARD OF DIRECTORS OF THE FRASER VALLEY REGIONAL DISTRICT ON THE <DAY> DAY OF <MONTH>, <YEAR>

Chief Administrative Officer / Deputy

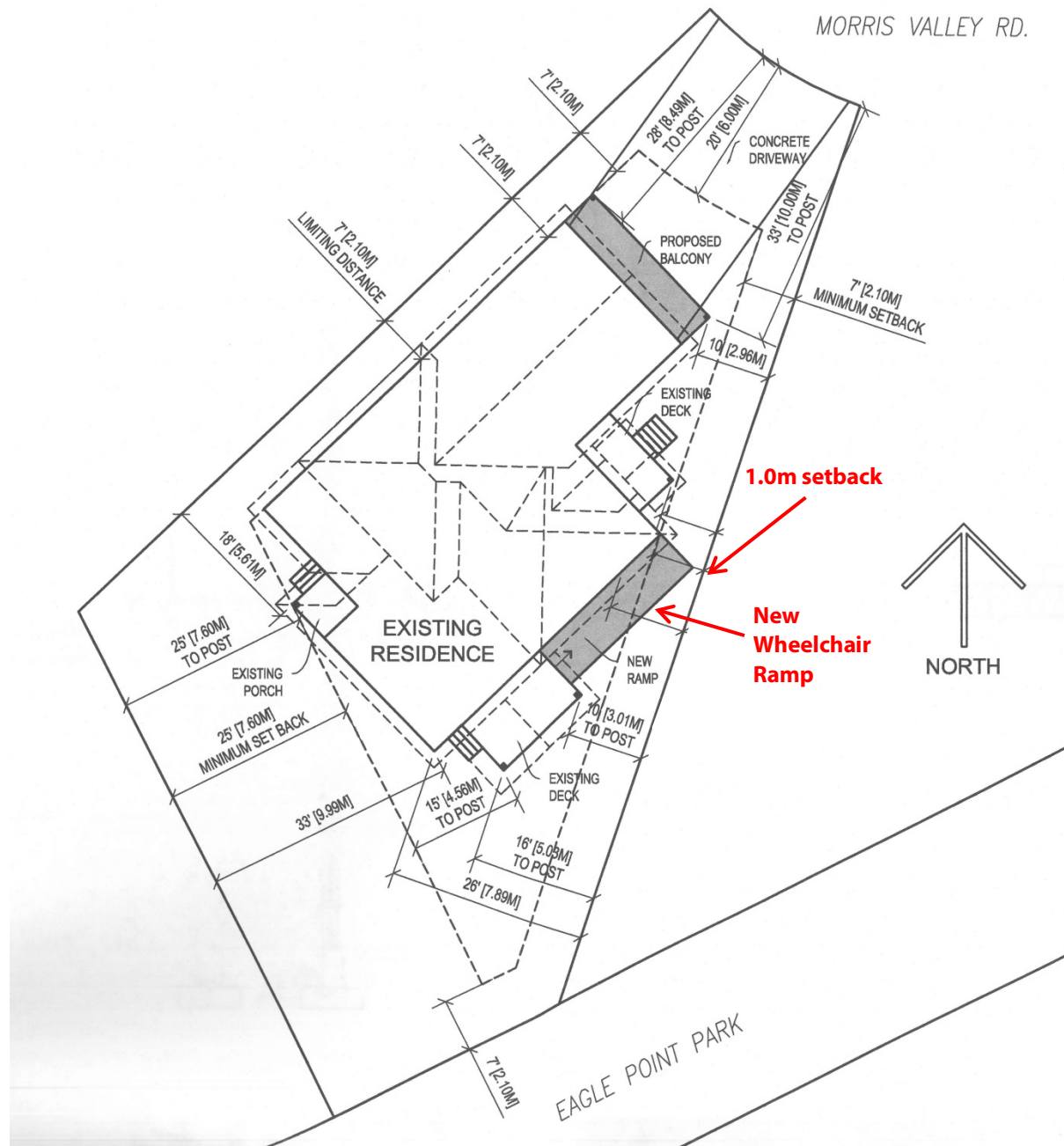
THIS IS NOT A BUILDING PERMIT

DRAFT

DEVELOPMENT VARIANCE PERMIT 2019-16
SCHEDULE "A"
Location Map



DEVELOPMENT VARIANCE PERMIT 2019-16
SCHEDULE "B"
Site Plan



SCHEDULE A-4

Permit Application

I / We hereby apply under Part 14 of the *Local Government Act* for a;

☒ Development Variance Permit

☐ Temporary Use Permit

☐ Development Permit

An Application Fee in the amount of \$ 350 as stipulated in FVRD Application Fees Bylaw No. 1231, 2013 must be paid upon submission of this application.

Civic Address #78 14550 Morris Valley Road PID 026-415-836

Legal Description Lot 78 Block _____ Section 35 Township 3 Range 30 Plan BCS1493

The property described above is the subject of this application and is referred to herein as the 'subject property.' This application is made with my full knowledge and consent. I declare that the information submitted in support of the application is true and correct in all respects.

Owner's
Declaration

Name of Owner (print) William Edward Perfitt	Signature of Owner	Date 5/21/2019
Name of Owner (print) Ronaye Perfitt		Date 5/21/2019

Owner's
Contact
Information

Address		City
Email		Postal Code
Phone	Cell	Fax

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

Agent

I hereby give permission to _____ to act as my/our agent in all matters relating to this application.

Only complete this section if the applicant is NOT the owner.

Signature of Owner	Date
Signature of Owner	Date

Agent's contact information and declaration

Name of Agent		Company
Address		City
Email		Postal Code
Phone	Cell	Fax

I declare that the information submitted in support of this application is true and correct in all respects.

Signature of Agent	Date
--------------------	------

Development Details

Property Size strata lot Present Zoning PRD-1

Existing Use _____

Proposed Development _____

Proposed Variation / Supplement I would like to place a wheelchair ramp at the side of the house I am trying to finish to give access to the side deck and ground level in case it is needed for myself or my wife.

1 METRE SET BACK FROM PROPERTY LINE

(use separate sheet if necessary)

Reasons in Support of Application I William E. Perfitt have been in a wheelchair unable to walk until I regained my ability to walk. I have been warned that if I fall or do something I should not due that I could wind up back in a wheelchair or having to use a walker again permanently. Ronaye has had both hips replaced and is walking with two canes and has mobility problems. we keep a walker and a wheelchair in our home.

Page 2 of 4

**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:

yes
☐

no
☒

30 metres of the high water mark of any water body

yes
☐

no
☒

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.

**Contaminated
Sites Profile**

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

yes
☐

no
☒

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
☒

I 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.

Required Information

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
At a scale of:			North arrow and scale
1: _____			Dimensions of property lines, rights-of-ways, easements
			Location and dimensions of existing buildings & setbacks to lot lines, 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 Plan			Location, quantity, size & species of existing & proposed plants, trees & turf
Same scale as site plan			Contour information (_____ metre contour intervals)
			Major topographical features (water course, rocks, etc.)
			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@fvr.ca.

To: CAO for the Fraser Valley Regional District Board

Date: 2019-06-17

From: Dave Roblin, Manager of Operations

File No: 5340

Subject: Cultus Lake North Waste Water Treatment Plant Odour Control

RECOMMENDATION

THAT the Fraser Valley Regional District Board authorize its signatories to execute a contract with Ramtech Environmental Products. to provide the Odour Control equipment for the Cultus Lake North Wastewater Treatment Plant for the sum of \$269,000 plus tax.

STRATEGIC AREA(S) OF FOCUS

Provide Responsive & Effective Public Services
Support Environmental Stewardship

PRIORITIES

Priority #1 Waste Mangement
Priority #2 Air & Water Quality

BACKGROUND

On April 14th 2018, a referendum was conducted to determine whether to proceed with a plan to build a new wastewater treatment plant (WWTP) for Cultus Lake. The referendum passed and subsequently Fraser Valley Regional District North Cultus Sewer System Loan Authorization Bylaw No. 1468, 2018 was adopted. This bylaw authorizes the FVRD to borrow up to \$6,500,000 for this project.

DISCUSSION

Requests for Proposal (RFPs) were issued by the FVRD to select qualified vendors to supply the Odour Control equipment required for the new plant. The RFPs were posted on BC Bid and closed on May 31 2019.

Each of the RFPs received responses from three proponents. Each Proposal received was evaluated based on the following criteria:

- Technical
- Operation and Maintenance Requirements
- References
- Schedule
- Warranty
- Price

After reviewing the proposal, Ramtech Environmental Products was identified as the preferred proponent for the Odour Control Equipment for the North Cultus Waste Water Treatment Plant

COST

The estimated value of the new Cultus Lake North WWTP is \$6,500,000. The maximum borrowing permitted by the proposed Fraser Valley Regional District North Cultus Sewer System Loan Authorization Bylaw No. 1468, 2018 is \$6,500,000. The total cost of the Odour Control System equipment to be supplied by Ramtech Environmental Products is \$269,000 plus taxes.

COMMENTS BY:

Tareq Islam, Director of Engineering & Community Services Reviewed and supported.

Mike Veenbaas, Director of Financial Services Reviewed and supported.

Jennifer Kinneman, Acting Chief Administrative Officer Reviewed and supported.

To: CAO for the Regional and Corporate Services Committee

Date: 2019-06-11

From: Alison Stewart, Manager of Strategic Planning

File No: 6840-20-010

Subject: Proposed UBCM Resolution - Provincial Response to Homeless Camps on Crown Lands

RECOMMENDATION

THAT the Fraser Valley Regional District Board forward a resolution on the need for a provincial strategy to address rural homelessness and encampments on Crown land to the Union of BC Municipalities for consideration at its September 2019 convention;

AND THAT the resolution shall be as follows:

RURAL HOMELESSNESS: CROWN LAND ENCAMPMENTS

WHEREAS Homelessness is a challenge facing both urban and rural communities;

AND WHEREAS electoral areas have the least ability to address homelessness, in that they are by their very nature remote from health, social, police and other services and the minimal tax bases cannot support the hard and soft infrastructure required to address homelessness;

AND WHEREAS the province's response to homeless encampments on Crown land has been inconsistent or ad-hoc in nature, sometimes relocating encampments without taking into account impacts on rural communities and regional district resources;

THEREFORE IT BE RESOLVED that the province of British Columbia through its newly established Office of Homelessness Coordination within the Ministry of Poverty Reduction and Social Development develop a rural homelessness strategy to address what is clearly a gap in the province's response to homelessness.

STRATEGIC AREAS OF FOCUS

Support Environmental Stewardship

Support Healthy & Sustainable Community

BACKGROUND

In late August 2018, the Fraser Valley Regional District (FVRD) became aware, after the fact, of an initiative of the provincial government to relocate a homeless encampment (Borden Creek) on Crown Land in the Chilliwack River Valley (Electoral Area E) to a private property in the Columbia Valley (Electoral Area H). An article in the August 31, 2018 Chilliwack Progress provided an outline of the

process, which apparently included the RCMP, Ministry of Municipal Affairs and Housing (MAH) and the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD). While the FVRD has generally been aware of homeless encampment problems on Crown land in the Chilliwack River Valley, the Region was not consulted on this move.

A number of concerns arose with the province's approach to this problem:

1. Since the province facilitated the move, what supports, if any, were provided to ensure the property owner's and area resident's interests are protected. BC Housing's involvement in this process is unclear.
2. What supports, if any, were provided to camp occupants in order to transition them from homelessness to being appropriately housed.
3. There are several other encampments in the Chilliwack River Valley and other rural areas in the region. In this particular case, the private land in question was ALR land located in a rural electoral area. If this has become FLNRORD's standard practice, will the ministry continue to relocate homeless encampments to private lands in other parts of the FVRD, including municipalities?

Based on the experience in the FVRD there is a need for a provincial strategy to address homelessness on Crown land in rural electoral areas as it is an issue not unique to the FVRD. The province has recently established an Office of Homelessness Coordination within the Ministry of Poverty Reduction and Social Development, but it is very early in its formation and unclear as to its function and whether the Office will address what is clearly a gap in the province's response to homelessness.

A UBCM resolution asking the province to develop a strategy to address homelessness in rural areas and more specifically address homeless encampments on Crown land may bring this issue to the forefront. A draft resolution has been prepared for consideration at the June 11, 2019 Electoral Area Services Committee and Regional and Corporate Services Committee meetings. The deadline for submitting resolutions to UBCM is June 30, 2019.

DISCUSSION

Homelessness is a challenge facing communities throughout the lower mainland and other parts of the province. Increasing numbers of people are choosing to locate in rural areas, on private land, Crown land and First Nations lands. The costs of cleaning Crown land sites are considerable, but downloading such encampments onto a regional district is not a solution. Electoral areas have the least ability to address homelessness, in that they are by their very nature remote from health, social, police and other services. The minimal tax bases of rural areas cannot support the hard and soft infrastructure required to address homelessness.

According to the FVRD's 2017 Homeless Count, approximately one third of the FVRD's homeless population live unsheltered. Approximately 16% of that group live in cars/vans or campers and are found in locations both inside and outside the region's municipalities. The issue in this case is that the province, who is ultimately responsible for the provision of healthcare, housing and social services has

downloaded responsibility of this particular encampment onto the regional district with no consultation or consideration of local Zoning bylaws, ALR status or the community's capacity to accommodate such a land use.

The process used by FLNRORD in addressing the homeless encampment at Borden Creek is of concern. Homelessness is not only a housing issue. Mental health and addiction issues and related health impacts are significant drivers of homelessness. Based on this most recent response, there appears to be no provincial strategy to address homelessness on provincial Crown lands. Rather, it appears to have been dealt with in an ad hoc manner. To place the onus of this problem onto a small rural community without adequate resources is not an appropriate solution. In addition to the health and homelessness issues, these encampments put the environment at risk, with general garbage, human waste, used needles and other dangerous waste in the mix.

Based on the experience in the FVRD there is a need for a provincial strategy to address homelessness on Crown land in rural electoral areas as it is an issue not unique to the FVRD. The deadline for submitting resolutions to UBCM is June 30, 2019.

The proposed resolution is as follows:

RURAL HOMELESSNESS: CROWN LAND ENCAMPMENTS

WHEREAS Homelessness is a challenge facing both urban and rural communities;

AND WHEREAS electoral areas have the least ability to address homelessness, in that they are by their very nature remote from health, social, police and other services and the minimal tax bases cannot support the hard and soft infrastructure required to address homelessness;

AND WHEREAS the province's response to homeless encampments on Crown land has been inconsistent or ad-hoc in nature, sometimes relocating encampments without taking into account impacts on rural communities and regional district resources;

THEREFORE IT BE RESOLVED that the province of British Columbia through its newly established Office of Homelessness Coordination within the Ministry of Poverty Reduction and Social Development develop a rural homelessness strategy to address what is clearly a gap in the province's response to homelessness.

COST

No cost

CONCLUSION

Homelessness is a challenge facing communities throughout British Columbia. Increasing numbers of people are choosing to locate away from urban centres in rural areas - on private land, Crown land and First Nations lands. Electoral areas have the least ability to address homelessness in that they have a very limited tax base and are by their very nature remote from health, social, police and other services.

A UBCM resolution asking the province to develop a strategy to address homelessness in rural areas and more specifically address homeless encampments on Crown land may bring this issue to the forefront.

COMMENTS BY:

Stacey Barker, Director of Regional Services

Reviewed and supported.

Mike Veenbaas, Director of Financial Services

No further financial comments.

Jennifer Kinneman, Acting Chief Administrative Officer

Reviewed and supported.

To: CAO for the Regional and Corporate Services Committee
From: Christina Vugteveen, Manager of Park Operations
Subject: Fraser Valley Regional District Parks Closure Policy Updates

Date: 2019-06-11

File No: 6120-01

RECOMMENDATION

THAT the Fraser Valley Regional District Board adopt the updated *Parks Closure Policy*.

STRATEGIC AREA(S) OF FOCUS

Support Healthy & Sustainable Community
Provide Responsive & Effective Public Services

PRIORITIES

Priority #4 Tourism
Priority #5 Outdoor Recreation

BACKGROUND

The Fraser Valley Regional District (FVRD) is committed to providing the public with safe parks, trails and usage of associated infrastructure. One of the ways in which this is managed, is to close parks and/or specific areas in the parks to protect its users, park infrastructure and their unique ecosystems. In 2013, the Parks Closure Policy was adopted by the FVRD Board. This policy was recently reviewed and updated to reflect the addition of new Electoral Area community parks and the Sub-Regional Parks (West) service area, and to ensure that the practices and terminology were up-to-date to accurately reflect current park operations.

DISCUSSION

The review of this policy (attached) included an assessment of current practices and resources, as well as recommendations from the Municipal Insurance Agency (MIABC) which is our insurer. The proposed Parks Closure Policy update includes response to both emergency and non-emergency events which may require a park closure. This policy is for parks which are operated and managed directly by the FVRD.

General Response

Information on park conditions comes from a variety of sources including regular inspections, communication with local first responders or emergency personnel, responding to weather forecasts and conditions, and communication from the public. Public and staff safety is the priority, and as such, decisions on closures and communications regarding them will be evaluated at the time of the incident, and processes put into place to respond to the situation at hand.

Spring Freshet

In 2018, much of the Fraser Valley, including our parks, experienced a sustained higher than average freshet which resulted in closures to many of our parks. This part of the policy was updated to reflect the learnings from the 2018 freshet, and to provide clarity around the special opening for Commercial Fishing guides at Island 22 Regional Park.

Wildfire Risk

This is a new section added in the Parks Closure Policy, in response to climate change and the increasing wildfire presence in British Columbia over the past several years. While there is no smoking or campfires permitted in FVRD Parks, the FVRD monitors wildfire risk by following restrictions, guidelines, and closures as set out by the BC Wildfire Service, and liaising with local fire departments to determine any closures or restrictions.

Non-Emergency Events

Construction, planned maintenance, and exclusive use permit requests are a regular part of Park Operations. Posting signs and giving advance notice to the public for these types of events are an important part of providing exceptional customer service. All requests for complete park closures for events must have the approval of the Board.

COST

There are no new costs associated with the Parks Closure Policy.

CONCLUSION

The proposed Park Closure Policy update will ensure that the FVRD is providing the public with safe parks and clear communication, while protecting park infrastructure.

COMMENTS BY:

Stacey Barker, Director of Regional Services

Reviewed and supported.

Mike Veenbaas, Director of Financial Services

Reviewed and supported.

Jennifer Kinneman, Acting Chief Administrative Officer

Reviewed and supported.



FRASER VALLEY REGIONAL DISTRICT POLICIES AND PROCEDURES

POLICY: Parks Closure Policy

Date Issued: January 30, 2013

Date Amended:

PURPOSE

The Fraser Valley Regional District (FVRD) is committed to providing the public with safe parks, trails and associated facilities to recreate. It is also a priority for the FVRD to protect the natural assets of these spaces, including its vegetation and wildlife. Occasionally conditions arise where closure of an area is necessary to protect the park and its users. The Parks Closure Policy sets out conditions which require the closure of a park, trail, or portion thereof, in an effort to protect the public, park infrastructure and/or the ecosystem. This policy also outlines the procedure staff must follow to identify conditions where closure is warranted and how to safely and effectively implement such a closure.

RISK IDENTIFICATION, ASSESSMENT & GENERAL RESPONSE

Both emergency and non-emergency events may require park closure. Sometimes these events are forecasted, and provide staff time to prepare (i.e. rising water levels or flooding), while others can be unpredictable with little time to prepare for a closure (landslide, flash flood, severe weather event, or police incident).

Field staff will conduct a risk assessment to identify whether conditions are present to warrant a closure. Generally, this assessment will include:

- conducting visual inspections to identify any unsafe conditions;
- communicating with local first responders, emergency personal or pertinent stakeholders;
- evaluating complaints that may have been received;
- researching outside conditions that may have impact; and
- seeking expertise if required.

If unsafe conditions arise, staff will notify the Manager of Park Operations immediately. If warranted, and if there is no immediate threat to staff safety, park staff will ask members of the public to leave the area. Staff will remain at the park gate, park entrance or safe area, and wait for further instruction or assistance.

The Manager of Park Operations or his or her designate has full authority to make a closure and remove a closure and will determine next steps. The Manager of Park Operations will inform the Director of Regional Services regarding the situation, who will then advise the Chief Administrative Officer.

Parks Closure Policy

Staff will post signs advising the public of any hazardous or closed areas, and any safety concerns. All signs and notices will be posted in visible locations at the facility, area or park which is affected.

The Manager of Park Operations will prepare information, in liaison with Communications staff, regarding the closure to be posted on the FVRD website and on social media.

The Manager of Park Operations will also liaise with the appropriate Emergency Operations Centre and municipal staff when appropriate.

SPRING FRESHET

High flows and flooding on the Fraser River and its tributaries can occur during the annual spring freshet when snow that has accumulated during the winter in the mountains of the Fraser River watershed melts. The FVRD has parks located along these low lying areas which can be impacted by high water, fast flowing water, localized flooding and associated erosion.

Environment Canada provides real time monitoring of water levels for the Fraser River and other rivers. Low level flooding may occur along the Fraser River as water levels exceed 4.0m as measured at the Mission Gauge. Parks may be closed partially or in full depending on the water levels and impacts to the parks.

For Island 22 Regional Park and Dewdney Regional Park, when the readings reach the levels identified below, the parks will be inspected as per the Parks Inspection Policy and/or closed. The chart below is intended to be used as a guideline and the parks may close at lower water levels if warranted by inspection.

Park	Mission Gauge Level	Action
Dewdney Regional Park	4.0 m	Park Inspection
	4.5 m	Close Park
Island 22 Regional Park	5.7 m	Park Inspection
	6.0 m	Close Park
	6.0 m – 6.7 m	Special Opening may be permitted

Special Opening During High Water Events for Commercial Fishing Guides

The Manager of Park Operations may recommend to the Director of Regional Services and the Chief Administrative Officer that experienced Commercial Guides continue to have access to Island 22 Boat Launch for the purpose of launching watercraft. This *SPECIAL OPENING* will have the following restrictions:

- Commercial Guides who request a Special Opening will be required to sign a waiver prior to accessing and launching a watercraft at Island 22 Regional Park.
- Operational hours during the *Special Opening* will be from 8:00am – 4:00pm.
- Expenses incurred for managing the gate access during a Special Opening will be incurred as part of the annual cost of the gatehouse operation.

WILDFIRE RISK

Extended periods of high temperatures and dry conditions make parkland vulnerable to fire. This is of particular concern when parkland is within or adjacent to municipal or rural communities where wildland-urban interface fires may occur.

As per the Parks Regulation Bylaw, smoking and campfires are not permitted in FVRD parks; however this alone is not enough to prevent the breakout of fire.

The FVRD will follow the restrictions, guidelines, and closures as set out by the BC Wildfire Service, and will liaise with the local fire department as applicable to determine any closures/restrictions.

NON-EMERGENCY EVENTS

Any request from an agency, group, organization or members of the public to close a park for the purpose of a park permit, filming, special event (>30 people) or special request must be made in writing to the Manager of Park Operations 60 days prior to the event.

- All requests for complete park closures for events must have approval of the Board. The Manager of Park Operations will prepare a report with recommendations to the Board regarding the request.
- If approved, the Manager of Park Operations will notify the applicant.

Park closure may also occur due to construction, maintenance, and repair work. Staff will post signs and closure notices that are scheduled in advance for a minimum of 1 week before the closure to give users adequate notice.

To: CAO for the Electoral Area Services Committee
From: Mike Veenbaas, Director of Financial Services

Date: 2019-06-11
File No: 1880-20

Subject: 2018 Electoral Area Annual Development Cost Charge Report

INTENT

This report is intended to advise the Committee of information pertaining to the annual Development Cost Charge report. Staff is not looking for a recommendation and has forwarded this information per the requirements of the Local Government Act.

STRATEGIC AREA(S) OF FOCUS

Support Healthy & Sustainable Community

Provide Responsive & Effective Public Services

BACKGROUND

Section 569 of the Local Government Act requires that before June 30th in each year the Regional District must prepare and consider a report on Development Cost Charges (DCCs). The report must include a) the amount of DCCs received, b) the expenditures from DCC reserves, c) balances in DCC reserve funds at the start and end of the year, and d) any waivers and reductions in DCCs.

DISCUSSION

Schedule "A" is the official report on Development Cost Charges as required under Section 569.

As at December 31, 2018 the Regional District had two (2) DCC Bylaws that require annual reporting to the Board. These DCC Bylaws are:

Bylaw 1074, 1992
Bylaw 1096, 2011

West Popkum Storm Drainage
Electoral Area D Integrated Water System

COST

There are no costs associated with this report.

CONCLUSION

The report summarizes the DCC activities for the Regional District in 2018 and meets the requirements of Section 569 of the Local Government Act.

COMMENTS BY:

Jennifer Kinneman, Acting Chief Administrative Officer

Reviewed and supported.

Schedule "A"

Fraser Valley Regional District

2018 Development Cost Charge Report

In accordance with Division 19 Section 569 Annual Development Cost Charges Report, below is information regarding Development Cost Charges within Electoral Area D which includes the following; the amount of development cost charges received, expenditures from the development cost charge reserve funds, the balance in the development cost charge reserve funds at the beginning and at the end of 2018, as well as any waivers and reductions.

	Opening Balance	DCC Contributions	Investment Income	Expenses	Closing Balance
Bylaw 1074, Drainage	\$ 199,748	\$ 36,800	\$ 7,697	\$ -	\$ 244,245
Bylaw 1096, Area D Water	\$ 109,067	\$ 48,895	\$ 2,425	\$ 83,432	\$ 76,955

Waivers and reductions provided under Section 563 (2)

There were no waivers or reductions for the 2018 fiscal year.



May 24, 2019

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

File: 10280-60 (92G/09, 92G/16,
92J/01, 92J/02,
92J/07, 92J/08,
92J/10, 92J/11,
92J/12)

Dear Chair and Directors:

The BC Geographical Names Office has received proposals from Lil'wat Nation to correct the spelling of a few features in the Fraser Valley Regional District. At this time, we are inviting comments on two proposed name changes as detailed below and shown on the attached map:

1. *Change the name of **Lillooet River** to "**Lil'wat River**."*
 - The river flows SE through Lillooet (Lil'wat) Lake into Harrison Lake
 - "Lil'wat River" is the Ucwalmicwts name of the feature. Lillooet is an anglicization of Lil'wat (Advice from Lil'wat Nation, 2018).
 - The mouth of the river is located at: 49.122.14556, -122.14556
2. *Change the name of **Lillooet Lake** to "**Lil'wat Lake**."*
 - The lake is an expansion of Lillooet (Lil'wat) River, NW of Harrison Lake
 - "Lil'wat Lake" is the Ucwalmicwts name of the feature. Lillooet is an anglicization of Lil'wat (Advice from Lil'wat Nation, 2018).
 - The approximate centre of the lake is located at: 50.24583, -122.49611

These features are within or form a portion of the boundary of the traditional territory of several First Nations and are within or near the border of local governments, so it is important to ascertain a) if there are other known traditional names for these features, and b) that the proposed names reflect the heritage values in the area.

Before considering adoption of these names, may we have your advice and comments? In particular, is there any reason why these names would not be appropriate for these features?

Adoption of these names would not prejudice legitimate claims to the land.

.../2

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Please feel free to provide your comments in any format. Your response before 24 August 2019 would be appreciated. Thank you in advance.

Kind regards,



Carla Jack
Provincial Toponymist
Carla.Jack@gov.bc.ca
778 698-4183

Enclosure

cc:	Alpine Club of Canada - Whistler Section	Recreation Sites and Trails BC
	Association of Canadian Mountain Guides	Samahquam First Nation
	Avalanche Canada - Sea to Sky	Search and Rescue - Pemberton
	BC Mountaineering Club	Skatin Nation
	BC Parks	Squamish-Lillooet Regional District
	Bridge River Indian Band	St'at'imc / Lillooet Tribal Council
	Douglas First Nation	Stewardship Pemberton
	Federation of Mountain Clubs of BC	Sto:lo Nation/ Sto:lo Tribal Council
	Klahoose First Nation	Sts'ailes First Nation
	Kwantlen First Nation	Tsilhqot'in National Government
	Laich-kwil-tach Treaty Society	Village of Pemberton
		Water Licensing - South Coast



Proposed Name

Proposed Name: Liwat River

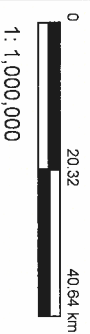
River

Current Name: Lillooet River
Mouth of River: 49.74722, -122.14556

NTS Maps: 92G/9, 92G/16, 92J/1, 92J/7, 92J/8, 92J/10, 92J/12

Proposed Name: Liwat Lake

Current Name: Lillooet Lake
Centre of Lake: 50.24583, -122.49611
NTS Maps: 92J/1, 92J/2, 92J/7, 92J/8

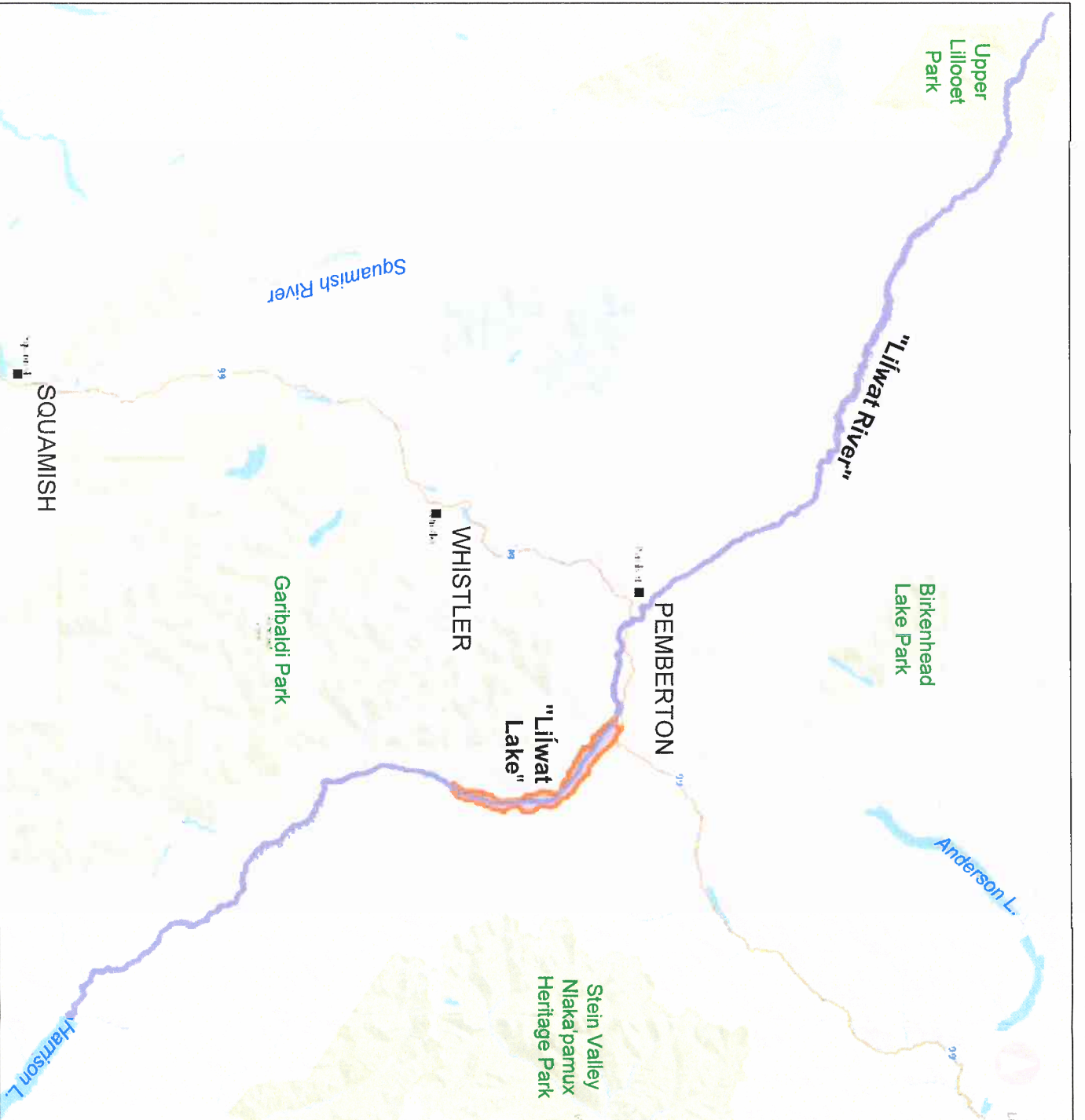
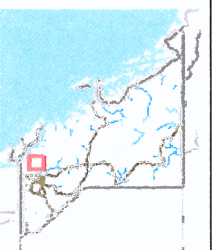


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Datum: NAD83
Projection: WGS_1984_Web_Mercator_Auxiliary_Sphere

Key Map of British Columbia





May 29, 2019,

To The Union of British Columbia Municipalities,

I am writing on behalf of Victoria City Council, requesting favourable consideration and resolutions of support to restore Provincial support for libraries.

At the May 23, 2019 Council Meeting, Council approved the following resolution:

WHEREAS WHEREAS libraries are a social justice equalizer that provide universal access to information and learning materials irrespective of income levels;

WHEREAS libraries are now so much more than books, building community and a sense of inclusion;

WHEREAS restoring funding to libraries supports the BC Government's agenda to eliminate poverty, improve access to education, and address social justice in BC;

WHEREAS funding rates have been frozen since 2009 and inflationary costs have increasingly been put on municipal property tax payers which is a regressive approach to funding public libraries;

WHEREAS municipalities face downloading from upper levels of government and have few tools to raise funds,

THEREFORE BE IT RESOLVED that Council request the Mayor write to the Minister of Education, the Premier, and all local MLAs strongly advocating for the restoration of library funding to a level that reflects both inflationary cost increases since 2009 and the value of this system to the Province.

BE IT FURTHER RESOLVED that this resolution be forwarded to other municipalities in the Capital Regional District and across BC requesting their favourable consideration.

We eagerly look forward to your support on this matter.

Sincerely,

Lisa Helps
Victoria Mayor



April 29, 2019

The Honourable George Heyman
Minister of the Environment and Climate Change Strategy
Room 112 Parliament Buildings
Victoria, BC V8V 1X4

Dear Minister:

BC is known across Canada and North America as a leader in Extended Producer Responsibility (EPR).

Most recently, in 2014, the BC Recycling Regulation was expanded to include Packaging and Paper Products (PPP) which changed the landscape of recycling in BC and has resulted in improved recycling for the residential sector.

However, there is a gap in service and the qathet Regional District is writing to ask that the Ministry of Environment and Climate Change Strategy (MOECCS) expand the scope of the Recycling Regulation for PPP to include the Industrial Commercial and Institutional (ICI) sector.

In 2014, many British Columbia local governments signed on to the Multi Materials BC (now Recycle BC) program. The program is only responsible for residential PPP, leaving the ICI sector, including schools, hospitals and entertainment events, dependent on the private sector or local governments for access to recycling and does not hold the producers of the ICI PPP accountable to fund the costs for recycling.

With recent changes in the global commodity market, as a result of the Chinese National Sword, local governments and the private sector are facing challenges that include reduced access or lack of access to recycling for the ICI sector.

Without being included in the Recycling Regulation, ICI recyclables such as cardboard, paper, metal, plastic and glass containers run a huge risk of being landfilled.

Additionally, Regional Districts, through their Solid Waste Management Plans, are required to set waste diversion targets which rely on restricting recyclable material from the garbage from both the residential and ICI sectors. This shortfall in ICI recycling services will delay local government's ability to meet diversion targets and implement key initiatives such as landfill bans. As well, in many cases the current PPP EPR programs have local government taxpayers

subsidizing the ICI sector. The qRD's Solid Waste Management Plan, approved by the MOECCS in 2018, outlines a Zero Waste Strategy for our region. This strategy outlines waste diversion targets, including increasing ICI recycling. Working with ICI to increase recycling is scheduled to start in 2019 and is supported by the qRD waste Bylaw 532 which restricts recyclable material from the garbage.

Being an isolated community (only accessible by ferry or plane), the only ICI materials accepted for free by the one private local recycler, Sunshine Disposal and Recycling, was paper, cardboard and #2 plastics. In response to small businesses expressing frustration by the lack of recycling options available to them in 2016, the qRD worked with Recycle BC and Green By Nature to conduct a 3 month audit at our central recycling depot to determine the percentage of ICI materials being collected. With the percentage of ICI materials weighing in at 8%, the qRD allowed small businesses to bring limited amounts of PPP materials to our central recycling depot at a cost to the qRD of \$266 per tonne. The tipping fee for municipal solid waste is currently at \$225 per tonne.

With commodity market prices in freefall, Sunshine Disposal is currently losing money requiring them to implement a tipping fee to clients for cardboard and paper. Sunshine Disposal advised that they anticipate 80% of their customers will opt out of this paid service, which, including bin rental, will be a similar fee to garbage. The qRD can only accept a small amount of ICI at our central depot, otherwise we will be over 8%, which will be cost prohibitive.

The qRD and the rest of the province need a solution to avoid valuable resources like cardboard ending up in the landfill.

We are not coming to you in exasperation expecting the province to give us the answer. No, quite the opposite, we want to be a part of the solution and have developed some options for you to consider which would require cooperation and collaboration with the province to make any of them a reality.

Immediate:

- Expand the Recycling Regulation to include PPP from the ICI sector

The Ministry may recall that back in 2014 our Regional District met with the then Minister and Ministerial staff during the annual UBCM Convention. Our meeting included a 'show and tell'. We demonstrated that the products taken from retail shelves by consumers were produced by the very same manufacturers who distribute their products to the various wholesalers, major sporting and entertainment events, restaurants, coffee shops, hotels, schools, universities, hospitals and the like. The irony of it all is that their shipping and consumer packaging enters every market sector, whether you are a residential, institutional, commercial or industrial consumer. This solution will ensure that ICI recyclables are recycled instead of landfilled. It will shift costs to

the producers of the PPP and will help local government jurisdictions province-wide meet waste diversion targets.

Short-term:

- Relax burning permits in places like Paper Excellence Canada - Powell River

Currently, Paper Excellence burns wood hog fuel in a biomass boiler to generate steam for heat and power production. They do this under Permit 3149. With the onslaught of excess cardboard not being able to go to foreign market, relax or modify the burning permits to allow cardboard to be incinerated as a fuel source. In places like ours, we will reduce the carbon footprint of shipping out cardboard by barge or ferry from our remote and isolated community. Other communities may also have compelling factors to minimize shipping costs and transport cardboard to regionally located biomass boilers at other paper mills or industry.

Mid-term:

- Provide seed funding to create an economically efficient re-purposing industry

After markets for expended recyclables must be resilient and insulated from off-shore market economies. This could be achieved with added-value industries. Cardboard for instance, could have alternate uses. If shredded, cardboard could be used in the agriculture industry as bedding. But for safety and protection to animals, contaminants such as staples should first be removed. Capital start-up for sophisticated equipment of this nature is required. If economies of scale could be driven down, eventually strategic locations throughout the province could be established to serve local economies in various regions. This again is an attempt at reducing the carbon footprint for transporting cardboard. Invariably, the product will re-enter the ecosystem as manure and be spread on farming fields. Or it may enter the system directly as a compost feedstock.

Long-term

- Mandate recycling content in finished products

Stabilization is a responsibility of upper tier governments. Market systems are characterized by economies that can create extremes of prosperity and business cycles that produce great decline (University of Alberta/Dalhousie University, 2005). Such is the case with the policy of the Chinese National Sword. This is where upper tier governments need to step in and take measures to correct the market. Upper tier governments have the tools and the resources to do this. "Since capital and labour generally flow freely across governmental jurisdictions within a country, much of the impact of stabilization policies of one government unit will likely spill over into other jurisdictions" (Bird & Slack, 1993, p. 16). The proposed mid-term option above is also an upper tier government intervention for the good of the whole. This long-term option is to

mandate recyclable material as a percentage into feedstock for finished products such as writing paper, toilet paper, facial tissue, paper towels, packaging, etc. Some of these products are proven examples of including recyclable materials in production, but these and more products need to be expanded upon. Eliminating virgin feedstock will reduce the carbon footprint and revitalize the already consumed cardboard and packaging waste. Additionally, eliminating subsidies on virgin materials such as oil will create a more level playing field.

Thank you for your time. We respectfully ask that you move expediently on these solutions to assist in promoting a healthy and sustainable environment.

Yours sincerely,



Patrick Brabazon, Chair

cc Nicholas Simons, MLA - Powell River-Sunshine Coast

References

Local government finance. (Spring 2005). (2005). Edmonton, AB: University of Alberta.

Bird, R.M. & Slack, N.E. (1993). *Urban public finance in Canada*. Toronto, ON: John Wiley & Sons

Date

The Honourable George Heyman
Minister of the Environment and Climate Change Strategy
Room 112 Parliament Buildings
Victoria, BC V8V 1X4

Dear Minister,

The _____ is writing to ask that the Ministry of Environment and Climate Change (MOECCS) to expand the scope of the Recycling Regulation for Packaging and Paper Product (PPP) to include the Industrial Commercial and Institutional (ICI) sector.

In 2014 many British Columbia local governments signed on to the Multi Materials BC (now Recycle BC) program. The program is only responsible for residential PPP, leaving the ICI sector including schools, hospitals, restaurants and entertainment events dependent on the private sector or local governments for access to recycling and does not hold the producers of the ICI PPP accountable to fund the costs for recycling.

Regional Districts, through their Solid Waste Management Plans are required to set waste diversion targets and restrict recyclable material from the garbage. With recent changes in the global commodity market, as a result of the Chinese National Sword, local governments are facing challenges that include reduced access or lack of access to recycling for the ICI sector. Without being included in the Recycling Regulation, ICI recyclables such as cardboard, paper, metal, plastic and glass containers run a huge risk of being landfilled. This shortfall in services will delay the ability of local governments to meet diversion targets set out in their Solid Waste Management Plans.

Describe your particular local impacts here if applicable

The _____ is proposing a solution to avoid valuable resources like cardboard ending up in the landfill. The onus on local government to carry the burden of cost should instead be transferred to the producers of the PPP. The current model is unsustainable as the end user, taxpayers and business, are subsidizing the conglomerates.

If local governments are expected to reach diversion targets with no compensation from producers, recyclable materials may not be handled properly. We are not the only local government feeling the impacts of the Chinese National Sword and want to ask that the Ministry expand the current Recycling Regulation to include PPP from the ICI sector.

Thank you for your time. We respectfully ask that you move expediently to assist in promoting a healthy and sustainable environment.

Sincerely,



LOWER MAINLAND

LOCAL GOVERNMENT ASSOCIATION

2019 RESOLUTIONS DISPOSITION

Abbreviation Key:

ER = Executive Resolution – resolution proposed by the LMLGA Executive

RR = Referred Resolution – resolution referred back from UBCM from the previous year

R = Resolution – resolution received from the membership by the deadline

OF = Resolution off The Floor of the Convention

PART 1 – LMLGA EXECUTIVE RESOLUTIONS

The Lower Mainland LGA Executive has proposed one resolution for consideration by the membership.

ER1 Call to Action On Global Climate Emergency

LMLGA Executive

Whereas the earth's global climate has now tipped into an arguably irreversible and critical path, bringing unprecedented weather extremes and causing catastrophic loss of life and costly damage to property, crops and livestock,

And whereas these extremes are challenging the habitability of vast regions of the earth due to rising oceans, repetitive flooding, drought and wildfire devastation,

And whereas an unprecedented and rapid rise in the extinction of our planets species of plants, animals and indigenous cultures is causing an irreversible biodiversity crisis which is further accelerating the catastrophic impact to our planet,

And whereas the collapse of ecosystems threatens all life on earth,

And whereas the United Nations International Panel on Climate Change concluded that current levels of the greenhouse gases carbon dioxide, methane, and nitrous oxide in our atmosphere are higher than at any point over the past 800,000 years, and their ability to trap heat is changing our climate in multiple ways.

Therefore be it resolved that LMLGA supports a call to action and asks all levels of Government **(including local government) to adopt climate emergency motions and** to take dramatic steps toward the protection of biodiversity and to accelerate the reduction in greenhouse gas emissions, which are a primary cause of this climate emergency.

ON MOTION, as amended, was ENDORSED

PART 2 – REFERRED RESOLUTIONS

UBCM has referred one late resolution from the 2018 UBCM Convention to the 2019 resolutions cycle for consideration by Lower Mainland LGA members.

RR1 BCEHS Dispatching Protocols

Port Moody

Whereas local governments have recently been made aware that BCEHS has implemented a new process, the clinical response model for assigning paramedics, ambulances, and other resources to 911 calls, and as part of this new process, BCEHS has decided that in some cases depending on the condition of the patient, it will no longer require the support of other first responder agencies such as fire rescue services;

And whereas fire rescue staff are well equipped to provide support to first responders, this ten minute window is a critical period of time and the condition of the patient can be deteriorating or the illness or injury can be more serious than first thought:

Therefore be it resolved that the **Ministry of Health be asked to work with first responders and municipalities to ensure the clinical response model incorporates protocols for dispatch of all first responders to provide pre-hospital care to calls from which attendance of any first responder has a positive impact on patient care.** ~~BCEHS be asked to revise the Clinical Response Model to ensure that other first responder agencies, such as fire rescue services, that provide pre-hospital care, are utilized for all Orange and Yellow calls because:~~

- ~~• these call types often involve a patient whose condition is deteriorating;~~
- ~~• these call types can be under reported or improperly coded;~~
- ~~• patient comfort is important and should not be excluded from consideration when a dispatcher is deciding whether to forward a call to another agency; and~~
- ~~• all patients deserve the best possible care.~~

And be it further resolved that the Ministry incorporate the recommendations as identified by the Municipal Auditor General in the report titled Access to Emergency Health Services dated February 2019.

ON MOTION, as amended, was ENDORSED

PART 3 – RESOLUTIONS RECEIVED BY THE DEADLINE

Members of the Lower Mainland LGA submitted the following resolutions by the deadline for consideration by the membership.

Resolutions for Debate

Resolutions to be considered individually.

LEGISLATIVE

R1 Management of Provincially Regulated Utilities in Municipal Highways

Coquitlam

Whereas, under the *Community Charter*, the soil and freehold of every highway is vested in the municipality and a municipal Council may regulate and prohibit in relation to all uses of or involving a highway but subject to the *Utilities Commission Act* and to all orders given under that Act;

And whereas, the British Columbia Utilities Commission has full and exclusive jurisdiction to hear and determine any matter within its authority under the *Utilities Commission Act* and permits provincially regulated pipelines to be located within municipal highways despite objections from municipalities that the pipelines can hinder the ability of municipalities to manage highways and other utilities that use highway corridors;

And whereas, the urban landscape in the Lower Mainland has changed significantly since the development of the provincial utility regulators, absent of modernization which enables local governments to oversee the orderly use of municipal roads, resulting in unforeseen jurisdictional disagreements and a lack of clarity over regulatory functions:

Therefore be it resolved, that the Province, with the assistance of UBCM, undertake a holistic review of the regulatory framework surrounding provincial utility undertakings and update legislation accordingly to enable a collaborative approach to planning and managing civic infrastructure corridors.

ON MOTION, was ENDORSED

R2 Council Meeting Chairing Opportunities for Councillors

Pitt Meadows

Whereas the *Community Charter*, section 116 item 2.c, stipulates that it is the mayor's responsibility to preside at council meetings when in attendance;

And whereas the *Community Charter*, section 130, requires that councillors be prepared to fulfill the mayor's role in his/her absence, including presiding over council meetings, thus making it prudent that municipalities create learning opportunities for councillors to develop their leadership skills and gain confidence in meeting protocols and procedures:

Therefore be it resolved that the Province of BC be encouraged to consider an amendment of section 116 of the *Community Charter* to allow for councillors to periodically preside at council meetings when the mayor is in attendance for the purposes of learning, professional development, and as a practice of good government.

ON MOTION, was ENDORSED

COMMUNITY SAFETY

R3 Wildfire Smoke

Harrison Hot Springs

Whereas wildfire smoke is increasingly present in and around the ~~Village of Harrison Hot Springs~~ **Province of BC** during the summer months;

And whereas wildfire smoke negatively impacts human health and the public's comfort and ability to enjoy the natural beauty of ~~Harrison Hot Springs'~~ **the Province of BC's** parks and beaches, which has a negative impact to the economy of our ~~Province Resort Municipality~~;

Therefore be it resolved that the Province take a more proactive role in assessing risks associated with exposure to wildfire smoke and create decision making tools to assist communities in determining what measures should be taken to mitigate those risks.

ON MOTION, as amended, was ENDORSED

R4 Money Laundering Counter-Measures in Casinos

Delta

Whereas there is credible evidence that links casinos in British Columbia to organized crime and money-laundering on a very large scale;

And whereas the current regulatory and monitoring system has failed to stop money fraud in BC casinos:

Therefore be it resolved that the BC Government be requested to take immediate steps to address money laundering in casinos, and to undertake an evaluation of cashless gaming systems, whereby account-based card technologies are used to verify player identity and track gambling transactions on all gaming devices.

ON MOTION, was ENDORSED

ELECTIONS

R5 Fresh Voices #LostVotes Campaign

New Westminster

Whereas the Province of British Columbia has the governing authority to implement electoral legislative changes including allowing for Permanent Residents to vote in municipal elections; and

And whereas more than 45 countries have granted Permanent Residents some form of voting rights — including seven jurisdictions in the US and 25 European Union countries; and 11 municipalities in Canada are working toward extending local election voting rights to Permanent Residents:

Therefore be it resolved that UBCM request the Province of British Columbia make the necessary changes to allow Permanent Residents to vote in municipal elections in municipalities in British Columbia.

ON MOTION, was ENDORSED

R6 Support for Fresh Voices Campaign

Port Moody

Whereas the Province of British Columbia has the governing authority to implement electoral legislative changes including allowing for Permanent Residents to vote in municipal elections;

And whereas more than 45 countries have granted Permanent Residents some form of voting rights—including seven jurisdictions in the US and 25 European Union countries; and 11 municipalities in Canada are working toward extending local election voting rights to Permanent Residents;

Therefore be it resolved that the Province of British Columbia make the necessary changes to allow Permanent Residents to vote in municipal elections in Port Moody and other municipalities.

ON MOTION, was ENDORSED

R7 Removing Cap on Candidate Contribution to Their Own Campaign

Langley City

Whereas under the *Local Elections Campaign Financing Act* (LECFA), candidate contribution limits have been established which now put a cap on how much a candidate may contribute to his or her own campaign;

And whereas candidates who wish to fund their own campaigns without seeking external campaign contributions are now extremely limited in how much they can spend on their campaigns:

Therefore be it resolved that the province amend the *Local Elections Campaign Financing Act* to **raise the cap on how much a candidate may contribute to his or her own campaign from \$1,200 to \$5,000 per year.** ~~eliminate the cap on how much a candidate may contribute to his or her own campaign so that candidates may, if they so desire, contribute their own funds up to the allowable campaign expense limit.~~

ON MOTION, as amended, was ENDORSED

TRANSPORTATION

R8 #AllOnBoard Campaign

New Westminster

Whereas the City of New Westminster has recognized and has demonstrated over the past years its commitment to the health and well-being of its residents, and lack of transportation is one of the most

common reasons for missing medical appointments and a significant barrier to social inclusion and labour market inclusion for low income adults and youth;

And whereas the #AllOnBoard campaign, concerned agencies in New Westminster and through-out Metro Vancouver, and directly impacted youth and adult community members have brought to the attention of the City of New Westminster the direct harm that is brought to them through the bad credit ratings they develop through fare evasion ticketing, as they cannot afford to pay the \$173 fines received individually, or the resulting accrued 'TransLink debt' from many unpaid fines;

And whereas the City of New Westminster and other municipalities contribute to charities and non-profits which then out of necessity subsidize transit tickets for those who cannot afford to access crucial social services provided by the City of New Westminster and other municipalities, and sometimes pay off 'TransLink debt' and fare evasion fines to TransLink and external collection agencies:

Therefore be it resolved that the City of New Westminster endorse the #AllOnBoard Campaign; the City write a letter to the TransLink Mayors' Council on Regional Transportation, the TransLink Board of Directors, the Ministry of Municipal Affairs and Housing, and the Ministry of Social Development and Poverty Reduction asking TransLink **and BC Transit** to work with the provincial government regarding funding and developing a plan that will provide free public transit for minors (ages 0-18), and reduced price transit based on a sliding scale using the Market Basket Measure for all low-income people regardless of their demographic profile;

And be it further resolved that the City write separate letters to the Mayors' Council on Regional Transportation and to the TransLink Board of Directors asking them to 1) require TransLink **and BC Transit** adopt a poverty reduction/equity mandate in order to address the outstanding issue of lack of affordability measures to ensure those who need public transit the most can access the essential service of transit, and 2) to request TransLink **and BC Transit** immediately and without delay amend existing by-laws and cease ticketing all and any minors for fare evasion as the first step towards the full implementation of free transit for children and youth 0-18, and allow low-income adults to access community service and/or culturally appropriate restorative justice community service as an alternative to the financial penalty of a fare evasion ticket;

And be it further resolved that the resolution regarding support for the #AllOnBoard Campaign be forwarded for consideration at the 2018 LMLGA convention and subsequent UBCM convention.

ON MOTION, as amended, was ENDORSED

R9 #AllOnBoard Campaign

Vancouver

Whereas the lack of transportation is one of the most common reasons for missing medical appointments and a significant barrier to social inclusion, access to social services and labour market inclusion for low income adults and youth;

And whereas the #AllOnBoard Campaign has demonstrated the direct harm that is brought to low income adults and youth due to fare evasion ticketing, resulting in bad credit ratings because of unpaid fines:

Therefore be it resolved that TransLink be requested to adopt a poverty reduction/equity mandate in order to address the outstanding issue of lack of affordability measures to ensure those who need public transit the most can access the essential service;

And be it further resolved that the Mayors' Council on Regional Transportation and TransLink, immediately and without delay, amend existing by-laws and cease ticketing all minors for fare evasion as the first step towards the full implementation of free transit for children and youth (aged 0-18);

And be it further resolved that TransLink adopt a poverty reduction mandate based on non-stigmatizing affordability measures, including unlinking fare evasion fines from the Insurance Corporation of British Columbia and infrastructure expansion; and the introduction of community service and restorative justice options for adults as an alternative to fare evasion tickets.

ON MOTION, was ENDORSED

R10 Support for the #AllonBoard Campaign

Port Moody

Whereas the City of Port Moody has recognized and has demonstrated over the past years its commitment to the health of its residents, and lack of transportation is one of the most common reasons for missing medical appointments and is a significant barrier to social inclusion;

And whereas Port Moody and other municipalities donate to charities which then, out of necessity, pay for transit passes and sometimes fines for low-income individuals, including minors;

Therefore be it resolved that the #AllonBoard Campaign be endorsed and the TransLink Mayors' Council, the Ministry of Municipal Affairs and Housing, and the Ministry of Social Development and Poverty Reduction be asked to work with the provincial government and local governments to develop a plan that will provide free public transit for minors (ages 0-18), free transit for people living below the poverty line (as identified by market basket measure, in line with the BC poverty measures), and reduced price transit based on a sliding scale for all low-income people regardless of their demographic profile.

ON MOTION, was ENDORSED

TAXATION

R11 Tax Credit for Local Government Election Candidate Campaign Contributions

Langley City

Whereas tax credits are available for campaign contributions made to candidates in provincial and federal elections but are not available for campaign contributions made to candidates in local government elections;

And whereas there is not the same incentive for individuals to contribute to local government election campaigns as there is for provincial and federal election campaigns:

Therefore be it resolved that the *Income Tax Act* [RSBC 1996] Chapter 215 be amended to provide for the issuance of tax credits for campaign contributions made to candidates in local government elections.

ON MOTION, was ENDORSED

ENVIRONMENT

R12 *Water Sustainability Act* Section 11 Change Approvals Review Times

Delta

Whereas the Province administers and processes *Water Sustainability Act* Section 11 Change Approvals ('Change Approvals') to authorize users to make complex changes in and about a stream;

And whereas the Province no longer commits to completing Change Approval reviews within 140 days of receipt of the application, causing excessive delays that result in increased project costs, missed funding opportunities and uncertainty in project timelines:

Therefore be it resolved that the Province must re-commit to processing Change Approvals within 140 days of receipt;

And be it further resolved that the Province provide adequate funding and staffing to fulfill the target review period of 140 days.

ON MOTION, was ENDORSED

R13 Greenhouse Gas Limits for New Buildings

Port Moody

Whereas climate change is recognized to be an urgent concern requiring rapid decarbonization of energy across all sectors, including buildings, in order to achieve 45% GHG emissions reductions by 2030 and net-zero GHG emissions by mid-century, as noted by the IPCC Special Report on 1.5C;

And whereas the British Columbia Energy Step Code establishes targets for increasing energy efficiency of new construction, but these may not result in the necessary levels of GHG emissions reductions to support local government GHG reduction targets nor BC's legislated GHG emissions reduction targets;

And whereas new buildings can last for many decades and are difficult, expensive, and disruptive to retrofit for renewable energy after construction;

And whereas near-zero GHG emissions mechanical systems are well proven and can be cost effectively incorporated in new buildings, while also improving efficiency;

Therefore be it resolved that the Province include GHG limits for new construction as an enforceable element in Division B of the British Columbia Building Code, including a pathway to achieve zero GHG emissions for new construction in a timeline commensurate with the science of climate change and BC's reduction targets;

And further be it resolved that the Province's goal in the CleanBC Plan to "make every new building constructed in BC "net-zero energy ready" by 2032" be revised to "make every new building constructed in BC "zero emissions" and "net-zero energy ready" by 2032".

ON MOTION, was ENDORSED

R14 Ramping Up Lower Mainland BC Climate Action in Response to the Climate Emergency Squamish

Whereas the detrimental effects of climate change are more and more evident in BC, Canada and the rest of the world;

And whereas the world is currently on track for a more than 3°C warming based on policies currently in place, and those policies will need to be strengthened significantly to limit warming to 1.5°C, based on recommendations of the Intergovernmental Panel on Climate Change;

And whereas both the provincial and federal governments have been advancing climate emergency response through Clean BC and the Pan-Canadian Framework on Clean Growth and Climate Change respectively:

Therefore be it resolved that the **local, regional**, provincial and federal governments be urged to both recognize the climate change emergency and accelerate their efforts to fight climate change at levels that match the urgency of the issue;

And be it further resolved that the provincial government establish a remaining carbon budget for all public and private sector emissions commensurate with limiting warming to 1.5°C and report annually on the expenditure of the Province's remaining carbon budget;

And be it further resolved that the provincial government form a "Climate and Equity" working group to provide guidance and support a transition off of fossil fuels in ways that prioritize those most vulnerable to climate impacts and most in need of support in transitioning to renewable energy.

ON MOTION, as amended, was ENDORSED

LAND USE

R15 Restricting Cannabis Cultivation on Agricultural Land Reserve

Delta

Whereas improving food security is a high priority for most British Columbians;

And whereas the legalization of cannabis in 2018 has prompted many greenhouse operators to replace food crops with cannabis:

Therefore be it resolved that the provincial government be requested to establish a cap on the number of licences issued for cannabis facilities in agricultural communities in order to protect food security in British Columbia.

ON MOTION, was ENDORSED

R16 Outstanding Statutory Rights of Way

Delta

Whereas there are many situations throughout BC where municipal utilities are located within private property and no associated statutory right of way or easement was registered against title to the property in the Land Title Office at the time of installation many years ago;

And whereas municipalities are often responsible for or are willing to assume responsibility for these utilities within private property because they are of benefit to the public and essential to the operation and maintenance of municipal services:

Therefore be it resolved that that the provincial government work with local governments to develop legislation that would permit the registration of statutory rights of way to resolve historic issues with unregistered statutory rights of way or easements for municipal utility works located within private properties in an expeditious and cost-effective manner.

ON MOTION, was ENDORSED

R17 Cost Subsidies for the Termination of Land Use Contracts

Port Moody

Whereas the requirements set out by Province of British Columbia in its Bill 17 (2014) regarding Land Use Contract Terminations create significant workload burden for municipalities;

Therefore be it resolved that the Province of British Columbia be requested to provide funding to municipalities to cover additional Planning Department workload associated with executing the requirements of Bill 17 (2014).

ON MOTION, was ENDORSED

R18 Funding for BC Parks Management

Pemberton

Whereas the negative impacts to lower mainland Provincial parks and Crown Land recreation areas continue to occur due to increasing tourism and limited funding;

Therefore be it resolved that that the Province be requested to allocate additional funding to managing BC Parks, specifically Joffre Lakes Provincial Park, and Crown Land recreation areas in the Sea to Sky Corridor and Lower Mainland.

ON MOTION, was ENDORSED

SELECTED ISSUES

R19 Creation of Office of the Renters Advocate

New Westminster

Whereas the retention of residential tenancy is having a critical impact on the security and stability of residents, seniors and families throughout the province of British Columbia;

And whereas the retention of workers in all sectors of our local economy is visibly linked to shelter affordability;

And whereas previous provincial government policies or lack thereof are clearly a contributing factor to the current situation of rental sustainability and home ownership affordability;

And whereas many local governments struggling to address this crisis have limited resources or powers to be able to adequately develop sustainable solutions to this problem:

Therefore be it resolved that the LMLGA and UBCM seek support of the Provincial Government to create an Office of The Renters Advocate, to monitor and analyzes renters' services and issues in BC, and make recommendations to government and service providers to address systemic issues caused by rental shortages, renovictions, demovictions and housing affordability.

ON MOTION, was ENDORSED

R20 Request for First Nations Participation on Commissions

Pemberton

Whereas the Village of Pemberton, in partnership with the regional district, other local governments, and First Nations in the Sea to Sky area are working collaboratively to develop a regional transit commission to establish a regional transit system to connect Mt. Currie to Metro Vancouver;

And whereas the current provincial transit commission model does not allow for representation from First Nations which does not allow for an equal representation or an equitable decision making platform process: Therefore be it resolved that the Province of British Columbia amend the legislation respecting the representation on commissions to include First Nations.

ON MOTION, was ENDORSED

R21 Support of Indigenous Court System

New Westminster

Whereas the rate of Indigenous men and women in the Canadian Federal and Provincial criminal incarceration systems is disproportionately high; and

And whereas 3% of the population identify as Indigenous and the Indigenous population in our prison system is 27% men and an alarming 38% women; and

And whereas cultural and spiritual reconnection is facilitated through the guidance of Indigenous Elders and families and the Indigenous Court:

Therefore be it resolved that UBCM, FCM and LMLGA lobby the Canadian Federal and Provincial Governments to fund and expand the Indigenous Court System.

ON MOTION, was ENDORSED

Consent Agenda

The Lower Mainland LGA Executive recommends endorsement of all the resolutions contained in the Consent Agenda Block.

COMMUNITY SAFETY

R22 Funding for Climate Change Adaptation - Flood Protection

Delta

Whereas flood protection works are deficient in many areas throughout the Province of British Columbia and, in many areas, are adjacent to Wildlife Management Areas or environmentally protected areas;

And whereas climate change is increasing the risk of flooding in many coastal communities due to long term sea level rise;

And whereas there are limited funds to address long term dike improvement works:

Therefore be it resolved that senior levels of government work with local governments to fund and assist in implementing a streamlined approvals process for long term flood protection adaptation programs.

ON MOTION, was ENDORSED

R23 BC Search and Rescue Funding Model

Squamish

Whereas British Columbia's Search and Rescue volunteer organizations provide an indispensable service and demand for Search and Rescue is increasing, in part, as a result of rising recreation tourism driven by Destination BC's marketing campaign Super, Natural British Columbia;

And whereas British Columbia Search and Rescue Association (BCSRA) has requested a predictable and sustainable funding model from the Province since 2013, but there is no such funding in the 2019 provincial budget:

Therefore be it resolved that UBCM petition the Province to work with BC Search and Rescue Association to identify and implement a sustainable funding model.

ON MOTION, was ENDORSED

TRANSPORTATION

R24 BC Rail Properties

Squamish

Whereas BCR Properties Ltd. owns surplus lands not required for railway and port operations and has a mandate to dispose of those lands at the highest price attainable;

And whereas for many local governments, these lands can represent critical opportunities relating to diverse social, recreational, economic, environmental and infrastructure needs and purposes:

Therefore be it resolved that the Ministry of Transportation and Infrastructure review and amend the mandate of BCR Properties Ltd. such that it be directed to dispose of its surplus lands with consideration to local government land needs for critical infrastructure, environmental needs, community recreation and economic development, as well as for social needs such as affordable housing lands at significantly less than fair market value prices.

ON MOTION, was ENDORSED

TAXATION

R25 Extension of Vacancy Taxation Authority to Local Government

Port Moody

Whereas the Province of British Columbia responded to a housing affordability crisis in 2016 with legislation empowering the City of Vancouver to introduce a surtax on vacant residential properties, resulting in \$38 million in revenues for that community in 2018 and creating a strong disincentive to leaving properties vacant;

And whereas communities across British Columbia face housing affordability pressures, while a portion of the housing supply in all communities remains vacant;

Therefore be it resolved that the UBCM call on the Province of British Columbia to extend the authority to introduce a surtax on vacant residential properties to local governments across British Columbia, providing communities with the discretion to decide whether to introduce an additional tax to discourage vacant and derelict buildings, and encourage the occupancy, maintenance, and improvement of buildings to address housing affordability and public safety.

ON MOTION, was ENDORSED

FINANCE

R26 Development Cost Charges Legislation

Coquitlam

Whereas the *Local Government Act* currently restricts the collection of Development Cost Charges to areas of sewage, water, drainage, roads and park land;

And whereas new development creates capital cost burdens on municipalities in other areas, such as, but not limited to, emergency services, artificial sports fields, and recreation and cultural facilities:

Therefore be it resolved that that LMLGA direct UBCM to lobby the provincial government to conduct a holistic review of the Development Cost Charges legislation and update the Best Practices Guide to address the outdated provision regarding eligible costs for Development Cost Charges.

ON MOTION, was ENDORSED

R27 Reform of Development Finance Tools

North Vancouver City

Whereas existing tools for funding community amenities and infrastructure enhancements, including Development Cost Charges, are inflexible and were not designed for urban municipalities in addressing contemporary issues including provision of affordable housing and transit enhancements;

And whereas the shortcomings of existing mechanisms for extracting amenities and contributions from new development has resulted in a patchwork of ad hoc systems and approaches which differ by local government and require lengthy site-by-site negotiations and rezonings to implement:

Therefore be it resolved that the Province be requested to comprehensively review existing funding mechanisms for financing growth and amenities including Development Cost Charges and consider introducing new tools with which municipalities can ensure new development is aligned with community objectives and contribute to a livable region, with such considerations to include introducing a consistent approach to land value capture and amenity charges which does not rely on negotiations through rezoning.

ON MOTION, was ENDORSED

R28 Broaden the Allowable Uses of Parkland Development Cost Charges

Langley City

Whereas the BC government has determined that Parkland Development Cost Charges (“DCCs”) cannot be used to fund sport-related park infrastructure such as synthetic turf fields, tennis or basketball courts, water spray parks, swimming pools and arenas;

And whereas municipalities can use Parkland DCCs to provide fencing, landscaping, drainage and irrigation, trails, rest-rooms, changing rooms and playground and playing field equipment and there is tangible evidence that new development directly impacts the demand for sport-related park infrastructure through increased attendance at municipal recreation facilities and increased demand for playing time on municipal sports fields:

Therefore be it resolved that the BC government be requested to approve an amendment to Section 935(3) (b)(ii) of the *Local Government Act* to include sport-related park infrastructure as an applicable Parkland DCC capital cost.

ON MOTION, was ENDORSED

R29 Request for Non-Treaty First Nations Eligibility for Emergency Preparedness Grant Funding Through UBCM

Pemberton

Whereas the Village of Pemberton, in partnership with the regional district, and First Nation in the Pemberton Area are working collaboratively on emergency preparedness and response initiatives;

And whereas in order to identify and prepare response and put in place mitigation measures, significant costs are associated with the work;

And whereas UBCM offers grant funding through the Community Emergency Preparedness Fund for such initiatives that are available to local governments, but not to Non-Treaty First Nations:

Therefore be it resolved that UBCM [or the Province of BC or both] amend the eligible applicants to include Non-Treaty First Nations.

ON MOTION, was ENDORSED

ASSESSMENT

R30 Varied Tax Rate for Residential Class

Langley City

Whereas the Province of British Columbia through the *BC Assessment Act*–Prescribed Classes of Property Regulation B.C. Reg. 438/81 specifies that there is one assessment class for all types of residential properties and the *Community Charter* outlines that a municipal bylaw to establish the property value taxes each year under section 197(3) specifies there is a single rate for each property class;

And whereas the assessed value of multi-family housing and single family housing appreciates at vastly different rates, leading to large fluctuations and tax rates swings year-to-year between these housing types:

Therefore be it resolved that the Province of British Columbia amend the *BC Assessment Act* and the *Community Charter* to allow the residential class to be split into two distinct residential classes so that a different rate may be applied to each type of residential property to allow for better tax planning, and a more consistent application of property tax changes, for all residents no matter their housing type.

ON MOTION, was ENDORSED

ENVIRONMENT

R31 Tax Exemption for Electric Bicycles

Squamish

Whereas the sale of bicycles and tricycles, parts for bicycles and tricycles, bicycle and tricycle attachments and bicycle and tricycle accessories are Provincial Sales Tax exempt due to the health and environmental benefits provided by the use of bicycles and tricycles;

And whereas the Province of British Columbia through its recent Clean BC plan and 2019 budget has incentivized the transition to electric vehicles through financial incentives:

Therefore be it resolved that the Province of British Columbia be urged to exempt electric bicycles (pedal assist) from Provincial Sales Tax charges.

ON MOTION, was ENDORSED

LAND USE

R32 Preservation of Archaeological Artifacts

Delta

Whereas local governments routinely undertake excavation works for road, sewer and water services for their communities;

And whereas excavations, particularly in coastal areas, may uncover archaeological sites which are protected under the provincial *Heritage Conservation Act*;

And whereas the costs incurred by local government are often impossible to predict and may significantly impact the final costs of the project:

Therefore be it resolved that the BC Government be requested to fund additional expenditures borne by local governments to record and document archaeological findings in accordance with the provincial *Heritage Conservation Act*.

ON MOTION, was ENDORSED

HEALTH

R33 Food Security

Port Coquitlam

Whereas it is important that BC Communities have a local food system to enable access to affordable and healthy food options and improve community sustainability and BC Communities should encourage awareness about and the expansion of a regional food system;

And whereas the provincial government is committed to promoting healthful living and making BC a healthy place to be:

Therefore be it resolved that the BC Ministry of Health be requested to initiate programs and partnerships to increase community awareness of the benefits of nutritious and affordable food and support regional initiatives to enhance community food security.

ON MOTION, was ENDORSED

SELECTED ISSUES

R34 National Healthy School Meal Program

Vancouver

Whereas healthy school meal programs are widely considered to have a positive effect on school performance, as well as cognitive and social-emotional skill development;
And whereas many schools are experiencing funding shortfalls for their healthy school meal programs:

Therefore be it resolved that the Province be requested to increase investment in school meal programs in BC, working toward a universal meal program in all schools, in alignment with their commitment to health promotion and poverty reduction;

And be it further resolved that the federal government and FCM be requested to work with the Province towards creating and funding a Universal Healthy School Food Program.

ON MOTION, was ENDORSED

PART 4 – RESOLUTIONS OFF THE FLOOR OF THE CONVENTION

OF1 Local Government Autonomy

Maple Ridge

Whereas the *Community Charter* acknowledges that municipalities and their Councils are “democratically elected, autonomous, responsible and accountable”; require the authority to determine the public interest of their communities; and the *Local Government Act* grants local governments the powers and flexibility required to fulfill their purpose and respond to the needs of their communities;

And whereas the Ministry of Municipal Affairs & Housing has taken unilateral action in Maple Ridge that undermines the jurisdiction of the Council of the City of Maple Ridge to determine and represent the public interest of this community, setting a dangerous precedent that jeopardizes the autonomy of all local governments in British Columbia in representing the interests of their communities through fair and accountable public process;

Therefore be it resolved that the City of Maple Ridge urges the Province of British Columbia to commit to work in collaboration with local governments within the bounds of their respective jurisdictions on all current and future projects of mutual concern to local governments and the Provincial Government.

NOT ADMITTED FOR DEBATE

OF2 Criminal Justice Reform

Abbotsford

Whereas British Columbia currently has the highest threshold/charge approval standard in Canada in proceeding with charges and criminal prosecution of gangsters while communities across British Columbia's lower mainland have concurrently seen a year over year rise in gang-related homicide and violence;

And whereas ongoing court delays favour the rights of the accused over the rights of victims and/or the community;

And whereas the Government of Canada committed \$328-million over 5 years beginning in 2018, and \$100-million annually thereafter to tackle the increase in gun related violence and gang activity in Canada as well as \$43 million annually in the National Crime Prevention Strategy to develop cost-effective ways to prevent crime among at-risk populations and vulnerable communities.

Therefore be it resolved that that the Mayor's Caucus/UBCM request that, in support of addressing the ongoing gang violence across the lower mainland of BC, the Province of BC and BC's Attorney General and Minister of Public Safety immediately begin working with the Government of Canada to take steps to explore initiatives to address issues within the British Columbia justice system including BC's restrictive charge approval standards, the ongoing high volume of court delays as well as measures to address community safety in support of the rights of all Canadians to live in safe communities.

ON MOTION, was ENDORSED

OF3 Widening of Trans Canada Hwy #1

Abbotsford

WHEREAS the critical congestion problems on the TransCanada Highway between the Fraser Valley and the Port Mann bridge continue to interrupt a safe, reliable and efficient multi-modal transportation network that supports employment and economic development movement of goods and services, as well as job creation for the Province of BC;

AND WHEREAS the Federal Government has already identified the continuation of the next phase of the TransCanada Highway 6-laning improvements from 216th street to the Whatcom Road interchange as a priority to expand markets for key local economic sectors, support thousands of residents in accessing employment, support the continued success of the Abbotsford International Airport, provide access to Universities, hospitals, aid in the reduction of greenhouse gas emissions, improve affordability of families, and support increased public safety through the reduction of traffic congestion:

Therefore be it resolved that UBCM lobby the provincial government to prioritize funding toward the expansion of the TransCanada Highway through the Fraser Valley;

And be it further resolved that this funding be made a high priority of the government of British Columbia;

And be it further resolved that any lanes added be dedicated to HOV, transit and/or goods movement.

ON MOTION, as amended, was ENDORSED

OF4 Lower Mainland LGA Convention Conservation

Whistler

Therefore be it resolved that the Lower Mainland LGA cease the practice of giving out convention novelty items.

ON MOTION, was NOT ENDORSED



RECEIVED

JUN 10 2019

June 1, 2019

Dear Regional District Chair and Board Members:

FRASER VALLEY REGIONAL DISTRICT

The 2019 Community Recognition Awards Call for Nominations is now open

I invite your community to identify a recently completed civic building or structure with wood use (either architecturally or structurally), and submit your nomination for the 2019 Community Recognition Awards, to be presented at the UBCM convention in Vancouver this fall. The awards are presented annually to local governments that advocate for using wood in a local project, or through visionary initiatives that work toward building a community culture of wood. Wood use in public buildings brings pride to BC towns and cities, leaves a lasting legacy and celebrates BC's wood culture.

If you are thinking of a new project, there has never been a better time to take advantage of the many benefits wood has to offer.

Why wood? Wood is good!

Wood is also the best choice for the environment, as nothing can make a green building 'greener' than optimizing the use of wood, which has a smaller carbon footprint than other building materials. Wood also benefits occupants in the indoor environment. Research has shown people thrive when working and learning in beautiful and high-quality spaces finished with natural materials like wood.

What's new in the world of wood? Consider the advantages and possibilities.

Wood WORKS! BC and the Canadian Wood Council are here to offer our technical expertise, training and education to help your local government realize a lower carbon footprint, competitive building costs, and comfortable, high-performance and effective spaces for your community. Please call me if you are ready to move forward with a new civic project. I can provide information on the professional technical services Wood WORKS! BC offers to your project teams, FREE of charge.

The Wood WORKS! BC Community Recognition Awards program is your opportunity to showcase your community and a wood project that has brought pride to your citizens.

Submit your nomination today! www.wood-works.ca/bc

Regards,

Lynn Embury-Williams
Executive Director
Wood WORKS! BC
1 877 929 9663 – ext. 1
lembury-williams@wood-works.ca

PS Please note that nominations are only open to local governments and their projects. Projects must have been completed within the last three years and built in whole or part with local government funds. Self-nominations are accepted and encouraged.

Deadline for nominations: Friday, August 30, 2019

About Wood *WORKS!* BC



WOOD SOLUTIONS
CONFERENCES



WOOD DESIGN
LUNCHEON CONFERENCES



IN-HOUSE SEMINARS



COMMUNITY RECOGNITION
AWARDS



WORKSHOPS



WOOD DESIGN AWARDS



TECHNICAL SUPPORT



WOOD BUILDING TOURS

Wood *WORKS!* is a national industry-led program of the Canadian Wood Council, with a goal to support innovation and provide leadership on the use of wood products and building systems. Through conferences, workshops, seminars and case studies, Wood *WORKS!* provides education, training and technical expertise to building and design professionals and local governments involved with commercial, institutional and industrial construction projects throughout BC. For more than 20 years, Wood *WORKS!* BC has facilitated practical, efficient, versatile and cost-effective building and design solutions through the use of wood – the most sustainable, natural and renewable building material on Earth.

Wood *WORKS!* BC has also worked extensively with municipalities on projects ranging from fire halls to arenas to recreation centres. Wood *WORKS!* BC is a recognized resource to help BC communities build with wood and fulfill provincial aspirations to be the first and best customers of our forest products, and our expertise is available free of charge.

Wood *WORKS!* BC: Services to Local Governments

Free Technical Advice

- structural, fire, seismic, acoustic, envelope, architectural, building performance

Community Outreach

- local government liaison and wood design support
- provincial government consultation and collaboration
- industry association partnerships and consultation

Sourcing Wood Products and Building Systems

Professional Development/Liaison

- Architectural Institute of BC, Engineers and Geoscientists British Columbia, BC Housing, Building Officials Association of BC

High Performance Building Support

- advancing low embodied and low operational carbon buildings in your community



Following are some highlights of Fraser Basin Council's current work in the Fraser Valley.

Fraser Valley Illegal Dumping Alliance

- As part of its one-year contract with Swim Drink Fish Canada to administer the Fraser Valley Illegal Dumping Alliance, FBC facilitated a strategy development session June 4 to help FVIDA members clarify its purpose and goals. An ensuing report will guide the group on what actions to take to prevent unwanted dumping in the first place, and to explore partnerships with Mission, Abbotsford and other communities in the region to tackle the persistent and growing problem of illegal dumping. The work done in the region could have implications for communities around the province.

Coded Wire Tag program to identify Chinook and Coho

- Last month the Fraser Valley team joined a joint FBC and Monitoring and Compliance Panel Project to boost participation in the Coded Wire Tag (CWT) program. The Department of Fisheries and Oceans uses the coded wire tags to improve estimates of Chinook and coho salmon, and to determine when to open fishing to commercial and recreational groups, and for First Nations Food, Social and Ceremonial harvest. The tags also provide DFO biologists with other vital details. For the program to work, fishers are asked to submit heads (which contain the coded wires) from marked fish to DFO. While there is good participation from the commercial fishery, as a condition of license agreements, DFO aims to increase participation from anglers and First Nations in order to protect and sustainably manage Chinook and coho stocks. The role of the FBC Fraser Valley office is to work with team members and leaders in the recreational fishing sector to identify gaps in relationships and awareness with recreational anglers, and to develop a strategy by 2020 to strengthen participation from anglers.

Lower Mainland Flood Management Strategy – LMFMS highlights

- **Flood and Environment Atlas** – Now complete, the online atlas collates the best available data about environmental values and features along the Fraser River from Hope to Richmond, and along coastal foreshore areas from White Rock to Squamish, as relevant to the Lower Mainland Flood Management Strategy. Thanks to the Community Mapping Network BC for developing the atlas and to the LMFMS Environment Advisory Committee for their guidance and collaboration. Explore the atlas features at <https://www.cmnbc.ca/atlasgallery/lower-mainland-flood-and-environment-atlas/>
- **Flood and Environment Field Survey** – To build on the data collated for the online atlas, the LMFMS is proposing to undertake fieldwork this summer to address some information gaps or questions relevant to the flood strategy in the Lower Mainland. The team is taking suggestions for data from the field that would inform and support the flood strategy.
- **Hydraulic Modelling and Mapping** – This final report is expected in a few weeks, along with other components such as flood scenario maps and animations. Details are still being reviewed regard the ongoing operations, maintenance and stewardship of the model, including ways to share access to partners interested in simulating additional flood scenarios. The main report will also have a plain language summary for non-technical audiences. The LMFMS will have a full update at its next JPC meeting later this month (June).
- **Flood Information Videos and Website** – Work continues on these two related initiatives. The videos will feature short interviews with experts discussing their particular subject matter, relating to flood mitigation and prevention.
- **Sub-Regional Planning Processes** – The Joint Planning Committee is reviewing ways to support several sub-regional plans to evaluate the suitability of different flood risk reduction options for different sub-regions, with different local circumstances. The JPC is seeking members to advise and take part in the sub-regional process.

For more information, please contact:

Christina Toth at 604-864-9295, ctoth@fraserbasin.bc.ca | Bob Purdy at 604-488-5355, bpurdy@fraserbasin.bc.ca



Squamish-Lillooet Regional District Update

May 2019

Updates from the Squamish-Lillooet Regional District Board and Committee meetings of May 2019

Note from Chair Rainbow: Bear Aware - This is a time of year when bears are in and around our communities and after a long winter, are hungry and searching for easy access to food. We have to accept that bears will be part of our lives in the Regional District and conduct ourselves in a manner which will keep people and the bears safe. RMOW and District of Squamish have excellent awareness programs and are designated as Bear Smart Communities. The rural areas are less organized and in one community this week, a sow and two cubs were killed by Conservation Officers. I encourage people living outside municipalities to educate themselves about bear behaviour and take steps to ensure that they are not attracting wildlife unnecessarily and that they know how to react when encountering a bear.

Please check out this link to Whistler's program which contains information and also further links:

<https://www.whistler.ca/services/environmental-stewardship/bears-and-wildlife/bears/bear-smart-community>

Also, here is a link to the BC Government page on Bear Smart which has good information plus directions of where to go for further assistance:

https://www2.gov.bc.ca/assets/gov/environment/plants-animals-and-ecosystems/conservation-officer-service/bearsmart_brchr.pdf

The Electoral Area Directors will be discussing Bear Smart to determine what we can do to assist smaller communities in the Regional District as the SLRD member municipalities undertake their own programs.

Pitch-In Week

SLRD staff, as well as staff from the member municipalities of Whistler, Squamish and Pemberton, participated in a 20-minute challenge during Pitch-In Week and together collected 1,120 lbs/508 kg of garbage!

BYLAWS

The following bylaws were adopted:

- Bralorne Sewer System Local Service Conversion and Establishment Bylaw No. 585, 1995, Amendment Bylaw No. 1614-2019 to increase the maximum tax requisition amount to allow for the borrowing of up to \$300,000 from the Municipal Finance Authority for the purpose of completing the construction of the new Bralorne wastewater treatment system.
- Squamish-Lillooet Regional District Development Approval Information, Fees and Notification Procedures Bylaw No. 1301-2014, Amendment Bylaw No. 1636-2019 to reflect a reduced fee structure for affordable housing.
- Squamish-Lillooet Regional District Electoral Area D Zoning Bylaw No. 1350-2016, Amendment Bylaw No. 1613-2019 to incorporate the Agricultural Land

Commission changes regarding cannabis production in Electoral Area D.

- Squamish-Lillooet Regional District Electoral Area D Zoning Bylaw No. 1350-2016, Amendment Bylaw No. 1610-2018 regarding amendments to short-term rentals and Bed & Breakfast zoning in Area D.

Squamish-Lillooet Regional District Electoral Area C Zoning Bylaw No. 765, 2002, Amendment Bylaw No. 1637-2019, to allow for a pension to accommodate 20 guests in 10 rooms plus an auxiliary unit for staff accommodations in the WedgeWoods Subdivision (Electoral Area C), was introduced and given first reading, and referred out for comment.

Squamish-Lillooet Regional District Pemberton and District Transfer Station Loan Authorization Bylaw No. 1567-2018, Amendment Bylaw No. 1640-2019 to make the previously approved borrowing for the new Pemberton & District Transfer Station non-site specific, was introduced and read a first, second and third time, and will be forwarded to the Inspector of Municipalities for approval prior to adoption.

Squamish-Lillooet Regional District Electoral Area C Zoning Bylaw No. 765, 2002, Amendment Bylaw No. 1612-2019 to incorporate the Agricultural Land Commission changes regarding cannabis production

in Electoral Areas C, was read a third time (as amended) and sent to the Ministry of Transportation & Infrastructure for their approval prior to adoption.

Short-Term Rentals and Bed & Breakfast Zoning Amendment Bylaws

The Board received the results from the short-term rentals survey as well as the input received from the referral to chambers of commerce and tourism associations regarding changes to Bed & Breakfast zoning.

There will be further public meetings held for Electoral Area A, Electoral Area B and Electoral Area C regarding short-term rentals and Bed & Breakfast zoning amendment bylaws - Squamish-Lillooet Regional District Zoning Bylaw No. 670, 1999, Amendment Bylaw No. 1607-2018, Squamish-Lillooet Regional District Electoral Area B Zoning Bylaw No. 1300-2013, Amendment Bylaw No. 1608-2018, and Squamish-Lillooet Regional District Electoral Area C Zoning Bylaw No. 765, 2002, Amendment Bylaw No. 1609-2018.

An amendment to Squamish-Lillooet Regional District Development Approval Information, Fees and Notification Procedures Bylaw No. 1301-2014 to reflect a reduced fee structure for short term nightly rental rezoning applications will be drafted.

Fine Peace Furry Creek Developments Comprehensive Rezoning, Electoral Area D

The Fine Peace Furry Creek Developments Ltd. rezoning application was granted permission for staff to proceed with a review of their comprehensive zoning amendment application at Furry Creek, Electoral Area D.

Abolfathi, Squamish Valley (Electoral Area D) Non-Farm Use Application #7

The SLRD did not support the Abolfathi, Squamish Valley (Electoral Area D) Non-Farm Use Application #7 to move the site of the current campground (on ALR land), however, the applicant was invited to submit for the Board's consideration a new application that includes a plan to put the land (from which the campground is being moved) into agricultural production.

T'it'q'et First Nation - 911 (Lillooet/Area B)

The SLRD will engage with the T'it'q'et regarding 911 services in their community.

Pemberton & District Recreation Service Transfer

The Squamish-Lillooet Regional District entered into a 5-year Licence of Use agreement with the Village of Pemberton beginning June 1, 2019, regarding the Pemberton Community Centre Building (and Water Park), the Pemberton Youth/Seniors Centre and Gates Lake Community Park whereby the SLRD grants to the Village of Pemberton the right to use the aforementioned assets for public recreation and community use. This Licence is related to the Recreation Service Delivery Service Agreement between the SLRD and the Village for the transfer of the management of the joint SLRD Electoral Area C and Village recreation service from the SLRD to the Village effective June 1, 2019.

Revitalization of Northern Economic Development & Initiatives Committee

The SLRD Northern Economic Development & Initiatives Committee will be reinvigorated and will meet on a quarterly basis.

LETTERS OF SUPPORT

- **Blackwater Creek Elementary School Community Space** - to the Superintendent of School District No. 48 with respect to the project to renovate a building beside the Blackwater Creek Elementary School for a space for a library and after school programming, and as a community space for Poole Creek to D'Arcy residents.
- **Lillooet River Upper Reach Sediment Trap** - to the Pemberton Valley Dyking District for their long-term tenure application to secure sediment trap and deposit locations, such sediment removal which was recommended in the recently updated recommendations from the Lillooet River Sediment Management Plan.
- **Direct Air Capture** - for Huron Clean Energy and Carbon Engineering's application to the Canada Infrastructure Bank for financing their initial Direct Air Capture commercial facility to be located in BC.

GRANTS IN AID**The following was granted from Area A Northern Area BC Hydro Payment In Lieu of Taxes (PILT) Funds Reserve:**

- \$16,580.51 to the Bridge River Valley Community Association (BRVCA) to support its Bralorne Church and Hall Foundation Repair and Revitalization Project, subject to the BRVCA receiving \$30,000.00 in grant funding from Northern Development Initiative Trust in respect of the Bralorne Church and Hall Foundation Repair and Revitalization Project.

The following was granted from Area B Northern Area BC Hydro Payment In Lieu of Taxes (PILT) Funds Reserve:

- \$6,250 to the Lillooet Agriculture & Food Society for the 2nd Quarter of 2019 for their coordinator's salary.

The following was granted from Area C Amenity Funds:

- \$5,000 to the Lillooet Lake Estates community for firefighting equipment.

The following were granted from Area B Select Funds:

- \$1,000 to the Lillooet & Community Bursary Fund Committee to enable young people in Lillooet and surrounding community to continue their education at Post-Secondary Institutes.
- \$1,000 to the St'at'imc Grad Committee for the 2019 St'at'imc graduates and the 21st Annual Graduation Ceremony event to be held on June 8th, 2019 at T'it'q'et Community Hall.

- Up to \$430 to Pemberton Wildlife Association and/or Coast to Cascades Grizzly Bear for the supply and installation of informational signage in proximity to the start of the Texas Creek Forest Service Road, Molybdenite Lake and Molybdenite Ridge (also known as Ochi Basin), to alert the public of the presence of grizzly bears in the area.

The following were granted from Area C Select Funds:

- \$1,250 to the Lílwat Nation, in the form a sponsorship, for their Annual Lílwat Nation Rodeo & Pow-wow held on May 18, 19 & 20, 2019 at the Lillooet Lake Rodeo Grounds in Mt. Currie.
- \$1,000 to the Pemberton & District Public Library Board towards the costs associated with their Oktoberfest fundraiser for the cost of smaller furnishings, sound baffles and upgraded audio-visual equipment for the Pemberton & District Public Library.
- \$150 to the Pemberton & District Public Library towards Marilyn Marinus's retirement celebration event and gift in recognition of her service to the community.

The following was granted from Area D Select Funds:

- \$2,000 to Howe Sound Secondary School for the Area D Annual Scholarship to a Howe Sound Secondary graduate.

