



COLUMBIA SHUSWAP REGIONAL DISTRICT

Regular Board Meeting

AGENDA

Date: Thursday, June 15, 2017
Time: 9:30 AM
Location: CSR D Boardroom
555 Harbourfront Drive NE, Salmon Arm

Pages

1. Call to Order
2. Board Meeting Minutes

2.1 Adoption of Minutes

1

Adoption of May 18, 2017 regular Board meeting minutes.

Motion

THAT: the minutes of the May 18, 2017 regular Board meeting be adopted.

2.2 Business Arising from the Minutes

The following motion and an amending motion were DEFERRED to the June, 2017 Board meeting, in order for staff to draft refinements to the communications that will properly inform the public about the proposed noise bylaw and what it is and what it is not.

Moved By: Director Parker

Seconded by: Director Demenok

THAT: the Board support the recommended communications plan for Noise Bylaw No. 5754 which includes website and social media information, online survey, and public availability of printed information prior to consideration of second reading of the bylaw.

And

Moved By: Director Eliason

Seconded by: Director Demenok

THAT: the above resolution be amended by replacing the words community consultation with public information.

THAT: the above motions and the amending motion be DEFERRED to the June, 2017 Board meeting, in order for staff to draft refinements to the communications that will properly inform the public about the proposed noise bylaw and what it is and what it is not.

Staff are recommending a Revised Motion for Consideration of the Board.

Motion

THAT: the Board support a communications plan for Noise Bylaw No. 5754, the purpose of the communications being to inform the public about the proposed bylaw by developing a Frequently Asked Questions Fact Sheet, with the information to be posted on the CSRD website, social media and available at the CSRD office, prior to considering second reading of the bylaw.

3. Delegations

3.1 10:00 AM Spec-Team Assessment Society - Specialized Team that responds to those with Fetal Alcohol Spectrum Disorder (FASD)

27

Bernadette O'Donnell, Executive Director, in attendance to present to the Board on Fetal Alcohol Spectrum Disorder and request a letter of support for provincial grant funding to cover assessment fees and support programs.

3.2 10:15 AM Shuswap Watershed Council

28

Director Demenok, Chair, presenting the Shuswap Watershed Council 2016 Annual Report to the Board.

ADMINISTRATION**4. Correspondence****Motion**

THAT: the correspondence contained on the June 15, 2017 regular Board agenda be received for information.

4.1 Okanagan Shuswap Natural Resource District (May 12, 2017)

32

Letter from Mark Hopkins, RPF, Tenures and First Nations Officer, in response to the April 20, 2017 regular Board agenda item - Amendments to Tolko Forest Stewardship Plan to add new Cutblocks and Roads.

The Board recommended that the Ministry of Forest, Lands and Natural resources place a moratorium on future logging activity in the Hummingbird Creek and Mara Creek basin due to history of large debris flows in the area.

4.2 Ministry of Forests, Lands and Natural Resource Operations (May 23, 2017)

34

Letter from Gerry MacDougall, Regional Executive Director, in response to the Board's letter dated May 8, 2017 requesting that Shuswap and Mara Lakes be designated as application-only area for private moorage.

4.3 Brian Simpson, Wildfire Management Services (May 24, 2017)

35

Follow up from the Interior Lumber Manufacturers' Association (ILMA) delegation at the May 18, 2017 Board meeting.

Request CSRD Board consider letter of support similar to attached draft letter to the Premier as issued by the East Kootenay Regional District.

4.4 Union of BC Municipalities (UBCM) (May 25, 2017)

41

Letter from Councillor Murry Krause, President, in response to the 2016 resolutions put forward by the Board at the UBCM Membership Convention.

4.5 Union of BC Municipalities (UBCM) (June 6, 2017)

45

Bulletin from UBCM website stating the deadline for Board-endorsed resolutions is June 30, 2017.

5. Reports

5.1 Director Remuneration Review Committee Meeting Minutes - May 23, 2017 47

Motion

THAT: the minutes of the Directors Remuneration Review Committee Meeting held on May 23, 2017 be received for information.

6. Business General

6.1 2016 Statement of Financial Information (SOFI) Report 49

Report from Jodi Pierce, Manager, Financial Services, dated June 1, 2017 seeking Board approval of the 2016 Statement of Financial Information Report.

Motion

THAT:

The Board approve the 2016 Statement of Financial Information Report as required by the Financial Information Regulation, Schedule 1, subsection 9(2) and section 376 subsection (1) of the Local Government Act.

6.2 Columbia Shuswap Film Commission Contract 58

Report from Robyn Cyr, Economic Development Officer (EDO), dated May 5, 2017.

Motion

THAT: The Board empower the authorized signatories to enter into a sole source contract with David Barritt to implement projects as outlined in the 2017 work plan for the Columbia Shuswap Regional Film Commission.

7. Business By Area

7.1 Grant in Aid Requests 75

Report from Jodi Pierce, Manager, Financial Services, dated June 5, 2017.

Motion

THAT: the Board approve the following allocations from the 2017 electoral grant-in-aids:

Area B

\$2,000 - Trout Lake Fire Department (operational costs)

Area C

\$2,500 - Sorrento Memorial Hall (window installation)

Area D

\$1,400 - Silver Creek Parent Advisory Council (team jerseys)

Area E

\$1,500 – Sicamous & District Museum & Historical Society (operational costs)

7.2 Golden/Area A EOF Application – Kicking Horse River Access 78

Report from Jodi Pierce, Manager, Financial Services dated June 2, 2017.

Motion

THAT: with the concurrence the Electoral Area A Director, the Board approve funding from the Golden and Area A Economic Opportunity Fund to the Town of Golden in the amount of \$25,000 for the purpose of funding activities required to achieve regulatory approval for channel modifications of the Kicking Horse River.

7.3 Area C Community Works Fund – Tennis Court Resurfacing 149

Report from Jodi Pierce, Manager, Financial Services, dated June 5, 2017

Motion

THAT: in accordance with Policy F-3 “Electoral Area Community Works Fund – Expenditure of Monies”, access to the Community Works Fund be approved up to \$31,500 plus applicable taxes from the Area C Community Works Fund for resurfacing the tennis courts at the Shuswap Lake Estates Tennis Club.

7.4 Lakeview Place Waterworks – Upgrade Award 164

Report from Terry Langlois, Utilities Team Leader, dated June 2, 2017.

Upgrades to the SCADA, electrical and instrumentation components to connect the Lakeview Place Water System to Cedar Heights Waterworks.

Motion

THAT: the Board empower the authorized signatories to enter into an agreement with Turn-Key Controls to provide, install and commission the Supervisory Control and Data Acquisition (SCADA), and the electrical and instrumentation upgrades for the Lakeview water system upgrade and connection project to Cedar Heights for a total cost of \$61,100 plus applicable taxes.

7.5 Tappen/Sunnybrae Fire Hall Addition – Contract Award

167

Report from Darcy Mooney, Manager, Operations Management, dated May 31, 2017. Tappen/Sunnybrae Fire Hall Addition - Contract Award

Motion

THAT: the Board empower the authorized signatories to enter in to an agreement with 478868 BC Ltd. (dba McDiarmid Construction) to construct the addition to the Tappen/Sunnybrae Fire Hall for a total cost of up to \$665,000 plus applicable taxes.

Motion

THAT: in accordance with Policy No. F-3 “Electoral Area Community Works Fund – Expenditure of Monies”, access to the Electoral Area Community Works Fund be approved for up to \$20,000 plus applicable taxes from the Electoral Area C Community Works Fund allocation for energy efficient upgrades at the Tappen/Sunnybrae Fire Hall.

7.6 Electoral Area E Community Works Fund – Malakwa Community Park

170

Report from Ryan Nitchie, Community Services Team Leader, dated May 31, 2017. Access to Electoral Area E Community Works Fund for additional park infrastructure at Malakwa Community Park.

Motion

THAT: in accordance with Policy No. F-3 “Electoral Area Community Works Fund - Expenditure of Monies” access to the Electoral Area Community Works Fund be approved for up to \$60,000 plus applicable taxes from the Electoral Area E Community Works Fund allocation for park construction at Malakwa Community Park.

7.7 Sicamous Landfill Design and Operation RFP Award

173

Report from Ben Van Nostrand, Team Leader, Environmental Health Services dated June 6, 2017. Sicamous Landfill Design and Operation Plan Update RFP Award.

Motion

THAT: the Board empower the authorized signatories to enter into an agreement with XCG Consulting Limited to update the Sicamous Landfill Design and Operation Plan for a total cost of \$32,555 plus applicable taxes.

8. Administration Bylaws

8.1 **Area C Liquid Waste Management Plan Implementation Service Amendment Bylaw No. 5741** 176

- Read a first, second and third time, as amended - February 16, 2017.
- Approved by Inspector of Municipalities - April 20, 2017.

Motion

THAT: "Area C Liquid Waste Management Plan Implementation Service Amendment Bylaw No. 5741," be adopted this 15th day of June, 2017.

8.2 **Sorrento/Blind Bay/Reedman Point Community Sewer Service Area Bylaw No. 5742** 180

- Read a first, second and third time - February 16, 2017.
- Approved by Inspector of Municipalities - April 20, 2017.

Motion

THAT: "Sorrento/Blind Bay/Reedman Point Community Sewer System Service Area Bylaw No. 5742," be adopted this 15th day of June, 2017.

8.3 **Sorrento/Blind Bay/Reedman Point Community Sewer Service Loan Authorization Bylaw No. 5743** 184

- Read a first, second and third time - February 16, 2017.
- Approved by Inspector of Municipalities - April 20, 2017

Motion

THAT: "Sorrento/Blind Bay/Reedman Point Community Sewer Service Loan Authorization Bylaw No. 5743," be adopted this 15th day of June, 2017.

9. IN CAMERA

Motion

THAT: pursuant to Sections 90(1)(a)(c) and (e)

(a) 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;

(c) labour relations or other employee relations;

(e) 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;

of the Community Charter, the Board move In Camera.

DEVELOPMENT SERVICES**10. Business General**

- None.

11. ALR Applications

11.1 Electoral Area D: Agricultural Land Commission (ALC) Application Section 20(3) - Non-Farm Use LC2521D (Jordan Baer) 187

Report from Christine LeFloch, Development Services Assistant, dated May 29, 2017.

6024 Highway 97B, Ranchero

Motion

THAT: Application No. LC2521D, Section 20(3) Non-Farm Use, for That Part of the Southwest ¼ of Section 33, Shown Red on Plan B3050, Township 19, Range 9, West of the 6th Meridian, Kamloops Division Yale District, Except Part Now Road See Plan H10220 be forwarded to the Provincial Agricultural Land Commission recommending approval, this 15th day of June, 2017.

12. Directors' Report on Community Events

One (1) Minute Verbal Report from Each Board Director for information.

ELECTORAL AREA DIRECTORS**13. Business by Area**

13.1 Electoral Area A: Development Variance Permit No. 641-29 (Mountain Shadows Development Ltd.) 216

Report from Jennifer Sham, Planner, dated May 24, 2017.
Highway 95, Nicholson

Motion

THAT: in accordance with Section 498 of the Local Government Act, Development Variance Permit No. 641-29, for Lot 3 Section 6 Township 27 Range 21 W5M KD Plan 16263, varying Schedule 'A' – Levels of Service of Subdivision Servicing Bylaw No. 641, as amended, to allow a subdivision which would create a fee simple lot (Lot 1, EPP25575) with a parcel size of 0.751 ha serviced by a surface water source and an on-site sewerage disposal system, and a fee simple lot (Lot 2, EPP25575) with a parcel size of 0.583 ha serviced by an off-site well and an on-site sewerage disposal system, as shown on Schedule A, be approved for issuance this 15th day of June, 2017.

13.2 Electoral Area C: Development Variance Permit No. 641-25 (Franklin) 289

Report from Jennifer Sham, Planner, dated May 18, 2017.
3700 & 3710 Sunnybrae-Canoe Point Road, Sunnybrae

Motion

THAT: in accordance with Section 498 of the Local Government Act, Development Variance Permit No. 641-25, for Lot 1 and 2 Section 2 and 11 Township 21 Range 10 West of the 6th Meridian Kamloops Division Yale District Plan KAP82925, varying Schedule "A" – Levels of Service of Subdivision Servicing Bylaw No. 641, as amended, to allow a subdivision which would create a fee simple lot (new Lot 1) with a parcel size of less than 1 ha serviced by a community water system and an on-site sewerage disposal system, as shown on Schedule B, subject to registration of a suitably worded Section 219 covenant on title of the new Lot 1 requiring connection to a community sewer system when it becomes available, be approved for issuance this 15th day of June, 2017.

13.3 Electoral Area E: Development Variance Permit No. 641-26 (Handley) 320

Report from Candice Benner, Development Services Assistant, dated May 16, 2017.
2405 and 2485 Samuelson Road, Cambie-Solsqua

Motion

THAT: in accordance with Section 498 of the Local Government Act, Development Variance Permit No. 641-26, for that part of:

1. Lot 1, Sections 7 and 8, Township 22, Range 7, W6M, KDYD, Plan 18189;
 2. The Northeast Quarter of Section 7, Township 22, Range 7, W6M, KDYD, Except (1) The South Half of the South Half of Legal Subdivision 10, (2) Part Included in SRW Plan 15917, and (3) Part Included in Plan 18189 and NEP 22490; and
 3. Lot A, Section 7, Township 22, Range 7, W6M, KDYD, Plan NEP 22490,
- varying Subdivision Servicing Bylaw No. 641, by waiving the requirement that a surface water source proposed for an Independent On-Site Water System must be included on the List of Eligible Sources, contained in Schedule D of Bylaw No. 641; which will allow:
- Proposed lot 2, EPP68797 to obtain domestic water from Holms Creek and Enquist Spring; and,
 - Proposed lot 1 & 3, EPP68797 to obtain domestic water from Holms Creek,

for a proposed subdivision under application No. 2014-06104E,

be issued this 15th day of June, 2017, subject to receipt of water quality analyses for all subject parcels that meet the requirements of Subdivision Servicing Bylaw No. 641.

13.4 Electoral Area F: Development Variance Permit No. 800-18 (Magnavista Estates Ltd.) 334

Report from Jennifer Sham, Planner, dated May 19, 2017.
6471 Lindsay Road, Magna Bay

Motion

THAT: in accordance with Section 498 of the Local Government Act, Development Variance Permit No. 800-18 for Lot A Section 13 Township 23 Range 10 W6M KDYD Plan 29439 Except Plans 29668 and 30666 varying the rear parcel setback from 4.5 m to 1.09 m for the steel control bin and vault (components of the water system) located on the subject property, be approved for issuance this 15th day of June, 2017.

14. Planning Bylaws

14.1 Electoral Area E: Lakes Zoning Amendment (Layden) Bylaw No. 900-19 356

Report from Christine LeFloch, Development Services Assistant, dated May 8, 2017.
655 Swanbeach Road, Swansea Point

Motion

THAT: "Lakes Zoning Amendment (Layden) Bylaw No. 900-19" be read a first time this 15th day of June, 2017;

AND THAT: The Board utilize the simple consultation process for Bylaw No. 900-19 and it be referred to the following agencies and First Nations:

- Department of Fisheries and Oceans;
- Navigation Canada;
- Ministry of Forests Lands and Natural Resource Operations – Lands Branch
- CSRD Operations Management; and
- All relevant First Nations Bands and Councils.

14.2 Electoral Area F Official Community Plan Amendment (Isley) Bylaw No. 830-18, Magna Bay Zoning Amendment (Isley) Bylaw No. 800-30 374

Report from Dan Passmore, Senior Planner dated May 12, 2017.
6929 Squilax-Anglemont Road and 2556 McClaskey Road, Magna Bay.

Motion

THAT: "Magna Bay Zoning Amendment (Isley) Bylaw No. 800-30" be read a first time this 15th day of June 2017;

AND THAT:

the Board utilize the simple consultation process for Bylaw No. 800-30 and it be referred to the following agencies and First Nations:

Interior Health;

Ministry of Forests, Lands and Natural Resource Operations - Archaeology Branch;

CSRD Operations Management; and,

Relevant First Nations Bands and Councils.

14.3 Electoral Areas C, E, and F: Housekeeping Amendments – Floodplain Management, Intersection Sightlines, and Panhandle lots (CSRD Zoning Bylaws) 411

Report from Dan Passmore, Senior Planner, dated April 12, 2017.

Motion

THAT: "Scotch Creek Zoning Amendment (CSRD) Bylaw No. 825-34' be read a second time, as amended, this 15th day of June, 2017;

Motion

THAT: "Magna Bay Zoning Amendment (CSRD) Bylaw No. 800-26" be read a second time, as amended, this 15th day of June, 2017;

Motion

THAT: "Anglemont Zoning Amendment (CSRD) Bylaw No. 650-11" be read a second time, as amended, this 15th day of June, 2017;

Motion

THAT: "Rural Sicamous Land Use Amendment (CSRD) Bylaw No. 2064" be read a second time, as amended, this 15th day of June, 2017;

Motion

THAT: "South Shuswap Zoning Amendment (CSRD) Bylaw No.701-83" be read a second time, as amended, this 15th day of June, 2017;

Motion

THAT: a public hearing to hear representations on Scotch Creek Zoning Amendment (CSRD) Bylaw No. 825-34, Magna Bay Zoning Amendment (CSRD) Bylaw No. 800-26, Anglemont Zoning Amendment (CSRD) Bylaw No. 650-11, Rural Sicamous Land Use Amendment (CSRD) Bylaw No. 2064, and South Shuswap Zoning Amendment (CSRD) Bylaw No.701-83, be held;

AND FURTHER THAT: notice of the public hearing be given by staff of the Regional District on behalf of the Board in accordance with Section 466 of the Local Government Act;

AND FURTHER THAT: the holding of the public hearing be delegated to Director Rhona Martin, as Chairman of the Board of the CSRD, or Director Paul Demenok, if Director Martin is absent, and the Director give a report of the public hearing to the Board.

15. Release of In Camera Resolutions

- If Any.

MEETING CONCLUSION

16. Upcoming Meetings/Events

16.1 Area C Governance Study Committee Meeting

Thursday, June 15, 2017 - 6:00 p.m. to 8:00 p.m.
Blind Bay Community Hall - 2510 Blind Bay Road, Blind Bay

16.2 Electoral Area Directors Committee Meeting

Tuesday, June 27, 2017 9:30 a.m.
CSRD Boardroom, 555 Harbourfront Drive NE, Salmon Arm

16.3 Area A Local Advisory Committee Meeting

Tuesday, June 27, 2017 6:00 p.m. to 8:00p.m.
BC Visitors Centre Golden, 111 Golden Donald Upper Road, Golden

17. Next Board Meeting

17.1 Thursday, July 20, 2017 9:30 a.m.

CSRD Boardroom, 555 Harbourfront Drive NE, Salmon Arm

18. Adjournment

Motion

THAT: the regular Board meeting of June 15, 2017 be adjourned.



REGULAR BOARD MEETING MINUTES

Note: The following minutes are subject to correction when endorsed by the Board at the next Regular meeting.

Date: May 18, 2017
 Time: 9:30 AM
 Location: Revelstoke Community & Aquatic Centre
 600 Campbell Ave, Revelstoke

Directors Present	R. Martin (Chair)	Electoral Area E
	K. Cathcart	Electoral Area A
	L. Parker	Electoral Area B
	P. Demenok	Electoral Area C
	R. Talbot	Electoral Area D
	L. Morgan	Electoral Area F
	C. Moss	Town of Golden
	M. McKee	City of Revelstoke
	T. Rysz	District of Sicamous
	K. Flynn	City of Salmon Arm
	C. Eliason	City of Salmon Arm
	S. Knaak	Electoral Area A Alternate

Staff Present	C. Hamilton	Chief Administrative Officer
	L. Shykora	Deputy Manager, Corporate Administration Services
	E. Johnson	Executive Assistant/Confidential Secretary
	J. Pierce	Manager, Financial Services
	D. Mooney	Manager, Operations Management
	B. Van Nostrand	Team Leader, Environmental Health Services
	R. Nitchie	Team Leader, Community Services
	T. Langlois	Team Leader, Utilities
	G. Christie	Manager, Development Services
	D. Passmore	Senior Planner
	J. Sham	Planner
	B. Payne	Manager, Information Systems

1. Call to Order

The Chair called the meeting to order at 9:30 AM.

2. Board Meeting Minutes

2.1 Adoption of Minutes

Adoption of April 20, 2017 regular Board meeting minutes.

2017-0501

Moved By Director Morgan

Seconded By Director Talbot

THAT: the minutes of the April 20, 2017 regular Board meeting be adopted.

CARRIED

2.2 Business Arising from the Minutes

None.

ADMINISTRATION

4. Correspondence

4.1 Canadian Radio-television and Telecommunications Commission (May 4, 2017)

Letter from the Chairman and Chief Executive Officer, Jean-Pierre Blais, on an opportunity to help shape the CRTC's new broadband funding regime.

In reviewing the letter from the CRTC, the Chief Administrative Officer suggested that the letter be referred to the Columbia Basin Trust Broadband Corporation for information.

2017-0502

Moved By Director Morgan

Seconded By Director McKee

THAT: the correspondence contained on the May 18, 2017 regular Board agenda be received for information.

CARRIED

5. Reports

5.1 SILGA Annual General Meeting Conference (April 25-28, 2017)

Three CSRD Resolutions supported at Southern Interior Local Government Association Annual General Meeting.

Resolutions are attached to the agenda for reference.

Chair Martin, verbal update.

Directors commented on the value of the SILGA Conference this year.

The 2018 SILGA Conference will be in Revelstoke.

5.2 Area A Local Advisory Committee Meeting Minutes - April 18, 2017

2017-0503

Moved By Director Cathcart

Seconded By Director Moss

THAT: the minutes of the Area A Local Advisory Committee Meeting held on April 18, 2017 be received for information.

CARRIED

5.3 Electoral Area Directors' Committee Meeting Minutes - April 4, 2017

Resolutions and Action Items brought forward to April Board meeting.

2017-0504

Moved By Director Talbot

Seconded By Director Morgan

THAT: the minutes of the Electoral Area Directors' Committee meeting held on April 4, 2017 be received for information.

CARRIED

6. Business General

6.1 Overtime – Managerial and non-managerial exempt staff

Report from Jodi Pierce, Manager, Financial Services, dated May 5, 2017. Policies F-18 (Overtime-Non-Managerial Exempt Staff) and F-19 (Recognition of Managerial Hours Worked) are being revised to clarify overtime calculations in Emergency Operations Centre activations.

2017-0505

Moved By Director McKee

Seconded By Director Morgan

THAT: the Board endorse the amendment to Policy F-18 “Overtime – Non-Managerial Exempt Staff” and approve its inclusion into the CSRD Policy Manual.

CARRIED

Discussion on the Motion:

Comment on undue burden to staff with the extraordinary emergency operations situations; the Chief Administrative Officer advised of new staff hiring and commencing work soon at the CSRD;

Query if municipal staff training is ongoing and the potential for assistance at the Emergency Operations Centre in the electoral areas; Staff responded that this discussion is ongoing, municipal staff are being encouraged to take the training so they are able to volunteer when the Emergency Operations Centre is activated.

2017-0506

Moved By Director McKee

Seconded By Director Morgan

THAT: the Board endorse the amendment to Policy F-19 “Recognition of Managerial Hours Worked” and approve its inclusion into the CSRD Policy Manual.

CARRIED

6.2 CSRD Solid Waste Disposal Tipping Fee and Regulation Bylaw No. 5737

Report from Ben Van Nostrand, Team Leader, Environmental Health Services dated May 8, 2017. Solid Waste Disposal Tipping Fee Bylaw Update

2017-0507

Moved By Director Eliason

Seconded By Director McKee

THAT: Bylaw No. 5737, cited as “CSRD Solid Waste Disposal Tipping Fee and Regulation Bylaw No. 5737” be read a first, second and third time this 18th day of May, 2017.

CARRIED

A brief discussion took place on the motion.

2017-0508

Moved By Director Morgan

Seconded By Director McKee

THAT: Bylaw No. 5737, cited as “CSRD Solid Waste Disposal Tipping Fee and Regulation Bylaw No. 5737” be adopted this 18th day of May, 2017.

CARRIED

3. Delegations

3.1 10:00 AM: Representatives of the Interior Lumber Manufacturers Association (ILMA)

The ILMA delegation presented information last year to the CSRD, requested and received support for a Resolution "Right Log to the Right Mill".

The purpose of the ILMA delegation this year is, firstly, to live up to the commitment to the Board from last year, to keep the Board informed and up to date on these ongoing issues. Secondly, to request the Board's ongoing support towards getting government to support the ILMA fiber needs and their continued industry competitiveness so they can maintain and increase long term jobs and economic development in the communities and the regional areas they are associated with. Lastly, to maintain and develop strong relationships with the Board and the ILMA by increasing communications directly between ILMA and the Board.

Brian Simpson and John Dooley, ILMA, explained this is an update since the last presentation to the Board, primarily to continue the dialogue and keep the Board informed on the issues that the industry is facing. These issues were described in a detailed Powerpoint presentation.

Mr. Simpson also commented on the impact of the newly announced softwood lumber agreement duties and the uncertainty it will create for their business community.

ILMA is hoping that the CSRD, along with 5 other regional districts, adopt a resolution of support for a letter to the Premier asking that the Minister of

Lands, Forests and Natural Resource Operations be given a Mandate to promote diversity, sustainability and resilience in BC's forest sector by implementing explicit measures to increase specialty, value-added and independent wood manufacturing in the Province of BC, and ensuring at the same time the principle of the "Right Log to the Right Mill" is being optimized.

This show of support by local governments is proving to be instrumental in pursuing the concerns of ILMA with the Provincial Government.

The Board was advised that the ILMA is holding its Annual Conference on June 15, 2017 in Creston, BC and he encouraged Board members to attend the one day event.

The delegation responded to several questions and comments of the Board.

Chair thanked ILMA representatives for the presentation which highlighted concerns that are very similar to those of the Southern Interior Beetle Action Coalition.

2017-0509

Moved By Director Parker

Seconded By Director McKee

That ILMA be asked for a letter for the Board to consider at a future meeting.

CARRIED

3.2 10:15 AM: Joanne Sweeting, Executive Director, Tourism Golden

Presentation of Tourism Golden 2015-2016 Annual Report

The Executive Director, Tourism Golden, presented an overview of Tourism Golden's Annual Report, noting a change in fiscal year. The Powerpoint described the year's activities and events, the public relations campaigns, future plans and strategic planning for the organization.

Director Cathcart commented on the great work being done at Tourism Golden and on the positive economic impacts to Golden and Area A associated with the events that are being attracted to the area.

6. Business General

6.3 Shuswap Economic Development Strategy – Contract Award

Report from Robyn Cyr, Economic Development Officer (EDO), dated May 8, 2017.

The Economic Development Officer was unable to attend today's meeting.

2017-0510

Moved By Director Flynn

Seconded By Director Demenok

THAT: The Board empower the authorized signatories to enter into an agreement with EDCD Consulting to develop the Shuswap Economic Development Strategy.

CARRIED

Discussion on the motion:

A question was asked if there will be communications with the municipalities involved in Shuswap Tourism, as well as the Salmon Arm Economic Development Society.

The Chair mentioned the assumption that community consultations would be done. When the Shuswap Economic Development Committee last met it asked that the stakeholder plans and communications be elaborated upon.

6.4 Rescheduling of the Committee of the Whole (Policy) Session

Report from Charles Hamilton, Chief Administrative Officer, dated May 15, 2017.

2017-0511

Moved By Director Parker

Seconded By Director Cathcart

THAT: the Board endorse the rescheduling of the June 15, 2017 Committee of the Whole (Policy) Session to the October 19, 2017 regular Board meeting.

CARRIED**7. Business By Area****7.1 Grant-in Aid Requests**

Report from Jodi Pierce, Manager, Financial Services, dated May 5, 2017.

2017-0512

Moved By Director Cathcart

Seconded By Director Demenok

THAT: the Board approve the following allocations from the 2017 electoral grant-in-aid's:

Area A

\$400 – Gentlemen's Leisure Club of Golden (bike swap event)

\$10,800 – Golden Opportunities for Refugees (refugee program support)

\$1,000 – Kicking Horse Country Chamber of Commerce (Kicking Horse Country Dash)

Area C

\$2,672 – White Lake Residents Association (replace safety buoys)

\$15,244 – Sorrento & Area Community Association (Sorrento beautification)

\$32,000 – South Shuswap Canada Day Society (Canada Day celebrations)

\$1,900 – Eagle Bay Fire Department Association (open house).

CARRIED**7.2 Electoral Area A Regional Trail Strategy RFP Award**

Report from Ryan Nitchie, Team Leader, Community Services May 8, 2017.

Electoral Area A Trail Strategy RFP Award.

2017-0513

Moved By Director Cathcart

Seconded By Director Moss

THAT: the Board empower the authorized signatories to enter into an agreement with Larch Landscape Architecture and Authentic Mountain Design to complete a Regional Trail Strategy for Electoral Area A for a total cost of \$59,855 plus a 15% contingency, plus applicable taxes.

CARRIED

7.3 No further borrowing resolution – Anglemont Waterworks

Report from Jodi Pierce, Manager, Financial Services, dated May 5, 2017.

2017-0514

Moved By Director Morgan

Seconded By Director Talbot

THAT: the Board confirms that there will be no further borrowing against Columbia Shuswap Regional District Bylaw No. 5620, being the Anglemont Waterworks Loan Authorization Bylaw and the remaining unissued loan authorization in the amount of \$3,898,744 will be cancelled.

CARRIED

7.4 General Strategic Priorities Grant Application

Report from Terry Langlois, Team Leader Utilities, dated May 15, 2017.
Board approval to apply for a General Strategic Priorities Grant.

2017-0515

Moved By Director Morgan

Seconded By Director Talbot

THAT: the Board empower the authorized signatories to apply for a General Strategic Priorities Fund grant in the amount of up to \$2,091,000 to fund 100% of the eligible costs to upgrade the Saratoga Water System.

CARRIED**7.5 Electoral Area C Grant-in-Aid Request**

Verbal update will be provided at the Board Meeting by Darcy Mooney, Manager, Operations Management.

The Manager, Operations Management, explained an opportunity for the CSRD to work with the Ministry of Forests, Lands and Natural Resource Operations in facilitating the removal and disposal of a derelict, abandoned houseboat vessel in the Eagle Bay area of Shuswap Lake.

2017-0516

Moved By Director Demenok

Seconded By Director Moss

WHEREAS the Compliance and Enforcement Branch of the Ministry of Forests, Lands and Natural Resource Operations is interested in working collaboratively with the CSRD to fund the removal and proper disposal of an abandoned and derelict houseboat vessel from Shuswap Lake located near the 3900 block of Eagle Bay Road in Electoral Area C;

BE IT RESOLVED THAT the Board authorize the expenditure of a maximum of \$1000 from the Electoral Area C Grant-in-Aid fund to cover the costs of landfill user fees associated with the disposal of the vessel.

CARRIED**8. Administration Bylaws****8.1 Alternative Approval Process (AAP) – Rail Corridor Trail Service and Loan Authorization**

Report from L. Shykora, Deputy Manager Corporate Administration Services, dated May 15, 2017. Staff are asking that the Board approve:

- 1) Estimate of Electors,
- 2) Elector Response Form,
- 3) Deadline of the date for submission of Elector Response Forms, and
- 4) Communication Document entitled Frequently Asked Questions – The Rail Corridor Initiative.

2017-0517

Moved By Director Flynn

Seconded By Director Demenok

THAT: for the purpose of obtaining approval for the Rail Corridor Trail Service Establishment Bylaw No. 5755 and the Rail Corridor Trail Service Loan Authorization Bylaw No. 5756, using the Alternative Approval Process, 2,918 be used as the fair determination of 10% of the eligible number of electors within the service area (Electoral Areas C, D, E, F, the City of Salmon Arm and the District of Sicamous).

CARRIED

2017-0518

Moved By Director Flynn

Seconded By Director Demenok

THAT: the Rail Corridor Trail Service Establishment Alternative Approval Process Elector Response Form be approved by the Board in the form attached to the report from the Deputy Manager, Corporate Administration Services dated May 15, 2017, subject to both the Rail Corridor Trail Service Establishment Bylaw and the Rail Corridor Trail Service Loan Authorization Bylaw No. 5756 being approved by the Inspector of Municipalities by Monday, May 29, 2017.

CARRIED

2017-0519

Moved By Director Rysz

Seconded By Director McKee

THAT: the deadline for receipt of submissions of Elector Response Forms for the Alternative Approval Process conducted for the Rail Corridor Trail Service Establishment Bylaw No. 5755 and for Rail Corridor Trail Service Loan Authorization Bylaw No. 5756 be determined to be 4:00 pm, Monday, July 17, 2017.

CARRIED

2017-0520

Moved By Director Rysz

Seconded By Director McKee

THAT: the Board endorse the publication “Frequently Asked Questions – The Rail Corridor Initiative” dated May, 2017.

CARRIED

8.2 Amendment to Rail Corridor Trail Service Establishment Bylaw No. 5755

Report from Lynda Shykora, Deputy Manager, Corporate Administration Services, dated May 15, 2017.

2017-0521

Moved By Director Rysz

Seconded By Director McKee

THAT: Third Reading given to Rail Corridor Trail Service Establishment Bylaw No. 5755 on April 20, 2017 be Rescinded this 18th day of May, 2017.

CARRIED

2017-0522

Moved By Director Rysz

Seconded By Director McKee

THAT: Section 6 of Rail Corridor Trail Service Establishment Bylaw No. 5755 be Amended to reflect the maximum requisition amount to be an equivalent of \$0.06 for each \$1,000 of net taxable value of land and improvements included in the Service Area this 18th day of May, 2017.

CARRIED

2017-0523

Moved By Director Rysz

Seconded By Director McKee

THAT: Rail Corridor Trail Service Establishment Bylaw No. 5755 be given Third Reading as Amended this 18th day of May, 2017.

CARRIED

9. IN CAMERA

2017-0524

Moved By Director Talbot

Seconded By Director Morgan

THAT: pursuant to Sections 90(1)(a)

(a) 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;

of the Community Charter, the Board move In Camera.

CARRIED

DEVELOPMENT SERVICES

10. Business General

10.1 Proposed Public Consultation Plan for Draft Noise Bylaw No. 5754.

Report from Gerald Christie, Manager, Development Services, dated May 18, 2017.

Proposed public consultation plan for draft Noise Bylaw No. 5754.

2017-0525

Moved By Director Parker

Seconded By Director Demenok

THAT: the Board support the recommended communications plan for Noise Bylaw No. 5754 which includes website and social media

information, online survey, and public availability of printed information prior to consideration of second reading of the bylaw.

Discussion on the motion:

A number of Directors spoke against the consultation aspect of the staff recommendation, noting the importance of educating the public about the bylaw and the difficulties involved in the enforcement of it, rather than obtaining feedback; the purpose of the communications should be to inform versus to consult;

Staff commented that the consultation was to include an explanation of the RCMP's role in enforcing the Noise Bylaw outside of CSRD regular office hours and on weekends;

Staff confirmed the intent of the recommendation is some newspaper advertising to direct the public to the CSRD website, communications through social media, as well as a survey,- the main survey question being Do You or Do You Not Support the Noise Bylaw; Directors had previously asked for an opinion poll/survey.

Amendment:

2017-0526

Moved By Director Eliason

Seconded By Director Demenok

That the above resolution be amended by replacing the words community consultation with public information.

2017-0527

Moved By Director Morgan

Seconded By Director Rysz

That the above motion and the amending motion be DEFERRED to the June, 2017 Board meeting, in order for staff to draft refinements to the communications plan that will properly inform the public about the proposed noise bylaw and what it is and what it is not.

CARRIED

11. ALR Applications

11.1 Electoral Area A: Agricultural Land Commission (ALC) Application Section 21(2) – Subdivision LC2527A Neil Tobler and Verena Tobler

Report from Candice Benner, Development Services Assistant, dated April 28, 2017.

2311 and 2379 Campbell Road, McMurdo

The applicant was in attendance.

The applicant made a presentation to the Board in support of their ALC application for a 3 lot subdivision, described the history of their family's ownership of the property, stated their estate planning needs, explained the conditions of the property and its capabilities for farming.

2017-0528

Moved By Director Cathcart

Seconded By Director Moss

THAT: Application No. LC2527A, Section 21(2) Subdivision in the ALR, for the north east quarter of Section 30, Township 25, Range 20, W5M, Kootenay District, Except Plans NEP64113, NEP72158, and NEP91075 be forwarded to the Provincial Agricultural Land Commission recommending approval of Proposed Lot 1 only, on this 18th day of May, 2017.

DEFEATED

Discussion on the motion:

Area A Director asked for the Board's support in defeating the motion, and for the Board's support for a recommendation to the ALC for support of all 3 lots as submitted by the applicant.

2017-0529

Moved By Director Cathcart

Seconded By Director Flynn

THAT: Application No. LC2527A, Section 21(2) Subdivision in the ALR, for the north east quarter of Section 30, Township 25, Range 20, W5M,

Kootenay District, Except Plans NEP64113, NEP72158, and NEP91075 be forwarded to the Provincial Agricultural Land Commission recommending approval of the original 3 lot subdivision application, on this 18th day of May, 2017.

CARRIED

Discussion on the motion:

Director comment that the property is very rocky; not suited for farming.

2017-0530

Moved By Director Cathcart

Seconded By Director Flynn

THAT: the CSRD Board request the Agricultural Land Commission Panel (ALC) to make a site visit to the property that is the subject of ALC application LC2527A (Tobler), before the ALC makes its decision on the application.

CARRIED

**11.2 Electoral Area B: Agricultural Land Commission (ALC) Application
Section 20(3) - Non-Farm Use LC2530B James and Lee-Ann Kramer**

Report from Candice Benner, Development Services Assistant, dated April 28, 2017.

4496 Airport Way, Rural Revelstoke

The applicant was in attendance.

2017-0531

Moved By Director Parker

Seconded By Director Demenok

THAT: Application No. LC2530B, Section 20(3) Non-Farm Use in the ALR, for Lot 1, Section 31, Township 22, Range 1, W6M, Kootenay District, Plan NEP73271 be forwarded to the Provincial Agricultural Land Commission recommending approval, on this 18th day of May, 2017.

CARRIED

**11.3 Electoral Area D: Agricultural Land Commission (ALC) Application
Section 20(3) – Non-Farm Use LC2531D Monty & Jennifer Siddall**

Report from Jennifer Sham, Planner, dated April 25, 2017.
4885 Highway 97, Falkland

The applicant was not in attendance.

2017-0532

Moved By Director Morgan

Seconded By Director Talbot

THAT: Application No. LC2531D, Section 20(3) Non-Farm Use, for the Northeast ¼ Section 19 Township 17 Range 11 W6M KDYD Except Plans A322 and KAP65292, be forwarded to the Provincial Agricultural Land Commission recommending approval on this 18th day of May, 2017.

DEFEATED

Discussion on the motion:

Area D Director does not support staff's recommendation; he asked the Board to defeat the motion and for support on an alternate recommendation for refusal of the application.

Area D Director believe that the property owner was aware of the rules before the house was built, on that basis he is asking for Board support to not recommend approval.

2017-0533

Moved By Director Talbot

Seconded By Director Morgan

THAT:

Application No. LC2531D, Section 20(3) Non-Farm Use, for the Northeast ¼ Section 19 Township 17 Range 11 W6M KDYD Except Plans A322 and KAP65292, be forwarded to the Provincial Agricultural Land Commission recommending refusal on this 18th day of May, 2017.

CARRIED

12. Directors' Report on Community Events

One (1) Minute Verbal Report from Each Board Director for information.

Municipal Directors left the meeting at this time.

ELECTORAL AREA DIRECTORS

13. Business by Area

13.1 Electoral Area A: Development Variance Permit No. 641-27 (Palumbo)

Report from Jennifer Sham, Planner, dated April 24, 2017.

Palumbo Heights Drive, Nicholson

Submission(s) from neighbouring property owners attached to Late Agenda.

Director Cathcart declared a conflict on this item.

Director Cathcart declared a conflict due to being an adjacent land owner to the property that is the subject of this Development Variance Permit application. Director Cathcart left the meeting at this time.

Alternate Director Knaak, Electoral Area A, attended this portion of the Board meeting, via teleconference.

The applicant was in attendance.

The Planner noted the receipt of one submission from a neighbouring property owner.

2017-0534

Moved By Director Parker

Seconded By Director Demenok

THAT: in accordance with Section 498 of the Local Government Act, Development Variance Permit No. 641-27, for that part of Legal Subdivision 2, Section 35, Township 25, Range 21, West of the 5th Meridian, Kootenay District, except Plans NEP66313, NEP74775, NEP7680, EPP37325 and EPP45014, varying Schedule 'A' – Levels of Service of Subdivision Servicing Bylaw No. 641, as amended (Bylaw No. 641), to allow a subdivision which would create a fee simple lot (Lot 1,

EPP68187) with a parcel size of 0.674 ha serviced by on-site water and on-site sewerage disposal system, as shown on Schedule 'B',
be approved for issuance this 18th day of May, 2017.

CARRIED

Discussion on the motion:

Alternate Director mentioned concern of neighbours about the potential affect on water, asking when there is concern about reducing the parcel size and also way of life, what is the level of confidence with the technical report on the water, would staff expect similar results when water levels on low.

Staff replied that the hydrogeologist report indicated it could substantially maintain the quantity, and that for any future subdivision with smaller lots the hydrogeologist report would need to be redone at that time.

In response to a question, staff advised that the applicant had considered moving the property lines to achieve parcel sizes that meet the minimum parcel sizes, adding this was not pursued due to the survey costs involved. This is an option available to the applicant if the variance is not approved by the Board.

Staff responded that the Subdivision Servicing bylaw establishes these minimum standards, there are checks and balances and approvals from Interior Health based on the science/reports available.

Area B Director stated the applicant has provided considerable information to support his application including the technical reports; the variance is reasonable and there are examples of similar variances being approved.

Alternate Director Knaak left the meeting at this time.

Director Cathcart returned to the meeting upon conclusion of consideration of Development Variance Permit 641-27.

13.2 Electoral Area A: Development Variance Permit No. 641-22 (Rod Steward and Lorraine Dever)

Report from Christine LeFloch, Development Services Assistant, dated April 27, 2017
2346 Blaeberry Road, Golden

The applicant was not in attendance.

It was noted that no written submissions were received from neighbouring property owners in relation to the proposed variance.

2017-0535

Moved By Director Cathcart

Seconded By Director Demenok

THAT: In accordance with Section 498 of the Local Government Act Development Variance Permit No. 641.22 for Block C, Section 1, Township 29, Range 22, West of the 5th Meridian, Kootenay District, varying Subdivision Servicing Bylaw No. 641, as follows:

1. Varying Section 8.3(a) by waiving the requirement that a surface water source proposed for an Independent On-Site Water System must be surface water from an intake that has unrecorded water and is on the List of Eligible Sources, shown in Schedule D of Bylaw No. 641, that is current as of the date of application for subdivision only for proposed Lot 2 as shown on the proposed plan of subdivision; and
2. Varying Section 8.5 by waiving the requirement that all components, including the intake, for an Independent On-site Water System must be located on the same parcel as the residential dwelling unit in respect of which they are required or located within easements or rights of way meeting the requirements of Section 9.11 of Subdivision Servicing Bylaw No. 641; and
3. Varying the volume of water required to be provided by an Independent On-site Water System pursuant to Section 8.8 from 2,275 litres per day to 2,273 litres per day only for proposed Lot 2;
4. for a proposed subdivision under application No. 2015-05926A;
5. be approved for issuance this 18th day of May, 2017.

CARRIED

13.3 Electoral Area F: Temporary Use Permit No. 830-2 (Darroch/Isley)

Report from Dan Passmore, Senior Planner, dated April 7, 2017.
6929 Squilax-Anglemont Road, Magna Bay

Submission(s) from neighbouring property owners and applicant attached to Late Agenda.

The applicant was not in attendance.

The Senior Planner noted submissions from the neighbouring land owners and the applicant related to issuance of the proposed Temporary Use Permit.

2017-0536

Moved By Director Morgan

Seconded By Director Talbot

THAT: In accordance with Section 493 of the Local Government Act, Temporary Use Permit No. 830-2 for Part W1/2 of the NW 1/4, Section 17, Township 23, Range 9, W6M, KDYD, Except Plan B7633 (PID: 014-009-552), for an approximately 7,500 m² portion of the subject property for outdoor boat and trailer parking for registered guests of Magna Bay Resort on the subject property from May 19, 2017 until May 19, 2020, be issued this 18th day of May, 2017

CARRIED

14. Planning Bylaws

14.1 Electoral Area E: Lakes Zoning Amendment (Remington) Bylaw No. 900-16

Report from Christine LeFloch, Development Services Assistant, dated April 28, 2017.

643 Swanbeach Road, Swansea Point

The applicant was not in attendance.

2017-0537

Moved By Director Talbot

Seconded By Director Morgan

THAT: "Lakes Zoning Amendment (Remington) Bylaw No. 900-16" be read a third time as amended this 18th day of May, 2017.

CARRIED

2017-0538

Moved By Director Talbot

Seconded By Director Morgan

THAT: "Lakes Zoning Amendment (Remington) Bylaw No. 900-16" be adopted this 18th day of May, 2017.

CARRIED

14.2 Electoral Area F: Magna Bay Zoning Amendment (Schneider) Bylaw No. 800-29

Report from Jennifer Sham, Planner, dated April 25, 2017.
6956 Casabello Road, Magna Bay

The applicant was not in attendance.

2017-0539

Moved By Director Morgan

Seconded By Director Talbot

THAT: "Magna Bay Zoning Amendment (Schneider) Bylaw No. 800-29" be read a third time this 18th of May, 2017.

CARRIED

2017-0540

Moved By Director Morgan

Seconded By Director Talbot

THAT: "Magna Bay Zoning Amendment (Schneider) Bylaw No. 800-29" be adopted this 18th of May, 2017.

CARRIED

14.3 Electoral Area C: Electoral Area 'C' Official Community Plan Amendment (Shuswap Lake Estates) Bylaw No. 725-8 and South Shuswap Zoning Amendment (Shuswap Lake Estates) Bylaw No. 701-87

Report from Dan Passmore, Senior Planner, dated April 10, 2017. Golf Course Drive, Blind Bay

The applicant was not in attendance.

2017-0541

Moved By Director Demenok

Seconded By Director Parker

THAT: "Electoral Area 'C' Official Community Plan Amendment (Shuswap Lake Estates) Bylaw No. 725-8" be read a second time this 18th day of May, 2017.

CARRIED

2017-0542

Moved By Director Demenok

Seconded By Director Parker

THAT: "South Shuswap Zoning Amendment (Shuswap Lake Estates) Bylaw No. 701-87" be read a second time this 18th day of May, 2017.

CARRIED

2017-0543

Moved By Director Demenok

Seconded By Director Parker

THAT: a public hearing to hear representations on Electoral Area 'C' Official Community Plan Amendment (Shuswap Lake Estates) Bylaw No. 725-8 and South Shuswap Zoning Amendment (Shuswap Lake Estates) Bylaw No. 701-87 be held;

AND THAT: notice of the public hearing be given by staff of the Regional District on behalf of the Board in accordance with Section 466 of the Local Government Act;

AND FURTHER THAT: the holding of the public hearing be delegated to Director Paul Demenok, as Director for Electoral Area 'C' being that in which the land concerned is located, or Alternate Director Arnie Payment, if Director Demenok is absent, and the Director or Alternate Director, as the case may be, give a report of the public hearing to the Board.

CARRIED

15. Release of In Camera Resolutions

The following resolution was released from the Closed (In Camera) meeting of May 18, 2017:

Resignation of Advisory Planning Commission Member, Electoral Area B:

"THAT: the Board accept the resignation of Chris Selvig from the Electoral Area B Advisory Planning Commission (APC);

AND FURTHER THAT: the resolution be authorized for release from the Closed (In Camera) meeting."

18. Adjournment

2017-0544

Moved By Director Cathcart

Seconded By Director Morgan

THAT: the regular Board meeting of May 18, 2017 be adjourned.

CARRIED

CHAIR

CHIEF ADMINISTRATIVE OFFICER

Spec-Team Assessment Society

Specialized Team
that responds
to those with FASD

Provides adults
suspected of having
FASD a confirmed
diagnosis

Interested in
advancing how
we all understand
and respond to
FASD

Aims to reduce the
incidence of FASD

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FX: 250.545.9226

bodonnell@shaw.ca
www.
specteamassessment.com

May 10, 2017-05-10

Board Members,
Columbia Shuswap,
Salmon Arm, BC.

Attention: Board Members

Re: presentation proposal June 15, 2017-05-10

Fetal Alcohol Spectrum Disorder (FASD) is a significant health concern we are facing in British Columbia as well as world wide. We are *Spec-Team Assessment Society*, a registered society operating out of Vernon, with mobile clinics in Kelowna and Kamloops. Together with the Asante Center in Maple Ridge, we are the only two clinics doing adult FASD assessments and diagnosis in the province.

I would like to make an informative presentation on FASD in the interior: addressing awareness, prevalence, the purpose of having an assessment and the community supports available. We will also share our mandate, vision and mission to support those touched by FASD and the research we are engaging in.

Following the presentation, we will be asking you for a "Letter of Support" that will acknowledge the need for our services in the interior. At this time, our provincial government does not fund FASD assessments which results in a fee for service that is substantial for individuals and families. A letter for support will be used as we continue to apply for grant funding that will cover assessments and support programs.

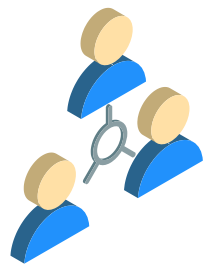
Respectfully,

Bernadette O'Donnell
Ex. Director
Spec-Team Assessment Society

ANNUAL HIGHLIGHTS REPORT

April 2016 – March 2017

2016 was the inaugural year of program implementation for the Shuswap Watershed Council (SWC). Here are the highlights of what was achieved for water quality monitoring, water quality protection, and safe recreation.

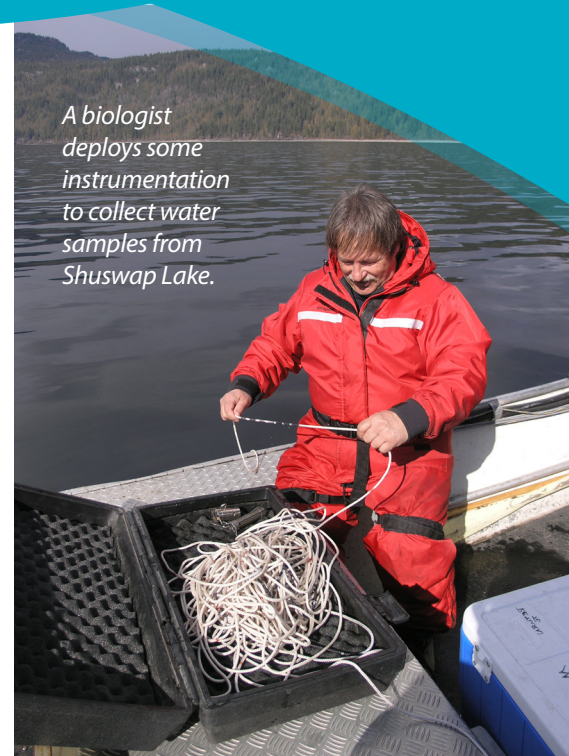


PEOPLE WORKING TOGETHER

WATER QUALITY PROGRAM

Water Monitoring Initiative

- Re-convened and expanded the Shuswap Water Quality Monitoring Group – a legacy of the Shuswap Lake Integrated Planning Process – to ensure collaborative, complete water quality monitoring across the watershed
- Tracked the activities and commitments to monitoring by other organizations
 - At least 17 different groups are involved in water quality monitoring
 - More than 500 water samples were collected and analysed



A biologist deploys some instrumentation to collect water samples from Shuswap Lake.

Water quality monitoring results are published in a separate report from the SWC. You can find it on our website.

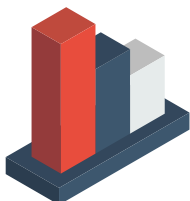
- Provided \$13,500 in support of an expanded monitoring program in the Salmon River. This was the first year of a three-year project with the BC Ministry of Environment to more intensely monitor the water quality of the Salmon River, which is vitally important to salmon and resident fish, agriculture and domestic uses, and has been the focus of many stewardship and restoration efforts.
- Developed a new monitoring project for nonylphenols, a substance of emerging concern that has not been monitored in the Shuswap. This project will be implemented in 2017.

WATER MONITORING



Nonylphenols are a group of compounds that are commonly found in industrial and consumer products such as plastics, rubber, detergents, cosmetics and shampoos, household cleaners, and latex paints. Treatment processes don't remove nonylphenols from waste water, which means that nonylphenols – along with many other substances – eventually end up in lakes and rivers. At certain concentrations, they are toxic to aquatic life.

WATER QUALITY DATA



- Developed a public user guide that explains how to access water quality data from the provincial "Environmental Management System" database – look for it on our website.

The Water Protection Advisory Committee makes recommendations to the SWC on projects related to water quality restoration, education, and partnership opportunities

Nutrients have long been of interest in the Shuswap because of their importance to lake health and productivity, and their ability to trigger an algae bloom. This is the first project of its kind in the watershed. The following research questions will be answered by the end of the three-year project:

- *Are there excess nutrients in the rivers that are not from the natural environment?*
- *If so, where are they coming from and how are they being transported into the rivers?*

Having answers to these questions will inform better nutrient management to protect our water quality.

WATER QUALITY PROGRAM

Water Protection Initiative

- Established a Water Protection Advisory Committee to support the work of the SWC



RESEARCH

- Entered into a research partnership with UBC – Okanagan and implemented the first year of a three-year \$150,000 research project to determine the sources of nutrients in the Shuswap and Salmon Rivers
 - 240 surface water samples were collected from 20 sites and tested for phosphorus and nitrogen levels
 - The monitoring also includes the collection and analysis of groundwater samples

- Provided \$10,000 to Splatins Development Corporation for restoration work they are leading on Alderson Creek, a tributary to the Shuswap River. The creek had been altered by past land use practices, and a 2 km reach was cleaned and re-configured, and restored with new vegetation and livestock exclusion fencing.

WATER QUALITY RESTORATION



EDUCATION



- Provided financial support to North Okanagan Dairy Extension Advisory Committee for a presentation to their membership on nutrient management



These photos show a cattle exclusion fence being built at Alderson Creek. Projects like these are often the result of several organizations working together. The SWC was pleased to work with Splatins First Nation, private land-owners, and BC Cattlemen's Association on this project.



SAFE BOATING EDUCATION AND EQUIPMENT

SAFE RECREATION

- Established a partnership with Royal Canadian Marine Search and Rescue (Station 106 Shuswap) to ensure complimentary and consistent safe boating education in the watershed
- Provided \$1200 to RCM-SAR for a *Kids Don't Float* lifejacket loaner station at the Salmon Arm Downtown Wharf. This has been a very successful initiative led by RCM-SAR, and the SWC is glad to be one of several community sponsors helping to bring this project to fruition.
- Purchased and distributed water safety whistles to boaters and paddlers
- Delivered safety campaigns throughout May – September 2016 focusing on lifejacket use, boating preparedness, cold water safety, and sober boating
- Created and distributed 6 tips for having fun and staying safe in the Shuswap rack card



A lifejacket loaner station was built at the Salmon Arm downtown wharf in Fall 2016, with financial support from the Shuswap Watershed Council and Knights of Columbus. This is one of several stations that RCM-SAR has built around the Shuswap.

COMMUNICATIONS AND ADVOCACY

- Created and distributed two new informative communiqués:
 - Water Protection brochure
 - *What is the Shuswap Watershed Council?* flyer
- Distributed SWC Meeting Highlights Reports to media
- Prepared the 2016 Shuswap Water Quality Report
- Attended and presented at the biennial *Watersheds 2016* conference
- Attended and presented at the North Okanagan Dairy Extension Advisory Committee's annual dairy industry seminar
- Kept an up-to-date website with meeting agendas and summaries, financial reports, and educational articles
- Corresponded with the Premier and Minister of Environment regarding measures to prevent an accidental introduction of aquatic invasive mussels
- Maintained an active presence on Facebook and Twitter
- Shared information and increased awareness of watershed issues and good stewardship within the Shuswap and beyond



The Shuswap watershed remains mussel-free. The SWC is helping to keep it that way!

ADMINISTRATION AND GOVERNANCE

- Finalized the *Terms of Reference* for the Shuswap Watershed Council, which sets out the roles, responsibilities, expectations and decision-making for Council members
- Established criteria to include community representatives in the Council membership, and welcomed three representatives in May 2016
- Held four Council meetings, once per quarter

2016-17 budget and expenses

The SWC's work is carried out thanks to contributions from the following local governments:

Contributor	Amount (\$)
Columbia Shuswap Regional District (Areas C, D, E, F and the District of Sicamous)	\$ 108,900
Thompson-Nicola Regional District	\$ 53,600
City of Salmon Arm	\$ 40,000
2016 surplus (carried forward from March 31, 2016)	\$ 56,240
Revenue for 2016-17	\$ 258,740

The SWC has managed the funds in a responsible and transparent manner. The program expenses for the year (April 1st, 2016 – March 31st, 2017) are as follows:

Activity	Budgeted (\$)	Expenses (\$)	Variance (\$)
Water Quality Program: Monitoring Initiative	57,800	37,716	20,084
Water Quality Program: Protection Initiative	72,500	75,691	- 3191
Water Quality Contingency Fund	20,000	0	20,000
Recreation Safety Education Program	9500	12,760	- 3260
Communications and Advocacy	27,500	15,587	11,913
Administration and Governance	29,000	35,672	- 6672
Operating Reserve	42,440	0	42,440
Summary of expenses for 2016-17	258,740	177,426	81,314

The SWC believes it's important to maintain a water quality contingency fund that can be drawn from in case of arising water quality issues that require additional, unforeseen monitoring.

SWC MEMBERS:

Paul Demenok – Chair
CSRD Area C

Larry Morgan – Vice Chair
CSRD Area F

Rene Talbot
CSRD Area D

Rhona Martin
CSRD Area E

Nancy Cooper
City of Salmon Arm

Ken Christian
TNRD, City of Kamloops

Rick Berrigan
TNRD, Village of Chase

Todd Kylo
District of Sicamous

Greg Witzky
*Secwepemc Nation,
Adams Lake Indian Band*

Dave Nordquist
*Secwepemc Nation,
Adams Lake Indian Band*

Herman Halvorson
RDNO Area F

Tundra Baird
RDNO, City of Enderby

Dennis Einarson
BC Ministry of Environment

Laura Code
BC Ministry of Agriculture

Lorne Hunter
Community representative

Ray Nadeau
Community representative

Randy Wood
Community representative





Reference: 228643

May 12, 2017

Chair Rhona Martin
Columbia Shuswap Regional District
jthingsted@csrd.bc.ca

Dear Chair Martin:

Thank you for your recent letter concerning possible timber harvesting and road building operations to the east of Swansea Point in the Hummingbird Creek and Mara Creek watersheds. The Ministry of Forests, Lands and Natural Resource Operations has received a number of letters from residents of the area expressing similar concerns. I am responding on behalf of the Ministry Executive and Ray Crampton, District Manager of the Okanagan Shuswap Natural Resource District.

In light of the damage caused by debris flows and flooding in 1997 and 2012, it is understandable that the community is looking for assurances that operations in the area do not represent increased risk to Swansea Point residents or their property. It is my understanding that Tolko Industries has shared their preliminary plans for harvesting and road building with many residents of the Swansea Point area. Although not required by their current Forest Stewardship Plan (FSP), Tolko elected to advise all landowners with domestic water intakes within 1000 metres of possible operations in the area. The information provided by Tolko was intended to identify the concerns of residents at the earliest possible date. These concerns will inform and complement the detailed hydrologic, engineering and terrain assessments that have yet to be carried out by Tolko.

From the correspondence received, it is apparent that some residents believe amending the proposed roads and blocks into the approved FSP constitutes approval for Tolko to proceed - this is not the case. Through their letter, Tolko is affirming their obligation that activities carried out in the area will be consistent with the procedures and commitments contained in the FSP. Before any activities can proceed, Cutting Permits and/or Road Permits must be submitted to, and approved by, the District Manager of the Okanagan Shuswap Natural Resource District. These permit applications must clearly demonstrate that they are consistent with the commitments made in the FSP.

Some parties have called for a complete moratorium on all operations upstream of Swansea Point. Taking such a step, however, would be premature before the assessments are complete and an informed decision can be made. Tolko has assured me of their commitment to continued dialogue with the residents of Swansea Point as they proceed with assessing the area. I encourage you take advantage of these opportunities. Should you require clarification on any of the points in this letter, please contact me by phone at 250 260-4609 or by email at mark.hopkins@gov.bc.ca.

Sincerely,

Mark Hopkins, RPF,
Tenures and First Nations Officer
Okanagan Shuswap Natural Resource District

pc: Office of the Minister of Forests, Lands and Natural Resource Operations
Ray Crampton, District Manager of the Okanagan Shuswap Natural Resource District
Paul Ross, Area Supervisor, Tolko Industries Ltd. (Lumby)



Reference: 228842

MAY 23 2017

Chair Rhona Martin
Columbia Shuswap Regional District
P.O. Box 978
Salmon Arm, British Columbia
V1E4P1

Distributed via email.

<input type="checkbox"/> CAO	<input checked="" type="checkbox"/> Agenda <i>June 15, 2017</i>	Ownership:
<input type="checkbox"/> Works	<input type="checkbox"/> Reg Board	File #
<input type="checkbox"/> DS	<input type="checkbox"/> In Camera	
<input type="checkbox"/> Fin/Adm	<input type="checkbox"/> Other Mtg	
MAY 23 2017		
<input type="checkbox"/> Ec Dev	RECEIVED	
<input type="checkbox"/> IT	<input type="checkbox"/> Staff to Report	Ack Sent:
<input type="checkbox"/> Parks	<input type="checkbox"/> Staff to Respond	<input type="checkbox"/> Fax
<input type="checkbox"/> SEP	<input type="checkbox"/> Staff Info Only	<input type="checkbox"/> Mail
<input type="checkbox"/> HR	<input type="checkbox"/> Dir Mailbox	<input type="checkbox"/> Email
<input type="checkbox"/> Other	<input type="checkbox"/> Dir Circulate	

Dear Chair Martin:

Your letter of May 8, 2017, requesting that Shuswap and Mara lakes be designated as application-only areas for private moorage, has been referred to me for response.

The recent amendments to the Private Moorage Policy provide regional operations of the Ministry of Forests, Lands and Natural Resource Operations with the authority to establish application-only areas (i.e. areas where general permissions will not be eligible) based on a consideration of local or regional issues.

The ministry's Thompson Okanagan Regional Operations staff are available to meet with you and your staff to discuss your request. To schedule the meeting, please contact Andy Oetter, Director of Authorizations, by phone at 250 828-4445 or by email at Andy.Oetter@gov.bc.ca. Alternatively, you may contact Mike Toews, Authorizations Manager, by phone at 250 828-4420 or by email at Michael.T.Toews@gov.bc.ca.

Thank you for writing.

Sincerely,

Gerry MacDougall
Regional Executive Director

pc: Office of the Premier of British Columbia
Andy Oetter, Director of Authorizations
Mike Toews, Authorizations Manager

Laura Schumi

From: Laura Schumi
Sent: Thursday, May 25, 2017 4:15 PM
To: Laura Schumi
Subject: FW: CSRD Board Meeting June Board Agenda Item under Correspondence Section
Attachments: Draft Letter to the Premiere as requested by EKR.DOCX;
 steve_thomson_mandate_letter.pdf

Good afternoon, Brian,

This email is to acknowledge receipt of your email and the draft letter which you had indicated you would provide to our office within 10 days. Thank you for that.

Our office will schedule the draft letter/request on our June, 2017 Board agenda for consideration by the CSRD Board. For your information, the June Board meeting is on Thursday, June 15th.

Post-meeting, we will communicate any formal resolution that was adopted by the Board.

Regards,

Lynda Shykora | Deputy Manager

Corporate Administration Services

Columbia Shuswap Regional District

T: 250.833.5939 | F: 250.832.3375 | TF: 1.888.248.2773

E: lschykora@csrd.bc.ca | W: www.csrd.bc.ca



 Please consider the environment before printing this e-mail

This e-mail is CONFIDENTIAL. If you are not the intended recipient, please notify me immediately and delete this communication, attachment or any copy. Thank you.

From: Brian Simpson [<mailto:wildfire.simpson@outlook.com>]
Sent: Wednesday, May 24, 2017 4:23 PM
To: Director Martin <RMartin@csrd.bc.ca>
Cc: Lynda Shykora <LShykora@csrd.bc.ca>; JOHN DOOLEY <jadooley@shaw.ca>; kenk@kalesnikoff.com;
aladyman@stella-jones.com; dan.battistella@ilma.com; mike@rcfc.bc.ca; Brian Simpson
 <wildfire.simpson@outlook.com>
Subject: CSRD Board Meeting Follow Up

Thank you for providing our ILMA delegation the opportunity to make presentation to the Board at last weeks meeting. I committed to sending you the draft letter produced for the EKR.D Board, that requests the Premier to put a specific objective in the new Forest Ministers mandate letter once that person has been named. I have enclosed this draft for your consideration. I am also including a copy of Minister Thomson's mandate letter from last year for easy reference. As we discussed at our meeting we believe getting this top down direction is one very important measure that can be taken to ensure real tangible change is seen in support of the Specialty, Value Added and Independent manufacturers in our province. To date 3 out of 4 Regional District Boards have made a motion to consider taking this step, with one more yet to see our recent presentation.

On behalf of the ILMA, we can't express our thanks enough for the CSRD Board ongoing support. It has been extremely important and will no doubt be instrumental in helping to address some of the concerns we have and to keep our member mills as a main economic driver in our communities for many years to come. Please let me know if there are any question around this or anything else we can help provide.

Brian Simpson Wildfire Management Services (1041469 BC Ltd.)

"Positive Results One Drip Torch At A Time"

wildfire.simpson@outlook.com

Phone: 250-304-5961

Draft Letter to the Premiere as requested by EKRD

Madame Premier:

We are writing to express our continued support for the independent, specialty, value-added manufacturing sector in our forest industry and specifically the local mills that belong to the Interior Lumber Manufacturers' Association (ILMA).

The East Kootenay Regional District Board on July 8, 2016 adopted the following resolution in support of the ILMA and specialty, value-added manufacturing in our province.

"That the Board supports the Interior Lumber Manufacturers' Association request for the provincial government to take action immediately to encourage and incent the distribution of existing provincial timber supply to optimize the "Right Log to the Right Mill" ensuring maximum opportunity for economic growth and the creation of jobs."

In view of the increasing need to support the growth of this sector, especially given shrinking annual allowable cuts and industry consolidation, resulting in mill closures and the ongoing loss of jobs for rural BC, there is an urgent need for direct involvement on this issue. To ensure it receives the priority it deserves in the coming year, we ask that a **specific objective** be included in the upcoming Minister of Forests, Lands and Natural Resources Operations Mandate letter. We offer the following statement to be considered for this purpose.

"Promote diversity, sustainability and resilience in our forest sector by implementing explicit measures to increase specialty, value-added and independent wood manufacturing in our province, and ensuring at the same time the principle of the "Right Log to the Right Mill" is being optimized".

The forest sector is essential to the economic well being of our communities. Maximizing the level of manufacturing on every log that comes from our forests is the only way we can realize the full can be realized for our rural communities and the people of BC.

With the reality of a shrinking fibre basket, increasing environmental concerns and the over-lying shadow of the Softwood Lumber implications, we ask that you consider taking a direct role in this matter. Providing this direction to the new Minister will ensure the growth of this sector is given the priority it requires across the province.

Sincerely

Chair, Regional District Board



July 30, 2015

Honourable Steve Thomson
Minister of Forests, Lands and Natural Resource Operations
Parliament Buildings
Victoria, British Columbia
V8V 1X4

Dear Minister:

On behalf of the people of British Columbia, I would like to thank you for the contributions made by you and your ministry over the past 12 months to make our province stronger.

You have been part of a government that has continued to deliver on the promises we made in our election platform, Strong Economy, Secure Tomorrow during the past 24 months. Balancing the budget for a third time, having our triple A credit rating confirmed and re-confirmed as stable by Moody's Investors Service, and continuing to support the growth of a diverse economy are all accomplishments of which we collectively and you individually can be rightly proud.

I am very pleased to note that you and each of your colleagues were again able to live within your voted legislative budgets. The people of our province elect us to work on their behalf—to control spending.

Living within our means is demonstrating our respect for the people of our province and the tax dollars they send to Victoria. By keeping government lean and reducing the cost of administration, we can make significant investments in people and the infrastructure on which they depend to succeed in a strong and growing economy.

As a result of our strong fiscal position, we have been able to provide new assistance to single parents as they return to the workforce, greater income exemptions for single parents on income assistance and continued record investments in funding for public health care, education and transportation—services on which families depend.

Our government is resolute in our desire to grow the economy as a way to enable more British Columbians to participate in the economy and obtain meaningful, family-supporting work. The work your ministry does each and every day to contribute to these efforts are noticed and valued.

In particular, I would like to congratulate you and your ministry for:

- Keeping our commitment to transferring the proceeds generated from freshwater fisheries licences to the Freshwater Fisheries Society of BC
- Completion of phases 1 and 2 of the BC Timber sales review and meeting your target for timber sales in 2014/15
- Working with First Nations and the Nature Conservancy to protect the archaeological values of Grace Islet near Saltspring Island

As you know, the annual mandate letter you receive is designed to be an ongoing workplan for your ministry that is updated on an annual basis. You will undoubtedly notice some changes since last June.

Your mandate for the following year is as follows:

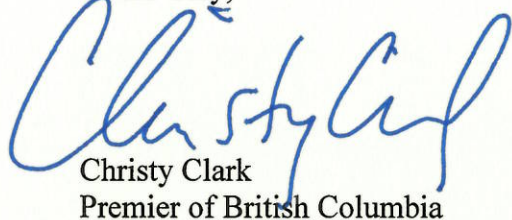
1. Balance your ministerial budget in order to control spending and ensure an overall balanced budget for the province of British Columbia.
2. Lead the Softwood Lumber Agreement discussions with the federal government and ensure that the federal government position is consistent with that of the province.
3. Continue to implement the recommendations of the BC Timber Sales Effectiveness review and report to Cabinet the status of timber sales in the province by December 31, 2015.
4. Continue to work with the Ministry of Community, Sport and Cultural Development to prepare for and minimize the impact of timber supply reductions caused by the mountain pine beetle.
5. Co-sponsor with the forest industry annual BC trade missions to China, India, Japan and Korea to continue to diversify BC lumber exports.
6. Finalize and implement the Great Bear Rainforest ecosystem-based management agreement.
7. Examine ways to enhance the security of fibre supply for secondary and non-lumber users of lower quality and residual fibre and bring forward options that can be introduced in the Spring 2016 Legislative Session.
8. Work with the forest industry on a new Forest Sector Competitiveness Strategy to maintain and enhance the industry, protect jobs and forest dependent communities and extract maximum value from our forest resource.

9. Work with the Ministry of International Trade and Ministry Responsible for the Asia Pacific Strategy and Multiculturalism to recognize significant Chinese Canadian Historic Places under the Heritage Conservation Act.
10. Undertake a review of registry services and permits issued by the Ministry and identify which permits can be administered online to reduce the time between application and issuance of the permit.
11. Work with Parliamentary Secretary Donna Barnett and her Rural Advisory Council to provide advice to government on ways to improve rural economic development, access to capital and the rural dividend.
12. Review the recent Auditor General report on Cumulative Effects assessment and make recommendations to Cabinet on ways to improve application of the framework while undertaking integrated management decisions.
13. Working with the Ministry of Environment, undertake an analysis of the impact of lower snowpacks and retreating glaciers on the forests of British Columbia and make recommendations to cabinet on strategies to protect our forests from any impacts of climate change.

In addition, as discussed and approved by Cabinet, our government is committed to ensuring British Columbia government services are easily accessed by our citizens and businesses. Minister Coralee Oakes will be leading this initiative on my behalf and over the following 12 months she will be reaching out to all ministries to assist in reducing unnecessary red tape and regulation.

It is hard to believe but it has been two years since the people of British Columbia put their faith in us to lead their province. We have accomplished much in those two years, but much work remains to deliver the promise of a strong economy and secure tomorrow for our citizens. I look forward to working with you over the coming year.

Yours truly,



Christy Clark
Premier of British Columbia



May 17, 2017

Chair Rhona Martin
Columbia Shuswap Regional District
Box 978
Salmon Arm BC V1E 4P1

Dear Chair Martin:

Re: 2016 Resolutions

Please find attached the provincial response to the 2016 resolution(s) put forward by your Board and endorsed by the UBCM membership at Convention.

I trust this information will be of assistance to you. Please feel free to contact Reiko Tagami, UBCM Information & Resolutions Coordinator, with any questions.

Tel: 604.270.8226 ext. 115 Email: rtagami@ubcm.ca

Sincerely,


Councillor Murry Krause
President

Enclosure

<i>Correspondence</i>		
<input type="checkbox"/> CAO <input type="checkbox"/> Works <input type="checkbox"/> DS <input checked="" type="checkbox"/> Fin/Adm	<input checked="" type="checkbox"/> Agenda <i>June</i> <input type="checkbox"/> Reg Board <input type="checkbox"/> In Camera <i>2017</i> <input type="checkbox"/> Other Mtg	Ownership: File#
<i>25</i> MAY 25 2017		
<input type="checkbox"/> Ec Dev <input type="checkbox"/> IT <input type="checkbox"/> Parks <input type="checkbox"/> SEP <input type="checkbox"/> HR <input type="checkbox"/> Other	RECEIVED <input type="checkbox"/> Staff to Report <input type="checkbox"/> Staff to Respond <input type="checkbox"/> Staff Info Only <input type="checkbox"/> Dir Mailbox <input checked="" type="checkbox"/> Dir Circulate	Ack Sent: <input type="checkbox"/> Fax <input type="checkbox"/> Mail <input type="checkbox"/> Email

*Chair Martin
Via email,
please.
Thank you.
LAShekora*

2016 B17 Sustained Funding for First Responder Agencies**Columbia Shuswap RD**

Whereas first responders are essential in providing emergency medical services;

And whereas an assured source of funding is currently not provided to first responder agencies throughout the province:

Therefore be it resolved that the provincial government be requested to immediately provide budget funds that provide a sustainable, continued source of funding to first responder agencies throughout the province.

Convention Decision: **Endorsed**

Provincial Response

Ministry of Health

First responder services are an important element of pre-hospital care in British Columbia, and the partnership between BC Emergency Health Services (BCEHS), fire departments and other agencies in responding to emergency events is essential.

The Ministry of Health appreciates your ongoing concern for fiscal accountability, as local governments continue to determine how to best allocate their funding and resources for responding to urgent and routine calls. Some municipalities have chosen to have first responders continue to attend both urgent and routine (non-emergency) calls, but others have elected to have first responders attend only those urgent calls where a patient's condition will benefit from initial care.

BCEHS reviews the provision of pre-hospital care to evaluate responses to 911 calls and to determine activities to improve patient care, and to optimize responses and the allocation of resources.

In February 2016, BCEHS released a demand and deployment study on ground resources in the Lower Mainland and Greater Victoria, and an accompanying action plan. The review analyzed over 350,000 incidents in 2014 (including 86,000 in Metro Vancouver, where first responders were dispatched to assist BCEHS paramedics). First responders from 21 municipalities in the Lower Mainland have been working with BCEHS, and provided their own data to assist in the review.

This data will be beneficial as BCEHS analyzes the entire continuum of emergency care, including the role of first responders in responding to medical emergencies. BCEHS has established a working group with 21 Lower Mainland municipalities and their fire departments, to develop effective and collaborative ways to enhance patient care.

Any changes to the BCEHS deployment model based on evidence from the resource review will help reduce first responders' wait time on scene, and the number of times first responders arrive on scene prior to BCEHS.

BCEHS will continue to consult with local governments and first responders throughout the province about the action plan. BCEHS is committed to providing timely, high quality and safe pre-hospital care for patients throughout BC, while using public resources in an effective and efficient manner.

2016 B36 Community Economic Development Investment Fund**Columbia Shuswap RD**

Whereas it is recognized that there is a pressing need to stimulate rural economic development in British Columbia;

And whereas mechanisms that allow rural regions to capture and reinvest some portion of regional economic activity has been identified as a best practice in rural economic revitalization;

And whereas the Community Economic Development Investment Fund (CEDIF) in Nova Scotia and other jurisdictions has proven to be an effective and efficient means to generate investment capital to support small business expansion and creation in rural areas:

Therefore be it resolved that the Ministry of Finance for British Columbia initiate a CEDIF program for BC that would offer British Columbians a tax credit of 35% or more for investing in locally owned and operated corporations, cooperatives and other community economic development initiatives.

Convention Decision: Endorsed

Provincial Response

Ministry of Finance

The British Columbia Government is committed to maintaining a competitive tax structure for all businesses, including those in rural regions.

BC already offers a small business venture capital tax credit, which supports investments in small businesses across the Province. The tax credit is worth 30 percent of eligible investments. A portion of this tax credit budget is reserved for corporations whose business activities promote community diversification in a region outside Greater Vancouver or the Capital Regional District.

BC also supports economic development by providing one of North America's most competitive business climates. The general corporate income tax rate has been cut by almost 35 percent since 2001 and is now the lowest in Canada. BC's combined federal-provincial rate is among the lowest in G7 countries. Moreover, Government has increased the small business corporate income tax threshold to \$500,000 and cut the small business corporate income tax rate 44 percent from 4.5 percent to 2.5 percent—one of the lowest rates in the country. BC businesses do not pay provincial capital tax or payroll taxes.

2016 B38 BC Hydro Remote Community Electrification Program**Columbia Shuswap RD**

Whereas the Province of BC made the decision to discontinue the BC Hydro Remote Community Extension Program;

And whereas numerous remote and rural communities in British Columbia continue to remain off-grid without electrical power;

And whereas the lack of electrification:

- prevents investment in projects that would foster sustainable economic development creating employment opportunities that would assist families resulting in a stronger community; and
- precludes these remote and rural communities, represented by local governments, to add to, enhance, or adequately improve safe drinking water and sewage disposal systems in accordance with the Province's legislation:

Therefore be it resolved that the minister responsible for BC Hydro take immediate steps to reinstate and adequately fund the BC Hydro Remote Community Electrification program to sustain the economic and social well-being of remote and rural communities throughout BC.

Convention Decision: Endorsed

Provincial Response

Ministry of Energy and Mines

Since 2006, the Province has provided approximately \$11 million in funding towards remote community energy efficiency and clean energy projects through the Remote Community Implementation Program administered by Fraser Basin Council.

In 2013, the Remote Community Electrification (RCE) Program was discontinued as a result of BC Hydro's budget review and the lack of federal funding available to support RCE projects.

British Columbia is a member of the Pan-Canadian Task Force on Reducing Diesel in Remote Communities as part of the Council of the Federation's Canadian Energy Strategy. Currently, the Task Force is preparing a Joint Report to identify opportunities and recommend solutions to reduce or eliminate diesel reliance in remote communities.

In addition, the Ministry of Energy and Mines' Community Energy Leadership Program also provides funding to energy efficiency and clean energy projects in communities across B.C., including remote communities.



Resolutions Procedures

The main forum for UBCM policy-making is the annual resolutions cycle. It provides an opportunity for local governments of all sizes and from all areas of the province to express concerns, share their experiences and take a united position.

Submitting Resolutions

Members are urged to submit resolutions first to Area Associations for consideration. Resolutions endorsed at Area Association annual meetings are submitted automatically to UBCM for consideration and do not need to be re-submitted to UBCM by the sponsor.

Please contact your Area Association for resolution submission procedures at the regional level.

Both UBCM and its member local governments have observed that submitting resolutions first to Area Associations results in better quality resolutions overall. If absolutely necessary, however, local governments may submit council- or board-endorsed resolutions directly to UBCM **prior to June 30, each year.**

Details on submission of resolutions, including late resolutions, are included in the Procedures for Submitting Resolutions linked below.

Procedures for Submitting Resolutions to UBCM [PDF - 241 KB]

Drafting Resolutions

Staff and elected officials are strongly encouraged to follow the writing guidelines set out by UBCM. A clear, concise resolution is easier to understand, and this increases the likelihood that the membership will grant it their endorsement. Further, clear resolutions will prompt more direct responses from the provincial or federal government, or relevant organization.

Writing Guidelines for Resolutions [PDF - 239 KB]

Use the sample resolution [PDF - 220 KB] for formatting guidelines.

For more extensive examples of quality resolutions, refer to the criteria and past winners of the Gold Star Awards for Resolutions.

Organization of Resolutions

Following the June 30 deadline, the Resolutions Committee meets to review, organize and make recommendations on all resolutions. Resolutions are organized in three sections, described below.

Section A resolutions address priority issues relevant to all local governments.

Section B is divided into three parts:

Part 1: Resolutions that support established UBCM policy

Part 2: Resolutions on new issues or issues considered previously but not endorsed, within the jurisdiction of local government

Part 3: Resolutions on new issues or issues considered previously but not endorsed, outside the jurisdiction of local government

Section C contains resolutions that are referred to similar resolutions in the Resolutions Book; to policy papers, reports, or special sessions at Convention; or to Area Associations.

Order of Consideration

Section A and B resolutions are introduced for debate in the order in which they appear in the Resolutions Book.

Selected Section B resolutions are considered as a block. Any voting delegate may withdraw a resolution from a block to speak in opposition or propose an amendment.

Section C resolutions are not admitted for debate.

Analysis of late resolutions—those received after June 30—is undertaken in the Resolutions Committee's "Report on Resolutions Received After the Deadline." This report may be considered after Section A has been debated, but not before the time printed in the Convention program. Historically, this report has been presented to the membership on the last day of Convention, at the beginning of the final policy session.

For detailed information on the consideration of resolutions, see [Handling of Resolutions at Convention \[PDF - 242 KB\]](#).

Contact

For any questions or concerns about the resolutions process please contact:

Reiko Tagami
Information & Resolutions Coordinator
rtagami@ubcm.ca
604-270-8226 ext. 115

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- Twitter: @ubcm

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COLUMBIA SHUSWAP REGIONAL DISTRICT

Minutes of a Directors' Remuneration Review Committee meeting held May 23, 2017
in the Board Room of the Regional District Office, Salmon Arm, BC

Note: The following minutes are subject to correction
when endorsed by the Committee at the next Committee meeting.

PRESENT

Chair:	R. Martin	Electoral Area 'E'
Directors	C. Moss	Town of Golden (Attended by teleconference)
	K. Flynn	City of Salmon Arm
	P. Demenok	Electoral Area 'C'
Staff:	J. Pierce	Manager, Financial Services
	C. Kraft	Deputy Treasurer, Financial Services

CALL TO ORDER

Chair Martin called the meeting to order at 9:34 AM.

BUSINESS GENERAL

The Committee was struck after the January 2017 Board meeting where the Board voted against the staff recommendation for changes to the remuneration bylaw based on the independent review by Sainas Consult Inc. and also voted against changes taking Director comments into consideration in conjunction with the review report.

In preparation for this meeting, staff compiled background materials for all Committee members which included emails from other Regional Districts, remuneration bylaws from same, a summary of findings and the original independent report and staff report from the January meeting.

At the outset of the meeting, Director Demenok presented a proposal that he compiled for discussion by the Committee. Each Director on the Committee then summarized their thoughts on the process to date.

Discussion followed on the information provided by staff; on the processes and reports to date; on Director Demenok's submission; and on various considerations within a remuneration bylaw.

There was no overall consensus reached, however, the following issues have received some preliminary agreement:

- There should be key guiding principles identified within the remuneration bylaw including, but not limited to, fiscal responsibility and fair compensation levels;
- Municipal Directors should be paid less than Electoral Area Directors; and
- There should be an additional stipend for the Vice-Chair position.

Staff was asked to determine the estimated cost of Director Demenok's proposed compensation structure for consideration by the Committee. Another Committee meeting will then be scheduled to discuss the outcome of this calculation, and to determine next steps.

ADJOURNMENT

There being no further business, the meeting adjourned at 12:00 p.m.

CERTIFIED CORRECT

CHAIR

CHIEF ADMINISTRATIVE OFFICER



BOARD REPORT

TO:
Chair and Directors
File No: 1880 01

SUBJECT:

2016 Statement of Financial Information (SOFI) Report

DESCRIPTION:

Report from Jodi Pierce, Manager, Financial Services, dated June 1, 2017 seeking Board approval of the 2016 Statement of Financial Information Report.

**RECOMMENDATION
#1:**

THAT:

The Board approve the 2016 Statement of Financial Information Report as required by the Financial Information Regulation, Schedule 1, subsection 9(2) and section 376 subsection (1) of the Local Government Act.

SHORT SUMMARY:

The 2016 Statement of Financial Information (SOFI), prepared in accordance with the Financial Information Act and the Financial Information Regulation is attached.

VOTING:	Unweighted Corporate	<input checked="" type="checkbox"/>	LGA Part 14 (Unweighted)	<input type="checkbox"/>	Weighted Corporate	<input type="checkbox"/>	Stakeholder (Weighted)	<input type="checkbox"/>
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BACKGROUND:

Every year, all local governments must prepare and submit a SOFI report to the Ministry of Community, Sport and Cultural Development by June 30. This report includes a Schedule of Board and Employee Remuneration, as well as a Schedule of Payments for the Provision of Goods and Services in accordance with the Financial Information Act. These Schedules must be approved by the Financial Officer and the Board prior to the deadline.

POLICY:

The SOFI Report must be prepared as required by the Local Government Act and the Financial Information Act.

IMPLEMENTATION:

The Report and related attachments will be sent to the Ministry of Community, Sport and Cultural Development upon Board Approval.

COMMUNICATIONS:

The SOFI documents will be available to the public via the CSRD website or at the front counter of the CSRD office.

DESIRED OUTCOMES:

The Board approve the attached SOFI document.

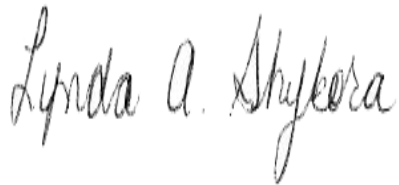
BOARD'S OPTIONS:

1. *Endorse the Recommendation.*
2. *Any other action deemed appropriate by the Board.*

Report Approval Details

Document Title:	2017_06_15_Board_FIN_SOFI.docx
Attachments:	
Final Approval Date:	Jun 5, 2017

This report and all of its attachments were approved and signed as outlined below:



Lynda Shykora - Jun 2, 2017 - 12:54 PM



Charles Hamilton - Jun 5, 2017 - 10:00 AM

Columbia Shuswap Regional District**SCHEDULE OF REMUNERATION AND EXPENSES - 2016**

<u>NAME</u>	<u>POSITION</u>	<u>REMUNERATION</u> (Inclusive of Taxable Benefits)	<u>EXPENSES PAID TO AND ON BEHALF OF:</u>
1: ELECTED OFFICIALS			
CANTLE, Michael	Alternate Director, Area A	\$ -	\$ 18
CATHCART, Karen	Director, Area A	20,890	8,575
COOPER, Nancy	Director, City of Salmon Arm	13,968	387
DE VOS, Joy	Alternate Director, Area D	579	86
DEMENOK, Paul	Director, Area C	25,184	12,866
ELIASON, Chad	Director, City of Salmon Arm	13,399	370
FLYNN, Kevin	Alternate Director, City of Salmon Arm	386	75
KNAAK, Stephanie	Alternate Director, Electoral Area A	464	1,009
LAVERY, Tim	Alternate Director, City of Salmon Arm	833	159
MAKAYEV, Malcolm	Alternate Director, District of Sicamous	254	32
MARTIN, Rhona	Chair, Area E	52,548	18,356
MCKEE, Mark	Director, City of Revelstoke	13,831	1,672
MORGAN, Larry	Director, Area F	24,941	12,409
MOSS, Caleb	Director, Town of Golden	13,874	3,200
NIXON, Linda	Alternate Director, City of Revelstoke	643	281
OSZUST, Ron	Alternate Director, Town of Golden	813	1,163
PARKER, Lori	Director, Area B	24,046	10,744
PAYMENT, Arnie	Alternate Director, Area C	193	29
RYSZ, Terry	Director, District of Sicamous	14,497	1,228
STUART, Doug	Alternate Director, Area B	645	444
TALBOT, Rene	Director, Area D	27,288	11,864
TOTAL - ELECTED OFFICIALS		\$ 249,275	\$ 84,969
2: EMPLOYEES EARNING MORE THAN \$75,000			
ABBOTT, Susan	Community Parks and Recreation Planner	\$ 75,773	2,521
BERGER, Sharen	Team Leader, Development Services	97,474	\$ 535
CHRISTIE, Gerald	Manager, Development Services	118,524	3,847
COUBROUGH, Sean	Assistant Regional Fire Chief	76,161	1,316
CYR, Robyn	Manager, Shuswap Tourism/Economic Development Officer	86,245	13,810
DODD, Dennis	Utilities Coordinator	77,774	3,790
HAMILTON, Charles	Chief Administrative Officer	180,674	8,509
KASSA, Hamish	Environmental Services Coordinator	90,031	9,162
KRAFT, Chelsea	Deputy Treasurer	94,864	1,205
LANGLOIS, Terry	Team Leader, Utilities	94,235	1,899
MOONEY, Darcy	Manager, Operations Management	124,288	2,219
MOUNT, Kenn	Regional Fire Chief	100,186	3,220
NITCHIE, Ryan	Team Leader, Community Services	83,738	4,911
PAYNE, Brad	Manager, IT/GIS Services	87,297	2,509
PIERCE, Jodi	Manager, Financial Services	122,076	3,595
SHYKORA, Lynda	Deputy Manager, Corporate Administration Services	89,461	3,268
VAN NOSTRAND, Ben	Team Leader, Environmental Health Services	91,757	5,232
TOTAL - SPECIFIED EMPLOYEES		\$ 1,690,559	\$ 71,548
CONSOLIDATED TOTAL of all Other Employees (i.e. earning less than \$75,000)		\$ 2,022,563	\$ 56,802
TOTAL - EMPLOYEES		\$ 3,713,122	\$ 128,350

Columbia Shuswap Regional District

3:

RECONCILIATION OF REMUNERATION AND EXPENSES FOR THE YEAR 2016

Total Remuneration - Elected Officials	\$ 249,275
Total Remuneration - Other Employees	<u>3,713,122</u>
SUBTOTAL:	3,962,397
RECONCILING ITEMS	
Non taxable benefits, employer portion of statutory deductions and accruals	830,510
TOTAL PER CONSOLIDATED STATEMENT OF FINANCIAL ACTIVITIES - EXPENDITURES (Note 13)*	<u><u>\$ 4,792,907</u></u>

*Note 13: Expenditures by Object - part of Salaries, Wages and Benefits / Travel

Columbia Shuswap Regional District

RECONCILIATION OF THE SCHEDULES FOR THE PROVISION OF GOODS & SERVICES FOR THE YEAR 2016

Schedules A & B

Total of aggregate payments exceeding \$25,000 paid to suppliers	\$ 11,826,831
Consolidated total of payments of \$25,000 or less paid to suppliers	3,133,831
Consolidated total of grants and contributions exceeding \$25,000	3,977,987
Consolidated total of grants and contributions less than \$25,000	370,661
TOTAL:	\$ 19,309,309

RECONCILIATION NOTE: The operational statement presented in accordance with Financial Information Regulation, Schedule 1, section 3 (1)(a) has been prepared in accordance with generally accepted accounting principles for British Columbia local governments, and expenditures have been accounted for in the period the goods and services are acquired and liability received. The schedule of payments for the Provision of Goods and Services indicates payments made in the year 2014 and therefore cannot be reconciled with the statement required in section 3.

Prepared under the Financial Information Regulation, Schedule 1, section 7 and the *Financial Information Act*, section 2.

Columbia Shuswap Regional District

**SCHEDULE OF PAYMENTS FOR THE PROVISION OF
GOODS AND SERVICES - 2016**

SCHEDULE - A :

AMOUNTS EXCEEDING \$25,000

0958579 BC LTD	\$ 32,834
A&B CONTRACTING (620241 BC LTD.)	278,490
ABSOLUTELY HAMMERED	102,548
ASSOCIATED FIRE AND SAFETY	110,580
BC HYDRO	305,388
BELL MEDIA RADIO GP	44,972
BILL'S BOTTLE DEPOT LTD.	99,180
BLACK PRESS GROUP	46,483
BOSA ROOFING	28,980
BRABY MOTORS LTD	34,683
BRUCE LANDSCAPING AND EXCAVATING	68,860
BWP CONSULTING INC	86,138
C MUNK MANAGEMENT	168,359
CANSEL SURVEY EQUIPMENT INC.	38,851
CDW CANADA INC.	34,406
CEDARDALE ENTERPRISES LTD.	51,153
CITY OF SALMON ARM	29,819
CITY OF SURREY	58,212
CITYVIEW (A DIVISION OF N HARRIS)	28,109
CLEANSITE MANAGEMENT	167,664
COMPLETE CLIMATE CONTROL INC.	86,152
CONTAINERWEST MANUFACTURING LTD.	35,319
CUMMING CONSTRUCTION LTD.	98,096
CUPE LOCAL 1908	40,338
D. PUKAS EXCAVATING LTD.	96,189
DICK, LUCKY	30,100
E. LEES & ASSOCIATES CONSULTING LTD.	61,731
EMCO CORPORATION	56,052
ESRI CANADA LTD.	64,622
EVERGREEN BUILDING MAINTENANCE	25,263
EXECUTIVE FLIGHT CENTRE	174,903
FIREWORKS CONSULTING INC.	25,961
FLYING W TRAIL RIDES LTD.	44,289
FULTON & COMPANY LLP	43,430
GENTECH ENGINEERING INC	232,348
GOLDEN BOTTLE DEPOT	26,743
GOOD NATURE HOLDINGS	34,967
GREENSTEP SOLUTIONS INC.	90,409
GROUPE INTERSOL GROUP: BRIN SHARP INC.	27,629
GUILLEVIN INTERNATIONAL CO	53,543
HALTON RECYCLING LTD. DBA EMTERRA ENVIRONMENTAL	55,995
HIGH IMPACT SIGNS & DESIGNS	28,275
HILLSON R. CRAIG	277,747
HUB FIRE ENGINES AND EQUIPMENT LTD.	738,755
INSURANCE CORPORATION OF BC	62,644
INTERCITY RECYCLE LTD.	68,876
INTERIOR UTILITY MANAGEMENT	373,320
JACOBSEN FORD SALES LTD.	26,383
K-9 CONTROL SERVICES	36,271
KAZWELL BUILDING & RENOVATIONS INC.	41,608
KIRKWOOD ELEVATORS LTD.	35,404
KYLE DEARING CONSULTING	53,432
LEKO PRE-CAST LTD.	54,537
LIDSTONE & COMPANY	72,893
MEARL'S MACHINE WORKS LTD.	102,756
MIERAU CONTRACTORS LTD	51,354
MINISTER OF FINANCE	86,160
MITCHELL PRESS LIMITED	28,113
MORROW BIOSCIENCE LTD.	110,216
MOUNCE CONSTRUCTION LTD.	361,795
MOUNTAIN VIEW ELECTRIC LTD.	34,455
MUNICIPAL INSURANCE ASSOC. OF B.C.	219,759
OPUS INTERNATIONAL CONSULTANTS (CANADA)	42,185
PACIFIC BLUE CROSS	232,182

Columbia Shuswap Regional District

**SCHEDULE OF PAYMENTS FOR THE PROVISION OF
GOODS AND SERVICES - 2016**

SCHEDULE - A :

AMOUNTS EXCEEDING \$25,000

PACIFIC MATTRESS RECYCLING INC.	52,602
PENSION CORPORATION	639,009
PHOENIX BENEFITS SOLUTIONS	36,260
PRESTIGE HARBOURFRONT RESORT	26,798
R. CRAIG HILLSON LTD.	163,459
R. LAWRENCE DESIGN INC.	47,712
R.B.W. FORESTRY & LANDSCAPE CO	105,876
RAMTECH ENVIRONMENTAL PRODUCTS	49,803
RCAP LEASING	36,825
REACH MARKETING CONSULTING	53,858
READING, DEBBIE	26,097
READING, GARY	135,111
RECEIVER GENERAL OF CANADA	1,087,196
RECYCLING SOLUTIONS	94,767
REGIONAL DISTRICT OF CENTRAL OKANAGAN	83,642
REVELSTOKE BOTTLE DEPOT	57,960
REVELSTOKE ENVIRONMENTAL SOLUTIONS LP	54,437
RICOH CANADA INC.	82,035
ROCKY MOUNTAIN PHOENIX	27,550
S.O.S. (SEWERAGE ON SITE) & EXCAVATING	27,276
SALMON ARM SECURITY	42,659
SCV CONTRACTORS	741,864
SHUSWAP BIRD OF PREY	58,564
SHUSWAP COUNTRY BUILDERS LTD.	44,699
SHUSWAP HUT & TRAIL ALLIANCE SOCIETY	140,540
SIVAN ENTERPRISES	94,755
SPA HILLS FARM INC.	32,330
STORY & CO.	63,978
STRAIN FRANK	367,596
SUPPLIED AIR SYSTEMS INC.	34,624
SWING TIME DISTRIBUTORS	31,567
T.A. RENDEK & ASSOCIATES LTD.	58,888
TELUS COMMUNICATIONS (BC) INC.	83,660
TELUS MOBILITY (BC)	35,741
TOTAL OFFICE SUPPLY LTD.	25,562
TRUEFORM CONTRACTING	27,937
TURN-KEY CONTROLS	90,964
VADIM COMPUTER MANAGEMENT GROUP	39,164
VELLA RADIOLINKS LTD.	51,913
WADE TECHNOLOGIES	61,747
WEIGH-TRONIX CANADA ULC	43,289
WESTERN WATER ASSOCIATES LTD.	201,547
WOLSELEY CANADA INC.	32,732
WORKERS' COMPENSATION BOARD OF B.C.	90,995
WOZAIR LEASING LTD.	82,336
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SUB-TOTAL: **\$ 11,826,831**

ALL SUPPLIERS WITH AMOUNTS LESS THAN \$25,000 **3,133,831**

TOTAL PAYMENTS TO SUPPLIERS FOR THE PROVISION OF **\$ 14,960,662**

Columbia Shuswap Regional District

SCHEDULE OF PAYMENTS FOR THE PROVISION OF GOODS AND SERVICES - 2016

SCHEDULE - B :

GRANTS AND CONTRIBUTIONS

EXCEEDING \$25,000

CITY OF REVELSTOKE	\$ 550,448
CITY OF SALMON ARM	210,034
COLUMBIA ELECTORAL AREA A TV REBROADCASTING	65,000
COLUMBIA SHUSWAP INVASIVE SPECIES SOCIETY	60,000
DISTRICT OF SICAMOUS	242,838
FRASER BASIN COUNCIL	115,900
GOLDEN & DISTRICT HIST. SOC.	55,500
GOLDEN COMMUNITY SOCIAL SERVICES CO-OP	30,000
GOLDEN CYCLING CLUB	25,000
LAKEVIEW COMMUNITY CENTRE SOCIETY	30,000
MALAKWA COMMUNITY LEARNING CENTRE	50,000
NORTH SHUSWAP FIRST RESPONDER SOCIETY	27,000
OKANAGAN REGIONAL LIBRARY	1,142,555
REVELSTOKE NORDIC SKI CLUB	100,500
SHUSWAP LIFEBOAT SOCIETY	25,000
SHUSWAP HUT & TRAIL ALLIANCE SOCIETY	40,500
SHUSWAP VOLUNTEER SEARCH & RESCUE	80,000
SICAMOUS & DIST. REC. CENTRE	320,000
SOUTH SHUSWAP CHAMBER OF COMMERCE	38,895
SOUTH SHUSWAP FIRST RESPONDERS ASSOCIATION	69,873
STERILE INSECT RELEASE PROGRAM	66,744
TOWN OF GOLDEN	632,200
SUB-TOTAL:	\$ 3,977,987
CONSOLIDATED TOTAL OF GRANTS & CONTRIBUTIONS	370,661
LESS THAN \$25,000	
TOTAL GRANTS & CONTRIBUTIONS PAID IN 2016	\$ 4,348,647

Prepared under the Financial Information Regulations, Schedule 1, section 7 and the
Financial Information Act, section 2.



BOARD REPORT

TO: Chair and Directors **File No:** 0585 01

SUBJECT: Columbia Shuswap Film Commission Contract

DESCRIPTION: Report from Robyn Cyr, Economic Development Officer (EDO), dated May 5, 2017.

RECOMMENDATION #1: THAT: The Board empower the authorized signatories to enter into a sole source contract with David Barritt to implement projects as outlined in the 2017 work plan for the Columbia Shuswap Regional Film Commission.

SHORT SUMMARY:

The purpose of this request is for the CSR D Board to approve that the sole source contract be awarded to David Barritt to implement projects for the Columbia Shuswap Film Commission (CSFC). Due to the specialized skills required to implement the CSFC film commission work, staff will not be issuing a Request for Proposal in relation to this project.

VOTING:	Unweighted Corporate <input type="checkbox"/>	LGA Part 14 (Unweighted) <input type="checkbox"/>	Weighted Corporate <input type="checkbox"/>	Stakeholder (Weighted) <input checked="" type="checkbox"/>
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BACKGROUND:

The mandate of the Columbia Shuswap Film Commission is to promote film and television production activity, in collaboration with Creative BC, within the geographic boundaries of the City of Revelstoke, the City of Salmon Arm, the District of Sicamous, and CSR D Electoral Areas B, C, D, E, and F, to the domestic and international film production industry.

The scope of work within the contract is very specialized and requires an individual or company that understands how the film industry works and that the company can also be reactive when film location requests are presented to the commission. David Barritt was introduced to the Shuswap Economic Development Advisory Committee meeting on Thursday, May 4, 2017.

David Barritt has been involved in the film industry for many years and has connections in the film industry both in Vancouver and Los Angeles. Staff has also worked with Mr. Barritt previously and has found him to be very professional and he has provided a very high quality of service.

POLICY:

As required and stated in Bylaw #5582, the Board must approve any sole source contracts over \$10,000.00.

FINANCIAL:

This agreement will be funded within the 2017 Columbia Shuswap Regional Film Commission budget. The contract amount will not exceed \$45,000.00 annually or \$3,750.00 monthly.

KEY ISSUES/CONCEPTS:

Below are the responsibilities and deliverables of the **Columbia Shuswap Film Commission Contractor** to the **Regional District** are as follows:

1. To capture high quality digital images that promote the diversity and accessibility of film locations in the Columbia Shuswap region.
2. To maintain and update the Reel Scout database with current location images as required.
3. To respond to client location requests, as required.
4. To provide film industry clients with location surveys and scouting services and act as a local point of contact for the Columbia Shuswap Film Commission.
5. To work collaboratively with the Columbia Shuswap Film Commission and Creative BC on planning sessions, as required.
6. To provide regional production reports to the Columbia Shuswap Film Commission for the calendar year, in which this agreement is in effect, within 30 days of the end date of this agreement.
7. To work with Creative BC to develop and participate in provincial marketing activities and initiatives as required.
8. To meet monthly with the CSRD EDO to provide on current film activities.
9. To attend training sessions with Creative BC on the Reel Scout location database as required.
10. To maintain current knowledge of the Columbia Shuswap region by completing regular scouting trips.
11. To maintain relationships with local community organizations and businesses that can provide support for film production for the CSFC.
12. Provide an annual report on film activity throughout the CSFC region – to be completed by March 31 for the previous calendar year.
13. To continue to develop relationships and create networks with producers, production managers and location managers in Los Angeles that will be scouting for film locations in BC.

IMPLEMENTATION:

R. Cyr, EDO, will work with David Barritt, to implement the film commission responsibilities and deliverables.

COMMUNICATIONS:

Staff will provide regular updates to the Shuswap Economic Development Advisory Committee at their regular meetings, and staff will also communicate to Directors, Electoral Area B and the City of Revelstoke. Staff will meet with Mr. Barritt on a monthly basis to oversee the CSFC work responsibilities and deliverables.

DESIRED OUTCOMES:

That the Board approve that the sole source contract be awarded to David Barritt for implementation of projects for the Columbia Shuswap Film Commission (CSFC).

BOARD'S OPTIONS:

1. *Endorse the Recommendation.*
2. *Deny the Recommendation.*
3. *Defer.*
4. *Any other action deemed appropriate by the Board.*

LIST NAME OF REPORT(S) / DOCUMENT(S) AVAILABLE FROM STAFF:

1. David Barritt Resume
2. Draft of the Columbia Shuswap Film Commission – Film Services Contract

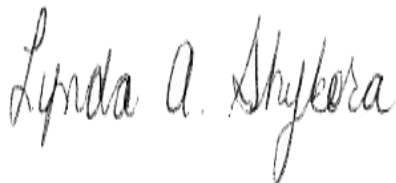
Report Approval Details

Document Title:	Columbia Shuswap Film Commission Contract.docx
Attachments:	- Business Resume.pdf - Film Commission Services - Contract 2017.pdf
Final Approval Date:	Jun 5, 2017

This report and all of its attachments were approved and signed as outlined below:



Jodi Pierce - Jun 2, 2017 - 8:00 AM



Lynda Shykora - Jun 2, 2017 - 12:49 PM



Charles Hamilton - Jun 5, 2017 - 10:03 AM

DAVID F. BARRITT

767 Abbington Ln.
Tappen, BC
V0E 2X3

Mobile:
604-329-6700

E-mail:
davidfbarritt@gmail.com

Profile

Film & Television industry professional with a long deep history of production within British Columbia. I have shot productions from Vancouver to Prince George, Whistler, Vancouver Island and even into Alberta.

I am a senior member of the Lighting department of I. A. T. S. E. Local 891.

As a veteran both on set and off, I have worked on many levels of production from startup, to "wrap", on both movie and television productions.

I have worked on small low budget productions and commercials thru to high budget Television and feature Films. I also have extensive knowledge of the equipment & studio rental industry.

Experience

MEMBER OF I. A. T. S. E. LOCAL 891 - Lighting Dept. since 1988

Positions Held: Lamp Operator, Best Boy, Gaffer & Rigging Gaffer

Television: 1980-90's into 2000's

Wiseguy - 21 Jumpstreet - McGyver - The Commish - X Files - Street Justice - Cobra - Fear The Walking Dead - Killing

Motion Picture: 1980-90's into 2000's

Who's Harry Crumb - The Fly 2 - Cousins - April Fools Day - Jumanji - Miracle On Ice - i Robot - Mission to Mars - Santa Clause 2 - Insomnia - Time Cop - Elf - Chronicles of Riddick - X Files "The Movie"

Paramount Pictures Backlot - Rental

Manager of Lighting Dept. 1994 - 1996

Rentals Manager 1996 - 1998

William F. Whites - Vancouver - Rental 2001 "contract"

Hired consultant: Evaluated and implemented policies and procedures aimed at creating greater efficiencies and accountability thru a system of checks and balances. Reviewed and audited Sub Rentals bringing down costs while increasing revenues.

Hollywood Rentals, Canada - Rental 2013 - 2016

Director of Operations: Managing daily operations of the entire facility including account/ show management. Fleet & Generator Division along with Aerial Rentals. Duties include but not limited to staff management & training. Dealing directly with productions from initial bidding to start up thru to wrap. Purchasing and manufacturing, CSA control. Studio liaison providing background support to our productions while on the studio lot.

Manhattan Beach Studio and Rentals, Canada - 2016 - 2017

Director of Operations & Client Relations Manager: MBSE purchased Hollywood Rentals in June of 2016. My duties remained the same with the addition of Client Relations. This new capacity included my meeting directly with Producers and Production Managers, initial contact to "sell" MBSE as an equipment provider. Once the show was signed I maintained contact with production and crews directly. It is also a part of my job to KNOW what is coming and currently happening with studios out of Los Angeles shooting in Vancouver.

COLUMBIA SHUSWAP FILM COMMISSION
Film Commission Services
SERVICE AGREEMENT

THIS AGREEMENT made as at the 1st day of June, 2017.

BETWEEN:

COLUMBIA SHUSWAP REGIONAL DISTRICT
Columbia Shuswap Film Commission

555 Harbourfront Drive NE, Box 978

Salmon Arm BC V1E 4P1

(Hereinafter called the "Regional District", "we", "us", or "our", as applicable)

OF THE FIRST PART

AND:

1089472 B. C. Ltd.

David Barritt

767 Abbington Lane

Tappen BC V0E 2X3

(Hereinafter called the "Contractor", "you", or "your" as applicable)

OF THE SECOND PART

The parties to this Agreement agree as follows:

SECTION 1 – DEFINITIONS

1. Where used in this Agreement:

- (a) "**Contract Price**" – means the total aggregate value stipulated in the Schedule B
- (b) "**Material**" – means all findings, data, reports, documents, records and material, (both printed and electronic), whether complete or otherwise, that have been produced, received, compiled or acquired by, or provided by or on behalf of the Regional District to, the Contractor as a direct result of this Agreement, but does not include:
 - a. Property owned by the Contractor;
- (c) "**Services**" – means the services described in the Schedule A;
- (d) "**Term**" – means the start and end date of the Agreement stipulated in the Schedule A;
- (e) "**Refund**" – means any refund or remission of federal or provincial tax or duty available with respect to any items that the Province has paid for or agreed to pay for under this Agreement;
- (f) "**Personal Information**" – means recorded information about an identifiable individual.

SECTION 2 – APPOINTMENT

2. The Regional District retains the Contractor to provide the Services during the Term, both described in Schedule "A".

SECTION 3 – PAYMENT OF CONTRACT PRICE

3. Subject to the provisions of this Agreement, the Regional District will pay the Contractor, in the amount and manner, and at the times set out in Schedule "B" attached to this Agreement.

SECTION 4 – REPRESENTATIONS AND WARRANTIES

- 4.01 The Contractor represents and warrants to the Regional District with the intent that the Regional District will rely thereon in entering into this Agreement that:
- (a) All information, statements, documents and reports by the Contractor to the Regional District in connection with this Agreement are true and correct;
 - (b) The Contractor has no knowledge of any fact that materially adversely affects, or so far as it can foresee, might materially adversely affect, its properties, assets, condition (financial or otherwise), business or operations or its ability to fulfill its obligations under this Agreement;
 - (c) It is not in breach of, or in default under, any law, statute or regulation of Canada or of the Province of British Columbia applicable to or binding on it or its operations;
- 4.02 All statements contained in any certificate, application, proposal or other document delivered by or on behalf of the Contractor to the Regional District under this Agreement or in connection with any of the transactions contemplated hereby will be deemed to be representations and warranties by the Contractor under this Agreement.
- 4.03 All representations, warranties, covenants and agreements made herein and all certificates, applications or other documents delivered by or on behalf of the Contractor are material and will have been relied upon by the Regional District and will continue in full force and effect during the continuation of this Agreement.

SECTION 5 – RELATIONSHIP

- 5.01 No partnership, joint venture, agency or other legal entity will be created by or will be deemed to be created by this Agreement or any actions of the parties pursuant to this Agreement.
- 5.02 The Contractor will be an independent contractor and not the servant, employee or agent of the Regional District.
- 5.03 The Contractor will not in any manner whatsoever commit or purport to commit the Regional District to the payment of money to any person, firm or corporation.
- 5.04 The Regional District may, from time to time, give instructions to the Contractor in relation to the carrying out of the Services, and the Contractor will comply with those instructions but will not be subject to the control of the Regional District regarding the manner in which those instructions are carried out except as specified in this Agreement.

SECTION 6 – CONTRACTOR'S OBLIGATIONS

6.01 The Contractor will:

- (a) Carry out the Services in accordance with the terms of this Agreement during the Term stated in Schedule "A" of this Agreement;
- (b) Comply with the payment requirements set out in Schedule "B", including all requirements concerning the use, application and expenditure of the payments provided under this Agreement;
- (c) Comply with all applicable laws;
- (d) Unless agreed otherwise supply, at its own cost, all labor, materials and approvals necessary to carry out the Services;
- (e) Subject to obtaining the prior written approval of the Regional District concerning form, content and location, the Contractor may post signs acknowledging the Regional Districts participation in the Services.

SECTION 7 – RECORDS

7.01 The Contractor will:

- (a) Establish and maintain accounting and administrative records in form and content satisfactory of the Regional District, to be used as the basis for the calculation of the Contract Price;
- (b) Establish and maintain books of account, invoices, receipts and vouchers for all expenses incurred in form and content satisfactory to the Regional District.

7.02 The Parties agree that the Regional District does not have control, for the purpose of the *Freedom of Information and Protection of Privacy Act*, of the records held by the Contractor.

SECTION 8 – CONFLICT OF INTEREST

8.01 The Contractor will not, during the Term, perform a service for or provide advice to any person, or entity where the performance of such service or the provision of the advice may, in the reasonable opinion of the Regional District, give rise to a conflict of interest between the obligations of the Contractor to the Regional District under this Agreement and the obligations of the Contractor to such other person, or entity.

SECTION 9 – CONFIDENTIALITY

9.01 The Contractor will treat as confidential all information or material supplied to or obtained by the Contractor, or any sub-contractor, as a result of this Agreement and will not, without the prior written consent of the Regional District, except as required by applicable law, permit its disclosure except to the extent that such disclosure is necessary to enable the Contractor to fulfill its obligations under this Agreement.

SECTION 10 – DEFAULT

10.01 Any of the following events will constitute an Event of Default, namely:

- (a) The Contractor fails to comply with any provision of this Agreement;
- (b) Any representation or warranty made by the Contractor in accepting this Agreement is untrue or incorrect;
- (c) Any information, statement, certificate, report or other document furnished or submitted by or on behalf of the Contractor pursuant to or as a result of this Agreement is untrue or incorrect;
- (d) The Contractor ceases, in the opinion of the Regional District, to operate;
- (e) A change occurs with respect to any one or more, including all, of the properties, assets, condition (financial or otherwise), business or operations of the Contractor which, in the opinion of the Regional District, materially adversely affects the ability of the Contractor to fulfill its obligations under this Agreement;
- (f) An order is made or a resolution is passed or a petition is filed for the liquidation of the Contractor;
- (g) The Contractor becomes insolvent or commits an act of bankruptcy or makes an assignment for the benefit of its creditors or otherwise acknowledges its insolvency;
- (h) A bankruptcy petition is filed or presented against, or a proposal under *the Bankruptcy and Insolvency Act* (Canada) is made by the Contractor;
- (i) A receiver or receiver-manager of any property of the Contractor is appointed; or
- (j) The Contractor permits any sum which is not disputed to be due by it to remain unpaid after legal proceedings have been commenced to enforce payment thereof.

SECTION 11 – TERMINATION

11.01 Upon the occurrence of any Event of Default and at any time thereafter the Regional District may, notwithstanding any other provision of this Agreement, at its option, elect to do any one or more of the following:

- (a) Terminate the Agreement, in which case the payment of the amount required under paragraph 12.03 of this Agreement will discharge the Regional District of all liability to the Contractor under this Agreement;
- (b) Require the Event of Default be remedied within a time period specified by the Regional District;
- (c) Suspend any installment of the Contract Price or any amount that is due to the Contractor while the Event of Default continues;
- (d) Waive the Event of Default;
- (e) Pursue any other remedy available at law or in equity.

11.02 The Regional District may also, at its option, either:

- (a) Terminate this Agreement on 60 days written notice, or
- (b) Terminate this Agreement immediately if the Regional District determines that the Contractor's failure to comply places the health or safety of any person receiving the Services at immediate risk,

And in either case, the payment of the amount required under paragraph 12.03 of this Agreement will discharge the Regional District of all liability to the Contractor under this Agreement.

- 11.03** Where this Agreement is terminated before 100% completion of the Services, the Regional District will pay to the Contractor that portion of the Contract Price which is equal to the portion of the Services completed to the satisfaction of the Regional District prior to termination.

SECTION 12 – DISPUTE RESOLUTION

- 12.01** All disputes arising out of or in connection with this Agreement will be referred to and finally resolved by arbitration pursuant to the *Commercial Arbitration Act*.

SECTION 13 – INDEMNITY

- 13.01** Without limiting the provisions of subparagraph (c) of paragraph 6.01, the Contractor will comply with the Workers' Compensation Legislation for the Regional District.
- 13.02** The Contractor will indemnify and save harmless the Regional District, its employees and agents, from and against any and all losses, claims, damages, actions, causes of action, costs and expenses that the Regional District may sustain, incur, suffer or put to at any time either before or after the expiration or termination of this Agreement, where the same or any of them are based upon, arise out of or occur, directly or indirectly, by reason of any act or omission of the Contractor, or of any agent, employee, officer, director, or sub-contractor of the Contractor pursuant to this Agreement, excepting always liability arising out of the independent negligent acts of the Regional District.

SECTION 14 – ASSIGNMENT AND SUB-CONTRACTING

- 14.01** The Contractor will not, without the prior, written consent of the Regional District:
- (a) Assign, either directly or indirectly, this Agreement or any right of the Contractor under this Agreement; or
 - (b) Sub-contract any obligation of the Contractor under this Agreement.
- 14.02** No sub-contract entered into by the Contractor will relieve the Contractor from any of its obligations under this Agreement or impose upon the Regional District any obligation or liability arising from any such sub-contract.
- 14.03** This Agreement will be binding upon the Regional District and its assigns and the Contractor, the Contractor's successors and permitted assigns.

SECTION 15 – OWNERSHIP

- 15.01** Any equipment, machinery or other property, provided by the Regional District as a result of this Agreement will:
- (a) be the exclusive property of the Regional District;
 - (b) Forthwith be delivered by the Contractor to the Regional District on written notice to the Contractor requesting delivery of the same, whether such a notice is given before, upon, or after the expiration or sooner termination of this Agreement.

SECTION 16 – NOTICES

- 16.01** Any written communication from the Contractor to the Regional District must be mailed, personally delivered, faxed, or electronically transmitted to the following address:

Columbia Shuswap Regional District
Attention: Robyn Cyr
 Columbia Shuswap Film Commission
 781 Marine Park Drive NE
 Box 978
 Salmon Arm, BC V1E 4P1

- 16.02** Any written communication from the Regional District to the Contractor must be mailed, personally delivered, faxed or electronically transmitted to the following address:

1089472 B. C. Ltd.
David Barritt
 767 Abbington Lane
 Tappen BC V0E 2X3

- 16.03** Any written communication from either party will be deemed to have been received by the other party on the five business days after mailing in British Columbia; on the date of personal delivery if personally delivered; or on the date of transmission if faxed;
- 16.04** Either party may from time to time, notify the other party in writing of a change of address and, following the receipt of such notice, the new address will, for the purposes of paragraph 17.01 or 17.02 of this Agreement, be deemed to be the mailing address of the party giving notice.

SECTION 17 – NON-WAIVER

- 17.01** No term or condition of this Agreement and no breach by the Contractor of any such term or condition will be deemed to have been waived unless such waiver is in writing signed by the Regional District and the Contractor.
- 17.02** The written waiver by the Regional District or any breach by the Contractor of any term or condition of this Agreement will not be deemed to be a waiver of any other provision of any subsequent breach of the same or any other provision of this Agreement.

SECTION 18 – ENTIRE AGREEMENT

- 18.01** This Agreement including the Schedules constitutes the entire Agreement between the parties with respect to the subject matter of this Agreement.

SECTION 19 – SURVIVAL OF PROVISIONS

- 19.01** All of the provisions of this Agreement in favor of the Regional District including, without limitation, paragraphs 3.02, 5.03, 7.01, 8.02, 10.01, 12.03, 14.03, 16.01, 18.01 to 18.02 and all of the rights and remedies of the Regional District, either at law or in equity, will survive any expiration or sooner termination of this Agreement.

SECTION 20 – MISCELLANEOUS

- 20.01** This Agreement will be governed by and construed in accordance with the laws of the Regional District.
- 20.02** The Schedules to this Agreement are an integral part of this Agreement as if set out at length in the body of this Agreement.
- 20.03** No amendment or modification to this Agreement will be effective unless it is in writing and duly executed by the parties.
- 20.04** If any provision of this Agreement or the application to any person or circumstance is invalid or unenforceable to any extent, the remainder of this Agreement and the application of such provision to any other person or circumstance will not be affected or impaired thereby and will be enforceable to the extent permitted by law.
- 20.05** Nothing in this Agreement operates as a consent, permit, approval or authorization by the Regional District to or for anything related to the Services that by statute, the Contractor is required to obtain unless it is expressly stated herein to be such a consent, permit, approval or authorization.
- 20.06** Where the Contractor is a corporation, the Contractor warrants that the signatory has been duly authorized by the Contractor to execute this Agreement without corporate seal on behalf of the Contractor.
- 20.07** This Agreement may be executed by the parties in separate counterparts each of which when so executed and delivered shall be an original, and all such counterparts may be delivered by facsimile transmission and such transmission shall be considered an original.
- 20.08** For the purpose of paragraphs 21.09 and 21.10, an "Event of Force Majeure" includes, but is not limited to, acts of God, changes in the laws of Canada, governmental restrictions or control on imports, exports or foreign exchange, wars (declared or undeclared), fires, floods, storms, strikes (including illegal work stoppages or slowdowns), lockouts, labor shortages, freight embargoes and power failures or other cause beyond the reasonable control of a Party, provided always that lack of money, financing or credit will not be and will not be deemed to be an "Event of Force Majeure".
- 20.09** Neither party will be liable to the other for any delay, interruption or failure in the performance of their respective obligations if caused by an Event of Force Majeure, in which case the time period for the performance or completion of any such obligation will be automatically extended for the duration of the Event of force Majeure.
- 20.10** If an Event of Force Majeure occurs or is likely to occur, then the party directly affected will notify the other Party forthwith, and will use its reasonable efforts to remove, curtail or contain the cause of the delay, interruption or failure and to resume with the least possible delay compliance with its obligations under this Agreement.

Section 21 - Insurance

The Contractor will be required to provide to the Regional District:

21.01 Proof of public liability insurance for injury, property damage or death arising from the Proponent's operations under the agreement in an amount not less than **THREE MILLION (\$3,000,000) DOLLARS** naming the Columbia Shuswap Regional District as additional named insured;

21.02 Proof of professional liability insurance in an amount of not less than **FIVE HUNDRED THOUSAND (\$500,000) DOLLARS**; and

21.03 Proof of registration with WorkSafeBC.

The parties hereto have executed this Agreement the day and year as set out above.

SIGNED AND DELIVERED by the
Columbia Shuswap Regional District

SIGNED AND DELIVERED by the Contractor or an
Authorized Representative of the Contractor

Charles Hamilton CAO

David Barritt - *1089472 B. C. Ltd.*

(Signature)

(Signature)

SCHEDULE A CRITERIA AND DELIVERABLES

Creative BC brings a strategic and integrated approach to the growth and development of the province's creative industries. Creative BC provides professional expertise and business support to strengthen BC's motion picture, interactive digital, music and publishing sectors. The programs, services and investments act as a catalyst to help these sectors realize their economic and creative potential and contribute to the future prosperity of our province.

Creative BC provides funding under a Transfer Agreement with Creative BC that enables the Columbia Shuswap Film Commission to meet the following criteria of this agreement.

The responsibilities of the **Columbia Shuswap Film Commission** in this agreement are as follows:

1. Be a certified member of the Association of the Film Commissioners International;
2. Have a permanent business address;
3. Provide evidence of financial support by municipal and/or regional governments;
4. Submit a business plan and budget to Creative BC annually;
5. Sign a Transfer under Agreement with Creative BC agreeing to the above criteria and the following deliverables;
6. Maintain and update a regional film website which includes local information to production clients including information relating to local business, local labor, and local government contacts that would generally be required to work with filming activities in the Shuswap region;
7. To provide Creative BC with a copy of the Columbia Shuswap Film Commissions financial statements and/or annual report no later than 30 days following the end date of this agreement.
8. To include the Creative BC logo and website link on the front page of the Columbia Shuswap Film Commission web site; and,
9. Recognize Creative BC as a financial partner on the Columbia Shuswap Film Commission's website.

The responsibilities and deliverables of the **Contractor** to the **Regional District** and the **Columbia Shuswap Film Commission** are as follows:

1. To capture high quality digital images that promote the diversity and accessibility of film locations in the Columbia Shuswap region.
2. To maintain and update the Reel Scout database with current location images as required.
3. To respond to client location requests, as required.
4. To provide film industry clients with location surveys and scouting services and act as a local point of contact for the Columbia Shuswap Film Commission.
5. To work collaboratively with the Columbia Shuswap Film Commission and Creative BC on planning sessions, as required.
6. To provide regional production reports to the Columbia Shuswap Film Commission for the calendar year, in which this agreement is in effect, within 30 days of the end date of this agreement.
7. To work with Creative BC to develop and participate in provincial marketing activities and initiatives as required.
8. To meet monthly with the CSRD EDO to provide on current film activities.

9. To attend training sessions with Creative BC on the Reel Scout location database as required.
10. To maintain current knowledge of the Columbia Shuswap region by completing regular scouting trips.
11. To maintain relationships with local community organizations and businesses that can provide support for film production for the CSFC.
12. Provide an annual report on film activity throughout the CSFC region – to be completed by March 31 for the previous calendar year.
13. To continue to develop relationships and create networks with producers, production managers and location managers in Los Angeles that will be scouting for film locations in BC.

TERM OF THE AGREEMENT

This Agreement is for a term commencing June 1, 2017 and ending on December 31, 2017.

SCHEDULE "B"
Fees

1. Fees will be payable to the Contractor, in the fulfillment of the obligation under this Agreement, as follows:
 - a) Upon receipt and approval of two signed Agreements with the Regional District agreeing to the criteria and deliverables as set out in Schedule "A",
 - b) The fees for these services will be paid to David Barritt *1089472 B. C. Ltd.* to deliver the services as outlined in Schedule "A".
 - c) The Contractor will be reimbursed for reasonable expenses for travel expenses such as meals and accommodations directly related to film location requests. These expenses must be approved by the Regional District prior to any expenses being incurred.
 - d) Invoices for these services will be submitted to the Regional District monthly with detailed activities and back up documentation.
2. Notwithstanding paragraph 1 of this Schedule in no event will the fees payable to the Contractor in accordance with paragraph 1 of this Schedule exceed, in the aggregate, \$45,000.00 annually and does not include GST.
3. In accordance with paragraphs 3 of the Agreement, all such refunds or remissions obtained by the Contractor must be applied to the provision of the Services, set out in Schedule "A" or performance of any other obligation of the Contractor under this Agreement in respect of those Services.



BOARD REPORT

TO:
Chair and Directors
File No: 1850 20 17

SUBJECT:

Grant in Aid Requests

DESCRIPTION:

Report from Jodi Pierce, Manager, Financial Services, dated June 5, 2017.

**RECOMMENDATION
#1:**

THAT: the Board approve the following allocations from the 2017 electoral grant-in-aids:

Area B

\$2,000 - Trout Lake Fire Department (operational costs)

Area C

\$2,500 - Sorrento Memorial Hall (window installation)

Area D

\$1,400 - Silver Creek Parent Advisory Council (team jerseys)

Area E

\$1,500 – Sicamous & District Museum & Historical Society (operational costs)

VOTING:

 Unweighted
Corporate

☐

 LGA Part 14
(Unweighted)

☐

 Weighted
Corporate

☒

 Stakeholder
(Weighted)

☐
POLICY:

These requests meet the requirements of Policy F-30, are approved by the respective Area Director and required source documentation has been received. These requests are within the Electoral Area's grant-in-aid budget.

COMMUNICATIONS:

The respective Electoral Director will advise each organization of the Board's decision. Successful organizations will be sent a cheque accompanied by a congratulatory letter.

DESIRED OUTCOMES:

That the Board endorse the recommendation

BOARD'S OPTIONS:

1. *Endorse the Recommendation.*
2. *Any other action deemed appropriate by the Board.*

Report Approval Details

Document Title:	2017-06-15_Board_Fin_Grant in Aids.docx
Attachments:	
Final Approval Date:	Jun 7, 2017

This report and all of its attachments were approved and signed as outlined below:

No Signature - Task assigned to Lynda Shykora was completed by assistant Emily Johnson

Lynda Shykora - Jun 6, 2017 - 1:26 PM

A handwritten signature in black ink, appearing to read 'C. Hamilton', with a stylized flourish at the end.

Charles Hamilton - Jun 7, 2017 - 8:47 AM



BOARD REPORT

TO:
Chair and Directors
File No: 1850 31

SUBJECT:

Golden/Area A EOF Application – Kicking Horse River Access

DESCRIPTION:

Report from Jodi Pierce, Manager, Financial Services dated June 2, 2017.

RECOMMENDATION #1:

THAT: with the concurrence the Electoral Area A Director, the Board approve funding from the Golden and Area A Economic Opportunity Fund to the Town of Golden in the amount of \$25,000 for the purpose of funding activities required to achieve regulatory approval for channel modifications of the Kicking Horse River.

SHORT SUMMARY:

In 2016, the commercial white water rafting industry was effectively denied access to the lower Kicking Horse River by the Canadian Pacific Railway in order to meet Transport Canada's regulations for safety management. White water rafting is a significant economic generator within the Town of Golden and Area A and forms a fundamental component of the Golden Area tourism industry. Town of Golden Staff have been encouraged by provincial agency representatives to apply for funding to investigate development of a modified stream channel which will require a contribution by the Town in the amount of \$25,000.

VOTING:	Unweighted Corporate	<input type="checkbox"/>	LGA Part 14 (Unweighted)	<input type="checkbox"/>	Weighted Corporate	<input type="checkbox"/>	Stakeholder (Weighted)	<input type="checkbox"/>
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BACKGROUND:

The Town of Golden has provided a thorough staff report containing further background information and is attached to this report.

POLICY:

This request meets the criteria for support in relation to CSRD Policy *F-29, BC Hydro Payments -in-Lieu of Taxes* funding assistance to stimulate economic development within the Golden/Area A area.

FINANCIAL:

The balance of the Golden/Area A EOF (less commitments) to the end of 2017 is \$383,000. This includes the 2017 distribution to be received in summer 2017 estimated to be \$400,000. There are additional commitments in future years that will be funded through subsequent PILT distributions. If approved, payment could be made prior to receipt of the 2017 distribution if necessary as the payment to Kicking Horse Culture will not be paid until receipt of the 2017 distribution from BC Hydro is received.

IMPLEMENTATION:

Upon Board approval funding will be provided at the request of the Town of Golden.

COMMUNICATIONS:

Upon Board approval the Town of Golden will be notified of the Board's decision.

DESIRED OUTCOMES:

That the Board approve the funding request from the Town of Golden.

BOARD'S OPTIONS:

1. *Endorse the Recommendation.*
2. *Deny the Recommendation.*
3. *Defer.*
4. *Any other action deemed appropriate by the Board.*

Report Approval Details

Document Title:	2017-06-15_Board_Fin_EOF Area A Kicking Horse River Access.docx
Attachments:	- EOF Application - Kicking Horse River Access.pdf
Final Approval Date:	Jun 7, 2017

This report and all of its attachments were approved and signed as outlined below:

No Signature - Task assigned to Lynda Shykora was completed by assistant Emily Johnson

Lynda Shykora - Jun 6, 2017 - 2:54 PM

A handwritten signature in black ink, appearing to read "C. Hamilton", with a stylized flourish at the end.

Charles Hamilton - Jun 7, 2017 - 8:46 AM



May 31st, 2017

File: 1855-04/EOF

Jodi Pearce
Manager, Financial Administration Services
Columbia Shuswap Regional District
Box 978, Salmon Arm, BC V1E 4P1
VIA EMAIL TO: JPierce@csrd.bc.ca

Dear Jodi:

At a Special Meeting held by the Town of Golden Council held May 30th, 2017 the following resolution was passed:

THAT per the Staff Report EOF Leverage to Rural Development Fund for Kicking Horse River Access Study received May 30th, 2017 from the CAO, Council REQUEST of the CSRD Board the release of \$25,000 from the Economic Opportunity Fund for the purposes of partially funding continuing analysis, consultation, surveying and engineering necessary to achieve regulatory approval for channel modifications of the Kicking Horse River;

AND THAT Council APPROVE the CAO using these funds in leveraged application to the Province's Rural Development Fund for the same purpose.

This resolution is associated with the EOF Application submitted May 17th, 2017 by the undersigned to the CSRD staff for policy compliance assessment, which was confirmed. I note also via email the support of the Area 'A' Director for this request.

To this end, I trust this letter will be sufficient in moving this request to the CSRD Board level. I have attached my staff report to Town council which may serve as adequate reference for Board members. Thank you for your role in the application process for this initiative.

Sincerely,

Jon Wilsgard
Chief Administrative Officer

c: Charles Hamilton, CAO

Attachment-





Staff Report

CORPORATE ADMINISTRATION

To: Council File: 1855-04/EOF; 2280-20/Prov of BC/KH Riv
From: Jon Wilsgard, CAO/CO Date: May 30th, 2017
Subject: EOF Leverage to Rural Development Fund for Kicking Horse River Access Study

RECOMMENDATION

THAT per the Staff Report *EOF Leverage to Rural Development Fund for Kicking Horse River Access Study* received May 30th, 2017 from the CAO, Council REQUEST the CSRD Board release of \$25,000 from the Economic Opportunity Fund for the purposes of partially funding continuing analysis, consultation, surveying and engineering necessary to achieve regulatory approval for channel modifications of the Kicking Horse River;

AND THAT Council APPROVE the CAO using these funds in leveraged application to the Province's Rural Development Fund for the same purpose.

BACKGROUND

White water rafting on the lower Kicking Horse River is a nearly 40 year old world class commercial activity that forms a fundamental and identifying component of the Golden area's prominent tourism industry within a provincially designated Resort Region.

In 2016 the commercial white water rafting industry was effectively denied access to the lower Kicking Horse River by the Canadian Pacific Railway in order to meet Transport Canada's 2014 "Grade Crossing Regulations" for safety management of federally regulated grade crossings.

The result has been a significant impact to a major tourism and economic driver in the Golden area which attracts an estimated 40,000 visitors annually; 15,000 of which specifically raft the Lower Canyon.

During 2016, a flurry of international media stories covered the topic, and several negotiations were held and failed between CP Rail representatives and the rafting contingent, local government politicians (namely the Town of Golden Mayor and Area 'A' Director), the MLA, and cabinet ministers.

With the assistance of the Province's Rural Dividend Fund, the Ministry of Jobs, Tourism and Skills Training and the Ministry of Transportation and Infrastructure, the Town of Golden commissioned a report in late 2016 to investigate the feasibility of cost effective alternative access options to the Lower Canyon. The total cost of the study was \$55,000.

Now complete, the study included consultation with rafting industry stakeholders, CP Rail, and provincial transportation engineers, leading to the investigation of three potential options: modifying the existing access route with safety-enhancing infrastructure, modifying the river bed to remove obstacles to safer rafting, or constructing an alternative highway egress point that avoids conflict with CPR tracks. All options were analyzed to determine their relative valued measured against economics, engineering, recreation, and tourism.

The study has concluded that the best option for further investigation is the development of a modified stream channel between the Upper and Lower Canyon, with the aim of creating an unhindered stretch of white water for use by highly-skilled rafters and recreational kayakers.

This investigation or next “phase” will require more comprehensive consultation with First Nations and federal government agencies, bathymetric surveys, deeper hydraulic modeling, and environmental studies to support regulatory approval. To this end, the Province has undertaken preliminary queries to gauge the positivity of consultation and process requirements in order to move this file forward.

DISCUSSION

Staff have been encouraged by provincial agency representatives to make application again to the Rural Dividend Fund for the maximum amount permitted under an 80/20 funding contribution formula, requiring a \$25,000 contribution from the applicant. A successful application will yield \$100,000 thereby bringing \$125,000 to the ongoing project.

While this amount will not be sufficient to fund this phase of the project, it remains the only openly available source of meaningful higher level government funds at this time. Following the “restart” of provincial government operations following the current election turmoil, efforts will be made to secure additional funding through ministry cost sharing agreements or corporate sponsorships.

Stantec Engineering representatives have recently met with staff and have committed to providing a phased work plan to meet project goals and financial constraints.

It is the purpose of this report to solicit Council approval for release of \$25,000 from the Economic Opportunity Fund, for which staff will use to leverage by application to the Rural Dividend Fund, an additional \$100,000 for the project.

CSRD staff have confirmed EOF policy applicability to this request and the Area Director has confirmed her support for the application.

The deadline for Rural Dividend Fund applications is May 31st.

IMPLICATIONS

Strategic

(Guiding Documents Relevancy -Strategic Plan, OCP)

Nil. While of considerable local importance, this project is entirely emergent for Council and staff and while it may align with some strategies in the OCP, its contemplations and implementation are outside municipal jurisdiction. That said, the outcome intent is the re-establishment of a commercial rafting presence within town limits.

Financial

(Corporate Budget Impact)

All funds for this initiative have been provided by the Province. Staff anticipates the town providing in-kind contributions such as meeting space, office, and communication services.

Current EOF Funding commitments for 2017:

Kicking Horse Culture	\$90,000 (Area A 50% funded its portion through tax)
Golden Nordic Ski Club	\$45,000 (approved in 2014)
Community Social Service Alignment Project	\$30,000 (2nd year of three year project)
Imagine Kootenay	\$13,000 (2nd year of three year project)
Golden Cycling Club	\$25,000
	<hr/>
	\$203,000

The EOF is replenished annually with approximately \$400,000.

Administrative**(Policy/Procedure Relevancy, Workload Impact and Consequences)**

There are no policy or procedure relevancies associated with the project. In 2016 the CAO spent 30 hours on the project; in 2017 to date, 15 hours. Grant applications, messaging, funding negotiations, contract development, management, and engagement are anticipated to include another 15 hours at minimum. Corporate work plan items are being impacted; however, staff recognizes the importance of this issue and will ensure the ability of the corporation to respond and contribute to a needed solution for community benefit.

The Province continues to view the municipality as the logical administrative leader on this file; the regional district has indicated its support in principle but has not allocated any direct administrative resources to it.

Subject to the position of Council, staff feel the Town of Golden's role should logically end upon achieving the goals of this next phase of the project.

OPTIONS

1. Approve the recommendation.
2. Approve the recommendation; modify the scope of EOF release.
3. Do not approve the recommendation.

Respectfully Submitted,


Jon Wilsgard
Chief Administrative Officer/
Corporate Officer

Attachment-

- Town of Golden EOF Application
- News Release – Kicking Horse River Access Report



COLUMBIA SHUSWAP REGIONAL DISTRICT

555 Harbourfront Drive NE, PO Box 978, Salmon Arm, BC V1E 4P1 | T: 250.832.8194 | TF: 1.888.248.2773 | www.csr.bc.ca

APPLICATION FOR ECONOMIC OPPORTUNITY FUNDS – Page 1

PREAMBLE:

The EOF were created specifically as a means of compensating for the loss of economic opportunities on those lands affected by the dams and reservoirs and the resultant economic impacts to the affected communities. As such, the EOF are to provide funding assistance for projects deemed by the participating members and ratified by the Corporate Board to be worthy of support in an effort to stimulate economic development within the impact areas.

Impact Areas are as follows:

- Golden and Area 'A'
- Revelstoke and Area 'B'
- Sicamous and Area 'E'
- Area 'B' only

Criteria for accessing each EOF will be based on the demonstrable and enduring benefit to the economy of the affected communities at large. The EOF are designed to stimulate economic generators, transportation facilities and infrastructure development supportable jointly by the participating members involved and approved by the Board.

The EOF shall not be used as grant-in-aid funding.

ONLY NON-PROFIT ORGANIZATIONS ARE ELIGIBLE FOR FUNDING

1. Date: May 17th, 2017
2. Name of Organization: Town of Golden
3. Address: Box 350, Golden BC V0A 1H0
4. (a) Date organization established in the Regional District: 1957
 (b) Registered Society in Province of BC:
 Reg. No. Incorporated Municipality Date: _____
5. President: Mayor Ron Oszust Phone: 250-344-2271
 Address: as above
6. Secretary: Jon Wilsgard Phone: 250-344-2271
 Address: as above
7. Board of Directors

1. <u>C. Bruce Fairley</u>	4. <u>C. Connie Barlow</u>
2. <u>C. Chris Hambruch</u>	5. <u>C. Leslie Adams</u>
3. <u>C. Eddie Leigan</u>	6. <u>C. Caleb Moss</u>

APPLICATION FOR ECONOMIC OPPORTUNITY FUNDS – Page 2

8. Executive Director or contact person: Jon Wilsgard, Corporate Officer
Phone: _____ Email: cao@golden.ca
9. Impact Area: Golden and Area 'A'
10. Society or Organization's objectives:
- GOOD GOVERNANCE
- PROVIDING SERVICES AND LAWS FOR COMMUNITY BENEFIT
- PROVIDING STEWARDSHIP OF PUBLIC ASSETS
- FOSTERING ECONOMIC, SOCIAL AND ENVIRONMENTAL WELL BEING IN COMMUNITY
11. Purpose to which funding will be expended:
SEE ATTACHMENT
12. Funding Requested: \$ 25,000
13. Budget (attach copy): \$ \$125,000
-
14. How will the project stimulate economic development within the community?
SEE ATTACHMENT
15. Details of community support for objectives:
SEE ATTACHMENT

**ATTACH ANY ADDITIONAL INFORMATION WHICH WOULD ASSIST
IN THE EVALUATION OF YOUR REQUEST.**

**ON BEHALF OF THE ORGANIZATION,
I/WE HEREBY DECLARE THAT ALL THE INFORMATION PRESENTED
AND/OR PROVIDED WITH THIS APPLICATION IS TRUE AND CORRECT.**

DATED AT Golden, BC THIS 17th DAY OF May, 20

Jon Wilsgard

NAME _____

SIGNATURE

250-344-2271

TELEPHONE

cao@golden.ca

EMAIL

Attachment to Application for Economic Opportunity Funds

Background

White water rafting on the lower Kicking Horse River is a nearly 40 year old world class commercial activity that forms a fundamental and identifying component of the Golden area's prominent tourism industry within a provincially designated *Resort Region*.

In 2016 the commercial white water rafting industry was effectively denied access to the lower Kicking Horse River by the Canadian Pacific Railway in order to meet Transport Canada's 2014 "Grade Crossing Regulations" for safety management of federally regulated grade crossings.

The result has been a significant impact to a major tourism and economic driver in the Golden area which attracts an estimated 40,000 visitors annually; 15,000 of which specifically raft the Lower Canyon.

During 2016, a flurry of international media stories covered the topic, and several negotiations were held and failed between CP Rail representatives and the rafting contingent, local government politicians (namely the Town of Golden Mayor and Area 'A' Director), the MLA, and cabinet ministers.

With the assistance of the Province's *Rural Dividend Fund*, the *Ministry of Jobs, Tourism and Skills Training* and the *Ministry of Transportation and Infrastructure*, the Town of Golden commissioned a report in late 2016 to investigate the feasibility of cost effective alternative access options to the Lower Canyon.

Now complete, the study included consultation with rafting industry stakeholders, CP Rail, and provincial transportation engineers, leading to the investigation of three potential options: modifying the existing access route with safety-enhancing infrastructure, modifying the river bed to remove obstacles to safer rafting, or constructing an alternative highway egress point that avoids conflict with CPR tracks. All options were analyzed to determine their relative value measured against economics, engineering, recreation, and tourism.

The study has concluded that the best option for further investigation is the development of a modified stream channel between the Upper and Lower Canyon, with the aim of creating an unhindered stretch of white water for use by highly-skilled rafters and recreational kayakers.

This investigation will require more comprehensive consultation with First Nations and federal government agencies, bathymetric surveys, deeper hydraulic modeling, and environmental studies to support regulatory approval. To this end, the Province has undertaken preliminary queries to gauge the positivity of consultation and process requirements in order to move this file forward.

With the encouragement of provincial agency representatives, the Town of Golden intends to apply to the *Rural Dividend Fund* for the maximum amount permitted under an 80/20 funding contribution formula, requiring a \$25,000 contribution from the applicant.

The purpose of this funding will be to continue the investigative, consultative, and engineering work required in order to achieve regulatory approval for river modifications, facilitating a return to access by the commercial river rafting sector to the lower Kicking Horse Canyon. The Town of Golden will re-engage Stantec Engineering, effectively picking up where the initial report left off, to begin this next phase.

A return to commercial river rafting in the lower canyon would restore several million dollars of annual GDP to the Golden area, benefitting a wide variety of tourism associated businesses in the broader community. An unobstructed channel would create a contiguously navigable white water corridor, bringing with it a host of enhanced attributes that would significantly increase recreational use of the river, both commercial and public.

Community support for lower canyon access is strong and indisputable. Residents have held multiple rallies, and media channels continue to have significant activity on the topic.

Kicking Horse River Access Feasibility Study

Feasibility Study Examining
Proposed Options for Accessing
the Lower Canyon of the Kicking
Horse River for Whitewater
Rafting



Prepared for:
Town of Golden

Prepared by:
Christine Haylock

November 3, 2016


Revision	Description	Author		Quality Check	
A	Client Review	CH	2016-11-03	RJ	2016-11-03
B	Client Review	CH	2016-11-21	MW	2016-11-21
C	Draft Report	CH	2017-02-08	MW	2017-02-10
D	Peer Review	CH	2017-03-02	DD	2017-03-02
E	Final Report	CH	2017-03-24	JB	2017-03-06

Sign-off Sheet

This document entitled Kicking Horse River Access Feasibility Study was prepared by Stantec Consulting Ltd. ("Stantec") for the account of The Town of Golden (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by  _____
(Signature)

Christine Haylock

Reviewed by  _____
(Signature)

Matt Wood

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

Table of Contents

EXECUTIVE SUMMARY	I
ABBREVIATIONS	II
GLOSSARY	II
1.0 INTRODUCTION	1
GOLDEN'S COMMERCIAL RAFTING INDUSTRY	1
2016 CRISIS OF ACCESS.....	3
2.0 PROJECT SCOPE.....	4
METHODOLOGY.....	4
Objective 4	
Stakeholder Consultation	4
Options Assessment.....	4
3.0 OPTIONS ANALYSIS.....	6
OPTION 1 – MODIFICATIONS TO THE EXISTING PUT-IN.....	6
Highway Egress	6
Option 1a – Level Grade Crossing	10
Option 1b - Pedestrian Bridge Over CPR Tracks	10
OPTION 2 – MODIFICATIONS TO RIVER BED	13
Channel modification.....	13
OPTION 3 – YOHO BRIDGE RIVER-LEFT ACCESS	22
Highway Pull-Off	22
4.0 CONCLUSIONS.....	26
Recommendation	29
MOVING FORWARD	29
Current Scope.....	29
Next Steps	29
5.0 DISCLAIMER.....	32
6.0 APPENDICES.....	33
LIST OF TABLES	
Table 1: TransCanada Highway Egress Options Evaluation Summary.....	10
Table 2: Pedestrian Bridge Conceptual Opinion of Probable Costs.....	12
Table 3: Riverbed Modification Conceptual Planning Opinion of Probable Costs	21
Table 4: Highway Pull-Off at Yoho Bridge Conceptual Planning Opinion of Probable Costs.....	24

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY**LIST OF FIGURES**

Figure 1 - Kicking Horse River	1
Figure 2 - Existing Rafting Access	2
Figure 3 - Access Options	6
Figure 4 - Highway Egress Options	8
Figure 5 - Pedestrian Bridge Over Tracks Alignment	11
Figure 6 - Option 2, Riverbed Modification	14
Figure 7 - Hazardous Hydraulic Conditions Approaching Five Mile Bridge Looking Downstream (Image courtesy of Mikkel St. John-Duncan)	15
Figure 8 - Looking upstream at Angled Roller and Bedrock Outcrop (Stantec, December 2016)	16
Figure 9 - Looking upstream at Angled Roller and Bedrock Outcrop (Image courtesy of Ryan Johanneson April 13, 2016)	16
Figure 10 - Approaching the Split Rock Looking Downstream (Image courtesy of Mikkel St. John-Duncan)	17
Figure 11 - Upstream Face of Split-Rock and its Constriction on Channel (Feature 2) – Looking Downstream	18
Figure 12 - Downstream Face of Split-Rock and Hazards on River Left (Feature 2) – Looking Upstream. Not shown to right of photo and 80m downstream is The Drop (Feature 3)	18
Figure 13 - Approaching the Drop Looking Downstream (Image courtesy of Mikkel St. John-Duncan)	19
Figure 14 - Option 3, Highway Pull-Off at Yoho Bridge	23

LIST OF APPENDICES

Appendix A – What we heard	34
Appendix B – Pedestrian Bridge Over Tracks Concept.....	35
Appendix C – Channel Modification Concept	36

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

Executive Summary

Commercial whitewater rafting on the KHR has been an ongoing activity for several decades and forms an important component of tourism revenues in the Golden, BC region. Rafting of the Lower Canyon on the Kicking Horse, a stretch separated from the Upper by an impassable section of whitewater, has been historically carried out by accessing the river at a location that requires crossing of CPR tracks. This use of CPR property for this purpose and in this manner is no longer permitted by the owners and so an alternative access solution is required.

This report aims to provide a preliminary analysis that explores options for a, cost-effective, long-term solution for access to the Lower Canyon.

After consultation with rafting industry stakeholders and CPR, a series of options was analyzed and discussed, with various criteria considered to determine a recommended option. These options include modifying the existing access route with safety-enhancing infrastructure; modifying the river bed to remove obstacles to safer rafting; and constructing an alternative highway egress point that avoids conflict with CPR tracks.

The preliminary feasibility of all options is analyzed to determine their relative value in terms of five factors: safety, economics, engineering, recreation, and tourism.

Limitations of the report include stakeholder engagement limited to the commercial rafting industry and CPR; and site survey limitations based on river flows and weather conditions.

The recommendation of this report is to further investigate the implementation of a modified stream channel between the Upper and Lower Canyon, with the aim of creating an unhindered stretch of whitewater for use by highly-skilled rafters and recreational kayakers.

The conclusions of this report and its related engineering modeling analyses are subject to further study. This includes further stakeholder engagement, detailed design, bathymetric survey, validated hydraulic modeling, and regulatory approval. Further environmental studies are also required to support regulatory approval.

Prior to, and concurrent with any further study, meaningful and comprehensive engagement with First Nations must be undertaken in accordance with all Provincial and Federal requirements.

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY**Abbreviations**

CPR	Canadian Pacific Rail
TCH	TransCanada Highway
KHCH	Kicking Horse Canyon Highway 1 Improvements
KHR	Kicking Horse River
MOTI	British Columbia Ministry of Transportation and Infrastructure

Glossary

Put-In	Access point to beginning of river trip
Take-out	Egress point at end of river trip
River-left	Left bank of river, looking downstream
River-right	Right bank of river, looking downstream
Historic put-in	Site features and procedures used by commercial rafting and private recreational kayakers up until 2016

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

1.0 INTRODUCTION

Stantec Consulting Ltd (Stantec) was retained by the Town of Golden (Golden) to complete a feasibility study (the study) for access options to the Lower Canyon of the Kicking Horse River (KHR). The study was initiated by Golden in response to safety concerns regarding the current access to the KHR.

This report aims to provide a preliminary analysis that explores options for a cost-effective, long-term solution for access to the Lower Canyon.

GOLDEN'S COMMERCIAL RAFTING INDUSTRY

Whitewater rafting on the KHR is a major tourism and economic driver in the Golden, BC area, attracting an estimated 40,000 visitors annually, 15,000 of whom specifically raft the Lower Canyon.ⁱ

The Kicking Horse River, for the purposes of whitewater recreation, is divided into three main sections: the Upper, the Middle, and the Lower Canyon. See Figure 1 - Kicking Horse River.



Figure 1 - Kicking Horse River

- The "Upper" has a flow ranging from Class I (lazy-flow) to Class III+, which typically begins at the Beaverfoot Road Bridge over the KHR, just outside of the western boundary of Yoho National Park.
- The "Middle" is a Class III/IV section that ends at the Rafters' Pull-Out.

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

- The “Lower Canyon” is a Class IV run that is typically only run as a high-adventure trip by rafting companies, and experienced recreational kayakers. The historic put-in has been via the maintenance road. Access to the river from the road requires crossing the CP tracks at an uncontrolled level crossing, the location known as “Mile 30.”

Figure 2 - Existing Rafting Access shows the location of the Lower Canyon access relative to the Yoho Bridge along TransCanada Highway 1 (TCH).

Between the Middle and Lower canyons is a section of Class IV-V whitewater that is only run by very experienced kayakers, at certain flows. The crux of this section is a rapid called “Bridge Drop,” located approximately under the Yoho Bridge.

A typical rafting trip includes the Upper and Middle Canyon sections of the Kicking Horse, with the addition of a Lower Canyon run, which is more advanced whitewater. All trips take out at the Rafters’ Take-out, with Lower Canyon clients transported by bus to the existing highway egress point (Figure 2) while rafts and equipment are transported with truck and trailer. The clients exit at the highway and walk down to the river, whereupon the trip proceeds downstream to Golden. This access point and road are used by CPR as a Hi-Rail access point, as well as by BC Hydro. Clients and equipment are picked up in town and transported back to the rafting basecamp near Beaverfoot Flats.

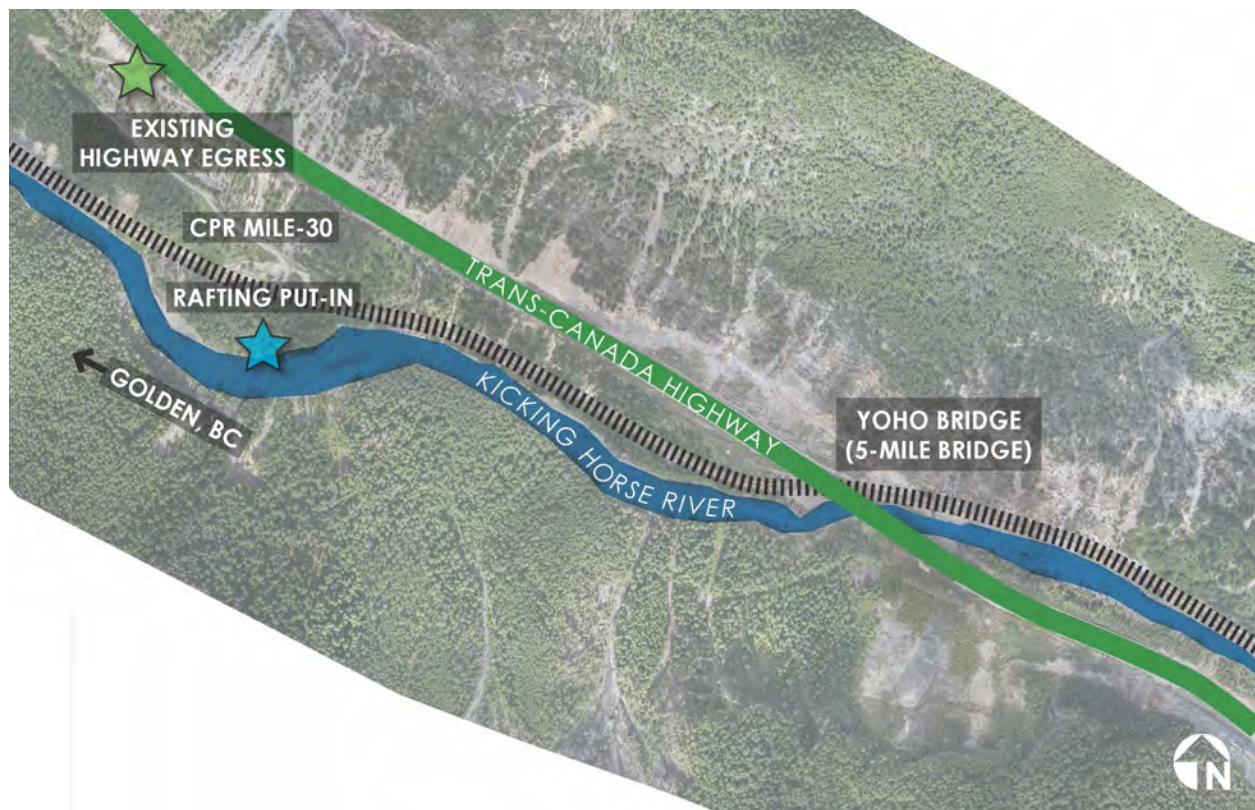


Figure 2 - Existing Rafting Access

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY**2016 CRISIS OF ACCESS**

In late summer of 2015, Transport Canada conducted an inspection of the tracks, at which time CPR and rafting companies in Golden, BC were notified of safety concerns related to public access of the tracks at Mile 30. By spring 2016, the six local rafting companies were notified by CPR that they would no longer be allowed access the KHR by crossing CPR land and rail lines. On May 20, 2016, a locked gate was installed at the top of the maintenance road, barring access to the CPR maintenance road, and by extension access to the Lower Canyon.

For the 2016 rafting season, commercial rafting on the Lower Canyon was carried out by a single company as temporary access option, accomplished by putting-in via helicopter adjacent to CPR lands at Mile 30.

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

2.0 PROJECT SCOPE

METHODOLOGY

Objective

The objective of this study was to evaluate the feasibility of KHR Lower Canyon access options identified through stakeholder consultation. The options were evaluated based on five criteria chosen as being representative of the qualities necessary to determine a long-term solution for access to the KHR. The purpose of the study was to recommend an option feasible for further analysis and preliminary design.

This study does not include detailed analysis of the regulatory, environmental, and social limitations. Further consultation with larger stakeholder groups, First Nations, regulatory agencies, and other proponents should be undertaken.

Stakeholder Consultation

The access options identified within this report were determined through a limited stakeholder consultation was conducted on August 25, 2016 at the Golden Council Chambers in Golden. Appendix A – What we heard outlines the findings of that process. This document was used to inform the options assessment, and was a catalyst for further collaboration between the study's authors, the Ministry of Transportation and Infrastructure, and members of the whitewater community. Resulting from this meeting was a list of possible modifications to the existing rafting access, as well as alternative options to access the Lower Canyon.

Additionally, a meeting with CPR Director of Government Affairs, Mike LoVecchio, occurred August 18, 2016 whereby the history of the site conflict was discussed, as well as possible solutions.

It is recognized that this consultation was not comprehensive of all stakeholders, but was intended to identify options that could provide an access solution for commercial rafting companies in Golden.

Options Assessment

Options brought forward at the stakeholder meeting were examined, with additional details discussed further. The criteria against which each option is examined were:

- Safety implications, referring to the safety of rafting clients, staff, and the general public not directly involved in river recreation.

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

- Economic implications including capital construction costs, engineering design costs, permitting costs and costs associated with maintenance and economic risks posed by naturally-occurring destructive forces.
- Engineering feasibility, examining the technical complexity of design, permitting, and construction required to carry out the implementation of the option.
- Recreational values, referring to the increase or loss of commercial recreation value of the option being examined relative to the current rafting logistics.
- Tourism values, examining the added value brought by the option with regard to broader tourism initiatives. It will put forward opportunities to expand the value of lower canyon rafting with value-added activities.

The next steps in options assessment would include project analysis for further feasibility, regulatory and environmental limitations, and potential consultations with a larger stakeholder group, First Nations, Ministry of Forest Lands and Natural Resources, Departments of Fisheries and Oceans in accordance with all regulatory and social licensing requirements.

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

3.0 OPTIONS ANALYSIS

The three primary options brought forward during stakeholder consultation in Golden, BC and their variations are discussed below.



Figure 3 - Access Options

OPTION 1 – MODIFICATIONS TO THE EXISTING PUT-IN

Highway Egress

Summary

The historic commercial rafting put-in at Mile 30 has significant safety concerns on two fronts: access from the TCH to the CPR maintenance road, and the unsanctioned level crossing at the CPR tracks. Therefore, any safe alternative proposed in this report will need to address both aspects.

The egress from the TCH to the CPR maintenance road is unsafe for school bus use, with insufficient room to turn the bus around as it arrives westbound, limited visibility for oncoming

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

traffic, and narrow shoulders. Client buses typically pull off the highway on the south shoulder, facing westbound against oncoming traffic, with clients unloaded facing traffic. A rafting company employee stands between the bus door and TCH traffic, directing clients to the highway shoulder. From there, clients are walked down the maintenance road to the rafting staging area. Rafts and other on-water equipment are driven to the staging area with pickup truck/trailer combination. The coordination of client buses between and within company trips occurs via radio, with waiting buses remaining at the Rafter's Take-Out, located approximately 3km east, until notified.

The client unloading process places both rafting company employees and clients in conflict with TCH traffic. Bus drivers execute difficult/illegal maneuvers with large vehicles, while clients are required to navigate a busy highway shoulder as part of a larger group. To date, there have been no reported incidents of conflict between highway traffic and rafters (both employees and clients); but the situation is acknowledged, by all parties, as being unsafe and undesirable.

For KHR access options that include exiting the TCH near the current location, highway egress options include:

1. Maintaining the currently-used method with few, if any, modifications to the egress point;
2. Upgrading and utilizing the wider pull-out area uphill to the west of the current access point, connecting it to the CPR access road with a constructed gravel road connection

This upgraded access point has been identified as part of the construction works for the planned Kicking Horse Canyon Highway Improvement project (KHC) Phase 4. The completion of this work is several years away, but preliminary analysis indicates that a road could be constructed from the new highway alignment. The highway realignment has not been fully engineered and is subject to further geotechnical, environmental and archaeological assessment.

Figure 4 - Highway Egress Options depicts the two options of exiting the highway and connecting with the CPR maintenance road.

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

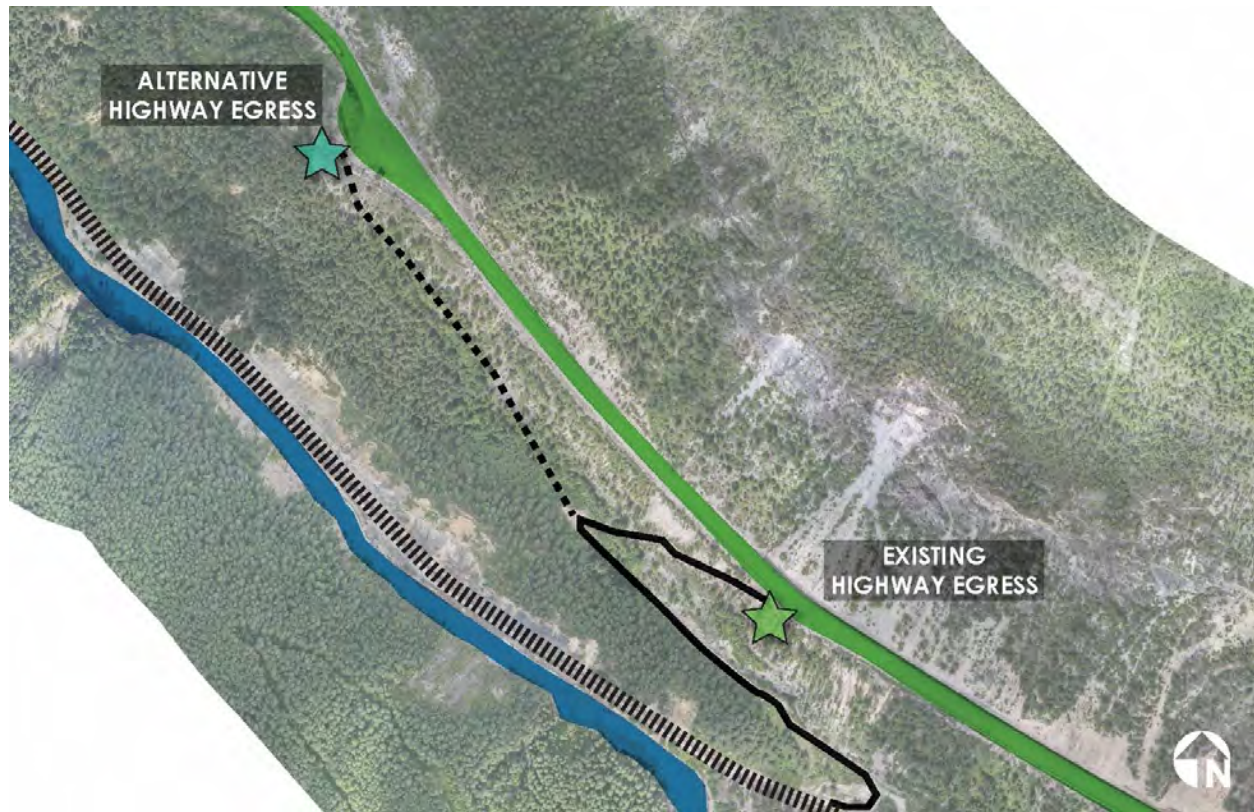


Figure 4 - Highway Egress Options

Evaluation

Safety

The safety deficits of the current highway egress are discussed above, and are significant. In addition, BC Ministry of Transportation and Infrastructure (MOTI) representatives have indicated that it does not meet current design standards for sightlines and space to execute a safe left-hand turn either existing traffic westbound, or entering traffic.

Development of a new road connection beginning at the wider pull-out presented above, could be designed to an acceptable level of safety for highway users, rafting clients and rafting company staff, with the expectation that it would still function as a right-in, right-out pull-off accessed from the west. It is expected that the development of this road would be undertaken concurrent with KHC Phase 4 improvements.

In either scenario, the access road would not be designated for general highway users. Access to the road would be gated to support restricted access for CPR, and commercial rafters only. This option would require further consultation between proponents and access permits from CPR.

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

Economic

The use of existing infrastructure poses the smallest economic impediment in terms of capital costs. Future costs associated with this option could include but are not limited to greater maintenance costs for the pull-outs and increased signage to help mitigate safety concerns.

The capital costs associated with upgrading the wider pull-out and constructing a connecting road to the existing CPR maintenance road could be incorporated into the KHC Phase 4 works. Adding the pull-out widening to the larger KHCH Phase 4 project would increase efficiency in design and construction and may decrease overall cost versus design and construction of the pull-out widening and road connection alone as a separate project.

Engineering

There are no engineering implications associated with the use of the existing infrastructure. However, as previously mentioned the existing access was never intended for commercial use.

Modification of the highway egress for the access road would require detailed engineering design, tendering and construction, and a completion date that is tied to the larger KHC Phase 4 highway improvement project would be preferable.

This option will also require consultation MOTI to determine if modification of the highway egress at this location will be feasible.

Recreation

The existing highway access presents a challenging, unsteady, and long walk down a steep, uneven road. As such, it depletes the recreation value of the river trip.

A modified access would enhance this experience significantly, leaving more space to exit the bus and continue on down the hill. This access road is estimated to have a gradient of as much as 14%, and would be unsuitable for bus travel.

A facility that allows for medium-term (several hours) parking for a small number of passenger vehicles would be an added benefit for recreational kayakers who typically leave a car at the put-in to be retrieved after the run is complete.

Tourism

There is currently no capacity for increasing use or creating value-added opportunities for tourism at the existing access, and is intended only for use by commercial rafting companies. It requires radio communication between rafting companies to ensure only one bus arrives at a time, and therefore limits use.

A modified access road constructed as part of the KHC Phase 4 works would likely have the same restrictions on access by the public or other unauthorized users.

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

Table 1: TransCanada Highway Egress Options Evaluation Summary

Evaluation Criteria	Existing Access	Modified Access
Safety	Unsafe for operators, clients, and motorists	A solution whereby no pedestrians are on the highway is preferred. Still requires tight turn on narrow maintenance road
Economic	This is the least expensive, as it requires no more than paving, signage and a gate	To be determined when KHC Phase 4 highway works are finalized.
Engineering	Existing	A short but challenging road to build on steep slopes
Recreation	Uncomfortable for clients and guides, diminishes wilderness experience for clients	Increased comfort and safety for clients and guides
Tourism	No net value for tourism goals of region	Limited value for wider tourism industry as there is no room for parking or other amenities

Option 1a – Level Grade Crossing

Summary

The current CPR crossing at the Mile 30 track location is not a controlled public crossing. It has not been subject to engineering review, nor the provision of safety measures to ensure the safety of the public, as it is part of the private rail operations of CPR. As such, CPR has the responsibility of securing their site and ensuring that no conflicts between the public and rail operations persist.

The provision of a safe, controlled grade crossing requires the adherence to Transport Canada's Grade Crossings Regulations, which form part of the *Railway Safety Act* implemented in November 2014.

Stantec conducted a preliminary review of the Mile 30 site and consultation with affected stakeholders, and it has been determined that an level-grade crossing is not feasible at this location. Based on initial stakeholder feedback, the level-grade crossing option was not reviewed against the five selection criteria. This option may be revisited in the future depending on the outcome of this study.

Option 1b - Pedestrian Bridge Over CPR Tracks

Summary

This option assumes a suitable highway egress point to the existing CPR maintenance road and that CPR will allow use of their maintenance road. It addresses the need for passage over the CPR tracks by the construction of a pedestrian bridge from the maintenance road over the

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

tracks to a developed staging area as shown in Figure 5 - Pedestrian Bridge Over Tracks Alignment.

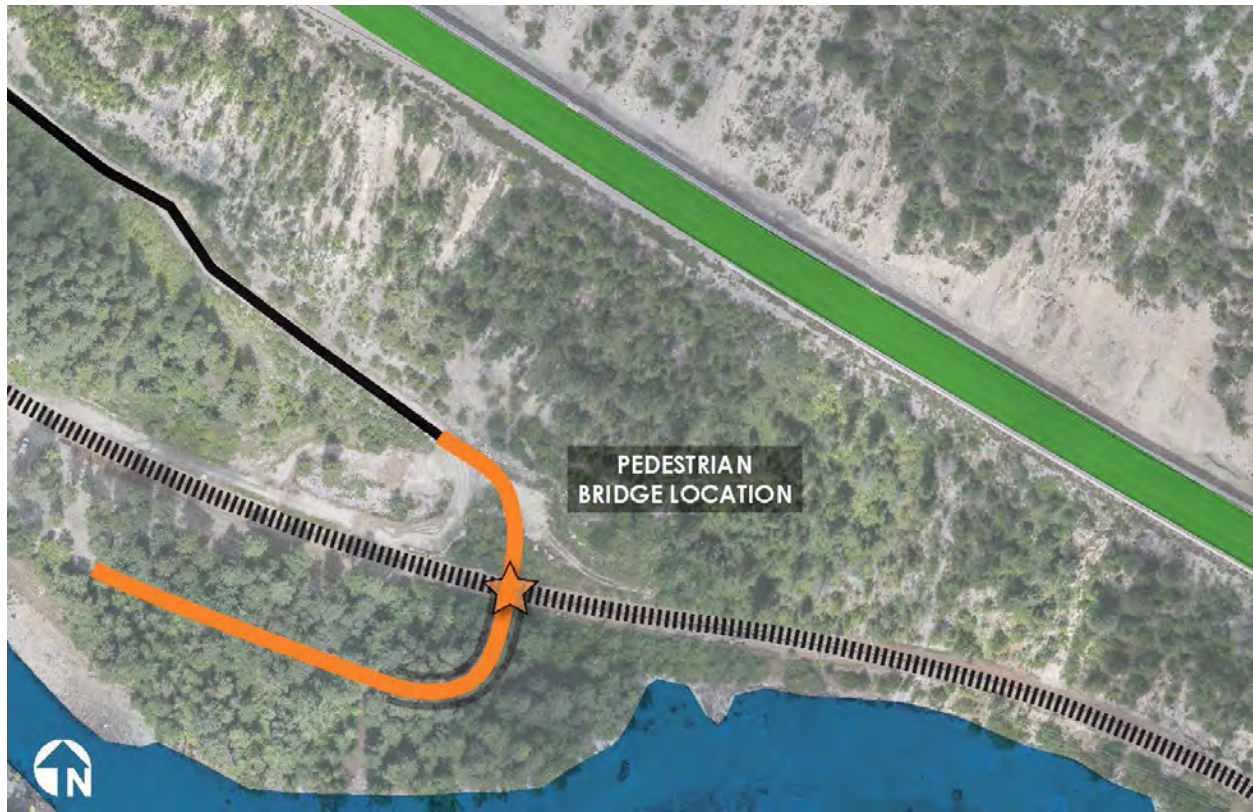


Figure 5 - Pedestrian Bridge Over Tracks Alignment

The possible bridge construction includes an uphill abutment, bridge deck, downhill abutment and ramp to the staging area. The staging area would require grading and vegetation removal. For this option consultation with CPR will be required to determine if the construction of the pedestrian bridge is feasible on what is likely CPR right of way.

Analysis of the existing slopes and accommodation of CPR tracks yields a conceptual design shown in Appendix B – Pedestrian Bridge Over Tracks Concept. This design assumes a bridge with 3.5 m concrete deck and railings high enough to inhibit falling objects onto the CPR tracks. This width of deck allows for a commercial raft to be carried by a person on each side. The conceptual bridge design is not expected to accommodate vehicle traffic, which would be required to park above the bridge. Traffic management would be in the form of fencing along the CPR right of way for a suitable distance, and signage explaining the expected behaviours of commercial rafting and CPR traffic on the site.

The staging area between the bridge and the water is subject to periodic spring floods and it is therefore unsuitable for development. All works require collaboration with CPR.

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

Evaluation

Safety

Notwithstanding the safety considerations of the highway egress, the safety mitigations provided by this option include:

- Reduced walking along the gravel maintenance road for clients, and;
- Reduction of conflicts between CPR operations and the public (assuming full compliance by the public with all safety measures).

The safety concerns for this option include the ongoing, although reduced, risk of conflict with CPR operations. These potential conflicts include the possibility of trespassers bypassing the bridge and circumventing safety measures such as fencing, and entering into conflict with rail traffic. As described above, the consequences of a conflict between rail traffic and a member of the public on the tracks could be extremely hazardous to all parties.

The remote location and difficult terrain of the crossing reduces the ability of emergency crews to respond to any incidents related to conflicts with CPR operations or other safety- or medical-related incidents that may arise as rafting trips are staging.

Economics

A Class D (+/- 50%) preliminary costing of construction works follows:

Table 2: Pedestrian Bridge Conceptual Opinion of Probable Costs

	Cost	Price
Highway egress construction	lump	\$4,000,000
Bridge, abutments, road surfacing	lump	\$2,000,000
TOTAL		\$6,000,000¹

1. This estimate is for construction costs only and is not reflective of total project cost. Additional costs associated stakeholder consultation and coordination with CPR, project management, engineering, environmental, geotechnical, civil, property acquisition (if required), and overall project contingency have not been accounted for in this estimate.

Engineering

The design of this bridge and its requisite supporting infrastructure is relatively uncomplicated, with significant civil engineering works already carried out in the vicinity, though the steep slopes and remote location pose logistical challenges, as well as the span of the bridge which is currently unknown.

Of note, Stantec conducted preliminary analysis on flood levels, and it is expected that the 1:200 year flood event would produce water levels that would reach the bridge embankments. This is important to note when considering alternative methods for crossing the tracks, specifically the

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

construction of culverts underneath, as they would be subject to flooding at this statistical frequency.

Recreation

The recreation value of this option is moderately greater than Option 1a, with gains made in the form of a more comfortable walk to the water and possible increased amenity value for the staging area. By providing a dedicated walking route and track crossing, the commercial rafting client experience is enhanced by no longer crossing at an unsanctioned rail crossing with difficult footing and direct proximity to moving trains.

Tourism

The intention of any use of this site is to maintain its existing function for CPR and BC Hydro, while providing safe access for commercial rafting operations. It is not intended to become a public park or to encourage use by members of the public, therefore any additional amenities that would do so are discouraged.

OPTION 2 – MODIFICATIONS TO RIVER BED

Channel modification

Summary

Rafting industry stakeholder feedback identified an option to modify the channel bed, and ultimately the hydraulics within the most challenging section the KHR, location as shown in Figure 6 - Option 2, Riverbed Modification.

This section of the river is characterized by its confinement between the steep valley walls of Navy Mountain to the north and Beaverhead Mountain to the south. These valley walls contain the CPR tracks on the overbank of river right (north bank), and the TransCanada Highway on river left (south). The reach boasts Class IV rapids in its upstream end that are present due to the river's morphology. The river's boulders likely sit upon the bedrock and may be glacial deposits, remnants from mass wasting or possibly the spoil from construction or maintenance activities within this section of the corridor. Downstream, the rapids are largely formed by bedrock outcrops, the Split Rock, and some boulders beginning in the most downstream end of the reach shown in Figure 6.

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY



Figure 6 - Option 2, Riverbed Modification

On the immediate upstream side of the Yoho Bridge (Five Mile Bridge) on the TCH, there is an angled bedrock outcrop in the bed of the KHR and another in the right bank that create hazardous whitewater conditions. Stakeholder feedback suggests this reach is impassible to commercial rafting and all but the expert recreational users.

Stantec's river engineer visited the site on December 19, 2016 when river flows were estimated to be 15 m³/s. Additional information was gathered from two videos taken by kayakers. One video is believed to have been take at around 40-50 m³/s while the second video (posted publicly on YouTube) is claimed to have been taken at 150 m³/s. Stantec notes that there are differences in the magnitude and shape of the hydraulics formed at these different flows and the videos supplemented the site observations and were later used to validate the hydraulic modelling of this reach.

The hazardous conditions are comprised of short series of three challenging hydraulics features over a horizontal length of 200 m (Figure 7).

Feature 1: The Angled Roller and Bedrock Outcrop

The first of the features is an angled roller extending out from river left into a bedrock outcrop on river right as shown in Figure 7. The angled roller turns, and then pulls vessels towards river right,

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

and into a complex hydraulic jump that is formed by the confinement from the bedrock outcrop that is protruding from the right bank. This feature can flip even large rafts left-over-right while they are in the angled hydraulic and possibly a downstream flip as they hit the complex hydraulic jump. This feature is understood to be only passable by expert whitewater users in smaller vessels who can actively maintain a path along river left.

Stantec's observed that the angled roller is likely formed by an angled bedrock protrusion on river left (Figure 8 and Figure 9). The bedrock is an impact hazard but the more likely danger is that there is a large hole (estimated 2.5 m deep) under the outcrop that can serve as a trap. Observations in a video of the site at 150 m³/s suggests a boil forms in this hole and if large enough can push vessels back upstream or more generally complicates the already dangerous hydraulics downstream of the angled roller.



Figure 7 - Hazardous Hydraulic Conditions Approaching Five Mile Bridge Looking Downstream (Image courtesy of Mikkel St. John-Duncan)

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

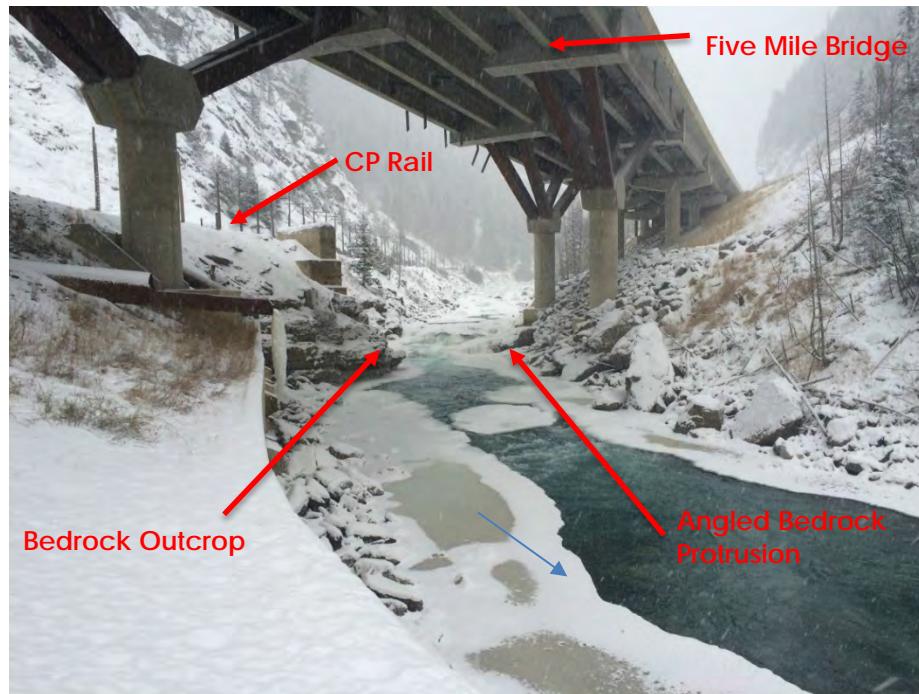


Figure 8 - Looking upstream at Angled Roller and Bedrock Outcrop (Stantec, December 2016)



Figure 9 - Looking upstream at Angled Roller and Bedrock Outcrop (Image courtesy of Ryan Johanneson April 13, 2016)

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

Feature 2: The Split Rock

The Split Rock feature is located 70 m downstream of Feature 1 (Figure 10). This feature is a large fragment of rock that is split along 3 large fracture planes and causes a constriction in the river channel (Figure 11 and Figure 12).

Constrictions are generally not too hazardous but the split-rock was described as one of the hazards on the reach. Observation suggests the hazard formed by the Split-Rock is less from the constriction and more because of its angle towards river left. Figure 12 shows the downstream face of the Split-Rock and the hazards immediately downstream of its constriction. The two large boulders located downstream river left, and the accumulations of woody debris that can form on (and near) this boulder potentially increase the safety hazards of the Split-Rock. The chute formed by the Split-Rock's constriction sends users river left into the hydraulics around the boulders. This may pose the hazard, but it is believed to be compounded by The Drop (Feature 3) located downstream.



Figure 10 - Approaching the Split Rock Looking Downstream (Image courtesy of Mikkel St. John-Duncan)

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

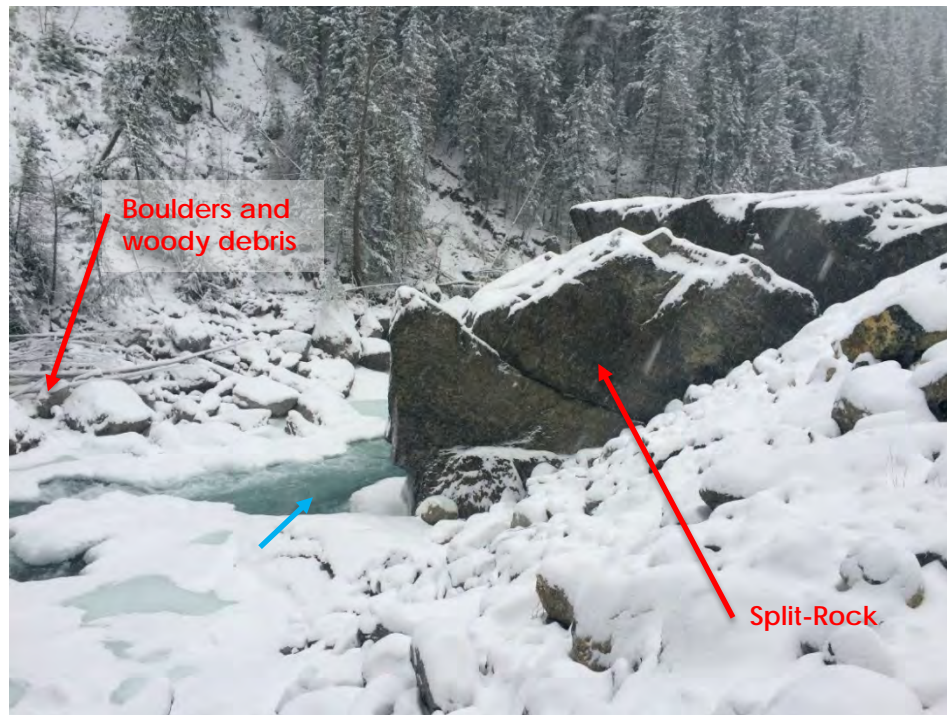


Figure 11 - Upstream Face of Split-Rock and its Constriction on Channel (Feature 2) – Looking Downstream

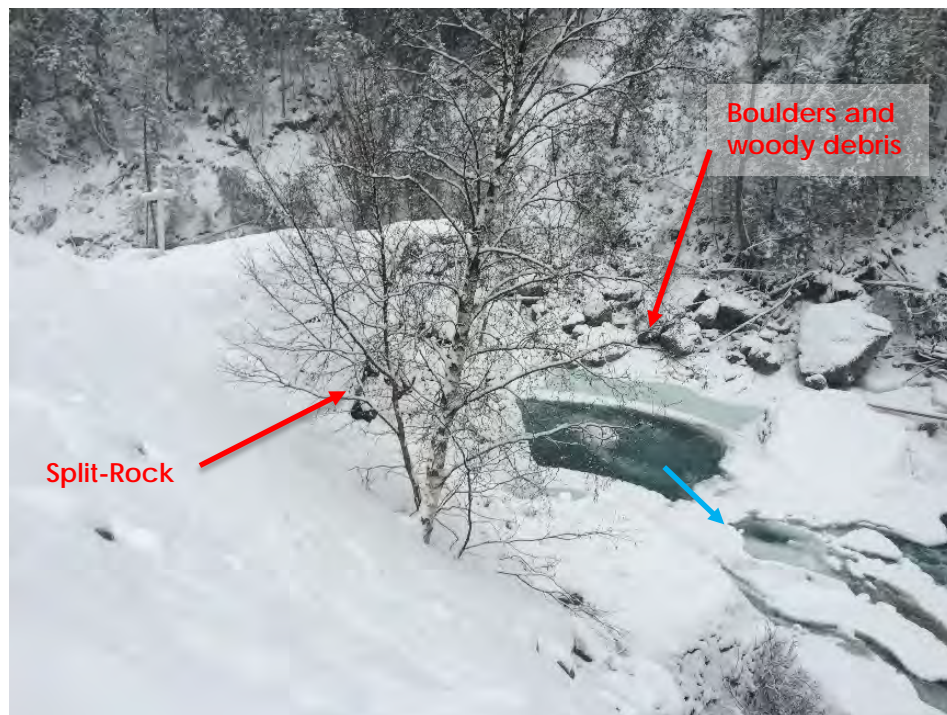


Figure 12 - Downstream Face of Split-Rock and Hazards on River Left (Feature 2) – Looking Upstream. Not shown to right of photo and 80m downstream is The Drop (Feature 3)

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

Feature 3: The Drop

The Drop is located 80 m downstream of the Split Rock and appears to be a convergent feature and may not form a hydraulic trap in itself but if users are in distress from passing the Split-Rock (Feature 2) then they may not approach The Drop at the correct angle, or with appropriate preparedness.



Figure 13 - Approaching the Drop Looking Downstream (Image courtesy of Mikkel St. John-Duncan)

This option includes the selective addition and/or removal of material to modify the river bed profile. The benefit to this option is that it could allow commercial and recreational whitewater users to run the reach of river and effectively eliminate the need for commercial outfits and many recreational users to pull-out of the river at the Kicking Horse Rest Area and bypass these features.

Evaluation

Safety

The goal of this option is to make this river segment navigable within prescribed flow parameters for commercial rafting operations.

Both upstream and downstream of these features are very hazardous whitewater conditions. It is our understanding from stakeholder feedback that the hydraulic features that are addressed by this option are those which make this section of the river impassable to commercial outfits, and most recreational whitewater users. It is our opinion that the modifications of the riverbed features can improve the safety on this reach of the river, but, the overall reach will maintain its Class 4 designation and should only be navigated by those who are trained and/or skilled enough to do so. It will not make this reach of the river safe for all users, at any time.

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

Engineering

Stakeholder communications and engagement will be an important part of the development of this option, with further engagement with regulatory agencies, First Nations in the area, commercial rafting operators, and recreational whitewater groups.

Stantec used a hydraulic model to evaluate three potential river bed modification strategies to develop a recommended option.

The first concept was the removal of the bedrock features that are creating the dangerous hydraulics. The hydraulic model indicated that this strategy would have less effect in improving the hydraulics than first anticipated, and that it would need to be combined with additional downstream and upstream bed modification works. An additional concern was in the potential stability concerns related to the proximity of the bedrock outcrop to existing CPR infrastructure.

The second concept was the installation of a series of small convergent weirs installed within the reach to backflood the hazardous features and stabilize the hydraulics. Hydraulic modelling of this concept indicated that the channel is too steep and the energy grade is too high for this solution. There is some merit in this concept as a designer could angle convergent weirs in a step to guide users around hazards at certain flows, however, at 150 m³/s the jumps were still very large and may not be deemed passable. The weir configuration might also have serviceability issues in this environment as they protrude from the bed grade and will be subjected to very high forces in flood.

The third concept, and the concept that is recommended should this option be pursued further, involves filling of the holes in the river bed to mute the plunging of the supercritical flows off the drops. This fill would also level the grades at the drops to match the overall bed grade and lessen the formation of hydraulics. Though this option will require more rock material than the other two options, the hydraulic model shows it to be the most effective at muting hydraulic jumps. The downstream ends of the fill locations at the Angled Roller (Feature 1) and The Drop (Feature 3) should be finished with a very low profile convergent weir to create a hydraulic that will reduce the potential for river users to become trapped. The hydraulic model indicates that this concept will not only smooth out the hydraulic profile through the reach but also provides a net reduction in river velocity. A plan and profile of a general arrangement for this option is provided in Appendix C – Channel Modification Concept.

A technical memo (Stantec, 2017) has been prepared with additional information regarding each of these options and the hydraulic modelling results.

This option will require regulatory approval under the *Water Sustainability Act* Section 11 and potentially Authorization from the Department of Fisheries and Oceans (DFO) under the *Fisheries Act*, dependent upon the existing fish habitat and the nature of the removal works. Both approval and authorization applications will require extensive environmental studies and engineered plans for the stream channel modifications that are based on sound assessment

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

and proof the proposed activities will meet the stated goals. Infrastructure owned by CPR and MOTI are very close to the proposed works and modifications of the river bed has the potential to destabilize this infrastructure.

Stantec recommends that a bathymetric survey and subsequently an update to the hydraulic model be completed to validate the feasibility of this option and better quantify its anticipated effects. This hydraulic model should be used to detail the design with respect to developing an estimate of the depth of fill (and ultimately, material volumes) and to size the rock to be installed.

Engineering drawings of the stream channel modification would need to be prepared to support the environmental permit applications, tender and construction

Economic

Our conceptual planning level assessment suggests that this option would require no construction of additional infrastructure, apart from potential for shoring of existing infrastructure should it be deemed impacted by the required extents of the riverbed modification. This infrastructure includes the eastern upstream pier of the Yoho Bridge Five Mile Bridge, and the historic bridge abutment that is connected to the right bank outcrop and may provide support to a portion of the CP tracks.

A Class D (+/- 50%) preliminary costing of construction works follows:

Table 3: Riverbed Modification Conceptual Planning Opinion of Probable Costs

	Cost	Price
Riverbed Modification	lump	\$1,600,000¹

- This opinion of probable cost is for construction only and is not reflective of total project cost. Additional costs associated stakeholder consultation, coordination with CPR and MOTI, project management, engineering, geotechnical, civil, environmental costs associated with assessment and regulatory permitting, construction of habitat offsetting (if required), and overall project contingency have not been accounted for in this estimate. Refinement of the opinion of probable costs will require the execution of the additional engineering and environmental studies described above.

Recreation

The recreation value of this option is considerable, as it creates a single navigable stretch of the KHR, from put-in at Beaver Flats to the Town of Golden, with more river time and less time spent executing the shuttle from the Rafters' Take-out to the Lower Canyon put-in.

Of note, though, is that even once the significant hazards are mitigated, the section of river downstream of the Rafter's Take-Out/Yoho Rest Stop will still be considered Class IV, and expert-only. For rafters desiring a safer or quieter experience, an Upper Canyon trip that ends at the Rafters' Take-Out is still possible.

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By removing the significant impediment between the Upper and Lower Canyons of the river, the logistical challenges incurred by having to take-out and put-in an entire trip are eliminated. This removes the need for delays and waiting for other rafting companies to use the highway egress point, and the discomfort of hiking down the access road to the current put-in, and the safety concerns of crossing the railroad.

Tourism

The enhanced commercial rafting experience benefits wider regional tourism efforts by creating a more desirable product to market, enhancing the region as a greater whitewater destination. While this study is limited to effects on the commercial rafting industry, the opportunity still exists to build upon this recreation and tourism experience.

OPTION 3 – YOHO BRIDGE RIVER-LEFT ACCESS

Highway Pull-Off

Summary

The BC MOTI completed preliminary design and analysis for an alternative exit off the TCH, located at the southeast side of the Yoho Bridge (Figure 14 - Option 3, Highway Pull-Off at Yoho Bridge). It encompasses an exit ramp, barricade, parking lane, driving lane and re-entry ramp, located between the bridge and rock cut face to the east. Appendix D shows the possible alignment of the pull-off.

From the pull-off area, a 3.5-metre wide pathway would be built along the highway and down the embankment to the river. Given the challenging and steep terrain, the pathway may need to be combined with a narrow trail for rafting clients with a hoist system for equipment. In-stream work along the bank would be required to create a safe entry into the river for rafters and other whitewater recreationists.

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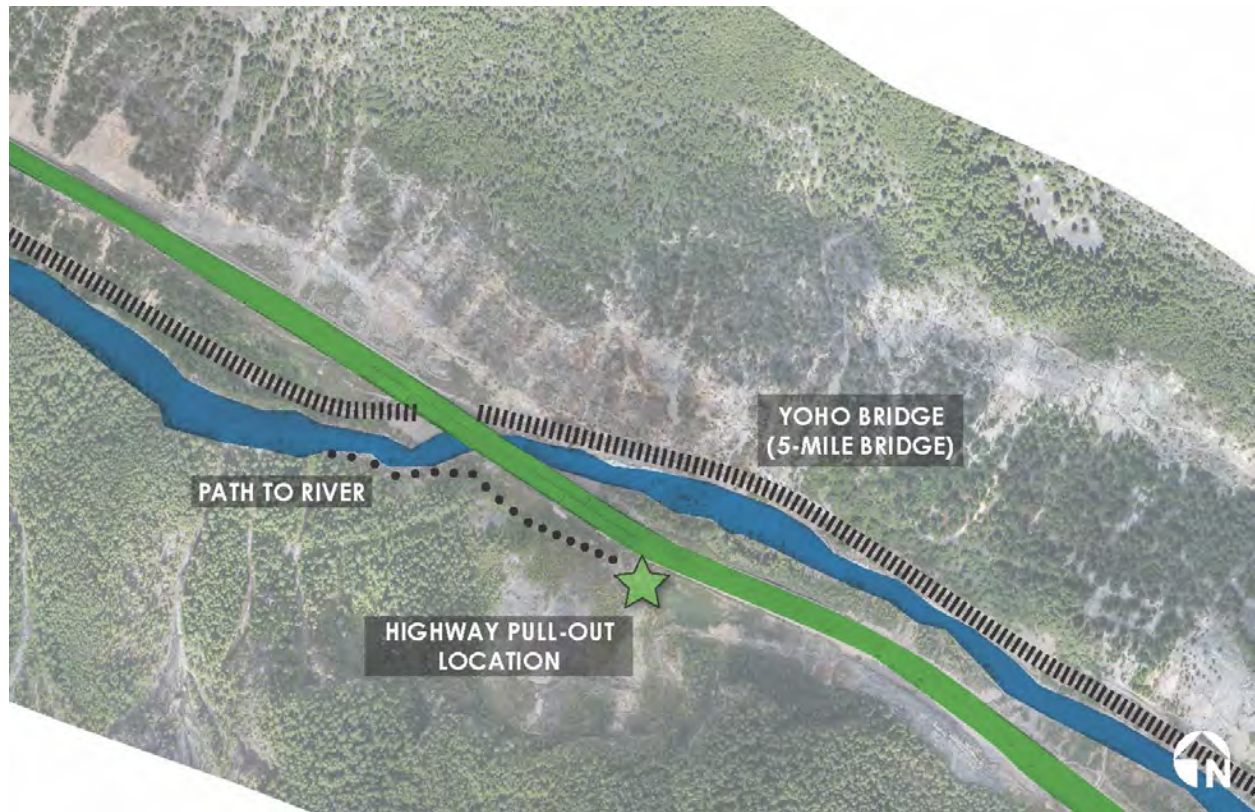


Figure 14 - Option 3, Highway Pull-Off at Yoho Bridge

Safety

There are three major safety concerns associated with this option. Firstly, there is currently insufficient room east of the Yoho Bridge to construct a pull-out that would meet engineering standards for a 100 km/hr highway alignment. The design of the highway pull-out, is constricted by the rock cut face to the east, and Yoho Bridge to the west. To design and construct a suitable highway pull-off at this highway speed, more room is required. The current concept design is suitable for highway speeds of 70km/h, less than the current TCH speeds of 100km/h. In order to mitigate this deficit, highway speeds could be reduced for this stretch of the highway, but this is not considered enforceable or desirable as driver expectations would not encourage speed reduction compliance. This is compounded by the location of the pull-out at the base of a hill on either side, increasing the likelihood of traffic acceleration.

The second safety concern is related to the risk of rock fall along the trail. This stretch of valley, formed by Beaverhead Mountain, poses significant instability, with risks to pathway users from the adjacent rock and terrain, as well as up-slope rock instability. The risks for both construction crews and trail users have been confirmed by Stantec engineers as being of considerable hazard, despite possible rockfall protection measures.

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

The third safety concern is the unstable terrain for the pathway itself, which could cause serious injury for rafting clients and guides as they make their way from the highway down to the river. The rock slope is known by Stantec and MOTI as being unstable and unpredictable, and is considered a significant risk both for construction crews and the ongoing use of the trail by rafters.

Economic

A Class D (+/- 50%) preliminary costing of construction works follows:

Table 4: Highway Pull-Off at Yoho Bridge Conceptual Planning Opinion of Probable Costs

	Cost	Price
Highway Pull-Off at Yoho Bridge	lump	\$15,000,000¹

- ¹ This opinion of probable cost is for construction only and is not reflective of total project cost. Additional costs associated stakeholder consultation, coordination MOTI, project management, engineering, geotechnical, civil, environmental property acquisition (if required), and overall project contingency have not been accounted for in this estimate.
- Refinement of the opinion of probable costs will require the execution of the additional engineering and environmental studies described above.

Engineering

The analysis, design and construction of the pathway portion is the most significant engineering consideration for Option 3. The terrain is extremely steep, and the material on which the path would be built is very unstable, requiring significant care when operating machinery during construction. This area has a history of slope movement and significant further geotechnical investigation is required to assess suspected slope instabilities.

The approvals process would likely be relatively straightforward, with most works being carried out within the TCH right-of-way. Modification to the river bank to construct a launch eddy for rafting would require approval under the *Water Sustainability Act*, and the results of any environmental and archaeological assessments completed to prove the feasibility of this option is unknown.

Recreation

The recreation value of this option is similar to that of the current access. The staging area at the river's edge would be significantly diminished, and would likely result in bottlenecks and group management concerns for larger trips.

Tourism

Of significant concern for the workability of the pull-off is its attractiveness to motoring tourists who typically stop at all highway pull-offs along this stretch of the TransCanada. The site is extremely visible on approach from both directions and provides a pathway to the river, which further increases the chances that it will be overused by the non-rafting public, leaving little room for commercial rafting equipment trucks/trailers, and client buses. Congestion at this site,

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

with the resultant parking overflow onto the highway, is a significant safety concern, as it would interfere with rafting operations as well as TCH traffic.

The option would be restricted to use by commercial rafting companies, and is not intended for the general public. Unauthorized use would pose a significant hazard to the motoring public.

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

4.0 CONCLUSIONS

Additional Consultation

For all options evaluated in this report additional consultation with regulatory agencies, proponents, and stakeholders is recommended. In addition, the Province of British Columbia and the Government of Canada each have a duty to consult and where necessary, accommodate Aboriginal groups whenever a decision or activity could impact Aboriginal rights and title. While the Province of British Columbia and the Government of Canada are responsible for ensuring that adequate and appropriate consultation and accommodation takes place, they often delegate procedural aspects of consultation to project proponents and may ask the proponent to:

- Provide information about the proposed project to Aboriginal groups early in planning process;
- Obtaining and discussing information about specific Aboriginal rights and interests that may be impacted;
- Considering modifications to plans to avoid or mitigate impacts to Aboriginal rights and interests; and
- Documenting engagement, specific Aboriginal rights and interests that may be impacted and any modifications to address concerns and providing this record.

Evaluation

Safety

The safety concerns associated with the current highway egress are significant. This portion of rafting logistics is the source of the greatest safety concern for operators and clients. Option 1 will require modification to the existing highway egress to address these safety issues and is vital for public safety and commercial rafters, with potential wider implications for CPR and BC Hydro access.

Rail safety and the avoidance of any conflict with rail traffic are also paramount. A grade-separated crossing (pedestrian bridge over the tracks), presented in Option 1, provides significant mitigation of these concerns. This option, however is unworkable without a safe solution to highway egress and CPR sanction for use of the maintenance road.

Option 2 avoids all conflict with CPR operations, and does not require access to the TransCanada Highway. Modification of the river bed can be completed to allow for the passage of commercial rafts, however the expected resultant class of whitewater is still considered expert-level (IV or greater).

With the implementation of Option 2 access to the Lower Canyon may only be accessed at certain water levels. Overall, the rafting operators and participants must weigh rafting client safety and risks. These risks are expected to be commensurate with those already posed by the downstream Lower Canyon stretch of the KHR. It is therefore the option of this report that at this

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

level of analysis, Option 2 is the safest solution for accessing the Lower Canyon by commercial rafting operations.

Option 3 has significant risk to safety because of its location at a known rock-fall location, and the design deficiencies of the highway pull-off. The safety concerns associated with implementation of Option 3 are greater than the other two options presented in this report and will likely require extensive mitigation.

Economic

At this level of evaluation, costs presented in this report are conceptual planning level and do not reflect the overall project costs. Additional costs associated with stakeholder consultation, coordination with CPR and MOTI, project management, engineering, geotechnical, civil, environmental, property acquisition (if required), and overall project contingency have not been accounted for in the estimates presented above. Refinement of these opinions of probable costs will require the execution of the additional engineering and environmental studies.

Based on the construction estimates in this report, Option 2, the modified river channel, is expected to be most cost-effective. However, this option has many variables that could significantly affect the overall project costs including additional costs for what could be a complex process for regulatory and proponent approvals.

Engineering

Engineering of Option 1 and 1a will require modification of the current highway egress. This option will require further clarity about when and how works related to KHC Phase 4 will take place, and consultation with MOTI to determine if modification of the highway egress at this location will be feasible. Depending on the KHC Phase 4 schedule, realignment of the access road independent of additional highway works could be considered.

In terms of technical investigations required, complexity of regulatory approvals and degree of technical complexity, Option 2 is associated with the most unknowns. Detailed modeling of this option will need to be completed. This option will require extensive consultation the outcome of which is unknown and somewhat difficult to predict. Stakeholder approvals and regulatory permits will also be required prior to moving forward with this option.

Engineering requirements for Option 3 will require more analysis to prove the feasibility of a highway pull out to meet TCH design criteria and construction of a geotechnical stable trail down to the KHR.

Recreation

The ideal resolution of the need to shuttle commercial rafting trips around a section of the river is to avoid having to do the shuttle in the first place. This reduces the amount of time "hurrying up and waiting," eliminates the disruption to a day in the wilderness, and mitigates the safety concerns posed by accessing the highway.

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

The resultant rafting experience as presumed in Option 2, will be one of continuous river travel, finishing in the Town of Golden.

Tourism

Tourism in the Golden area is centered on activities that connect people to the landscape, through athletic outdoor pursuits and cultural experiences. Any access solution for the Lower Canyon should add value to the wider Golden tourism objectives by enhancing the river experience itself.

Option 2 would provide the ability for river recreationists to travel the KHR, at certain water levels, continuously, a major enhancement of the rafting experience.

Summary

The following table aims to assign a value for each option, using the criteria discussed in the assessment portion of this report. This table assigns values that are subjective and intended to be qualified by the above discussion, and is intended to be a summary of the discussion above, not a replacement for it.

- 0- The value of this criteria is so low to be prohibitive of further investigation into the option
- 1- The value of this criteria is extremely low, or the criteria is extremely difficult to execute
- 2- The value of this criteria is less than the current access model, or poses difficulty in execution
- 3- The value of this criteria is unchanged from the current access model, or it is of average difficulty in execution
- 4- The value of this criteria is enhanced from the current model, or the criteria is straightforward in its technical feasibility
- 5- The value of this criteria is exceptional, or the criteria will be easy to achieve

	Option 1a	Option 1b	Option 2	Option 3
Safety	1	2	4	0
Economics	2	2	5	1
Engineering	2	2	2	2
Recreation	2	3	5	2
Tourism	2	2	4	1
TOTAL	9	11	20	6

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

Recommendation

It is the recommendation of this report that further study and attention be focused on Option 2, modifications to river bed.

Although this option is associated with many unknowns, it is also associated with the greatest potential for long-term recreation and tourism benefit. This recommendation is based on a preliminary feasibility and a planning conceptual level of and is contingent upon the validation of engineering assumptions through further modeling and design, additional environmental studies and consultation to determinate the feasibility of approvals and permits, outside of the scope of this report.

MOVING FORWARD

Current Scope

The following activities are part of the current scope of works, and will be appended to this report following their completion:

1. Channel survey and survey of features to be removed, to be completed when water level drops to 18 m³/s.
2. Preliminary geotechnical investigation to be completed by Stantec concurrent to channel survey.
3. Hydraulic Model to validate assumed effects of rock removal.
4. Channel Modification Option Feasibility Report. A very brief report describing the results of the above and with a more refined Opinion of Probable Cost. This report should be the basis for Golden's and additional stakeholder decision to proceed.

Next Steps

Consultation and Collaboration

Consultation with First Nations in the area should be conducted and will be compulsory for environmental permit applications. Additional consultation with regulatory agencies, proponents and stakeholders should be conducted at the conceptual stage. The outcome of the consultation process could largely determine the feasibility of this option. In addition, opportunities to collaborate with interested parties should be reasonably explored during all stages of design, construction, and operation of any facilities contemplated. An ongoing dialogue is encouraged.

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

Preliminary Engineering Report

The provision of a Preliminary Engineering report, which will build upon the feasibility report and provide more detailed drawings, and is the next stage in obtaining approval for the construction of Option 2. It will also be the basis for regulatory consultation to determine the feasibility of obtaining approvals and will also be included in the regulatory applications.

Environmental Requirements and Regulatory Permit Applications

An environmental assessment is recommended at the conceptual stage of this option. This environmental assessment will serve to inform the likelihood of approval of environmental permit applications (i.e. Section 11 approval, and DFO Authorization), and potential environmental works and habitat offsetting associated with this option.

Potential environmental requirements (not comprehensive)

- Full review of existing desktop information (Preliminary review complete. See Appendix E)
- Fish and fish habitat surveys to determine current aquatic habitat and potential habitat loss.
- Fisheries habitat modeling to determine proposed habitat loss for fish.
- Riparian area surveys to determine current riparian habitat and riparian loss.
- Environmental monitoring on site during construction will be a condition of approvals
- Post-construction assessment and/or monitoring will also be a condition of approvals
- Potential construction of habitat offsetting to compensate of habitat loss during construction.

Fisheries Act

The application follows one of three routes:

- Self-Assessment: no submission to DFO; completed internally.
- Request for Review: If a request for review is recommended or required, DFO typically takes 3 months to complete their review and issue a response.
- Authorization: If an Authorization is required, DFO as legal timelines that they have to meet, including

Timing:

- 60 days to determine if the application is complete; and following this

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

- 90 days for the Minister to issue an Authorization

At this early stage of the project, we anticipate that a request for review by DFO will be recommended.

Water Sustainability Act (WSA).

"Changes in and about a stream" is defined in the WSA as:

- Any modification to the nature of a stream, including any modification to the land, vegetation and natural environment of a stream or the flow of water in a stream, or
- Any activity or construction within a stream channel that has or may have an impact on a stream or a stream channel

Based on Stantec's recent communication and experience, a minimum of 6 months should be expected. However, the process can take up to a year.

It is imperative that the application be prepared and submitted as soon as feasible in order to secure a place in the review queue.

Navigation Protection Act

Stantec does not believe the KHR is a scheduled waterway that requires a formal submission to Transport Canada; however, it might be prudent to notify them, as well as the rafting companies as part of a wider engagement protocol.

Land ownership

The client/contractor must provide the names and addresses of any landowners at and upstream of the site. Potential land acquisition and land use/access agreements must be in place prior to construction.

Construction

- Completion of detailed design
- Preparation of tender documents.
- Establish ongoing environmental monitoring as required.
- Carry out ongoing construction supervision as per contracts.

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

5.0 DISCLAIMER

Whitewater recreational activities are inherently dangerous and hazards in natural systems like the Kicking Horse River cannot be fully mitigated. The recommendations herein do not aim to provide recreational features or features which can be deemed safe to users, or clients of commercial operations. Access to the site is uncontrolled. Stantec assumes no responsibility for the recreational or commercial use of the river at the location of these proposed modifications.

Concepts provided herein are based upon the following hydraulic principles:

- Eliminate the large hydraulic jumps; or, adjust the location and angle where hydraulic jumps occur to improve navigation.
- At locations where jumps may occur then direct flow to the center of the channel through convergent features.

Concepts provided herein are not deemed 'safe' cannot completely prevent death, injury or damage to property including, but not limited to:

- Drowning through means of hydraulic or physical entrapment;
- Impact with rocks, logs, or other objects;
- Impingement on rocks, logs, or other objects;
- The results of negligent use, or use beyond experience level; and,
- Performance above 150 m³/s (or below 50m³/s) , which was not assessed as part of this stage in the design.

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

6.0 APPENDICES

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

APPENDIX A – WHAT WE HEARD

**Golden Kicking Horse River
Access– August Engagement
Session Summary Report**

116500403



Prepared for:
Jon Wilsgard
Chief Administrative Officer /
Corporate Officer
Town of Golden

Prepared by:
Stantec Consulting Ltd.

September 12, 2016

GOLDEN KICKING HORSE RIVER ACCESS– AUGUST ENGAGEMENT SESSION SUMMARY REPORT

Golden Kicking Horse River Access Feasibility Study – 116500403

1.0 PURPOSE

The aim of this summary report is to capture the directed discussions had with key stakeholders identified by the Town of Golden client, including rafting operators, political representatives from Town, Regional and Provincial governments, and technical experts from the Ministry of Transportation and Infrastructure (MOTI) at an engagement session held on Thursday, August 25, 2016 for the Kicking Horse River Access Feasibility Study.

Directed discussions were guided by a set of questions for three different themes, including:

PART 1: NEEDS ASSESSMENT

- 1.1 What goes into a Lower Canyon raft trip?*
- 1.2 Where do key activities occur?*

PART 2: ACCESS OPTIONS

- 2.1 How could the existing access road be used for a modified put-in?*
 - *How will this impact: Safety (Clients, Guides, Public); Business/costs; Trip Logistics (shuttle, staging, parking, etc.); and Client Experience.*
- 2.2 What alternative opportunities exist for access to the lower canyon?*
 - *How will this impact: Safety (Clients, Guides, Public); Business/costs; Trip Logistics (shuttle, staging, parking, etc.); and Client Experience.*

PART 3: BEYOND THE RAFT

- 3.1 What other complementary activities could enhance the rafting experience?*
- 3.2 What site amenities or site enhancements could support this activity?*

2.0 KEY THEMES

Responses received were diverse, insightful and extremely valuable to the overall process. Following a review of the responses received at August 26, 2016 engagement session, a set of high-level themes emerged. Detailed responses are provided in Appendix A.

EXISTING SAFETY ISSUES

A constant theme throughout the discussion was the issue of safety. In particular, discussions of the current access raised a number of safety issues, including crossing the highway, the door of raft client buses opening up on to the highway side, the variable terrain of the Canadian Pacific (CP) maintenance road, and the state of the 30 Mile crossing. Participants were in agreement

that modifications to the existing access or the development of an alternative access must address these safety issues for all involved.

ACCESS OPTIONS

While discussions were diverse and covered a range of ideas as highlighted in Appendix A, participants were able to identify four potential access options to be explored by the project team based on their knowledge of the Kicking Horse River and Lower Canyon. This key theme and the four individual access options discussed will inform the project team in their own analysis of the feasibility of certain options.

1. *Modifications to Current Access*

Relative to other topics covered during the afternoon session, modifications to the current access occupied a short period of time. This was largely due to the fact that participants were skeptical of CP and willingness to allow for a potentially precedent-setting private crossing. However, individuals were able to identify that the development of a pedestrian bridge from the existing access road may be a possible option. The bridge design and location would have to account for land ownership and mitigate any interference with the existing CP tracks. Modifications to the current access may also require a certain degree of political involvement from Provincial Ministers as identified by participants at the session.

2. *Managing the River*

Certain participants had a clear interest in examining the topography and hydrology of the Lower Canyon along the Kicking Horse River with a hydrologist to see if any modifications could be made. This could lead to opportunities to connect the Upper and Lower stretches of the river, which would enhance the overall experience for rafters. However, the topic of managing the river led to others in the room identifying that altering the river with the existing gradient may lead to additional boulders returning the next year the portion of river.

3. *Yoho Bridge Pull-Off*

This preliminary access option emerged as a direct result of the efforts of MOTI staff to develop a preliminary idea and willingness to share with the group at the session. While the option had not yet received approvals, had no costs associated with it and had potential safety constraints associated with it due to speed of traffic near the pull-off, participants took interest in this option. Individuals also highlighted potential opportunities and issues with it, including avoiding congestion, limiting traffic speeds seasonally or temporally through the area and different ways to access the river from the highway.

4. *Enhanced 'Aerial' Modifications*

When discussing how to access the river from both the existing access and the preliminary Yoho Bridge pull-off, certain participants identified that one value-added means to do so could be the introduction of a zipline in combination with

stairs or pathways. Using this enhanced 'aerial' modification could avoid the CP 30 Mile rail crossing all together. In terms of potential locations, participants identified that a zipline could be located: from just after the bridge and run to Split Rock on the other bank; from the other side of the proposed Yoho Bridge pull-off location; or over CP property and on to the riverbank where helicopters have been landing. For each option, further analysis of land ownership, safety and costs would have to be completed.

RIVER-FOCUSED ENHANCEMENTS

During the final portion of the afternoon session, it became clear when asked about site amenities and site enhancements, that the 'biggest enhancement is adding a new piece of river to the rafting experience'. Participants did not want a series of additional amenities added to a new access beyond simple interventions to enhance the rafting experience for users, such as a new staging area or site-specific modification to the river. Modifications to the existing eddy before the Yoho Bridge was identified as one important river-focused enhancement that could benefit the enjoyment and safety of rafting client as the eddy is too weak and not large enough to accommodate a safe put-in.

MANAGING INCREASED ACCESS

Certain participants were cautious about any new amenity that could attract a large influx of the general public and create congestion or safety issues for commercial and recreational rafters trying to access the river by 'attracting more people to an area that is already tight'. As one participant indicated, 'I don't want options that encourage the public to run across the highway'. Participants acknowledged during the session that a new access, such as the Yoho Bridge pull-off, could also result in smaller trips, and this may require a '[...] change in price to reflect exclusivity.' As a result, there was a general agreement that a change in capacity on the site may be required to accommodate the infrastructure needed for the new access.

3.0 NEXT STEPS

The findings of this report will be shared internally with all participants in order to validate 'what was heard' and finalize the report. The report will then be revised and used by the project team as a key reference point in assessing the feasibility of potential access options for the Lower Canyon of the Kicking Horse River.

APPENDIX A: DETAILED FINDINGS

DETAILED FINDINGS

The detailed responses to each set of questions that formed the basis of the key themes are documented below. The use of quotations marks indicates a direct quote. Where there are no quotations, the discussion has been paraphrased.

PART 1: NEEDS ASSESSMENT

1.1 What goes into a Lower Canyon raft trip?

1.2 Where do key activities occur?

During the initial segment of the needs assessment, participants clarified for the project team that the Lower Canyon trips are typically an 'add-on' trip to the Upper Canyon. All detailed safety briefings are typically done in advance of the Upper Canyon trip at the Beaverfoot Road put-in. Clients who opt to also do the Lower Canyon trip, after the take-out from the Upper Canyon segment, are shuttled by a bus that crosses the highway to the CP access road at 30 Mile Crossing. Individuals then exit the bus at the pull-off for the CP access road with the door facing traffic. Historically clients have walked down the road and trucks were used to transport the rafts down the access road prior to being carried over the tracks whereupon clients walked over the tracks to the river bank and the rafts were launched. Currently, one operator transports clients and equipment directly to the riverbank via helicopter. All Lower Canyon Trips bring clients directly into Town with the take-out at the Kicking Horse Pedestrian Bridge at 8th Ave North.

1.3 Is there anything about the current access that negatively affects trips?

- *Safety of clients and guides*
- *Client enjoyment*
- *Trip logistics*
- *Business operations*

General Responses:

- **Highway Experience + Safety** - 'Crossing the highway is not an ideal situation' – nor is 'door [of the bus] opening on to the highway side'
- **State of CP Tracks and Access** - 'The CP tracks are in an appalling state' – used as an informal garbage dump of construction materials
- 'Road turn out is bad and the road is fairly steep' – loose gravel prevents school buses from traveling down further along the existing road.
- 'We are carrying boats through variable terrain'
- 'We drive boats down to tracks and guides take them across the tracks. Clients carry boats across the rocks'
 - Rocks at existing Lower Canyon put-in are relatively jagged and slippery
- 'Rare to see client turn around because of steep road' – however, if they find road physically demanding, they likely should not be rafting Lower Canyon.
- **Client Enjoyment + Changing State of Rafting** - 'Historically buses would go all the way down, but usage has changed significantly. Intensity and number of boats has increased'

- 'Nature of adventure traveler has changed as well as the risk we can take on'
 - 'We started with non-self-bailers. Now we can manage risk better'
 - 'Demands have also increased for level of adventure. We as operators have pushed that demand, but also societal shift'
 - 'Everyone needs an adrenaline fix'
- **Continued use of access** – 'Recreational kayakers are still trespassing across the CP tracks'
- **Trip Logistics** – 'With highway being tiered, the existing maneuver may not be feasible'
- Operators cannot make turn heading east with trucks and trailer and have to go all the way to the rafters take-out to turn around
- MOTI staff then identified they were 'concerned about getting out on the highway side' and would prefer that people getting out facing traffic is avoided.
- To date, operators have been managing that risk among others given the existing conditions of the access.
- As identified by one operator, 'we'd love not to have to drive across like that'
- **Business Operations + Permits** - currently, general river access permit is 'all part of the package and renewed every 5 to 10 years'. There is also a permit for accessing on and off the highway, but doesn't have any costs associated with it.

1.4 How could a site be ideally designed to enhance safety, client experience and trip logistics?

General Responses:

- A good staging area at the river is a necessary component
- 'Don't need a lot of space' – a portable toilet may be a good addition to a site, but don't need a lot of other amenities.
- 'Safety briefing is done prior to getting down there; only specific protocols related to the tracks and put-in are used'
- 'No one does lunch hour than around Hunter Creek'
- 'Sometimes lunch happens after the trip'
- 'Ideal site would be able to get on and off bus safely'
- 'Also a porta-potty facility would be ideal'

PART 2: ACCESS OPTIONS

2.1 How could the existing access road be used for a modified put-in?

- *How will this impact: Safety (Clients, Guides, Public); Business/costs; Trip Logistics (shuttle, staging, parking, etc.); and Client Experience.*

General Responses:

Discussions for this question focused on CP cooperation, ownership of the lands south of the tracks and the extent of the right-of-way of 30 Mile crossing. General skepticism was observed from the entire group with respect to this question. Everyone acknowledged challenges, and then agreed to move on to other solutions. Specific responses documented during this brief discussion include:

- 'Say CP allows us to access it now and then 10 years down the line they say no thanks – that is a huge issue'
- 'Trust is a major issue with CP'
- 'Does CP have a minimum set of conditions for an access?'
- 'Surprised there isn't a crossing arm in that area'
 - 'this is a non-existing crossing to CP – not a public crossing, therefore doesn't exist'
- 'Larger issue is that CP has to deal with thousands of public crossings across Canada and changing regulations'
- 'We need a conversation of that's more painful than this' – need CP to weigh out options and trade-offs
- 'Garneau has been involved – says we have to put safety first. It would take a political effort to squeeze CP. Hammer I can think of is to change taxation'
- 'It would be interested to have a conversation with Transport Canada – could be an ally'
- **Pedestrian Bridge** - While potentially hard to implement, one solution identified by the group for the existing access road was a pedestrian bridge with appropriate clearances that is not on CP property.
 - 'What are the parameters of a pedestrian bridge?'

2.2 What alternative opportunities exist for access to the lower canyon?

- *How will this impact: Safety (Clients, Guides, Public); Business/costs; Trip Logistics (shuttle, staging, parking, etc.); and Client Experience.*

General Responses:

1. Managing the River Morphology

- 'The river is a managed watercourse'
 - 'We need to look with the hydrologist at the river'
 - One participant asked for clarification by stating 'is this where we are talking about blowing up the river?'
 - 'Need to look at topography and hydrology'
 - 'At low water you can see the boulders. Biggest issue will be the gradient with managing the river. If you move them [boulders], they may return next year.'
- **Just Before the Bridge** – 'squeak a pull-out just before the bridge, but could be tough' and poses some safety risk should the rafts fail to exit in time.
- **Connecting upper and lower trips together with a path** – 'it's a long portage. Would need quads and a retaining wall for pathways'

2. Yoho Bridge Pull-Off

- MOTI representatives then presented a preliminary idea to the group involving a highway pull-off just east of the Yoho Bridge and emphasized that there is not approval yet, costs are to be determined and there are constraints with it in terms of safety and design due to speed of traffic near the approach. This led other participants to identify:
 1. 'Could you slow down traffic? 80 zone through there'
 2. 'Could it have seasonal use?' – this could mitigate potential concerns of a deceleration zone and acceleration zone
 - Potential issues with preliminary Yoho Bridge pull-off option:
 1. 'How do you limit non-commercial rafters use to avoid congestion?'

2. 'How do you ensure RVs and leisure kayakers are not stopping?'
 3. 'How do you get down from the highway?'
- **Before the Bridge** – 'might not be pretty, might not be cheap – but only way'
 - **Changing trips to account for new access** – 'the nature of the trip may change. May need to make trip smaller [capacity]'
 - 'Value added? You get the Lower Canyon, but costs more.'
 - 'Giving rafting away is not creating value'
 - 'May need to change price to reflect exclusivity'
 - 'We have a premium product here'
 - 'Need to market the river as a whole and have a price point that reflects the premium nature of the rafting'
 - 'If access changes, you may need to cap how many people you can take'
 - 'Limit capacity may create demand, not a bad thing for us operators' – similar to the nightclub analogy – given the option of A or B in a town you are visiting, 'you always go to the one with the lineup'
 - 'Okay with a cap on the site to accommodate the infrastructure you need for the new access'
 - **Hiking Trails** – 'there is capacity to the community to assist in building hiking trails. Trail builder alliance is working to build out parks plan through mostly trails'
 - 'Hiking trails could be difficult with grades on non-CP side'
 - **Potential Risks** – 'every time you take someone in and out of a raft is when risks are highest' – large reason for why clients wear helmets to avoid issues when moving outside the raft along the shorelines.
 - **Other Options** – 'I don't see any other options to the east of the bridge.'
 - 'Always nice to have buffer between where you eddy out and crazy piece.'
 - 'Raft waterslide along the edge?'

3. Zipline

- Discussions then shifted to one participant identify if it is feasible to introduce an 'aerial option' by asking the following question to the group - 'Could you zipline over CP tracks?'
 - 'Lots of places zipline rafts into canyons'
 - 'It's another enhancement to the product. Could be more difficult, but that may be much cooler for clients'
 - 'Other side of the bridge is an extremely useable area' – could be a combination of stairs and a zipline
 - 'Ziplines may have two highway pull-offs so could be more expensive'
 - Potential zipline options discussed included:
 1. Zipline from after the bridge to Split Rock on the other bank
 2. Zipline from the other side of the MOTI preliminary Yoho Bridge pull-off option
 3. Zipline over CP property and land on split along river where helicopters have been landing
 - However, for option 3 would need to know where the property ends and would also need to know what clearance is required.

4. Modifying Current Access

- **Current Access** – ‘Something will have to be done eventually and current access will have to be modified down the line to be certified as safe.’
 - ‘When four lanes happens – that issue has to be resolved’
- **Phase 4 Road Widening** – ‘so far off in implementation, no secured funding and we’d still be crossing tracks’
- **Political Approach** – ‘get Minister Bond and meet with CP in Calgary. Could be in September, and wouldn’t be a waste of time.’
 - ‘Minister Bond running again and she is very senior. Could also bring Minister Stone as well to meeting.’
 - ‘CP goes to government all the time and asks for favours.’
 - ‘It’s a critical piece to finding and implementing a solution’

PART 3: BEYOND THE RAFT

3.1 What other complementary activities could enhance the rafting experience?

3.2 What site amenities or site enhancements could support this activity?

General Responses:

To begin discussions, it was identified by the Project Manager that ‘many successful Ottawa River companies have different pieces. As such, how do we support an alternative put-in area through other tourism components?’ This generated a number of responses that largely focused on ensuring a new area doesn’t create more issues by ‘attracting more people to an area that is already tight’. Other responses included:

- ‘Don’t want public to linger there’
- ‘View point could be nice with CP engine, the bridge and the surrounding landscape’
- ‘Have big enough staging area for commercial and recreational rafters’
- ‘If ideal solution could add access for kayakers, that would be great’
- ‘Low-impact walking path/trail could also be nice’
- ‘Greater access may result in putting in more parking, trash cans and maintenance’
 - ‘Trucks and fifth wheels will likely park there’
 - ‘Guy who stops at every single pull-out for a photo is also an issue’
 - ‘Do not enter sign won’t stop them’
- While ideal complimentary activities may be difficult to identify - ‘need to consider Golden - show thousands of guests Golden and push them into Town’
- Higher put-in could allow individuals to ‘raft from bridge to beach then go into Golden’
- ‘Biggest enhancement is adding new piece of river to rafting experience’
- Greater access mitigation strategy – ‘could use barriers/gate to limit access for rafters’
 - ‘Unfortunately our capacity is limited and influence on highway traffic is hugely problematic’
 - ‘Coming in at certain time of day – so not out of the realm to staff it with a person to keep it moving’
 - ‘Pull-off for trucks just up the highway and past the Kicking Horse rest stop isn’t heavily used by the public’ – likely as a result of the steep slope and that they just passed a rest stop

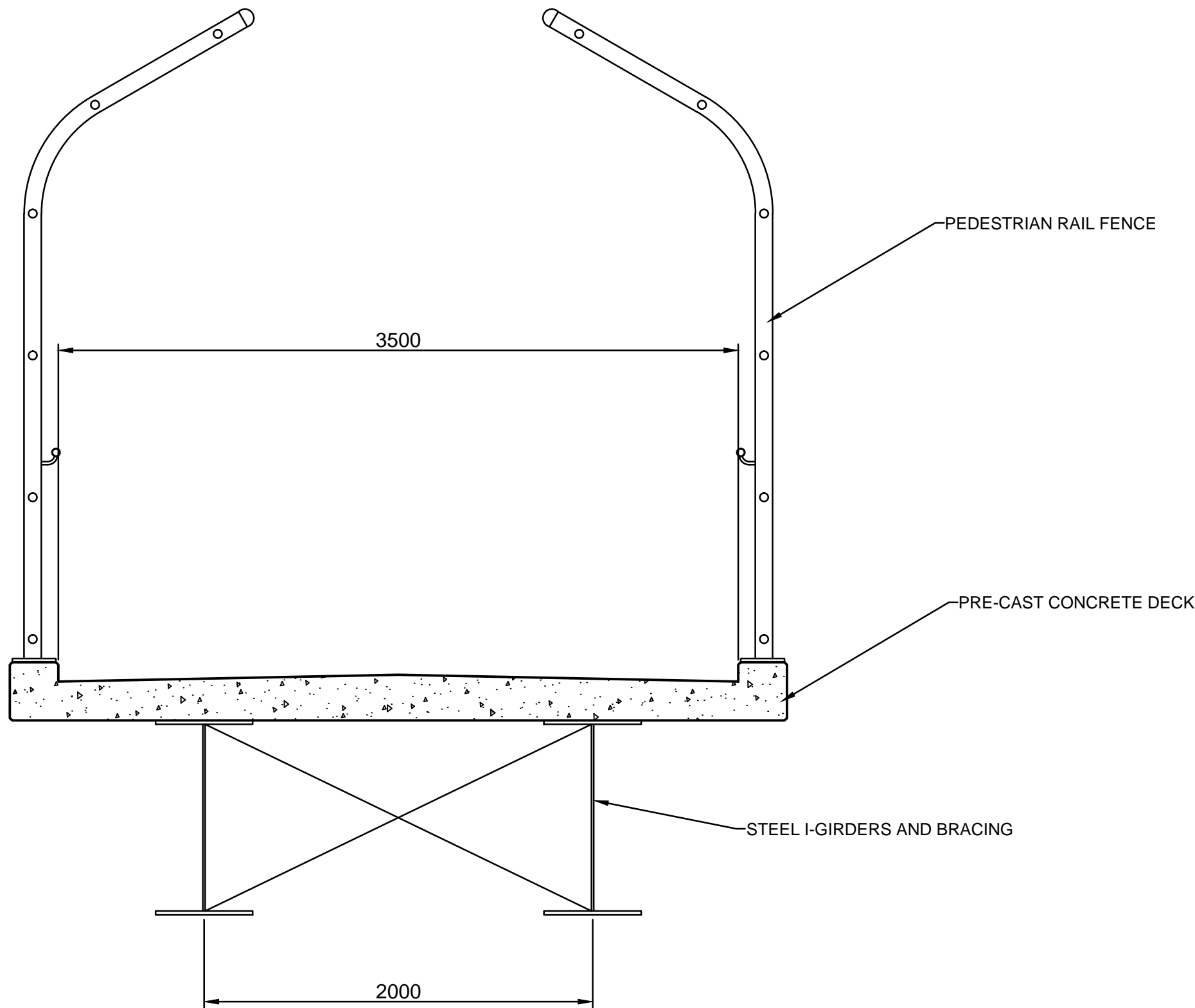
- 'Enhancements should enhance rafting experience and not attract others'
 - 'Make eddy near new bridge better. Rafters getting thrown into it from the start.'
 - Currently, eddy is too weak and not large enough to accommodate a safe put-in. Further, rapids start as soon as you get into the river. Modifying eddy could enable clients to build confidence before being thrown into it.
- 'I don't want options that encourage the public to run across the highway'

FINAL COMMENTS

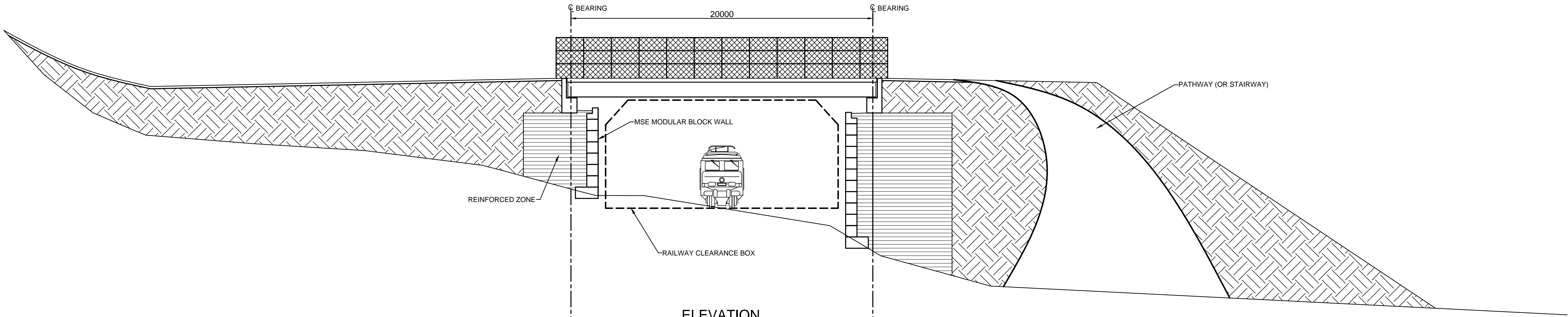
To conclude, participants were encouraged to share final thoughts to relay back to the entire project team. During this final portion of the afternoon session, attendees praised and thanked MOTI staff for their efforts to develop a preliminary alternative solution. Final thoughts included:

- 'Don't be concerned about throwing new ideas at us. We want creative solutions'
- 'Great river around us – so don't hesitate to be thinking outside of the box when you discover new information as part of your study'
- 'This is an amazing collaborative project – the community support locally, provincially, nationally and internationally through Facebook responses has been great'
- 'CP may be missing – but the collaboration is the upside'
- 'It is wonderful that the Province is supporting these efforts'
- 'If politicians knew where and how we wanted to access the river as rafters it would be easier for them to have a political conversation'
- 'Fly over CP tracks could get political support if they [Provincial Ministers] know what exactly we want'
- 'Interesting to see if we went to CP and provided clear direction, what their response might be'
- 'We don't want to chase that CP carrot constantly' – need to confirm if CP is willing to have a conversation at all

APPENDIX B – PEDESTRIAN BRIDGE OVER TRACKS CONCEPT



A TYPICAL BRIDGE SECTION
1: 25



ELEVATION
SCALE 1:150

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2016/10/13 4:07 PM By: jngier.wks

Revision	By	Appd.	YY.MM.DD
Issued	By	Appd.	YY.MM.DD

Consultants

Permit-Seal



300 - 175 2nd AVE
Kamloops, BC
www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.
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Client/Project
TOWN OF GOLDEN

KICKING HORSE CANYON
RAFTERS PULLOUT RAILWAY CROSSING
GOLDEN, BC

File Name:	116500403-S1.dwg	MAU	LMC	16.10.12
		Dwn.	Chkd.	Dsgn.

Title
RAILWAY CROSSING
RAILWAY CROSSING OPTIONS
AT-GRADE VS. GRADE SEPARATED

Project No.	Scale
116500403.592	AS SHOWN

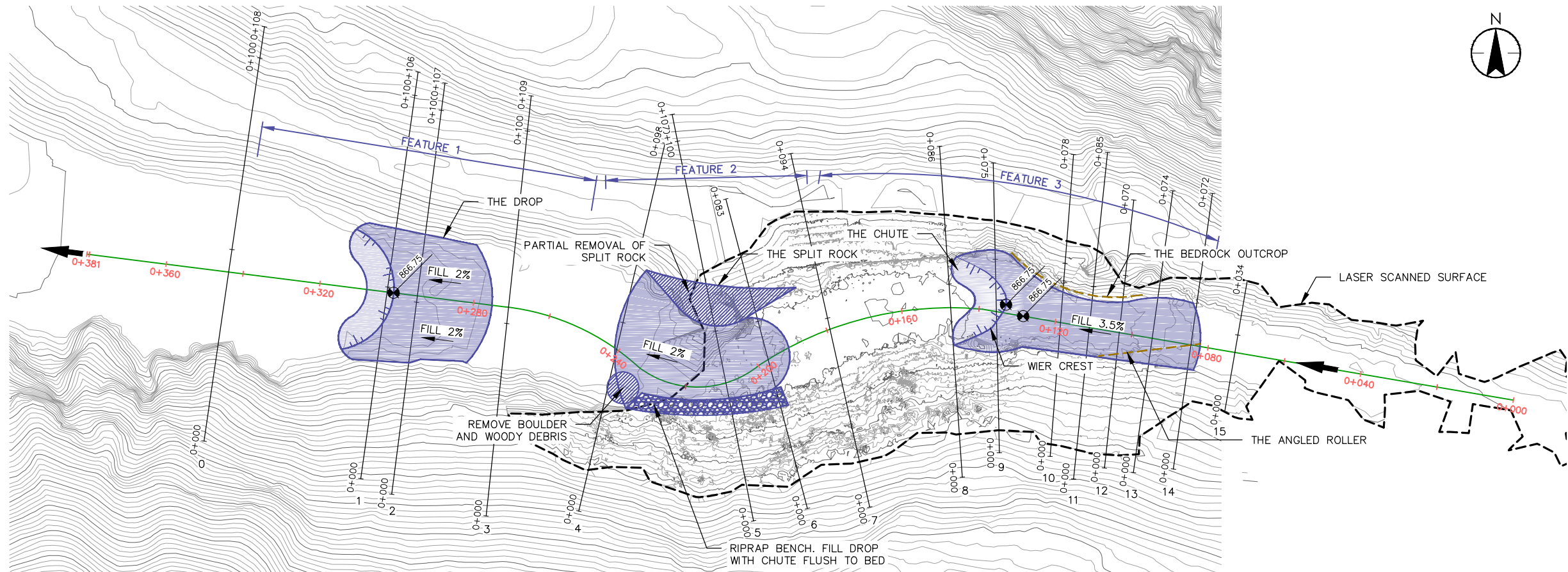
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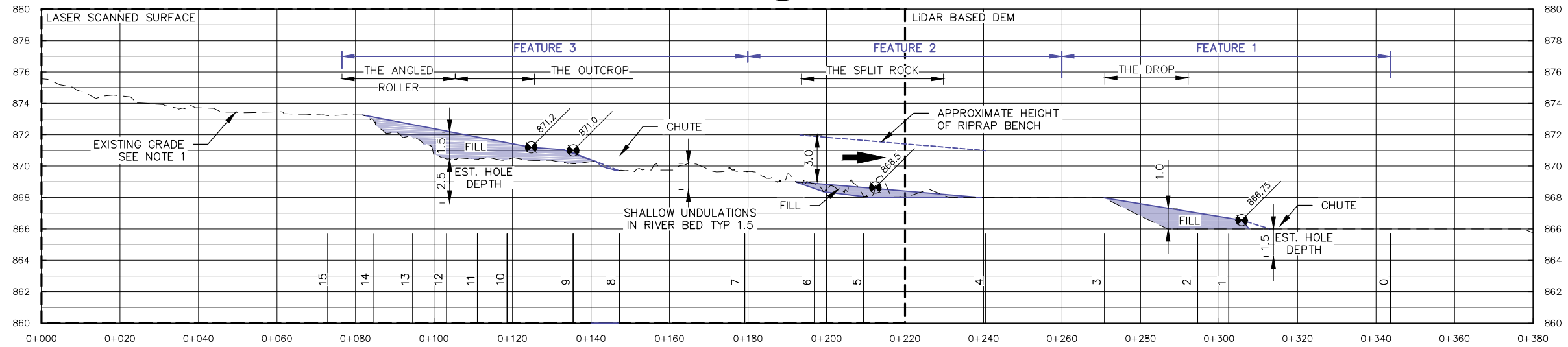
APPENDIX C – CHANNEL MODIFICATION CONCEPT

2017/01/31 11:09 AM By: Tandara, Catilina

Z:\Kicking_Horse_River\drawing\figure\kicking_horse.dwg



1 PLAN
1:1250



2 KICKING HORSE RIVER PROFILE
H 1:1250 V 1:200

ORIGINAL SHEET - ANSI B

JANUARY, 2017
116500403



Notes

1. EXISTING GRADE SHOWN IS A COMBINATION OF THE SUPPLIED LIDAR BASED DEM AND LIMITED LASER SCAN TAKEN BY STANTEC ON DECEMBER 19, 2016.
- 1.1. BATHYMETRY (GROUND SURFACE BELOW THE WATER) IS NOT REPRESENTED.
- 1.2. SURVEY REQUIRED IN EARLY APRIL TO VALIDATE MATERIAL QUANTITIES AND FEATURE GRADES. SCOUR HOLES AND BED UNDULATIONS SHOWN ARE FROM SURFACE OBSERVATIONS AND ARE FOR CONCEPT PURPOSES ONLY.

Scale: 1:1250



Client/Project
THE TOWN OF GOLDEN
KICKING HORSE RIVER
ACCESS ASSESSMENT

Figure No.

A1

Title

CHANNEL MODIFICATION
CONCEPT - PLAN

KICKING HORSE RIVER ACCESS FEASIBILITY STUDY

ⁱ Kicking Horse River Access Feasibility Study: Request for Proposals 2016



For Immediate Release

May 19, 2017

Kicking Horse River Access Feasibility Study Released

With funding assistance from the Province of B.C., through the Rural Dividend Program (Ministry of Forests, Lands and Natural Resource Operations) and the Ministry of Jobs, Tourism and Skills Training, the Town of Golden commissioned a report in late 2016. The purpose of the report is to investigate the feasibility of cost effective alternate access options to the Lower Canyon of the Kicking Horse River to support recreation and tourism access which is critical to the local river rafting industry in Golden.

Now complete, the study included consultation with rafting industry stakeholders, CP Rail, and provincial transportation engineers, leading to the investigation of three potential options: modifying the existing access route with safety-enhancing infrastructure, modifying the river bed to remove obstacles to create safer rafting conditions, or constructing an alternative highway egress point that would avoid the crossing of railroad tracks by rafters. All options were analyzed to determine their relative value and feasibility in the long term measured against economics, safety and engineering, recreation, and tourism.

The study has concluded that the most feasible option for further investigation is the modification of the stream channel to smooth the gradient and reduce the degree of difficulty in navigating the Kicking Horse River between the Upper and Lower Canyon. The aim with this proposed solution would be to eliminate the need for crossing the Trans-Canada Highway and CP Rail tracks by providing an opportunity for continuous rafting between the Upper and Lower Canyon.

This investigation will require more comprehensive consultation with First Nations, provincial and federal government agencies, bathymetric surveys, deeper hydraulic modeling, and environmental studies to support regulatory approval. To this end, the Town of Golden is working with the Province to undertake preliminary queries to gauge the level of consultation and process requirements in order to move this file forward.

The Town of Golden is currently exploring funding options to advance the next stage of investigation into this potential long-term solution with a goal to eventually re-establish Commercial River Rafting in the Lower Canyon of the Kicking Horse River.

In 2016, the Canadian Pacific Railway closed access to the lower Kicking Horse River for the commercial white water rafting industry so they could meet Transport Canada's 2014

Grade Crossing Regulations. The new regulations allow for the safe management of all federally regulated grade crossings. The result has been a significant impact to a major tourism and economic driver in the Golden area which attracts an estimated 40,000 visitors annually; 15,000 of which specifically raft the Lower Canyon.

Media Contact:

Jon Wilsgard, Chief Administrative Officer

Town of Golden

Phone: (250) 344-2271



BOARD REPORT

TO:
Chair and Directors
File No: 1850 40 17

SUBJECT:

Area C Community Works Fund – Tennis Court resurfacing

DESCRIPTION:

Report from Jodi Pierce, Manager, Financial Services, dated June 5, 2017

RECOMMENDATION #1:

THAT: in accordance with Policy F-3 "Electoral Area Community Works Fund – Expenditure of Monies", access to the Community Works Fund be approved up to \$31,500 plus applicable taxes from the Area C Community Works Fund for resurfacing the tennis courts at the Shuswap Lake Estates Tennis Club.

SHORT SUMMARY:

Information relating to this request is attached and is supported by the Electoral Area C Director. The Shuswap Lake Estates Tennis Club is in need of having the courts resurfaced to ensure a safe place to play.

VOTING:	Unweighted Corporate	<input type="checkbox"/>	LGA Part 14 (Unweighted)	<input type="checkbox"/>	Weighted Corporate	<input checked="" type="checkbox"/>	Stakeholder (Weighted)	<input type="checkbox"/>
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BACKGROUND:

The Shuswap Lake Estates Tennis Club is a non-profit organization with membership that is open to the public. Resurfacing the courts is an eligible program expenditure under the recreation infrastructure funding. The Club has endeavoured to submit three quotes for completion of the work, however, as this is a specialized process, they were only able to submit the one quote attached in time for the Board meeting. Should an additional quote become available, and be lower than the attached quote, the Club will use the lower cost option.

POLICY:

This request meets the criteria for support in relation to CSR D Policy *F-3, Community Works Fund – Expenditure of Monies*. Eligible recipients for Gas Tax funding include non-municipal not-for-profit organizations and court resurfacing is an eligible expenditure. The Shuswap Lake Estates Tennis Club is for public use and benefit.

FINANCIAL:

The balance of the Area C Community Works Fund (Gas Tax) is \$1,010,000 after all previously approved commitments. The 2017 distribution of approximately \$300,000 is in addition to the above amount. Expenditure of the funds will be in accordance with the 2014-2024 Agreement between the UBCM and CSR D, dated July 7, 2014.

IMPLEMENTATION:

Upon Board approval, a Use of Community Works Funds Agreement will be forwarded to the Shuswap Lake Estates Tennis Club for signature and funding will be made available upon submission of copies of eligible invoices for payment at the end of the project, anticipated for completion in summer 2017.

COMMUNICATIONS:

The CSRD will enter into an agreement with the Shuswap Lake Estates Tennis Club that transfers CSRD obligations on ownership and reporting to the Club (e.g. the Club will need to maintain records, provide access to auditors, spend funding on eligible costs of eligible projects, report to the CSRD on outcomes achieved, etc).

DESIRED OUTCOMES:

The Board will approve the recommendation.

BOARD'S OPTIONS:

1. *Endorse the Recommendation.*
2. *Deny the Recommendation.*
3. *Defer.*
4. *Any other action deemed appropriate by the Board.*

Report Approval Details

Document Title:	2017-06-15_Board_Fin_Area C Gas Tax - Shuswap Lake Estates Tennis Club.docx
Attachments:	- Tennis Club CWF Application.pdf
Final Approval Date:	Jun 7, 2017

This report and all of its attachments were approved and signed as outlined below:

No Signature - Task assigned to Lynda Shykora was completed by assistant Emily Johnson

Lynda Shykora - Jun 6, 2017 - 3:09 PM

A handwritten signature in black ink, appearing to read 'C. Hamilton', with a stylized flourish at the end.

Charles Hamilton - Jun 7, 2017 - 8:37 AM

Shuswap Lake Estates Tennis Club
c/o Ken Schamuhn
2863 Northwood Pl
Blind Bay, BC

June 2, 2017

CSRD Board
c/o Ms. Jodi Pierce
Manager | Financial Administration Services
CSRD

Dear Board Members,

This letter is further to our grant-in-aid application.

We request a grant, not through the grant-in-aid program, but rather from the Community Works Fund, with funding from the recreation infrastructure eligibility. The amount of grant we are requesting is as detailed in our original application for a grant-in-aid: \$31,500.

Thank you.

Respectfully yours,

Ken Schamuhn

COLUMBIA SHUSWAP REGIONAL DISTRICT

APPLICATION FOR GRANT-IN-AID

1. Date: May 17 2017
2. Name of Group: Shuswap Lake Estates Tennis Club
3. Address: 2468 Golf Course Drive Blind Bay BC V0E 1H2
4. (a) Date organization established in the Regional District: 2006
- (b) Registered Society in Province of BC:
Reg. No. Not Registered, but Non-Profit Date: _____
- (c) Registered Charitable Organization with Federal Government:
Reg. No. Not Registered, but Non-Profit Date: _____
5. Number of persons served:
Electoral Area: C Other (explain): not limited to Electoral C
6. President: Ken Schamuhn Phone: 250-675-5439
Address: 2863 Northwood PL Blind Bay BC V0E 1H2
7. Secretary: Betty Dupuis Phone: 250-675-5225
Address: 2592 Highlands Drive Blind Bay BC V0E 1H2
8. Board of Directors

1. <u>Warner Aeyelts, Vice Pres</u>	4. _____
2. <u>Janice Kinley, Treasurer</u>	5. _____
3. _____	6. _____
9. Executive Director or contact person: Ken Schamuhn
Phone: 250-675-5439 Email: ken.schamuhn@gmail.com
10. Society or Organization's objectives:
To provide quality, recreational and affordable tennis for the communities surrounding the Shuswap Lake Estates Tennis Courts; not limited to Blind Bay, Cedar Heights, White Lake, and Sorrento. To provide the same to non-residents visiting and vacationing in the area.

APPLICATION FOR GRANT-IN-AID – Page 2

11. Purpose to which grant fund will be expended:

To bring the surface of the tennis courts to a quality and safe surface to play on.

12. Budget (attach copy): \$
- 44,500.00

13. Grant Request: \$
- 44,500.00
- Minimum Required: \$
- 9,500.00

14. Has your organization received grants in previous years from the Regional District? Please indicate year, type of grant, and amount for past three years:

YEAR	AMOUNT
	Nil
	Nil
	Nil

15. How will community and/or participants benefit?

Quality and Safe tennis courts to play on for 20 years with a full re-pave expense and an estimated 5 years with a re-surface.

16. Amount of grant received from Senior Governments (Provincial/Federal), Local Governments, Crown Agencies, and other funding Agencies for the past three years.

NAME OF CONTRIBUTOR	YEAR	AMOUNT RECEIVED
		Nil
		Nil
		Nil

17. List amount of personal funding being used, e.g. Membership fees, bottle drives, bingo, casinos, etc.

98% of Membership Dues only to a minimum of \$22,000. It has taken the SLE Tennis Club a minimum of 6 years to acquire this kind of contribution to our courts.

18. Details of community support for objectives:

Membership and drop-in usage.

Closest tennis courts in the area - Salmon Arm and Kamloops.

APPLICATION FOR GRANT-IN-AID – Page 3

19. Please state size of membership in your organization: 38 (full pay); unlimited drop-in usage
20. Applications must be accompanied by the following supporting information if the requested amount is \$2,000 or greater.
- (a) The organization's most recent Financial Statements.
 - (b) The organization's projected Statement of Revenues and Expenditures for the upcoming calendar year or twelve month fiscal period, together with comparatives for the previous calendar year or twelve month fiscal period.

PLEASE FORWARD TO:
MANAGER, FINANCIAL SERVICES
COLUMBIA SHUSWAP REGIONAL
DISTRICT

ATTACH ANY ADDITIONAL INFORMATION WHICH WOULD ASSIST
IN THE EVALUATION OF YOUR REQUEST.

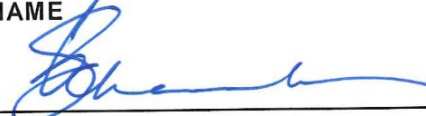
Note: This summary MUST be completed to process your request.

ON BEHALF OF THE ORGANIZATION,
I/WE HEREBY DECLARE THAT ALL THE INFORMATION PRESENTED
AND/OR PROVIDED WITH THIS APPLICATION IS TRUE AND CORRECT.

DATED AT Blind Bay, BC THIS 18 DAY OF May, 2017

Ken Schamuhn, President

NAME



SIGNATURE

250-675-5439

TELEPHONE

ken.schamuhn@gmail.com

EMAIL

ONLY NON-PROFIT ORGANIZATIONS ARE ELIGIBLE FOR GRANTS

Columbia Shuswap Reginal District
Application for Grant-in-Aid

From:
Shuswap Lake Estates Tennis Club

Maximum Grant:

Court Re Pave	\$ 35,000.00
Court Re Surface (paint etc)	\$ 31,500.00
Less Membership Contribution	<u>-\$ 22,000.00</u>
Total Application:	<u><u>\$ 44,500.00</u></u>

Minimum Grant:

Court Re Surface (paint & repair cracks)	\$ 31,500.00
Less Membership Contribution	<u>-\$ 22,000.00</u>
Total Application:	<u><u>\$ 9,500.00</u></u>

**SHUSWAP LAKE ESTATES
TENNIS CLUB (a)(b)**

**Shuswap Lake Estates Tennis Club
December**

2016

2015

Balance Sheet

Cash	\$ 6,127.36	\$ 3,978.66
Credit Union Dividends	32.58	31.98
Credit Union Patronage	52.58	41.34
Term #12 (Exp 01Jun 2015 1.4%)	2,591.10	10,418.68
Term #13 (Exp 04Dec15 1.85%)	10,564.94	2,598.18
Term #14 (Exp 02Apr 2017 1/5%)	2,621.63	2,552.70
	<u>\$ 21,990.19</u>	<u>\$ 19,621.54</u>

Income Statement

Revenues

Memberships	\$ 4,730.00	\$ 3,770.00
Dividend and Interest Earned	222.39	160.07
Drop In (not put in petty cash)	0.00	100.00
NSSCRA	74.00	275.00
	<u>\$ 5,026.39</u>	<u>\$ 4,305.07</u>

Expenses:

Liability Insurance	\$ 220.00	\$ 220.00
Court Supplies	2,203.14	4,201.51
Tennis BC	201.60	197.40
Misc.	33.00	
	<u>\$ 2,657.74</u>	<u>\$ 4,618.91</u>

Income (Loss)	\$ 2,368.65	\$ (313.84)
Previous years Cash Balance	<u>\$ 19,621.54</u>	<u>\$ 19,935.38</u>
	<u>\$ 21,990.19</u>	<u>\$ 19,621.54</u>

Balance Fwd from previous year:	\$ 142.75	\$ 142.75
Keys Cut	\$ (69.67)	
Chocolate Cake & wastebags	\$ (38.44)	
Items for Fay	\$ (22.25)	
Drop In Tennis	\$ 120.00	
	<u>\$ 132.39</u>	

**SHUSWAP LAKE ESTATES
TENNIS CLUB**

(b)

Shuswap Lake Estates Tennis Club
Projected

Projected
2017

Actual
2016

Balance Sheet

Cash	\$ 6,127.36	\$ 6,127.36
Credit Union Dividends	32.58	32.58
Credit Union Patronage	52.58	52.58
Term #12 (Exp 15 Jul 2017 1.4%)	2,591.10	2,591.10
Term #13 (Exp 11 Jun 2017 1.85%)	10,564.94	10,564.94
Term #14 (Exp 02 Apr 2017 1/5%)	2,621.63	2,621.63
	<u>\$ 21,990.19</u>	<u>\$ 21,990.19</u>

Income Statement

Revenues

Memberships	\$ 4,020.00	\$ 4,730.00
Dividend and Interest Earned	222.00	222.39
Drop In (not put in petty cash)	0.00	0.00
NSSCRA	0.00	74.00
	<u>\$ 4,242.00</u>	<u>\$ 5,026.39</u>

Expenses:

Liability Insurance	\$ 220.00	\$ 220.00
Court Supplies	500.00	2,203.14
Tennis BC	201.60	201.60
	-	33.00
	<u>\$ 921.60</u>	<u>\$ 2,657.74</u>

Income (Loss)	\$ 3,320.40	\$ 2,368.65
Previous years Cash Balance	<u>\$ 19,621.54</u>	<u>\$ 19,621.54</u>
	<u>\$ 22,941.94</u>	<u>\$ 21,990.19</u>

Petty Cash

Balance Fwd from previous year:	\$ 132.39	\$ 142.75
Flowers etc. for Petra	\$ (35.25)	\$ (69.67)
	\$ -	\$ (38.44)
	\$ -	\$ (22.25)
	\$ -	\$ 120.00
	<u>\$ 97.14</u>	<u>\$ 132.39</u>

Plexipave Tennis Court Surface Coating Quotation - Standard Colours

Shuswap Lake Estates - Dick Lepkey

JL-04/03/2016

Total Square Footage: 13,200
Total Square Meters: 1,228 2 Court (s)

To Supply All Labour, Materials, and Equipment To:

- 1 Pressure wash the entire surface with mechanical pressure washer.
- 2 Fill any major cracks or divots with tennis court crack filler and/or Court Patch Binder.
- 3 Inspect the entire surface and clean the surface by mechanical blower.
- 4 Apply by squeegee 1 coat(s) of "Acrylic Resurfacer" as per manufacturer's specifications.
- 5 Inspect the entire surface, remove any ridges, and clean the surface by mechanical blower.
- 6 Apply by squeegee 2 coat(s) of "Plexipave Color Filler Coat" as per manufacturer's specifications.
- 7 Inspect the entire surface, remove any ridges, and clean the surface by mechanical blower.
- 8 Apply by squeegee 1 coat(s) of "Plexichrome Color Finish Coat" as per manufacturer's specifications.
- 9 Line painting of: 2 Tennis court (s) with "Textured line paint" as per manufacturer's specifications. The playing lines will be taped, and two coats of line paint will be brush applied. All playing lines will be straight and true.

CONTRACT PRICE: \$20,072.05

G.S.T.: \$ 1,003.60

TOTAL PRICE: \$ 21,075.65

**TERMS: 25 % on confirmation - Deposit Prior to Start
75 % on completion - Cheque on Completion**

WARRANTY

**Tomko Sports Systems Inc. WARRANTIES ITS USAGE OF MATERIALS
AND WORKMANSHIP AGAINST PEELING, AND FADING FOR
A PERIOD OF 24 MONTHS FROM COMPLETION. THIS DOES NOT INCLUDE
PROBLEMS CAUSED BY THE MOVEMENT OF THE ASPHALT /SUB-BASE.**

***** ALL EXISTING CRACKS IN THE SURFACE / ASPHALT WILL RETURN OVER TIME *****

IN ADDITION :

- A The owner is responsible to supply the water for the duration of this contract within 150' of the court. The water must have adequate pressure (min. 60 PSI) to feed our power washer. If a water truck is to be supplied, it must have clean water and a good working pump. Standby Labour costs associated with not providing water when our crew arrives will be the responsibility of the owner / general contractor and charged out at \$160.00 / crew hour.
- B If other payment arrangements are deemed necessary than those outlined above, they must be agreed upon prior to start.
- C The above quotation does not include leveling of low spots (birdbaths). This is always done on a charge out basis unless otherwise stated in the quotation.
- D 110 feet of crack repair using the Riteway Crack Repair System has been included in the quote. Any crack repair wish to be done using Riteway greater than the 110 ft will be at a cost of \$24 per linear foot.

Plexipave Tennis Court Surface Coating Contract

Quote #: JL-04/03/2016

Please complete the following to proceed with this contract:

CUSTOMER NAME :

SIGNATURE :

DATE :

P.O.# :

COLOR SCHEME; PAD :

PERIMETER :

The above customer hereby accepts the terms of this contract , and of payment for Tomko Sports Systems Inc. to under take the above quoted project.

From: <jlee@tomkosports.com>
Subject: Additional Crack Repair
Date: April 7, 2017 at 1:45:20 PM PDT
To: "Petra Donatelli" <petrad@ribaa.ca>

Hi Petra,

It was nice to meet you and a number of your members yesterday. After walking over the courts with you guys we determined that 175 linear feet of cracks were the essential cracks that needed to be fixed. This Option 1 price to repair this 175 feet would be \$4437.54 + GST.

The total amount of cracks that I measured yesterday was just over double that amount at 390 linear feet. The Option 2 additional cost to repair all the cracks would be \$10,176.12 + GST.

Once you have discussed it with your members please advise on which option you would like to move forward with. Thank you and I look forward to working with you all.

Jonathon Lee, Operations Manager

Tomko Sports Systems
#165, 6660 Graybar Road
Richmond, B.C. V6W 1H9
P: [\(604\) 273-0257](tel:(604)273-0257)
C: [\(604\) 839-6296](tel:(604)839-6296)

tomkosports.com



LEASE CONTRACT

BETWEEN: **The Landlord** – Shuswap Lake Estates Ltd.
 and
 The Tenants – Shuswap Lake Estates Tennis Club

Dated: 23 day of SEPT 2010

It is agreed Shuswap Lake Estates Ltd., will lease to Shuswap Lake Estates Tennis Club Plan 29413 Lots #41 and #42 (other than the most westerly portion of Lot 42 situated between the Tennis Courts and Shuswap Lake Estates golf cart storage building, which area may or may not be developed in the future for private golf cart storage) better known as the Tennis Courts from January 1st, 2011 to December 31st, 2021.

Terms and Conditions:

- 1) The Shuswap Lake Estates Tennis Club shall control, maintain and administer the tennis courts.
- 2) The Tennis Club, during the term of this lease or any extension of same, will be responsible for all operating costs of the tennis courts including liability insurance and annual taxes.
- 3) 50% of the membership and user fees will be reserved for future maintenance (replacing surface of courts, nets and poles).
- 4) 60% of the directors of the Tennis Club will be residents of Shuswap Lake Estates.
- 5) Directors will be elected at the annual general meeting.
- 6) The membership will include anyone from the public who is a member of Shuswap Lake Estates Activity Club. In return the Tennis Club has free use of the banquet room for special occasions and wind ups.
- 7) The Shuswap Lake Estates Tennis Club is in association with Shuswap Lake Estates Community Association, the registered society with the Estates.
- 8) The tennis courts will revert back to Shuswap Lake Estates Ltd., should the Shuswap Lake Estates Tennis Club become bankrupt or defunct.
- 9) The tennis court area is to be maintained in a neat and tidy appearance at all times.

- 10) The Tennis Club will refrain from any conduct that would be detrimental to the area and particularly to Shuswap Lake Estates.
- 11) The Tennis Club at all times will promote the best interest and well being of Shuswap Lake Estates.
- 12) The use of the tennis courts may be extended to non-member visitors to our area by paying a fair and reasonable user fee.
- 13) The Tennis Club agrees to save Shuswap Lake Estates Ltd. from any liability claims attributed to the tennis courts or any portion of the land the courts are situated upon.

Signed by:


SHUSWAP LAKE ESTATES LTD.



WITNESS

Signed by:



SHUSWAP LAKE ESTATES TENNIS CLUB



WITNESS



BOARD REPORT

TO:
Chair and Directors
File No: 5600 10 02

SUBJECT:

Lakeview Place Waterworks – Upgrade Award

DESCRIPTION:

Report from Terry Langlois, Utilities Team Leader, dated June 2, 2017. Upgrades to the SCADA, electrical and instrumentation components to connect the Lakeview Place Water System to Cedar Heights Waterworks.

**RECOMMENDATION
#1:**

THAT: the Board empower the authorized signatories to enter into an agreement with Turn-Key Controls to provide, install and commission the Supervisory Control and Data Acquisition (SCADA), and the electrical and instrumentation upgrades for the Lakeview water system upgrade and connection project to Cedar Heights for a total cost of \$61,100 plus applicable taxes.

SHORT SUMMARY:

All CSR D owned water systems require the same SCADA / instrumentation components and software for compatibility purposes. Turn-Key Controls currently holds the service agreement with the CSR D for all of the existing water systems. Accordingly, it is recommended that Turn-Key Controls be authorized to complete the SCADA, Electrical and Instrumentation upgrades required for the Lakeview connection to Cedar Heights. Turn-Key Controls' quote to provide, install, and commission has been reviewed and is recommended by our engineering consultants.

VOTING:

 Unweighted
Corporate

☐

 LGA Part 14
(Unweighted)

☐

 Weighted
Corporate

☐

 Stakeholder
(Weighted)

☐
BACKGROUND:

The Lakeview Water System was recently acquired by the CSR D. This water system will be connected to the adjacent Cedar Heights water system owned and operated by the CSR D. The CSR D received a grant from the Clean Water and Wastewater Fund to facilitate the project. The SCADA / Electrical and instrumentation upgrades were identified in the Lakeview Heights Water System Assessment.

POLICY:

In accordance with Policy F-32 "Procurement of Goods & Services", Board authorization must be obtained for any sole sourced contract award over \$10,000.

FINANCIAL:

This project is jointly funded through the Area C Community Works Fund as well as a grant through the Clean Water and Wastewater Fund.

KEY ISSUES/CONCEPTS:

To provide sustainable, reliable water to the community of Lakeview Place Subdivision.

COMMUNICATIONS:

If approved by the Board, the CSRD will enter into an agreement with the Turn-Key Controls for the installation and commissioning of the Lakeview Waterworks SCADA, electrical and instrumentation upgrades.

DESIRED OUTCOMES:

The Board approve the recommendation and award the SCADA/electrical and instrumentation upgrade project to Turn-Key Controls.

BOARD'S OPTIONS:

1. *Endorse the Recommendation.*
2. *Deny the Recommendation.*
3. *Defer.*
4. *Any other action deemed appropriate by the Board.*

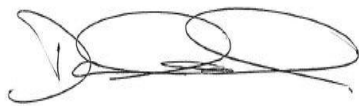
LIST NAME OF REPORT(S) / DOCUMENT(S) AVAILABLE FROM STAFF:

1. Gentech Engineering, Recommendation for Award.

Report Approval Details

Document Title:	Lakeview Place Waterworks Upgrade Award.docx
Attachments:	
Final Approval Date:	Jun 7, 2017

This report and all of its attachments were approved and signed as outlined below:



Darcy Mooney - Jun 6, 2017 - 11:13 AM



Jodi Pierce - Jun 6, 2017 - 11:47 AM

No Signature - Task assigned to Lynda Shykora was completed by assistant Emily Johnson

Lynda Shykora - Jun 6, 2017 - 3:20 PM



Charles Hamilton - Jun 7, 2017 - 8:34 AM



BOARD REPORT

TO:
Chair and Directors
File No: 7200 46 01

SUBJECT:

Tappen/Sunnybrae Fire Hall Addition – Contract Award

DESCRIPTION:

Report from Darcy Mooney, Manager, Operations Management, dated May 31, 2017.

Tappen/Sunnybrae Fire Hall Addition - Contract Award

RECOMMENDATION
#1:

THAT: the Board empower the authorized signatories to enter in to an agreement with 478868 BC Ltd. (dba McDiarmid Construction) to construct the addition to the Tappen/Sunnybrae Fire Hall for a total cost of up to \$665,000 plus applicable taxes.

RECOMMENDATION
#2:

THAT: in accordance with Policy No. F-3 "Electoral Area Community Works Fund – Expenditure of Monies", access to the Electoral Area Community Works Fund be approved for up to \$20,000 plus applicable taxes from the Electoral Area C Community Works Fund allocation for energy efficient upgrades at the Tappen/Sunnybrae Fire Hall.

SHORT SUMMARY:

In April 2017, the CSR D issued a tender for the budgeted addition and upgrades to the Tappen/Sunnybrae Fire Hall building. The tender includes a two bay expansion to the building with an upstairs training and meeting space. Upgrades to the structure and mechanical systems of the building are also necessary. The lowest bid submission received exceeds the 2017 budget allotment. Staff are investigating options to advance to the hall expansion through gaining additional efficiencies in the project and deferring the planned purchase of a Tender currently scheduled for 2018. A budget amendment will most likely be required before December 31, 2017.

VOTING:

Unweighted
Corporate

☐

LGA Part 14
(Unweighted)

☐

Weighted
Corporate

☒

Stakeholder
(Weighted)

☐
BACKGROUND:

The Tappen/Sunnybrae Fire Hall is one of the CSR D's busiest fire halls, responding to about 50 incident calls per year. The current hall contains two bays and a small meeting room. The fire hall expansion project will accommodate an additional two bays and a second story with meeting rooms, offices and a washroom. The existing meeting room will be used to accommodate the local First Responders group.

POLICY:

In accordance with CSR D Policy No. F-32 "Procurement of Goods & Services", Board authorization is required for any tender or RFP to be awarded in excess of \$500,000.

FINANCIAL:

The following table outlines the submitted tenders for this project, excluding taxes:

Company	Amount
Encan Construction Ltd.	\$ 895,881
Maddocks Construction Ltd.	\$ 985,020
478868 BC Ltd. (dba McDiarmid Construction)	\$ 665,000

The project will be funded from Area C Sub-regional Fire Suppression Reserve fund. Energy efficient upgrades to the building's lighting system can be funded through the Electoral Area Community Works Fund.

The 2017 Area C fire budget, function 047, contained a budget of \$475,000 for this project including engineering and procurement services. A budget amendment may need to occur in 2017 to ensure appropriate allocation of funds for this hall expansion. If necessary, the budget amendment will identify that the planned purchase of a Tender in 2018 will be deferred to a later date.

KEY ISSUES/CONCEPTS:

To prioritize and advance the expansion of the Tappen Sunnybrae Fire Hall.

IMPLEMENTATION:

Upon approval of the Board the project will commence immediately and is expected to be finalized by December 31, 2017.

COMMUNICATIONS:

The decision of the Board will be relayed to the preferred proponent.

DESIRED OUTCOMES:

The Board approve staff recommendation.

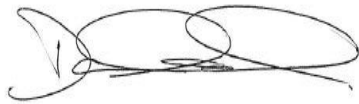
BOARD'S OPTIONS:

1. *Endorse the Recommendation.*
2. *Deny the Recommendation.*
3. *Defer.*
4. *Any other action deemed appropriate by the Board.*

Report Approval Details

Document Title:	Tappen_Sunnybrae_Fire_Hall_Addition_Contract_Award.docx
Attachments:	
Final Approval Date:	Jun 7, 2017

This report and all of its attachments were approved and signed as outlined below:



Darcy Mooney - Jun 6, 2017 - 11:13 AM



Jodi Pierce - Jun 6, 2017 - 11:35 AM

No Signature - Task assigned to Lynda Shykora was completed by assistant Emily Johnson

Lynda Shykora - Jun 6, 2017 - 3:41 PM



Charles Hamilton - Jun 7, 2017 - 8:31 AM



BOARD REPORT

TO:
Chair and Directors
File No: 6140 70 43

SUBJECT:

Electoral Area E Community Works Fund – Malakwa Community Park

DESCRIPTION:

Report from Ryan Nitchie, Community Services Team Leader, dated May 31, 2017.

Access to Electoral Area E Community Works Fund for additional park infrastructure at Malakwa Community Park.

RECOMMENDATION #1:

THAT: in accordance with Policy No. F-3 "Electoral Area Community Works Fund - Expenditure of Monies" access to the Electoral Area Community Works Fund be approved for up to \$60,000 plus applicable taxes from the Electoral Area E Community Works Fund allocation for park construction at Malakwa Community Park.

SHORT SUMMARY:

After consultation with the Electoral Area E Parks Advisory Committee and the Electoral Area E Director, staff is seeking approval for funding to complete the construction of a new Community Park in Malakwa. Board approval is being sought for expenditure of these funds in accordance with Policy No. F-3 "Electoral Area Community Works Fund – Expenditures of Monies".

VOTING:	Unweighted Corporate	<input type="checkbox"/>	LGA Part 14 (Unweighted)	<input type="checkbox"/>	Weighted Corporate	<input checked="" type="checkbox"/>	Stakeholder (Weighted)	<input type="checkbox"/>
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BACKGROUND:

The construction of new parks including playground equipment, walking and cycling trails, signage, a vault toilet, picnic shelter, community garden, landscaping, fencing, utilities and irrigation qualify as eligible expenditures of the Community Works Fund monies.

The Electoral Area E Parks Advisory Committee as well as the Electoral Area Director concur that completion of the new community park in Malakwa is a 2017 priority. Additional Community Works Funds are required to ensure the park is completed.

Following subdivision of property known as Eagle River Estates, parkland was dedicated to the CSR D for the creation of a new community park located on Community Hall Road in Malakwa. Consultation with the local area residents was conducted and the concept plan was created. In 2016, legal survey, registered easement for utilities, water system connection engineering, land clearing, non-motorized trail construction and nature play construction was completed. Playground equipment was purchased and is awaiting installation.

In 2017, staff plan to complete the remainder of the project including installation of the playground, vault toilet, picnic shelter, community garden, cycling track, concrete plaza, irrigation, signage, fencing, lighting and electrical.

POLICY:

Policy No. F-3 "Electoral Area Community Works Fund – Expenditure of Monies" states that the expenditure of monies from the Community Works Fund will be approved by the Board.

FINANCIAL:

\$60,000 will be allocated to complete construction of a new community park in central Malakwa. Expenditure of the requested funds will be allocated from the Community Works Fund.

KEY ISSUES/CONCEPTS:

Policy No. F-3 "Electoral Area Community Works Fund – Expenditure of Monies", states that the expenditure of monies from the Community Works Fund must be approved by the Board.

COMMUNICATIONS:

Staff will procure the goods and services for these projects in accordance with Policy No. F-32 "Procurement of Goods and Services".

DESIRED OUTCOMES:

The Board approve the expenditure from the Electoral Area E portion of the Community Works Fund.

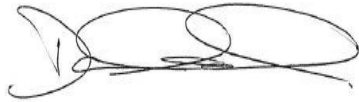
BOARD'S OPTIONS:

1. *Endorse the Recommendation.*
2. *Deny the Recommendation.*
3. *Defer.*
4. *Any other action deemed appropriate by the Board.*

Report Approval Details

Document Title:	2017-06-15_AreaE_CWF_Malakwa_Community_Park.docx
Attachments:	
Final Approval Date:	Jun 7, 2017

This report and all of its attachments were approved and signed as outlined below:



Darcy Mooney - Jun 6, 2017 - 11:14 AM



Jodi Pierce - Jun 6, 2017 - 11:42 AM

No Signature - Task assigned to Lynda Shykora was completed by assistant Emily Johnson

Lynda Shykora - Jun 6, 2017 - 3:00 PM



Charles Hamilton - Jun 7, 2017 - 8:43 AM



BOARD REPORT

TO: Chair and Directors

File No: 5360 39 02

SUBJECT: Sicamous Landfill Design and Operation RFP Award

DESCRIPTION: Report from Ben Van Nostrand, Team Leader, Environmental Health Services dated June 6, 2017.
Sicamous Landfill Design and Operation Plan Update RFP Award.

RECOMMENDATION #1: THAT: the Board empower the authorized signatories to enter into an agreement with XCG Consulting Limited to update the Sicamous Landfill Design and Operation Plan for a total cost of \$32,555 plus applicable taxes.

SHORT SUMMARY:

A Request for Proposals (RFP) was released in May of 2017, inviting qualified consulting firms, with expertise in landfill design and operations, to complete a review and update of the Design and Operation Plan for the Sicamous landfill. Six proposals were received and evaluated.

VOTING: Unweighted Corporate ☐ LGA Part 14 (Unweighted) ☐ Weighted Corporate ☒ Stakeholder (Weighted) ☐

BACKGROUND:

In order to ensure a landfill is being operated to current standards, the Ministry of Environment (MoE) recommends a Landfill Design and Operation Plan is updated every five years. In 2016, MoE updated and released a new landfill criteria document, which outlines new standards for landfill operations within BC. The existing Sicamous Landfill Design and Operation Plan is from 2006 and is overdue for a review.

A Landfill Design and Operation Update Request for Proposals (RFP) was released with a maximum budget of \$40,000. The following six submissions were received:

	Total Price (excluding taxes)
Golder Associates	\$30,945.00
XCG Consulting Ltd.	\$32,555.00
Tetra Tech	\$38,736.00
AECOM	\$39,735.00
GHD Ltd.	\$39,882.00
AE Associated	\$39,920.00

The submissions were evaluated by an evaluation team using the criteria as outlined in the RFP documents. Although Golder Associates was the lowest cost submission, the highest and best evaluation was given to XCG Consulting Ltd.

XCG Consulting Ltd. has worked with the CSRD on other solid waste projects in the past. In 2012, they completed the Solid Waste Management - Alternative Disposal Strategy report and in 2016, they completed the Solid Waste Management – System Costs Analysis report. The CSRD has been impressed with the quality of the reports produced by XCG Consulting Ltd. to date and given the value contained within their proposal to update the Sicamous Design and Operation Plan, staff recommends the contract be awarded to XCG Consulting Ltd.

POLICY:

CSRD Purchasing Policy No. F-32, "Procurement of Goods and Services", requires Board authorization when the lowest cost submission is not recommended.

FINANCIAL:

The Board has authorized the expenditure of up to \$50,000 from the 2017 Solid Waste Management Budget (219). The RFP to update the Sicamous Landfill Design and Operation Plan was released with a maximum budget of \$40,000. The difference of \$10,000 is to allow for unplanned contingencies.

KEY ISSUES/CONCEPTS:

To ensure that CSRD landfills are operating in accordance with the most current requirements and standards.

IMPLEMENTATION:

A contract will be drafted for the successful proponent upon Board approval.

COMMUNICATIONS:

All proponents will be notified of the Board's decision.

DESIRED OUTCOMES:

The Board approve staff's recommendation.

BOARD'S OPTIONS:

1. *Endorse the Recommendation.*
2. *Deny the Recommendation.*
3. *Defer.*
4. *Any other action deemed appropriate by the Board.*

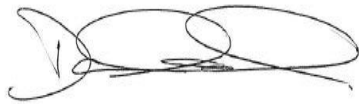
LIST NAME OF REPORT(S) / DOCUMENT(S) AVAILABLE FROM STAFF:

1. Request for Proposal submissions.

Report Approval Details

Document Title:	Sicamous Landfill Design and Operation Plan Update RFP Award.docx
Attachments:	
Final Approval Date:	Jun 7, 2017

This report and all of its attachments were approved and signed as outlined below:



Darcy Mooney - Jun 6, 2017 - 3:28 PM



Jodi Pierce - Jun 6, 2017 - 4:10 PM

No Signature - Task assigned to Lynda Shykora was completed by assistant Emily Johnson

Lynda Shykora - Jun 6, 2017 - 4:18 PM



Charles Hamilton - Jun 7, 2017 - 8:22 AM



Statutory Approval

Under the provisions of section 349

of the Local Government Act

I hereby approve Bylaw No. 5741

of the Columbia Shuswap Regional District,

a copy of which is attached hereto.

Dated this April ***day***

of 20 ***, 2017***

A handwritten signature in black ink, appearing to be "JL", written over a horizontal line.

Deputy Inspector of Municipalities

COLUMBIA SHUSWAP REGIONAL DISTRICT

BYLAW NO. 5741

A bylaw to amend the South Shuswap Liquid Waste Management
Plan Implementation Service Bylaw No. 5358

WHEREAS the Board of the Columbia Shuswap Regional District has established the service area to include all of Electoral Area C for the purpose of implementing a Liquid Waste Management Plan;

AND WHEREAS the 2009 Area C Liquid Waste Management Plan has been approved by the Minister of Environment;

AND WHEREAS the Board of the Columbia Shuswap Regional District has adopted the approved 2009 Area C Liquid Waste Management Plan;

AND WHEREAS it is deemed desirable to amend Bylaw No. 5358 in order to clarify the scope of the service;

NOW THEREFORE the Board of the Columbia Shuswap Regional District, in open meeting assembled, HEREBY ENACTS as follows:

1. Section 1 of Bylaw No. 5358 be deleted in its entirety and replaced with the following:

“The Regional District hereby establishes within Electoral Area C, a service for the purpose of implementing a Liquid Waste Management Plan to be known as “Area C Liquid Waste Management Plan Implementation Service Area”. The service shall include public education and water quality monitoring.

2. Section 5 of Bylaw No. 5358, as amended by Bylaw 5550, be deleted in its entirety and replaced with the following:

“The participating area in the named service is the entire Electoral Area C.”

3. Schedule “A” of Bylaw 5358 is hereby deleted in its entirety and replaced with the attached Schedule “A”.
4. This bylaw may be cited as “Area C Liquid Waste Management Plan Implementation Service Amendment Bylaw No. 5741”.

READ a first time this _____ 16th _____ day of _____ February _____, 2017.

READ a second time this _____ 16th _____ day of _____ February _____, 2017.

Bylaw No. 5741

Page 2

READ a third time this 16th day of February, 2017.

APPROVED by the Inspector of Municipalities this 20th day of April, 2017.

ADOPTED this _____ day of _____, 2017.

CHIEF ADMINISTRATIVE OFFICER

CHAIR

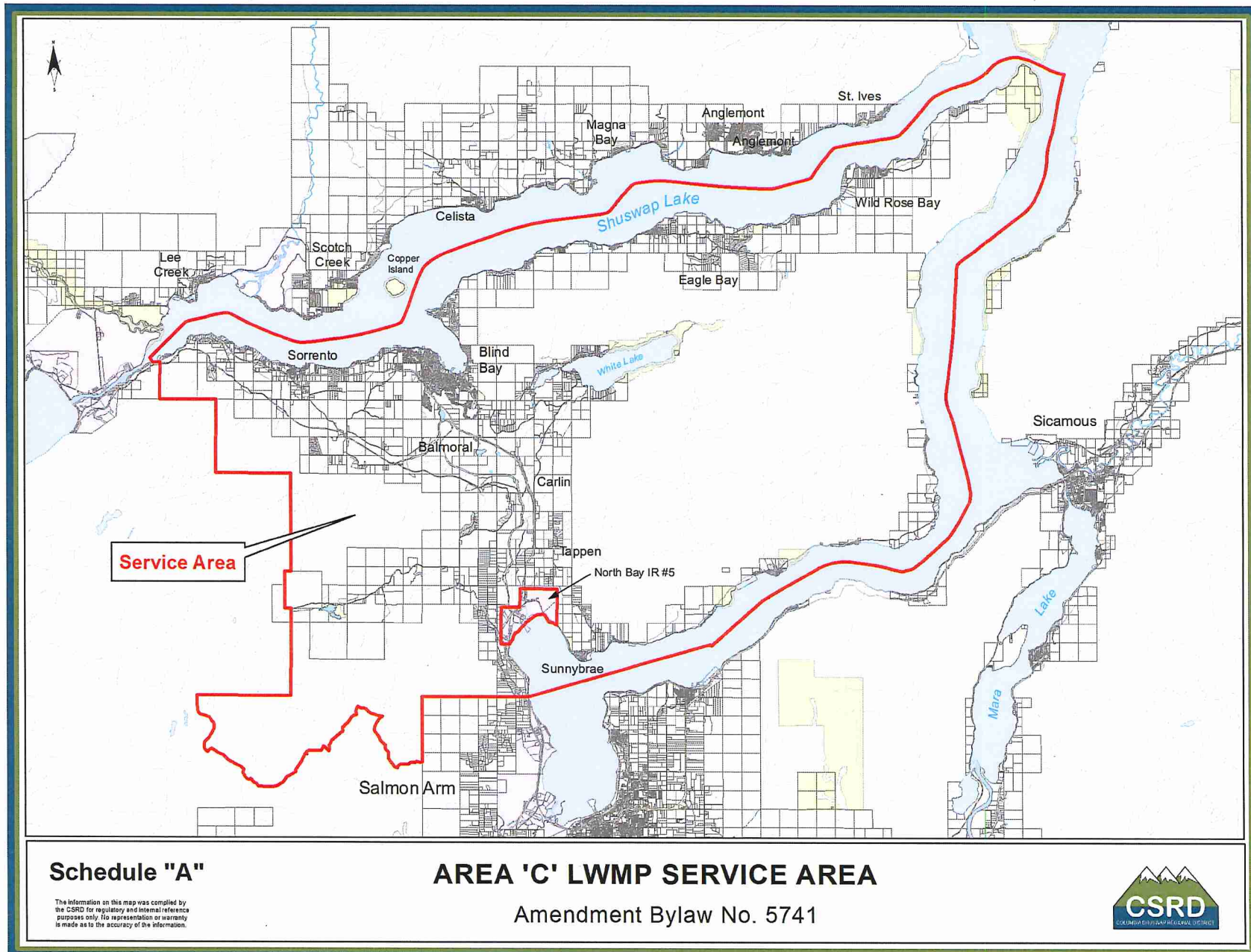
CERTIFIED a true copy of
Bylaw No. 5741 as read a third time.

CERTIFIED a true copy of
Bylaw No. 5741 as adopted.



Deputy Manager of Corporate
Administration Services

Deputy Manager of Corporate
Administration Services





Statutory Approval

Under the provisions of section 342

of the Local Government Act

I hereby approve Bylaw No. 5742

of the Columbia Shuswap Regional District,

a copy of which is attached hereto.

Dated this April ***day***

of 20 ***, 2017***

Deputy Inspector of Municipalities

COLUMBIA SHUSWAP REGIONAL DISTRICT

BYLAW NO. 5742

A bylaw to establish the Sorrento/Blind Bay/Reedman Point
Community Sewer System Service Area within Electoral Area C

WHEREAS a regional district may, by bylaw, establish a service under the provisions of the Local Government Act;

AND WHEREAS the Minister of Environment has approved the 2009 Area C Liquid Waste Management Plan;

AND WHEREAS the Board of the Columbia Shuswap Regional District has adopted the approved 2009 Area C Liquid Waste Management Plan;

AND WHEREAS the Board wishes to establish a service area for the purpose of providing a community sewer system for the communities of Sorrento, Blind Bay and Reedman Point in order to implement a portion of the 2009 Area C Liquid Waste Management Plan;

AND WHEREAS pursuant to the *Environmental Management Act*, if a waste management plan has been approved by the minister, the bylaw adopted by a regional district to implement the approved waste management plan does not require a petition, the assent of the electors or the approval of the electors.

NOW THEREFORE in an open meeting assembled, the Board of the Directors of the Columbia Shuswap Regional District enacts as follows:

SERVICE DESCRIPTION

1. To establish a service area for the purpose of providing a community sewer system for the communities of Sorrento, Blind Bay and Reedman Point in order to implement a portion of the 2009 Area C Liquid Waste Management Plan.

BOUNDARIES OF THE SERVICE AREA

2. The service area boundaries established by this bylaw are shown as outlined on Schedule A attached hereto and forming part of this bylaw.

PARTICIPATING AREA

3. The participating area in the named service is Electoral Area C.

REQUISITION

4. The maximum amount that may be requisitioned for the service provided under Section 1 of this bylaw is \$1,800,000 annually.

COST RECOVERY

5. The annual operating and debt servicing costs shall be recovered by one or more of the following:
- a) The requisition of money to be collected by a parcel tax;
 - b) The requisition of money to be collected by a property value tax on land and improvements only;
 - c) The imposition of fees and other charges that may be fixed by separate bylaw for the purpose of recovering these costs;
 - d) Revenues received by way of agreement, enterprise, gift, grant or otherwise.

EFFECTIVE DATE

6. This Bylaw will come into effect upon adoption.

CITATION

7. This bylaw may be cited as the "Sorrento/Blind Bay/Reedman Point Community Sewer Service Area Bylaw No. 5742.

READ a first time this 16th day of February, 2017.

READ a second time this 16th day of February, 2017.

READ a third time this 16th day of February, 2017.

APPROVED by the Inspector of Municipalities this 20th day of April, 2017.

ADOPTED this _____ day of _____, 2017.

CHIEF ADMINISTRATIVE OFFICER

CHAIR

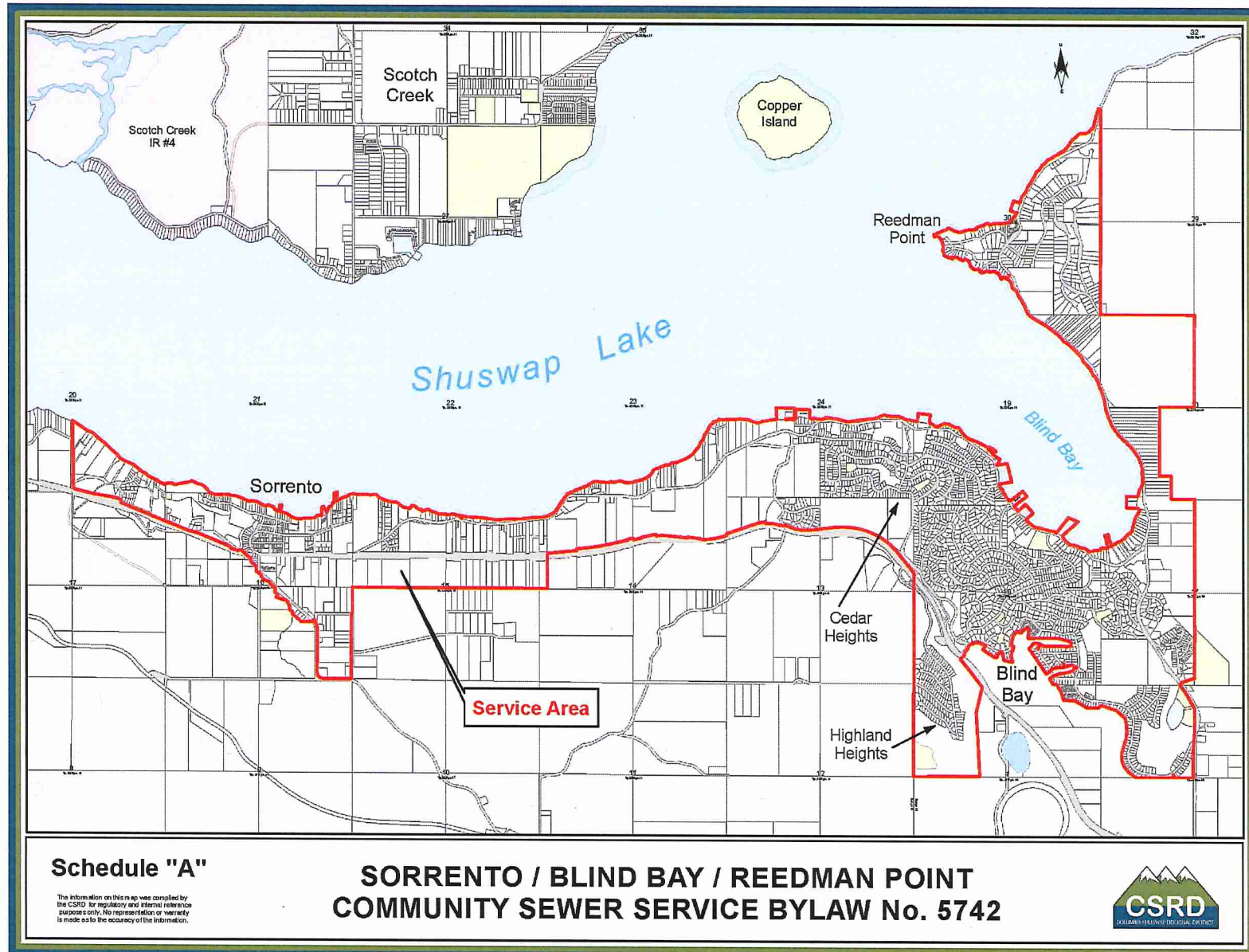
CERTIFIED a true copy of
Bylaw No. 5742 as read a third time.

CERTIFIED a true copy of
Bylaw No. 5742 as adopted.



Deputy Manager of Corporate
Administration Services

Deputy Manager of Corporate
Administration Services





Statutory Approval

Under the provisions of section 403

of the Local Government Act ***and***

of section 179 ***of the*** Community Charter

I hereby approve Bylaw No. 5743

of the Columbia Shuswap Regional District,

a copy of which is attached hereto.

Dated this April ***day***

of 20 ***, 2017***

Deputy Inspector of Municipalities

COLUMBIA SHUSWAP REGIONAL DISTRICT

BYLAW NO. 5743

A bylaw to authorize borrowing for the purpose of establishing a community sewer system for the communities of Sorrento, Blind Bay and Reedman Point

WHEREAS the Board of the Columbia Shuswap Regional District has established by Bylaw No. 5742 a service area for the purpose of providing a community sewer system within a portion of Electoral Area C;

AND WHEREAS it is deemed desirable and expedient to acquire property for the location of a community sewer treatment facility to serve the communities of Sorrento, Blind Bay and Reedman Point within Electoral Area C;

AND WHEREAS the estimated cost of acquiring property for a community sewer treatment facility including preliminary and detailed design work and expenses incidental thereto is the sum of Two Million Thirty Thousand Dollars (\$2,030,000) which is the amount of debt created by this bylaw;

AND WHEREAS the maximum term for which a debenture may be issued to secure the debt created by this bylaw is for a term not to exceed twenty (20) years;

AND WHEREAS the authority to borrow under this bylaw expires five years from the date on which this bylaw is adopted;

AND WHEREAS pursuant to *Section 5 of the Local Government Act Regional District Liabilities Regulation* the Board of the Columbia Shuswap Regional District is authorized to implement a Liquid Waste Management Plan which has been approved by the minister;

NOW THEREFORE, the Board of the Columbia Shuswap Regional District, in open meeting assembled HEREBY ENACTS as follows:

1. The Board of the Columbia Shuswap Regional District is hereby empowered and authorized to borrow upon the credit of the Regional District a sum not exceeding Two Million Thirty Thousand Dollars (\$2,030,000) for the purpose of acquiring property and preliminary detailed design work for a community sewer treatment facility within the "Sorrento/Blind Bay/Reedman Point Community Sewer Service Area" and to do all things necessary in connection therewith and without limiting the generality of the foregoing.
2. The maximum term for which debentures may be issued to secure the debt created by this bylaw is twenty (20) years.
3. This bylaw may be cited as the "Sorrento/Blind Bay/Reedman Point Community Sewer Service Loan Authorization Bylaw No. 5743".

Bylaw No. 5743

Page 2

READ a first time this 16th day of February, 2017.

READ a second time this 16th day of February, 2017.

READ a third time this 16th day of February, 2017.

APPROVED by the Inspector of Municipalities this 20th day of April, 2017.

ADOPTED this _____ day of _____, 2017.

CHIEF ADMINISTRATIVE OFFICER

CHAIR

CERTIFIED a true copy of
Bylaw No. 5743 as read a third time.

CERTIFIED a true copy of
Bylaw No. 5743 as adopted.



Deputy Manager of Corporate
Administration Services

Deputy Manager of Corporate
Administration Services



BOARD REPORT

TO: Chair and Directors

File	LC2521D
No:	PL20160154

SUBJECT: Electoral Area D: Agricultural Land Commission (ALC)
Application Section 20(3) - Non-Farm Use LC2521D (Jordan Baer)

DESCRIPTION: Report from Christine LeFloch, Development Services Assistant, dated May 29, 2017.
6024 Highway 97B, Ranchero

RECOMMENDATION #1: THAT: Application No. LC2521D, Section 20(3) Non-Farm Use, for That Part of the Southwest ¼ of Section 33, Shown Red on Plan B3050, Township 19, Range 9, West of the 6th Meridian, Kamloops Division Yale District, Except Part Now Road See Plan H10220 be forwarded to the Provincial Agricultural Land Commission recommending approval, this 15th day of June, 2017.

SHORT SUMMARY:

The subject property is located in the Ranchero area of Electoral Area 'D'. The owners have made a Non-Farm Use application to the ALC to allow a second residence that is not a manufactured home on the subject property to provide care for a family member. The property is 100% within the ALR.

VOTING:	Unweighted <input type="checkbox"/> Corporate	LGA Part 14 <input checked="" type="checkbox"/> (Unweighted)	Weighted <input type="checkbox"/> Corporate	Stakeholder <input type="checkbox"/> (Weighted)
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BACKGROUND:

PROPERTY OWNER:
Jordan and Heidi Baer

AGENT:
N/A

ELECTORAL AREA:
D

CIVIC ADDRESS:
6024 Highway 97B, Ranchero

LEGAL DESCRIPTION:
That Part of the Southwest ¼ of Section 33 Shown Red on Plan B3050, Township 19,

Range 9, West of the 6th Meridian, Kamloops Division Yale District, Except Part Now Road
See Plan H10220

SIZE OF PROPERTY:

4.6 Ha (11.37 ac)

DESIGNATION:

Ranchero/Deep Creek Official Community Plan Bylaw No. 750

AG – Agriculture

ZONING:

Ranchero/Deep Creek Land Use Bylaw No. 2100

R – Rural

CURRENT USE:

Agriculture, residential (2 residences), home occupation

PROPOSED USE:

Agriculture, residential (legalize 2nd residence temporarily), home occupation

SURROUNDING LAND USE PATTERN:

North: rural, agriculture, highway commercial (across Hwy 97B)

South: rural, agriculture

East: Hwy 97B, country residential

West: rural, agriculture

SITE COMMENTS:

Staff visited the property on October 4, 2016. This property includes a level, fenced pasture located adjacent to Highway 97B. The owner noted that they originally had a few head of cattle in the pasture but that they had been sold to another farm so that the fencing could be repaired and weed control could be completed. He has confirmed that there are a few cows and hogs on the property now. A second pasture area occupies the western portion of the property. This area is intended to be developed as a market garden. The owners have been experimenting with various market crops to learn what grows best on the land prior to proceeding with their plans to develop this area and are working on a financial plan for this endeavour. Amos pond is located at the property's southwest corner. The owners have water rights to this pond and intend to use it for irrigation of the future market garden and pasture.

Buildings on the property include the owner's residence (constructed in 2014), the original farmhouse (which was converted to a residence for the owner's parents), a large shop that is used for farm machinery maintenance, barn, garage, jam kitchen (used by the owner's parents for a small home occupation), and a number of sheds.

The original farmhouse was constructed in the 1950's. The owner renovated and added onto the house to create a wheelchair accessible residence for his parents in 2016 in order to accommodate his father who suffers from Parkinson's disease. The upstairs of the home is used as the residence while a portion of the walkout basement is intended to

provide space for retail sales and an office for the farm. The owner has indicated that 70% of the lower level of the house is crawl space and the remainder will be used for farm purposes as noted above.

There is also a small jam business on the property that is run by the parents of the owner. The fruit used for this business is not grown on the farm therefore this business is not an activity designated as farm use under the Agricultural Land Commission regulations. However, the area used for this business is less than 150 m² and therefore meets the ALC and zoning regulations for home occupation use. An additional home occupation (construction business) was present on the property at the time of the site visit. The type and scale of home occupation is not permitted on the subject property. The owner has since moved his construction business off the property to a leased lot in the City of Salmon Arm.

Staff note that a permanent secondary residence is not a permitted use in the Rural Zone but may be permitted as a temporary use subject to specific conditions as outlined in the Policy section below. This application is the result of bylaw enforcement due to a complaint received regarding construction of the secondary residence.

Land Interests in the Community:

The owner does not have any other interests in lands in this area of the CSRD.

Soils Capability:

The subject parcel is 100% within the ALR. According to Canada Land Inventory the soil capability of the parcel is:

The eastern portion of the subject parcel has 60% Class 5 and 40% Class 4 soils within low moisture holding capacity and topography limitations

These soils can be improved to 60% Class 4 and 40% Class 3 soils with low moisture holding capacity, excess water and topography as limitation.

The western portion of the subject parcel has 60% Class 4 soils with low moisture holding capacity and excess water and 40% Organic soils.

These soils can be improved to 60% Class 3 soils with low moisture holding capacity and excess water and 40% Organic soils.

History:

There have been a few ALC applications made in the area. See ALR History Map.

- #1299 (1977) application for exclusion for the purpose of developing a mobile home park was refused.
- #1307 (1977) application for exclusion was refused but subdivision of the parcel into a 2.2 ac lot and a 5.5 ac remainder was approved.

- #1370 (1982) application for a non-farm use to expand an existing auto wrecking business was refused.
- #1613 (1979) application for exclusion of the 9.98 ac parcel for the purpose of developing a mobile home park was refused.
- #1834 (1982) application for a non-farm use for a school was approved.
- #2003 (1986) application to subdivide a 0.57 ha lot with an 8.2 ha remainder was approved.
- #2296 (2004) application for a non-farm use to develop a golf course was approved.
- #LC2328 (2005) application to exclude 10.6 ha to be used for a mix of residential and golf course uses and include 8.6 ha proposed to be developed as part of a golf course was approved.
- #LC2327 (2006) application for a non-farm use to develop a golf teaching centre, driving range and maintenance equipment storage area was approved.
- #LC2378 (2008) application for a 2 lot subdivision was refused. Upon appeal ALC approved the application.

POLICY:

Policies that relate to this application include the following:

Ranchero/Deep Creek Official Community Plan Bylaw No. 750

Designation: AG-Agriculture

3.4 Agriculture

This land use designation applies to lands that are used and valued for agriculture. All lands within the ALR are in this land use designation. The objectives and policies relating to these matters are intended to serve as indicators of community preference and assist senior levels of government in planning and decision making.

Objective 1: Maintain the agricultural land base and protect it from activities that may diminish agricultural value and potential.

Objective 3. Support development that is compatible with the Community Values and Development Criteria.

Policy 1: Lands within the Agriculture designation are shown as "AG" on Schedule 'B'.

Policy 3: For lands within the ALR, the regulations and policies of the Agricultural Land Commission (ALC) apply. Approval must first be obtained from the ALC where land in the ALR is proposed for subdivision, a second dwelling unit, or a non-farm use.

Policy 6: One dwelling unit shall be permitted per lot and one secondary dwelling unit may be subject to zoning restrictions. The secondary dwelling unit will be subject to special provisions, including:

(a) setbacks from buildings and property lines;

- (b) the provision of required parking and access; and
- (c) the provision of adequate servicing that meets Provincial water and sewer regulations.

Section 3 Natural Resource Management

5.1 Agriculture

Goal: To protect agricultural land both within and outside the ALR for agricultural based activities.

Policy 1: This Plan supports the Agricultural Land Commission's mandate of preserving and encouraging the development of lands for agricultural purposes.

Policy 3: The CSRD discourages encroachment and fragmentation of farmland by non-farm related uses.

Ranchero/Deep Creek Land Use Bylaw No. 2100

Land Use Designation: R – Rural

2.4.1 Permitted Uses

Agriculture, guest ranch, silviculture, wood harvesting, mining, gravel extraction, trapping, aquaculture, watershed, kennel, airfield, airstrip, golf course, public use, single family dwelling, home occupation, accessory use.

2.4.2 Regulations

Maximum number of single family dwellings per parcel is 1; the minimum parcel area is 60 ha. Onsite sewage disposal and water are the servicing standards.

2.3.13 Provision of a Second Dwelling

Notwithstanding any other provisions of this bylaw, a second dwelling is permitted on parcels in excess of 1 hectare within areas zoned as R, RH, and RR, provided the following criteria are met:

- .1 The second dwelling shall be occupied by a full time employs engaged in agriculture on the parcel; or
- .2 The second dwelling shall be occupied by a relative who either receives care and maintenance from or administers care and maintenance to the occupants of the principal dwelling;
- .3 Where a second dwelling is provided in accordance with Section 2.3.13.2, a physician shall certify that such care and maintenance is necessary;
- .4 The second dwelling shall be sited not less than:
 - 4 metres from any property line
 - 5 metres from the principal dwelling or any building accessory thereto;
- .5 The second dwelling shall not be anchored to a permanent foundation;
- .6 The owner of the said land shall execute a covenant under Section 215 (now 219) of the Land Title Act in favour of the Regional District indicating that the second dwelling will be removed upon termination of the conditions specified in Section 2.3.13.1 and 2.3.13.2.

2.3.10 Home Occupations

Home occupations shall comply with all of the following regulations:

- .1 The home occupation shall be carried out accessory to and on the same parcel as the dwelling to which it relates.
- .2 The home occupation shall not produce, discharge or emit: smoke (except smoke produced from the heating of the home occupation space), dust, litter, vibrations; odorous, toxic or noxious matter or vapours; heat; glare; radiation; electrical or television interference; or sufficient noise, congestion or traffic to constitute a nuisance offensive to the community.
- .3 Outdoor storage and processing associated with the home occupation must be completely screened from adjoining properties and highways at a minimum height of 1.8 m (5.91 ft), with the exception of daycares and parking.
- .4 The area used for the display of new goods for sale not produced on-site is limited to 25 percent of the area used for the home occupation.
- .5 Total signage (excluding framing) used for the purpose of advertising the home occupation on each parcel shall not exceed 3 m² (32.29 ft²) in area. Signs shall have a minimum setback of 1 m (3.28 ft) from parcel lines. Where the signs are located within 5 m (16.4 ft.) of a highway, each sign shall not exceed 2 m² (21.53 ft²) in area.
- .6 All parking associated with the home occupation shall be on-site. One parking space shall be provided:
 - (a) per 100 m² (1,076.39 ft²) of area used for the home occupation (plus one parking space for any fraction of area greater than 100 m² (1,076.39 ft²), with the exception of daycares;
 - (b) per non-resident employee;
 - (c) per let bedroom in the case of a bed & breakfast;
 - (d) in compliance with dimensions and access requirements as set out in Schedule B.
- .7 Where the parcel is less than 0.4 ha (0.99 ac):
 - (a) no more than 2 persons shall be employed in a home occupation who are not residents of the dwelling in which the home occupation is taking place;
 - (b) the maximum area of all home occupation uses on a parcel is 275 m² (2,960 ft²) on lands outside the agricultural land reserve and 100 m² (1,076 ft²) on lands inside the agricultural land reserve;
 - (c) if the home occupation is a bed & breakfast, the bed & breakfast is limited to 3 bedrooms for let.
- .8 Where the parcel is 0.4 ha (0.99 ac) or larger:
 - (a) no more than 4 persons shall be employed in a home occupation who are not residents of the dwelling in which the home occupation is taking place;
 - (b) the maximum area of all home occupation uses on a parcel is 150 m² (1,615 ft²) on lands inside the agricultural land reserve;
 - (c) if the home occupation is a bed & breakfast, the bed & breakfast is limited to 6 bedrooms for let on lands outside the agricultural land reserve and 4 bedrooms for let on lands inside the agricultural land reserve.

Ranchero/Deep Creek Zoning Bylaw No. 751 – Under preparation (at First Reading)

Proposed Zone: AG1 – Agriculture 1

5.6.2 Principal Uses

Agriculture, agroforestry, single detached dwelling, timber harvesting.

5.6.3 Secondary Uses

Accessory use, agri-tourism, guest ranch, bed and breakfast, home occupation (subject to ALC regulations), secondary dwelling unit (subject to Section 3.7 of this Bylaw and ALC regulations).

*Section 3.7 of the proposed bylaw is currently under revision. However, the intent of this section will be to permit secondary dwelling units in accordance with ALC regulations.

Agricultural Land Reserve Use, Subdivision and Procedures Regulation

3(1) The following non-farm uses are permitted in an agricultural land reserve unless otherwise

prohibited by a local government bylaw or, for lands located in an agricultural land reserve

that are treaty settlement lands, by a law of the applicable treaty first nation government:

(b) for a parcel located in Zone 1,

(i) one secondary suite in a single family dwelling, and

(ii) either

(A) one manufactured home, up to 9 m in width, for use by a member of the owner's immediate family, or

(B) accommodation that is constructed above an existing building on the farm and that has only a single level;

1(1) In this regulation:

"immediate family" means, with respect to an owner, the owner's

(a) parents, grandparents and great grandparents.

(b) spouse, parents of spouse and stepparents of spouse,

(c) brothers and sisters, and

(d) children or stepchildren, grandchildren and greatgrandchildren;

"farm" means an occupation or use, for farm purposes, of one or several parcels of land or tenured areas of Crown land.

FINANCIAL:

This application is the result of bylaw enforcement and has identified a use on the property that is not in compliance with the Ranchero/Deep Creek Zoning Bylaw No. 2100. If the ALC does not approve the proposed non-farm use this file would be referred back to bylaw enforcement for follow up.

KEY ISSUES/CONCEPTS:

This application is the result of a bylaw enforcement complaint. The owner advises that he consulted the CSRD website for information prior to constructing the second residence on the property and was under the impression that the use was permitted. However, he had inadvertently been reading an early draft of the Ranchero/Deep Creek Zoning Bylaw No. 751 which is currently under development and is only at first reading.

The property was purchased by the current owners in 2012. At that time the old farmhouse was the only house on the property. The owners' original plan was to construct a new residence for themselves and then tear down the older home. They constructed their primary residence in 2013. After that time they changed their plan and decided to add onto the old farmhouse to create the secondary residence for their parents. The owner is a builder and was able to customize the home as a handicapped residence for the care of his father who suffers from Parkinson's disease.

Ranchero/Deep Creek Land Use Bylaw No. 2100 permits one residence per property that is zoned R-Rural. It also permits a secondary residence for the care and maintenance of a family member provided that the residence is not on a permanent foundation, a doctor has certified that it is necessary, the building meets specified setbacks, and the owner has registered a Section 219 covenant on title requiring the residence to be removed when it is no longer required for the care and maintenance of a family member. The owner has provided a letter from his father's neurologist regarding the need for care. He has also offered to register a covenant on title regarding the use of the second residence by his parents until such time as they pass, or require a higher level of care than can be provided at home.

It is also noted that Policy 6 of Section 3.4 Agriculture of the Ranchero/Deep Creek Official Community Plan Bylaw No. 750 supports a secondary residence subject to adequate servicing, parking and setbacks. The secondary residence is serviced by an approved septic system and the owner states that the well has been inspected by Interior Health. There is adequate parking on site and the building is sited in compliance with required setbacks.

If the ALC approves this application, CSRD bylaw requirements include:

- Execution of a covenant under Section 219 of the Land Title Act in favour of the Regional District indicating that the second dwelling will be removed upon termination of the conditions for which it is required, pursuant to Section 2.3.13 of Ranchero/deep Creek Land Use Bylaw No. 2100;
- A Development Variance Permit to allow the secondary dwelling to be on a permanent foundation. Section 2.3.13.5 Provisions for Secondary Residences of Ranchero/Deep Creek Land Use Bylaw No. 2100 states that the second dwelling shall not be anchored to a permanent foundation.

SUMMARY:

Development Services is recommending that application LC2521D, proposing a permanent secondary residence as a non-farm use in the ALR, be sent to the ALC recommending approval, for the following reasons:

- The secondary residence is providing an opportunity for the family to provide care and maintenance for the owner's father which is a permitted use in the Ranchero/Deep Creek Land Use Bylaw No. 2100 subject to certain conditions;
- The secondary residence is sited in an area of the property that is near the road and other farm buildings, therefore not impeding the use of the rest of the parcel for farm purposes;
- The secondary residence is connected to an approved onsite sewage disposal system;
- The Ranchero/Deep Creek OCP policies supports secondary residences as a permitted use; and
- The Electoral Area 'D' APC recommended approval of the secondary residence subject to a covenant being registered on title requiring removal or conversion of the residence to a non-habitable building when it is no longer required by the owner's parents.

IMPLEMENTATION:

If the ALC allows the proposed non-farm use, the owner would need to have a Section 219 covenant prepared by their solicitor for review of CSRD staff which would state that the secondary residence must be removed when it is no longer required by the owner's parents. Staff suggest the covenant could also include the option to convert the house to a non-habitable building.

The owner would also need to apply and receive approval for a Development Variance Permit to allow the secondary residence to be located on a permanent foundation.

COMMUNICATIONS:

This application was referred to the Electoral Area D Advisory Planning Commission (APC) for their review and input. The following recommendation was provided by the APC with regard to this application:

"Moved by Kerry Orchard and seconded by Barry Wilson that the APC D recommend the application for a second residence with the requirement that a restrictive covenant or other instrument be placed on the title of the property requiring that the second residence be decommissioned when the parents are no longer residing in the second residence.

Motion carried unanimously."

The recommendation of the Board will be forwarded to the ALC for consideration during its review of the application. There is no public involvement in applications to the ALC.

DESIRED OUTCOMES:

That the Board endorse the staff recommendation.

BOARD'S OPTIONS:

1. *Endorse the Recommendation. The application will be sent to the Agricultural Land Commission with a recommendation of approval.*

2. *Deny the Recommendation. The application will be sent to the Agricultural Land Commission with a recommendation of refusal.*
3. *Defer.*
4. *Any other action deemed appropriate by the Board.*

LIST NAME OF REPORT(S) / DOCUMENT(S) AVAILABLE FROM STAFF:

1. Agricultural Land Reserve Use, Subdivision and Procedures Regulation, BC Reg. 171/2002
2. Ranchero/Deep Creek Land Use Bylaw No. 2100
3. Ranchero/Deep Creek Official Community Plan Bylaw No. 750

Report Approval Details

Document Title:	2017-06-15_Board_DS_LC2521D_Baer.docx
Attachments:	<ul style="list-style-type: none">- LC2521D - Maps and Plans.pdf- LC2521D - Photos.pdf- Letter from Jordan and Heidi Baer, dated May 5, 2016.pdf- Letter from Dr. Jennifer Takahashi, dated June 9, 2016.pdf
Final Approval Date:	Jun 7, 2017

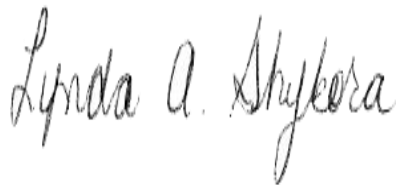
This report and all of its attachments were approved and signed as outlined below:



Corey Paiement - Jun 2, 2017 - 4:06 PM



Gerald Christie - Jun 5, 2017 - 7:42 AM

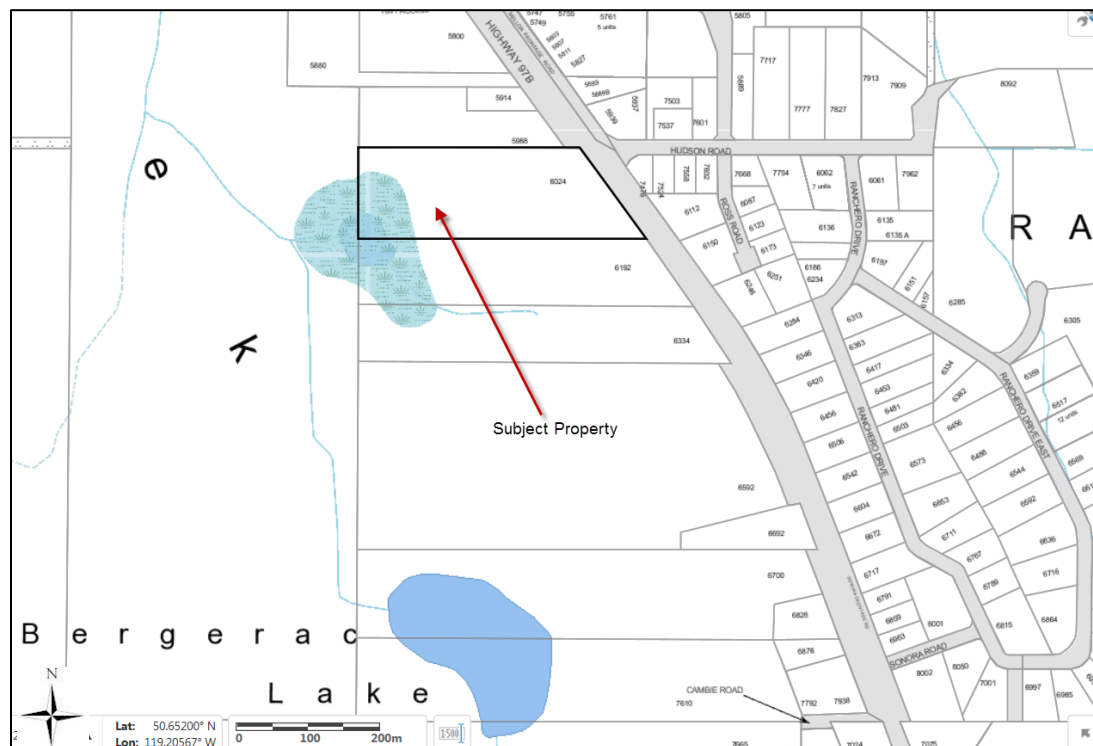
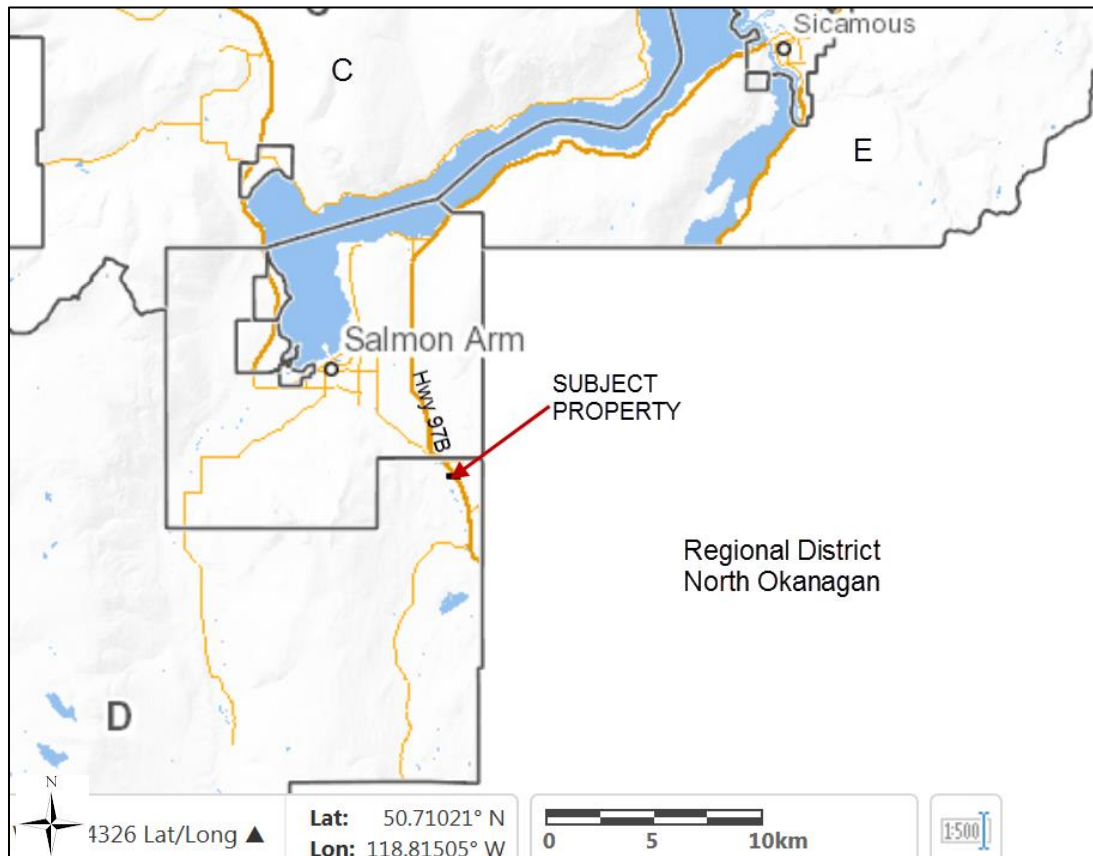


Lynda Shykora - Jun 7, 2017 - 10:06 AM



Charles Hamilton - Jun 7, 2017 - 10:29 AM

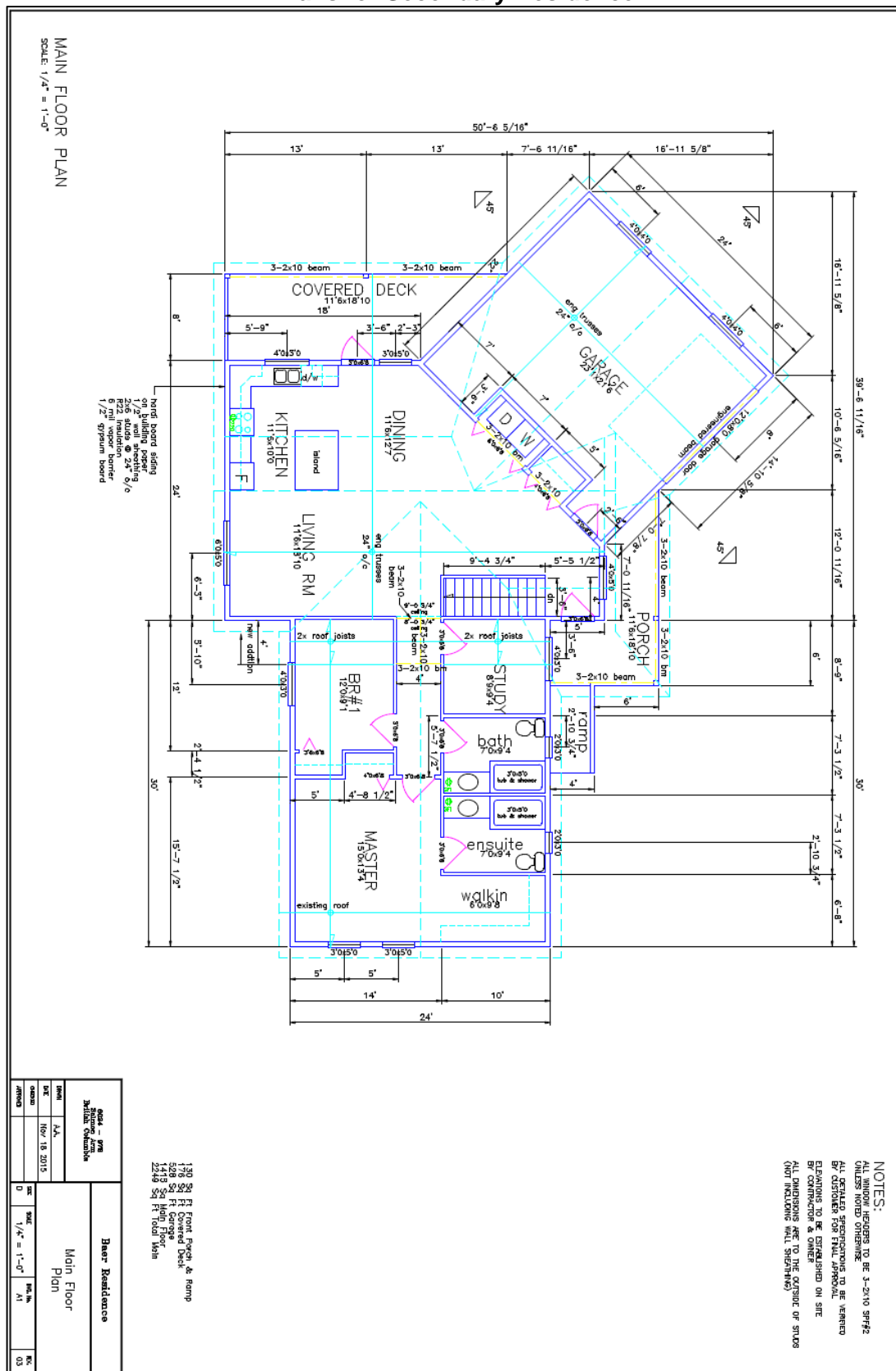
Location



Site Plan

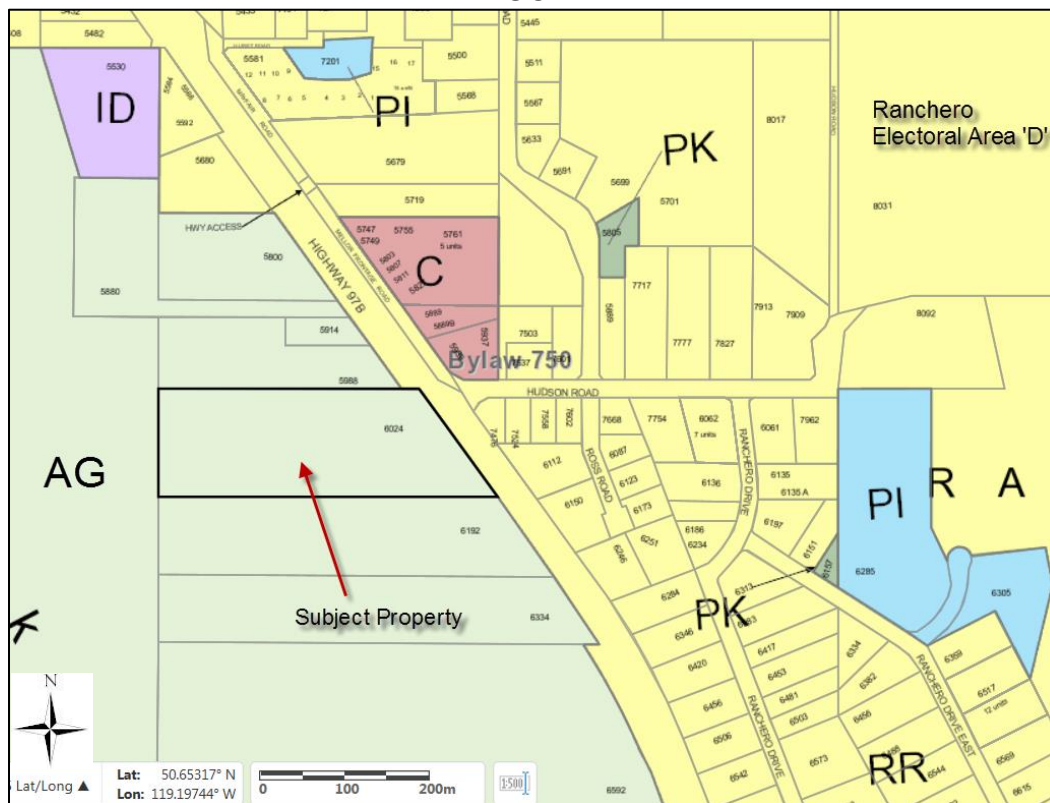


Plans for Secondary Residence

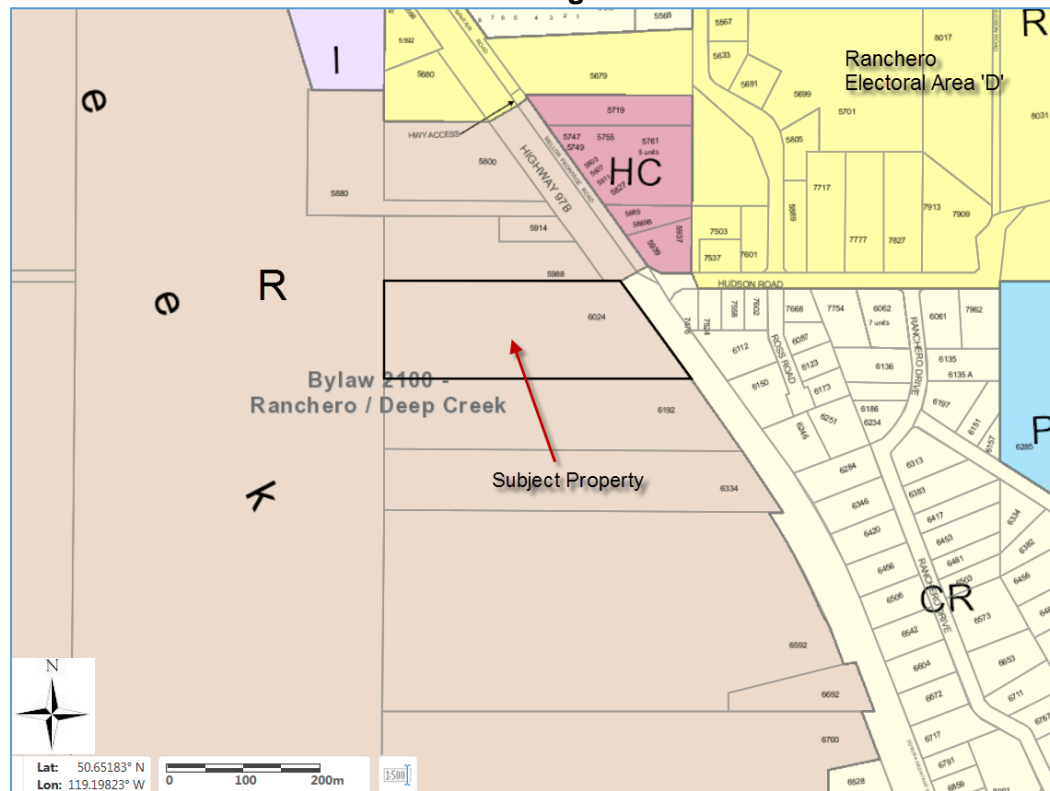


LC2521D – Maps and Plans

OCP

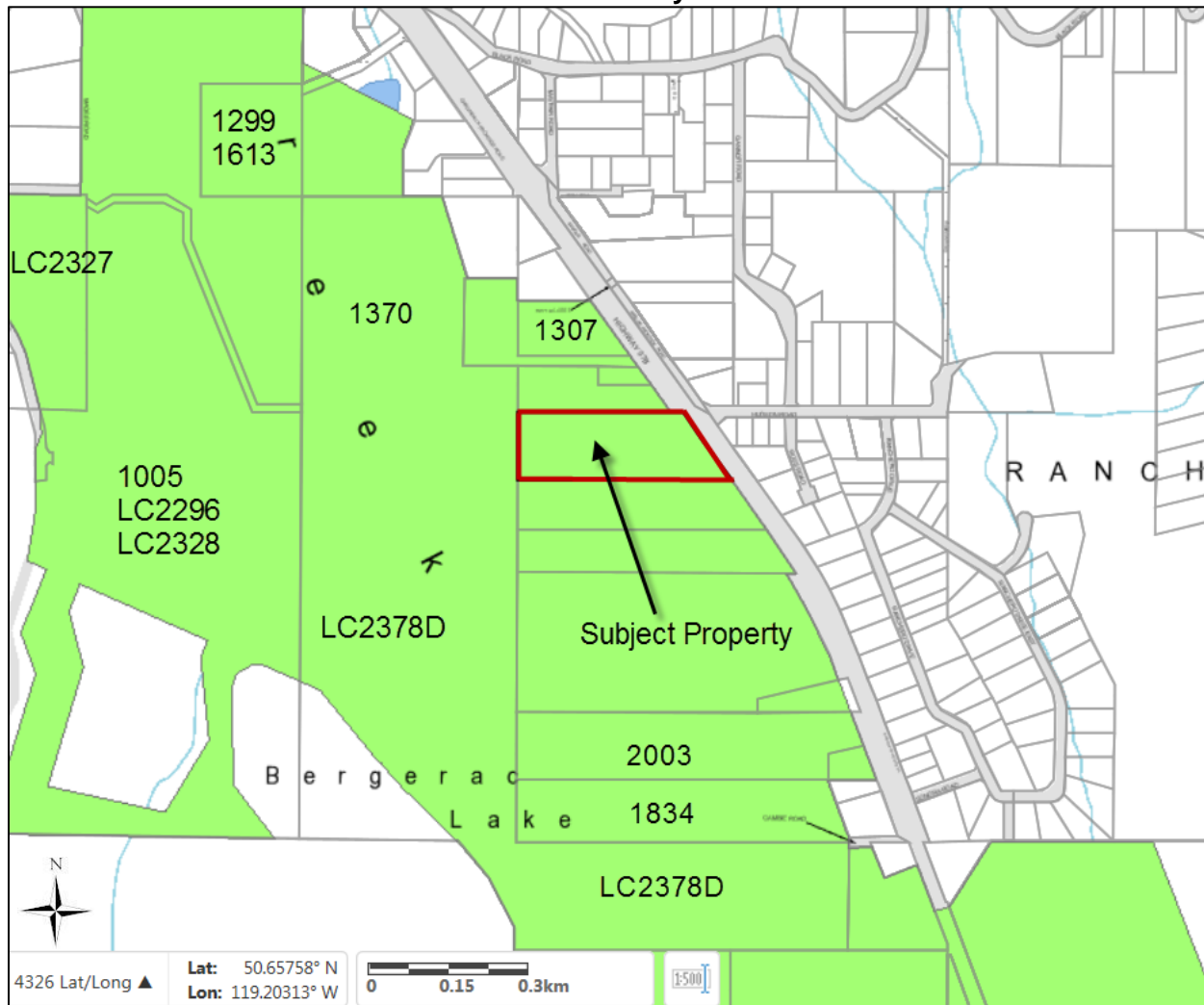


Zoning

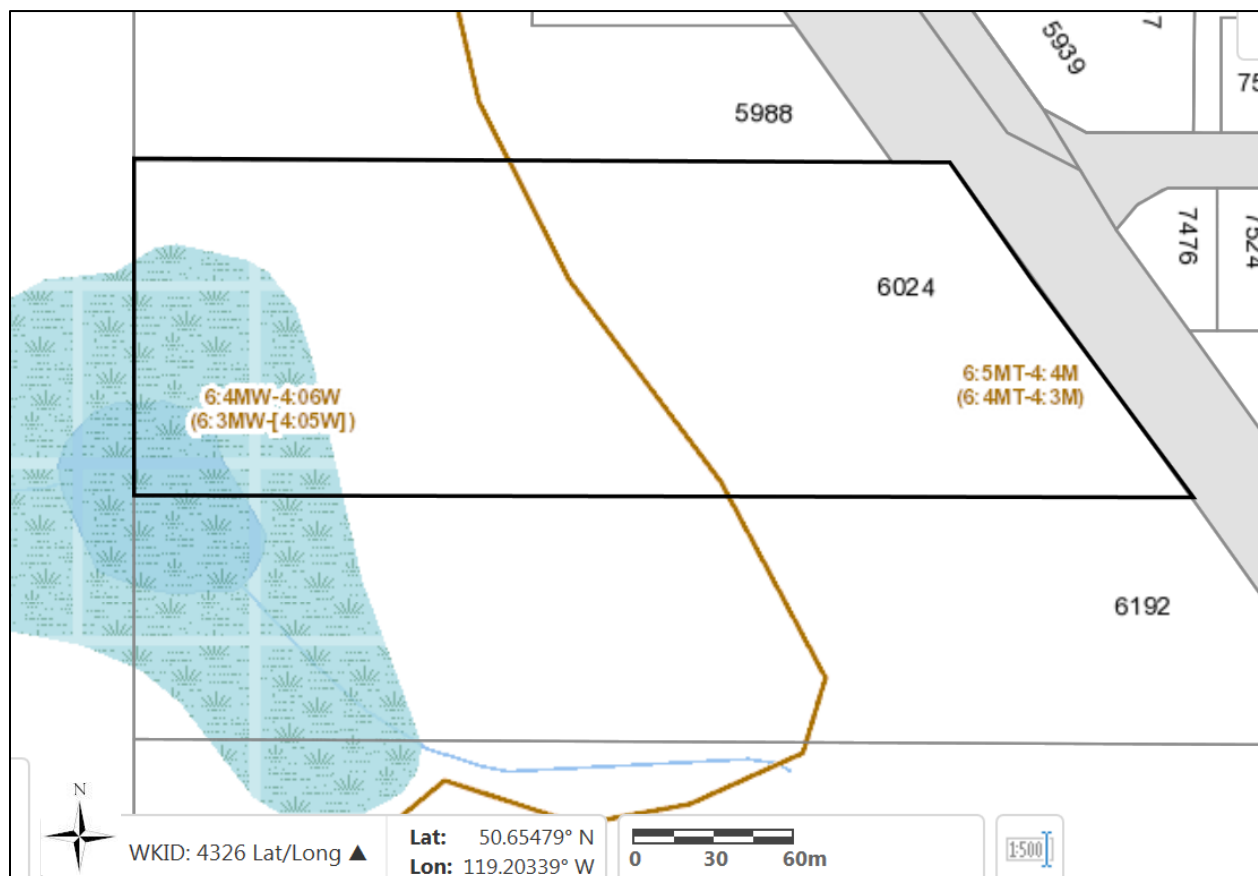
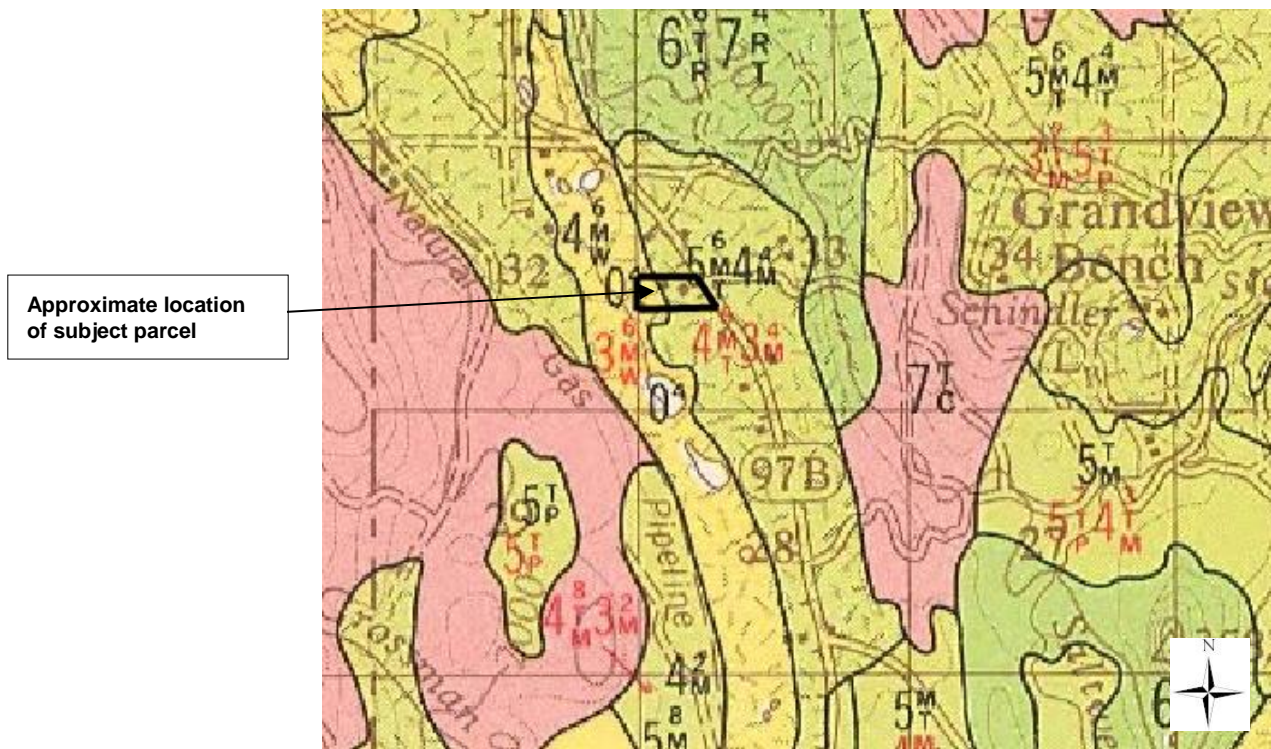


LC2521D – Maps and Plans

ALR History



Soils



LC2521D – Maps and Plans

Orthophoto



*Buildings etc. not visible in photo: Owner's residence and associated driveway, shop, fenced pasture

Photos taken October 4, 2016



Fenced pasture at front of property



Primary residence

LC2521D - Photos



Front of secondary residence



Rear of secondary residence with future farm sales office below

LC2521D - Photos



Future market garden area at west side of property



Machine shop and company vehicles

LC2521D - Photos



Shed and garage near secondary residence



Barn with shed

LC2521D - Photos



Looking east from primary residence



Experimental crop area behind secondary residence

LC2521D - Photos

Photos provided by the owners



Seeking to determine how well sweet corn grows



Experimenting with market crops

LC2521D - Photos



Original derelict farmhouse – renovated and added onto to create secondary residence for parents



Finished handicap accessible residence



Pastures worked up and new fencing installed



New fences for keeping livestock

May 5, 2016

Columbia Shuswap Regional District
555 Harbourfront Drive NE
Salmon Arm, B.C. V1E 4P1

Attention: Planning Department

Re: Property at 6024 97B Salmon Arm

To whom it may concern:

Following is a report on the present situation at the above mentioned property.

The property presently has a completed, single family dwelling that was constructed in 2014. It is presently inhabited by the owners, Jordan and Heidi Baer and our 5 children

This home has a total living space of 3888 sq. ft. plus 1440 sq. ft. of garage.

This home has a certified septic and the water system (well) has been inspected. The water quality is being tested by Interior Health due to a small home occupation, jam business, operated by the owner's parents on the property.

Since my father suffers, with a very debilitating case, of Parkinson's disease, at the age of 62, combined with the fact that we have been working towards developing this property into a working farm with the intent of converting the fields to produce bearing land. It was decided that a facility should be built to accommodate and care for the needs of my handicap father and create a place to house the offices and operations of jam sales; as well as, produce marketing for when we get to this stage. This would also afford us the help of my mother.

In accidentally reading "proposed" Bylaw 751 rather than the presently active Bylaw 2100 I was led to believe that I was permitted a second dwelling on the property for the above mentioned purposes.

We proceeded to take an old existing building on the property to renovate and add on to it to accommodate a handicap accessible facility for my father on the main floor and create an area in the basement that could be used for jam sales, farm produce sales, and administration.

I take personal responsibility for failing to look at the correct bylaw, on the other hand if there was a permitting process in place these kinds of errors would likely not happen.

You will find that Interior Health has been to the property and has approved the water system for its present uses.

There are 2 certified septic systems on the property.

We have water rights off of Amos pond with an irrigation system in place to accommodate our produce and grass irrigation requirements when we get to that stage.

This is a work in progress to take these dormant fields and bring them back to produce bearing fields.

A few questions:

Is it possible to put a covenant on title that permits use for my fathers care until he moves on to professional care or passes on? At that time we could decommission home, change its use, or possibly by then the new bylaw would be adopted?

I'm not familiar with process but have heard of temporary use permits. Is there such a provision in this situation due to the fact that a new bylaw is under process that may permit this?

If I understand the present bylaw correctly, our only contravention for a second dwelling to house parents is that of a fixed foundation. Are there previsions for a variance to this requirement?

Please advise as to what I should do from here.

If anyone wants to tour the property, we would be more than happy to arrange that.

Sincerely,

Jordan and Heidi Baer

06/13/2016 09:54 Nicola Neurology

(FAX)250 372 1381

P.001/002

Dr. Jennifer Takahashi
Neurologist and Movement Disorders Specialist
203 - 321 Nicola St., Kamloops, BC V2C 6G6
Office: (250) 314-9912 Fax: (250) 372-1381

2016-Jun-09

Jordan Baer
Box 532
Salmon Arm, BC
V1E 4N6

Dear Jordan:

RE: James Baer
1954-Jan-06

I am writing this letter on behalf of your father and my patient, James Baer. I understand that you are in the process of building a house for your parents on your property. The couple is looking forward to being able to reside in such a home in close proximity to you given the advancing Parkinson's disease-related disability faced by James. By his description, the home will have four-foot-wide hallways, three-foot-wide doors, handicapped-equipped washrooms, and other features that will accommodate James requirement for mobility aides such as a wheelchair and a walker.

I started to follow James clinically in June 2011, upon transfer of care from my neurology colleague Dr. Mosewich. I am a Neurologist who subspecializes in the care of individuals with movement disorders such as Parkinson's disease. James has advanced Parkinson's disease associated with marked on-off symptom response fluctuations. He has also been prone to severe involuntary muscle contractions and writhing movements impacting on his ability to sit, stand, and ambulate with comfort. There have been times during which James has been severely hindered in his ability to walk even short distances.

I understand that the regional district has brought to the family's attention that your property is still within the Agricultural Land Reserve. Accordingly, this means that you would not be able to build a second house on your property unless it was for your parents or farm workers.

I think it is both ideal and compassionate that you have been embarking upon building an appropriate home for your father and mother to reside in, taking into consideration his significant medical concerns.

I ask that the Columbia Shuswap Regional District and Agricultural Land Commission approve your building this home for your parents, on medical and compassionate grounds.

Sincerely yours,



Jennifer L. Takahashi, MD, FRCP(C)
JLT/bls
CPSID # 25222, MSP# 28688

06/13/2016 09:54 Nicola Neurology

(FAX)250 372 1381

P.002/002

cc: Columbia Shuswap Regional District
Agriculture Land Commission.



BOARD REPORT

TO:**Chair and Directors**

File No:	DVP641-29 PL20170100
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SUBJECT:

Electoral Area A: Development Variance Permit No. 641-29 (Mountain Shadows Development Ltd.)

DESCRIPTION:

Report from Jennifer Sham, Planner, dated May 24, 2017.
Highway 95, Nicholson

RECOMMENDATION:

THAT: in accordance with Section 498 of the Local Government Act, Development Variance Permit No. 641-29, for Lot 3 Section 6 Township 27 Range 21 W5M KD Plan 16263, varying Schedule 'A' – Levels of Service of Subdivision Servicing Bylaw No. 641, as amended, to allow a subdivision which would create a fee simple lot (Lot 1, EPP25575) with a parcel size of 0.751 ha serviced by a surface water source and an on-site sewerage disposal system, and a fee simple lot (Lot 2, EPP25575) with a parcel size of 0.583 ha serviced by an off-site well and an on-site sewerage disposal system, as shown on Schedule A, be approved for issuance this 15th day of June, 2017.

SHORT SUMMARY:

The subject property is located in the Nicholson Area of Electoral Area A. The owner has made application to subdivide the property into 3 lots. Proposed lot 1 will be serviced by an existing water licence and will be serviced by an on-site septic system. Proposed lot 2 is serviced by an off-site well and will be serviced by an on-site septic system. The owner is applying for a Development Variance Permit (DVP) to waive the Levels of Service requirements in Schedule "A" of Subdivision Servicing Bylaw No. 641, as amended (Bylaw No. 641) to allow the creation of 2 lots smaller than 1 ha in size (Lot 1 = 0.751 ha and Lot 2 = 0.583 ha).

VOTING:	Unweighted Corporate	<input type="checkbox"/>	LGA Part 14 (Unweighted)	<input checked="" type="checkbox"/>	Weighted Corporate	<input type="checkbox"/>	Stakeholder (Weighted)	<input type="checkbox"/>
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BACKGROUND:**REGISTERED OWNER:**

Mountain Shadows Developments Ltd.

AGENT:

Mike Palumbo

ELECTORAL AREA:

A

LEGAL DESCRIPTION:

Lot 3 Section 6 Township 27 Range 21 W5M KD Plan 16263

SURROUNDING LAND USE PATTERN:

North = Reflection Lake Road, Mobile Home Park

South = Highway 95
East = vacant
West = vacant

CURRENT USE:
Vacant

PROPOSED USE:
Rural Residential

PARCEL SIZE:
~3.125 ha

PROPOSED SIZE:
Lot 1 = 0.751 ha
Lot 2 = 0.583 ha
Remainder = ~1.79 ha

DESIGNATION & ZONE:
N/A

AGRICULTURAL LAND RESERVE:
0%

Site comments: A site visit was not conducted. The property appears to be currently vacant aside from a few wells and pumphouses.

POLICY:

Subdivision Servicing Bylaw No. 641, as amended
Schedule "A" - Levels of Service
All properties to be subdivided for single family residential use proposed to be serviced with an On-site Sewage Disposal System and an Independent On-site Water System must be a minimum of 1.0 ha in size, unless a smaller parcel size is permitted in Zoning Regulations.

FINANCIAL:

There are no financial implications to the CSRD with regard to this application.

KEY ISSUES/CONCEPTS:

The Board previously issued DVP641-3 on July 18, 2013 waiving the requirement that:

1. The surface water source be on the List of Eligible Sources shown on Schedule D of Bylaw No 641; and,
2. The groundwater source for proposed lot 2 be on the same parcel as the residential dwelling unit.

In other words, DVP641-3 allowed Abbott Spring (existing water licence [72200]) as the surface water source for proposed lot 1, and allowed the groundwater well servicing proposed lot 2 to be located on

the remainder (off-site well). Staff note that this off-site well on the remainder parcel will be protected by easement (EPP25576).

Subdivision Servicing Bylaw No. 641-1 (Bylaw No. 641-1) was adopted on January 16, 2014. As part of the amendment, the following text was added to the Schedule "A" - Levels of Service: "All properties to be subdivided for single family residential use proposed to be serviced with an On-site Sewage Disposal System and an Independent On-site Water System must be a minimum of 1.0 Ha. in size, unless a smaller parcel size is permitted in Zoning regulations." In accordance with Section 511 of the Local Government Act, the applicant had one year from the date of adoption of Bylaw No. 641-1 to complete the subdivision or Bylaw No. 641-1 would be applicable.

Through the subdivision process, the applicant was required to provide proof of adequate sewerage disposal methods for all lots and proof of potable water for all lots. Staff is in receipt of information from Wayne Thompson, Registered Onsite Wastewater Practitioner (ROWP), dated January 11, 2012, and Mario Pecora, ROWP, dated May 28, 2015 regarding sewerage disposal on all proposed lots. Staff is also in receipt of a hydrogeological assessment by Summit Environmental Consultants Inc. dated May 29, 2015 confirming that all proposed sources of water for the proposed lots meet the requirements of Bylaw No. 641, including potable water.

SUMMARY:

The applicant is requesting that the Board consider waiving the requirements of Schedule "A" - Levels of Service that all new parcels created by subdivision for residential use and serviced by an On-site Sewage Disposal System and an Independent On-site Water System, must be a minimum of 1 ha in size, for two lots (Lot 1 & 2, EPP25575).

Staff is recommending issuance of DVP641-29 for the following reasons:

- Two Authorized Persons have supplied staff with information regarding adequate sewage disposal methods; and,
- Staff is in receipt of a hydrogeological assessment confirming all water sources for all proposed lots meet the requirements of Bylaw No. 641.

IMPLEMENTATION:

If the Board issues DVP641-29, staff will forward the documentation to Land Title Office for registration on the titles of the two proposed lots.

COMMUNICATIONS:

Property owners and tenants in occupation within 100 m of the subject property were given notification a minimum of 10 days prior to the CSRD Board of Directors considering this application. Notification letters will be mailed on May 29, 2017. All interested parties have had the opportunity to provide comments regarding this application prior to the Board Meeting.

DESIRED OUTCOMES:

That the Board endorse staff recommendation.

BOARD'S OPTIONS:

1. *Endorse the Recommendation.*
2. *Deny the Recommendation.*

3. *Defer.*
4. *Any other action deemed appropriate by the Board.*

LIST NAME OF REPORT(S) / DOCUMENT(S) AVAILABLE FROM STAFF:

1. Subdivision Servicing Bylaw No. 641, as amended.

Report Approval Details

Document Title:	2017-06-15_Board_DS_DVP641-29_MountainShadowsDevelopment.docx
Attachments:	<ul style="list-style-type: none"> - DVP641-29 Permit.pdf - Summit_Environmental_letter_2015-05-29_DVP641-29.pdf - Mario_Pecora_letter_2015-05-28_DVP641-29.pdf - Wayne_Thompson_letter_2012-08-11_DVP641-29.pdf - Wayne_Thompson_letter_2012-05-02_DVP641-29.pdf - Wayne_Thompson_letter_2012-01-11_DVP641-29.pdf
Final Approval Date:	Jun 7, 2017

This report and all of its attachments were approved and signed as outlined below:



Corey Paiement - Jun 6, 2017 - 9:57 AM



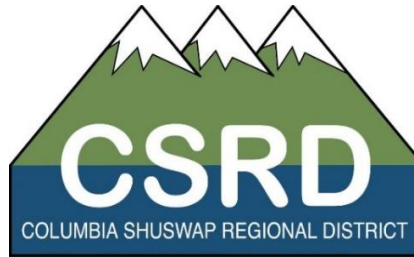
Gerald Christie - Jun 6, 2017 - 12:25 PM

No Signature - Task assigned to Lynda Shykora was completed by assistant Emily Johnson

Lynda Shykora - Jun 6, 2017 - 4:16 PM



Charles Hamilton - Jun 7, 2017 - 8:25 AM



DEVELOPMENT VARIANCE PERMIT NO. 641-29

1. OWNER: Mountain Shadows Developments Ltd., Inc. No. BC0842297
Box 316
Golden, BC V0A 1H0
2. This permit applies only to the lands described below:

Lot 1 Section 6 Township 27 Range 21 W5M KD EPP25575 (PID:_____);
and,

Lot 2 Section 6 Township 27 Range 21 W5M KD EPP25575 (PID:_____),

which property is more particularly shown outlined in bold on the map attached hereto as Schedule A.
3. The Subdivision Servicing Bylaw No. 641, as amended is hereby varied as follows:

Schedule A – Levels of Service, Minimum parcel size for new subdivisions where serviced by on-site sewage disposal and on-site Independent water system is varied from 1 ha to a minimum of 0.0751 ha for Lot 1, EPP25575, and 0.583 ha for Lot 2, EPP25575 of the proposed 3 lot subdivision, as shown on Schedule A.
4. This is NOT a building permit.

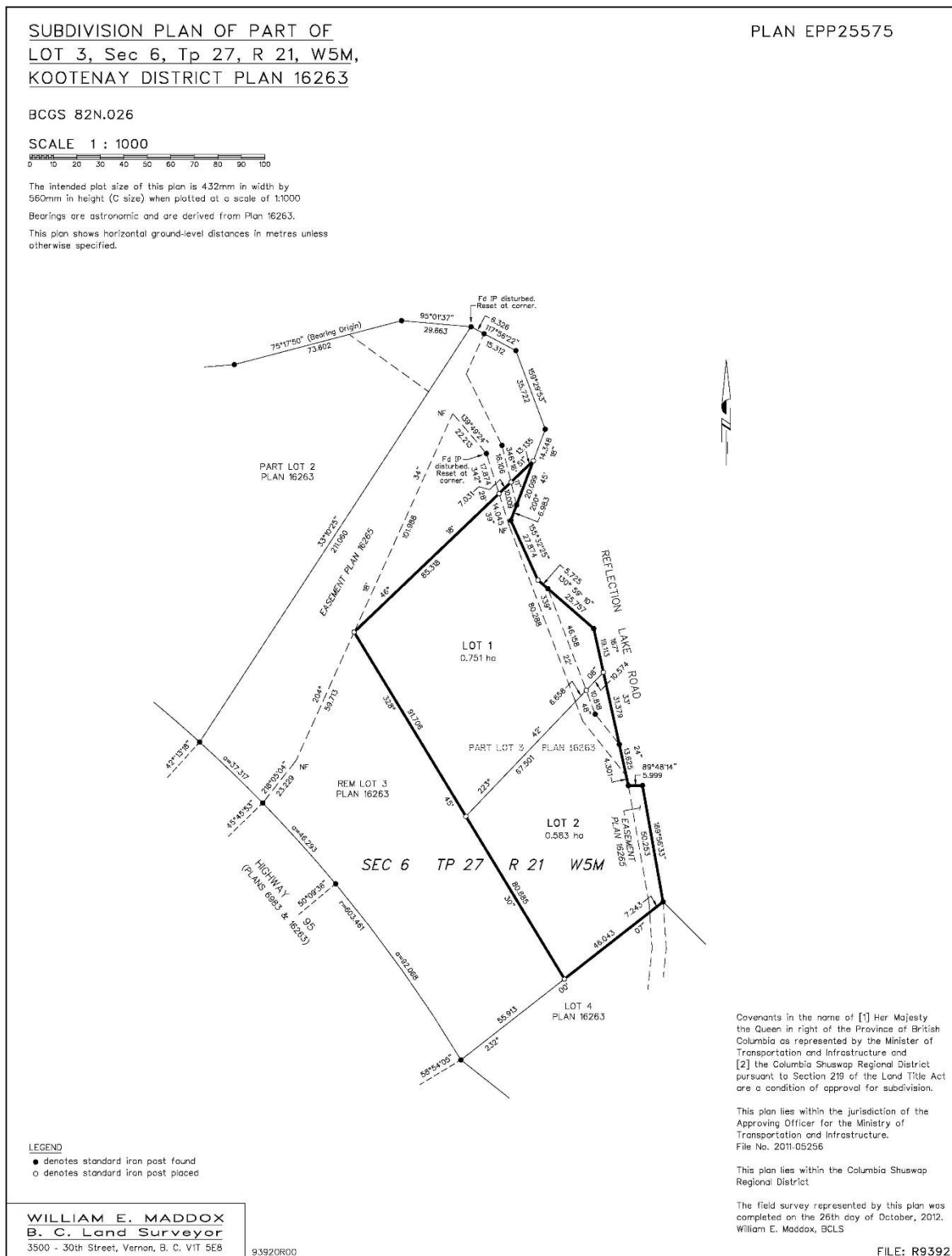
AUTHORIZED FOR ISSUANCE BY RESOLUTION of the Columbia Shuswap Regional District Board on the 15th day of June, 2017.

CORPORATE OFFICER

NOTE: Subject to Section 504 of the Local Government Act, if the development of the subject property is not substantially commenced within two years after the issuance of this permit, the permit automatically lapses.

This Permit addresses Local Government regulations only. Further permits or authorizations may be required from Provincial or Federal governments. It is the owner's responsibility to call FrontCounterBC at 1-877-855-3222 regarding this project.

Schedule A





Summit Environmental Consultants Inc.
Suite 200, 2800 29 Street
Vernon, B.C., Canada, V1T 9P9

TEL: 250.545.3672
FAX: 250.545.3654
www.summit-environmental.com

May 29, 2015

Michael Palumbo
President
Mountain Shadows Developments Ltd. Subdivision
Box 316, 1416 Golden View Road
Golden, B.C., V0A 1H0
Submitted via email to: mike@snowpeakrentals.com

**Re: REPORT - HYDROGEOLOGICAL AND HYDROLOGICAL ASSESSMENTS OF PROPOSED
SUBDIVISION (LOT 3, SEC 6, TP 27, RGE 21, W5M KOOTENAY DISTRICT, PLAN 16263)**

Dear Mr. Palumbo:

Summit Environmental Consultants Inc. (Summit) was retained to (1) assess water quality at a spring and (2) complete pumping tests and aquifer assessments for the two wells at the above-mentioned property south of Golden, B.C. in the Columbia Shuswap Regional District (CSRD).

1 BACKGROUND AND OBJECTIVES

We understand that you are planning to subdivide your property into three pieces with each serviced by a different water supply, as follows:

- Lot 1: water supply will be from Abbot Spring (herein referred to as "the spring").
- Lot 2: water supply will be from an existing drilled well (Well Plate ID No. [WPID] 32048; referred to as the South Well in previous reports).
- Remainder Lot: water supply will be from an existing drilled well (WPID 32047; referred to as the North Well in previous reports).

To complete the subdivision application, you require a water quantity and quality study (i.e. a hydrogeological assessment) for each well, and a water quality study (i.e. a hydrological assessment) for the spring.¹ You also require that a report be prepared and submitted to the CSRD by a professional engineer or geoscientist registered with the Association of Professional Engineers and Geoscientists of B.C. (APEGBC). These assessments are intended to satisfy the applicable sections of CSRD Subdivision Servicing Bylaw No. 641² ("the Bylaw") regarding assessment and demonstration of potable water. The

¹ The CSRD has accepted the transfer of the water licence as proof of water quantity for the spring; therefore, a quantity assessment is not required. The water licence states that the "maximum quantity of water which may be diverted is 500 Imperial gallons a day (2,275 L/day) (Conditional Licence 72200)."

² CSRD Subdivision and Servicing Bylaw No. 641-1. February 3, 2014. <http://www.csr.bc.ca/sites/default/files/bylaws/BL641%20Consolidated.pdf>



May 29, 2015
 Michael Palumbo
 Mountain Shadows Developments Ltd. Subdivision
 - 2 -

Bylaw requirements for subdivisions that need this professional-directed approach (i.e. assessments by a Qualified Professional) are listed in Table 1.

Table 1: Proof of water quantity and quality requirements under CSRD Bylaw 641

Bylaw Requirements	
<i>Source Yield</i>	A Qualified Professional must submit written confirmation that the sustainable well yield is at least 2,275 L/day.
<i>Well Recovery</i>	A Qualified Professional must submit written confirmation that well recovery is adequate to support the intended use of the well (minimum 2,275 L/day).
<i>Drawdown Interference</i>	A Qualified Professional must submit written confirmation that the operation of the proposed well at the desired rate (minimum 2,275 L/day) will not: <ul style="list-style-type: none"> • reduce the amount of available water for any well within 250 m of the tested well; or • result in changes to the water balance of the aquifer, considering cumulative impacts that could result in long-term environmental changes and/or reduced yield on a regional scale.
<i>Proof of Water Quality</i>	A Qualified Professional must review the water quality results, prepare a water system design (including treatment and disinfection system components if required), and provide written confirmation that the water will be potable, as defined in the Bylaw, when the recommended system is properly installed and operated.

Source: Requirements for Independent On-site Water System (CSRD Bylaw 641)

Pumping tests were performed previously on both wells in October 2011. WPID 32047 satisfied the Bylaw, whereas the volume of water pumped from WPID 32048 was less than the required amount. The well test data from this previous assessment are attached in Appendix A. New pumping tests were required because (1) insufficient water volume was removed from WPID 32048, (2) a professional-directed approach is required, and (3) neither well was tested for water quality during the previous assessment.



May 29, 2015
 Michael Palumbo
 Mountain Shadows Developments Ltd. Subdivision
 - 3 -

2 METHODS

2.1 SOURCE YIELD AND WELL RECOVERY

To meet the *Source Yield* and *Well Recovery* Bylaw requirements (Table 1), Summit coordinated and supervised aquifer pumping tests on WPID 32048 and WPID 32047 on May 6-7, 2015. WPID 32048 was pumped at 6 L/min for 420 minutes and WPID 32047 was pumped at 13.7 L/min for 170 minutes. During both tests, water levels were monitored during pumping and after pump shut-off (recovery).

The resulting data from each pumping test were subjected to the B.C. Certification of Public Convenience and Necessity (CPCN).³ This method extrapolates water levels to 100 days and calculates a sustainable pumping rate based on this extrapolation. The sustainable pumping rate is then reduced by a safety factor of 30% to account for changes in water levels over seasons, and over longer periods in cases where water level fluctuations are unknown. Because the tests were completed in May, when groundwater levels are typically higher, the pumping test data were also analyzed using the static water level recorded in October 2011 (i.e. during the original well tests). This approach, combined with the 30% safety factor applied to the data, allows for estimation of seasonal changes in water availability.

2.2 DRAWDOWN INTERFERENCE

To meet the *Drawdown Interference* Bylaw requirement (Table 1), Summit completed a search of the B.C. Water Resource Atlas and interviewed you to assess the number of wells within 250 m of the subject property. Three water supply wells were identified within 250 m:

- WPID 32048;
- WPID 32047; and
- the "Pumphouse Well," which supplies water to a trailer park located off the property. This well was not accessible, and therefore water levels could not be monitored. An additional test well (i.e. a non-supply well) is located next to the Pumphouse Well. This well (referred to as WPID 20465) is not currently in use but was accessible for water level monitoring.

Site plans showing the locations of these wells are attached in Appendix B.⁷

³ British Columbia Ministry of Environment. 2007. Evaluating Long-term Well Capacity for a Certificate of Public Convenience and Necessity: a guidance document. http://www.env.gov.bc.ca/wsd/plan_protect_sustain/groundwater/library/eval_well/index.html.



May 29, 2015
 Michael Palumbo
 Mountain Shadows Developments Ltd. Subdivision
 - 4 -

The following methods were used to assess drawdown interference between the identified wells:

- During the May 2015 pumping test of WPID 32048, water levels in WPID 32047 and WPID 20465 were monitored.
- During the May 2015 pumping test of WPID 32047, the Pumphouse Well was also pumped while water levels in WPID 32048 and in WPID 20465 were monitored.

2.3 PROOF OF WATER QUALITY

To meet the *Proof of Water Quality* Bylaw requirement (Table 1), Summit collected a groundwater sample from each well during the last 30 minutes of the pumping tests on May 6-7, and collected a surface water sample from the spring (i.e. three samples total). Standard sampling procedures⁴ were used and the samples were submitted to an accredited laboratory (CARO Analytical Services in Kelowna, B.C.) for analysis. The water samples were analyzed for the following parameters, based on the Bylaw requirements and Summit's recommendations:

- Groundwater samples (WPID 32048 and WPID 32047): alkalinity, chloride, colour (true), conductivity, fluoride, nitrate, nitrite, pH, sulphate, total dissolved solids, turbidity, total metals, dissolved metals, total coliforms, and *Escherichia coli*.
- Surface water sample (the spring): alkalinity, chloride, colour (true), conductivity, fluoride, nitrate, nitrite, pH, sulphate, total dissolved solids, turbidity, total metals, total coliforms, *E. coli*, total and dissolved organic carbon, and cyanobacterial toxins.

The results were compared with the Guidelines for Canadian Drinking Water Quality (GCDWQ).⁵ Guideline levels specified in the GCDWQ are designated as either "maximum acceptable concentrations" (MAC) or "aesthetic objectives" (AO). The MAC guidelines are health-based, and are determined based on the known health effects associated with the substance. The AO guidelines apply to those variables that affect taste or laundry (e.g. by staining), but do not pose a health hazard.

⁴ British Columbia Ministry of Environment. British Columbia Field Sampling Manual for Continuous Monitoring and the Collection of Air, Air-Emission, Water, Wastewater, Soil, Sediment, and Biological Samples. January 2003. http://www.env.gov.bc.ca/epd/wamr/labsys/field_man_pdfs/fld_man_03.pdf

⁵ Health Canada. Guidelines for Canadian Drinking Water Quality. http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/2012-sum_guide-res_recom/index-eng.php



May 29, 2015
 Michael Palumbo
 Mountain Shadows Developments Ltd. Subdivision
 - 5 -

3 RESULTS

3.1 SOURCE YIELD AND WELL RECOVERY

The following summarizes the findings of the source yield and well recovery assessment:

- **WPID 32048 (Lot 2):** A total of 2,520 L of water was removed and the well recovered 100% within 320 minutes of pump shut-off. The sustainable pumping rate, calculated using the CPCN method and taking into account well interference measurements, the static water level in October 2011, and a safety factor of 30%, exceeds the Bylaw required amount of 2,275 L/day. **Therefore, WPID 32048 meets the Bylaw requirement regarding source yield and well recovery.**
- **WPID 32047 (Remainder Lot):** A total of 2,330 L of water was removed and the well recovered 100% within 170 minutes of pump shut-off. The sustainable pumping rate, calculated as described for WPID 32048 above, exceeds the Bylaw required amount of 2,275 L/day. **Therefore, WPID 32047 meets the Bylaw requirement regarding source yield and well recovery.**

The data from these pumping tests, including raw data, calculation summary tables, and figures showing drawdown extrapolated to 100 days and interference effects, are attached in Appendix C.

3.2 DRAWDOWN INTERFERENCE

The following summarizes the findings of the drawdown interference assessment:

- Pumping of the Pumphouse Well caused no drawdown in the other two wells; therefore, it is reasonable to expect that pumping of the other wells will not have a significant drawdown effect on the Pumphouse Well. If the Pumphouse Well's pumping rate increases in future, water levels should be monitored in WPID 320407 and WPID 32048 to assess well interference.
- During pumping of WPID 32048, there was 0.532 m of drawdown in WPID 32047 and 0.071 m of drawdown in WPID 20465. During pumping of WPID 32047, there was 0.185 m of drawdown in WPID 32048 and 0.007 m of drawdown in WPID 20465. This indicates that pumping of WPID 32048 interferes with WPID 32047, and vice versa. To address this, the sustainable yield for each well was calculated using an available drawdown level that accounted for these interference effects. An additional 30% was removed to account for fluctuating annual groundwater levels.



May 29, 2015
 Michael Palumbo
 Mountain Shadows Developments Ltd. Subdivision
 - 6 -

3.3 PROOF OF WATER QUALITY

The results indicated that all tested parameters met their respective health-based GCDWQ MAC values. Total dissolved solids (TDS), iron, and manganese exceeded their respective GCDWQ AO values (Table 1). All results, tabulated and compared with the GCDWQ, are attached in Appendix D. The original laboratory report is attached in Appendix E.

Table 1: Concentrations of parameters that exceeded aesthetic-based drinking water guidelines

Parameter	Guideline level (mg/L)	Concentrations in Samples (mg/L)		
		Spring	WPID 32048	WPID 32047
TDS	500	501	606	693
Total iron (dissolved iron)	0.3 ¹	<0.01	2.25 (1.71)	0.49 (<0.10)
Total manganese (dissolved manganese)	0.05 ¹	<0.002	0.054 (0.054)	0.026 (0.008)

Notes:

Bolded values exceeded the Guidelines for Canadian Drinking Water Quality - Aesthetic Objectives (GCDWQ AO).

Details regarding the guidelines for each of these three parameters are as follows:

- **TDS:** Concentrations in excess of 500 mg/L may be associated with excessive water hardness, mineral deposition, and corrosion.⁶ The primary concern with elevated TDS is the effect on taste. According to Health Canada, drinking water with TDS less than 600 mg/L is considered good with respect to taste. Drinking water with TDS greater than 1,200 mg/L is generally considered unpalatable. There is no health-based guideline for TDS.
- **Iron:** Concentrations in excess of 0.3 mg/L can stain laundry and plumbing fixtures, and can affect the taste of the water.⁷ There is no health-based guideline for total iron.

⁶ Health Canada. 1991. Guidelines for Canadian Drinking Water Quality - Supporting Documents - Total Dissolved Solids. <http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/tds-mdt/index-eng.php>

⁷ Health Canada. 1978. Guidelines for Canadian Drinking Water Quality - Supporting Documents - Iron. Health Canada. <http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/iron-fer/index-eng.php>



May 29, 2015
 Michael Palumbo
 Mountain Shadows Developments Ltd. Subdivision
 - 7 -

- **Manganese:** Concentrations above 0.15 mg/L can stain laundry and plumbing fixtures, and may affect the taste of the water.⁸ Manganese can form coatings on plumbing fixtures even at concentrations of approximately 0.02 mg/L; however, it is difficult to achieve levels this low even with treatment. Therefore, the GCDWQ AO is set at 0.05 mg/L. There is no health-based guideline for manganese.

4 RECOMMENDATIONS

4.1.1 Recommendations for Water Treatment: WPID 32048 and WPID 32047

Because the results met the GCDWQ MAC, the water from WPID 32048 and WPID 32047 can be considered safe to drink. However, you may wish to treat the water for iron and manganese, particularly in WPID 32048 where GCDWQ AO exceedances of the dissolved and total forms of iron and manganese were detected. Treatment methods for iron and manganese can be found on Health Canada's website (<http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/iron-fer/index-eng.php#a4>) and in documents provided by the B.C. Groundwater Association (https://www.for.gov.bc.ca/hfd/library/documents/bib106076_iron_manganese.pdf).

4.1.2 Recommendations for Water Treatment: The Spring

According to Health Canada, surface water cannot be considered safe for human consumption without treatment.⁹ Treatment for surface water should include filtration (or other technology that provides an equivalent log reduction) and disinfection. The reason for this is that pathogenic protozoa (i.e. *Giardia* and *Cryptosporidium*), bacteria (total coliforms and *E. coli*), and enteric viruses can be found in surface water. Bacteria and enteric viruses can be treated using disinfection (chlorine or iodine); however, this may not provide sufficient protection against protozoa.¹⁰ Protozoa can be removed using microfiltration (≤ 0.1 micrometre).¹⁰ Treatment with ultraviolet light can also be effective against protozoa, bacteria, and viruses, but a pre-filter should be used to reduce turbidity, as this can interfere with the ultraviolet light treatment process. When selecting a treatment system, look for ones that are certified by an accredited body to meet the appropriate NSF International/American National Standards Institute standards.

⁸ Health Canada. 1987. Guidelines for Canadian Drinking Water Quality - Supporting Documents - Manganese. <http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/manganese/index-eng.php>

⁹ Health Canada. Drinking Water In The Great Canadian Outdoors. http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/outdoor-plein_air-eng.php

¹⁰ Health Canada. Water Treatment Devices for Disinfection of Drinking Water. <http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/disinfect-desinfection-eng.php>



May 29, 2015
 Michael Palumbo
 Mountain Shadows Developments Ltd. Subdivision
 - 8 -

5 CLOSURE

We trust this completes our assessment to your satisfaction. Please contact the undersigned if you have any questions.

Yours truly,



Marta Green, P.Geol.
 Hydrogeologist



Paul Hague, RPF
 Water and Earth Sciences Group Manager

Attachments

- Appendix A: Original well test data
- Appendix B: Site plans
- Appendix C: 2015 pumping test results
- Appendix D: Water quality results compared with drinking water guidelines
- Appendix E: Laboratory analytical report



May 29, 2015
 Michael Palumbo
 Mountain Shadows Developments Ltd. Subdivision
 - 9 -

Summit's Standard Disclaimer for Groundwater Well Capacity Investigations

Subject to the following conditions and limitations, the investigation described in this report has been conducted in a manner consistent with a reasonable level of care and skill normally exercised by members of the environmental science profession currently practicing under similar conditions in the area.

1. The scope of the investigation described in this report has been limited by the budget set for the investigation in the work program. The scope of the investigation has been reasonable having regard to that budget constraint.
2. The pump test analysis results are solely intended to demonstrate individual well compliance with water production requirements specified in the applicable regional or local district bylaws, and the test and water production results or findings may not be applicable at higher water production rates.
3. The investigation described in this report has been limited to the scope of work described.
4. The investigation described in this report has relied upon information provided by third parties concerning the history of well development and borehole stratigraphy and of well response to groundwater pumping (i.e. changes in water level over time). Except as stated in this report, we have not made an independent verification of such information.
5. The investigation described in this report has been made in the context of existing government regulations generally promulgated at the date of this report. Except as specifically noted, the investigation did not take account of any government regulations not in effect and generally promulgated at the date of this report.
6. The findings and conclusions are valid only for the specific properties identified in the report.
7. Since site conditions may change over time, the report is intended for immediate use. The well owner should anticipate that the well and pump system will require maintenance from time to time in order to maintain adequate well yield.

This report is intended for the exclusive use of Mountain Shadows Developments Ltd. Subdivision and immediate family members. It may not be used or relied upon in any manner whatsoever, or for any purpose whatsoever, by any other party. Summit Environmental Consultants Inc. makes no representation of fact or opinion of any nature whatsoever to any person or entity other than Michael Palumbo.

In accepting delivery of this report, Michael Palumbo hereby agrees that any and all claims which it may have against Summit Environmental Consultants Inc. or any of its servants, agents, or employees arising out of or in any way connected with the investigation described in this report or the preparation of this report, whether such claims are in contract or in tort, and whether such claims are based on negligence or otherwise, shall be limited to a total amount equal to the fees payable to Summit Environmental Consultants Inc. under our contract with Michael Palumbo.



May 29, 2015
Michael Palumbo
Mountain Shadows Developments Ltd. Subdivision
- 10 -

APPENDIX A: ORIGINAL WELL TEST DATA



SCHEDULE "H"

REGIONAL DISTRICT OF EAST KOOTENAY

WELL PUMPING TEST & RECOVERY INFORMATION

Owner: Mike Colombo Date: Oct 3rd 2011
 Legal Description: South well Well ID Plate No: 32048
 Well Pump Installer: Tim Hecksman Well Pump Installer Registration # 02050501
 Length of Pipe Above Ground: 2 ft metres Static Water Level: 45 ft metres
 Pumping Rate: 1.5 US Imp. Gal. (circle one) 60 ft Deep

Must monitor well until water level has recovered to at least 95%.

CLOCK TIME	ELAPSED TIME (MIN)	DEPTH TO WATER BELOW PIPE (metres)	DRAWDOWN BELOW STATIC WATER LEVEL (metres)	REMARKS PROBLEMS, DATES, ETC.
2:00	0	43 ft	0	
2:00	30 sec	46 ft	1	
2:01	1 min	47	2	36 pm
2:02	2 min	48	3	
2:03	3 min	48	3	
2:04	4 min	49	4	
2:05	5 min	50	5	
2:10	10 min	50	5	1.5 gpm
2:15	15 min	51	5	
2:20	20 min	50	5	
2:30	30 min			
2:45	45 min			
3:00	60 min			
3:30	90 min			
4:00	120 min			
RECOVERY				
4:00	Shut Pump Off	50	5	
4:00	30 sec	49	1	
4:01	1 min	49	1	
4:02	2 min	48	2	
4:03	3 min	48	2	
4:04	4 min	48	2	
4:05	5 min	48	2	
4:10	10 min	47	3	
4:15	15 min	46	2	
4:20	20 min	46	1	
4:25	25 min	45.5	1	
4:30	30 min	45.5	1	
4:45	45 min	45	1	
5:00	60 min			
5:30	90 min			
6:00	120 min			

WELL TEST

1. Measure depth to water from top of well casing (static water level).
2. Conduct pumping test for a two hour period. Record rate of pumping. Record depth to water as shown on pumping test and recovery form.
3. Record cumulative draw down.
4. Start recording recovery time as soon as pump is shut off.
5. Record recovery time as shown on back of this form for 2 hours, then hourly for 5 hours or until water reaches the static level as at the start of the pump test, whichever is sooner.
6. Record a description of the well, including depth of well, size of casing, how well was constructed and name of well driller. Provide a sketch of well location. A well driller's log may be used to provide this information.
7. Return completed documents to the Regional District of East Kootenay.

I confirm that this well is capable of producing 2,270 litres of water per day.


 Pump Installer's Signature

SCHEDULE "H"

REGIONAL DISTRICT OF EAST KOOTENAY

WELL PUMPING TEST & RECOVERY INFORMATION


Owner: Mike PolumboDate: Oct 3rd 2011Legal Description: North WellWell ID Plate No: 32047Well Pump Installer: Jim HoerlemannWell Pump Installer Registration #: 0000601Length of Pipe Above Ground: 2 ft metresStatic Water Level: 51' 11" metresPumping Rate: 6 (US) imp. Gal. (circle one)70 ft Deep

Must monitor well until water level has recovered to at least 95%.

CLOCK TIME	ELAPSED TIME (MIN)	DEPTH TO WATER BELOW PIPE (metres) ft	DRAWDOWN BELOW STATIC WATER LEVEL (metres) ft	REMARKS PROBLEMS, DATES, ETC.
8:00	0	51	0	
8:00	30 sec	52	1	
8:01	1 min	60	9	
8:02	2 min	56	5	
8:03	3 min	57	6	
8:04	4 min	58.5	7.5	6 Gpm
8:05	5 min	57	6	
8:10	10 min	59	8	
8:15	15 min	59	8	
8:20	20 min	59	8	
8:30	30 min	↓	↓	
8:45	45 min	↓	↓	
9:00	60 min	↓	↓	
9:30	90 min	↓	↓	
10:00	120 min	↓	↓	
RECOVERY				
10:00	Shut Pump Off	59	8	
10:00	30 sec	57	2	
10:01	1 min	53	6	
10:02	2 min	52	7	
10:03	3 min	52	7	
10:04	4 min	52	7	
10:05	5 min	51	8	
10:10	10 min	51	8	
10:15	15 min	↓	↓	
10:20	20 min	↓	↓	
10:25	25 min	↓	↓	
10:30	30 min	↓	↓	
10:45	45 min	↓	↓	
11:00	60 min	↓	↓	
11:30	90 min	↓	↓	
12:00	120 min	↓	↓	

WELL TEST

1. Measure depth to water from top of well casing (static water level).
 2. Conduct pumping test for a two hour period. Record rate of pumping. Record depth to water as shown on pumping test and recovery form.
 3. Record cumulative draw down.
 4. Start recording recovery time as soon as pump is shut off.
 5. Record recovery time as shown on back of this form for 2 hours, then hourly for 5 hours or until water reaches the same level as at the start of the pump test, whichever is sooner.
 6. Record a description of the well, including depth of well, size of casing, how well was constructed and name of well driller. Provide a sketch of well location. A well driller's log may be used to provide this information.
 7. Return completed documents to the Regional District of East Kootenay.
- I confirm that this well is capable of producing 2,270 litres of water per day.

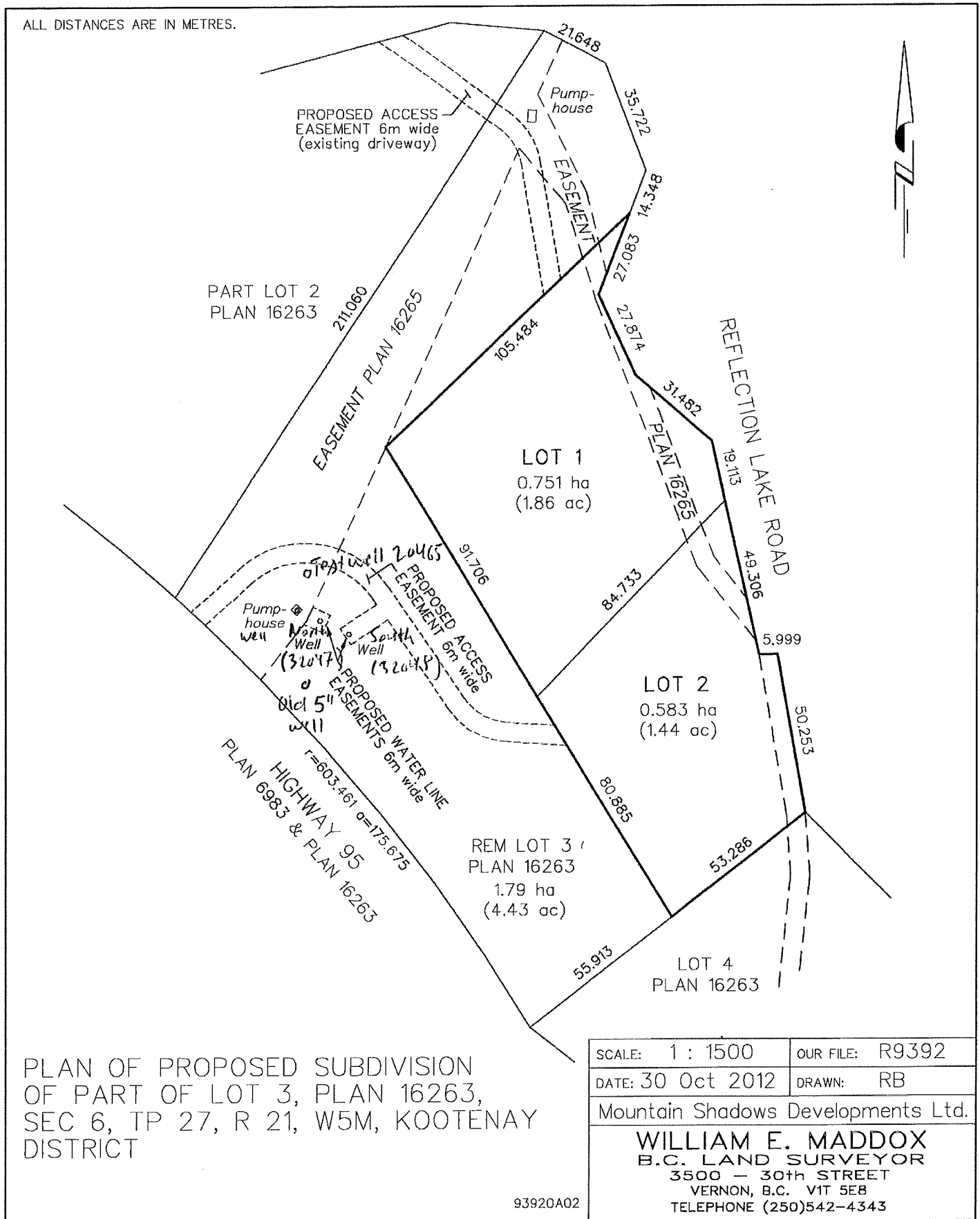

 Pump Installer's Signature

May 29, 2015
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- 11 -

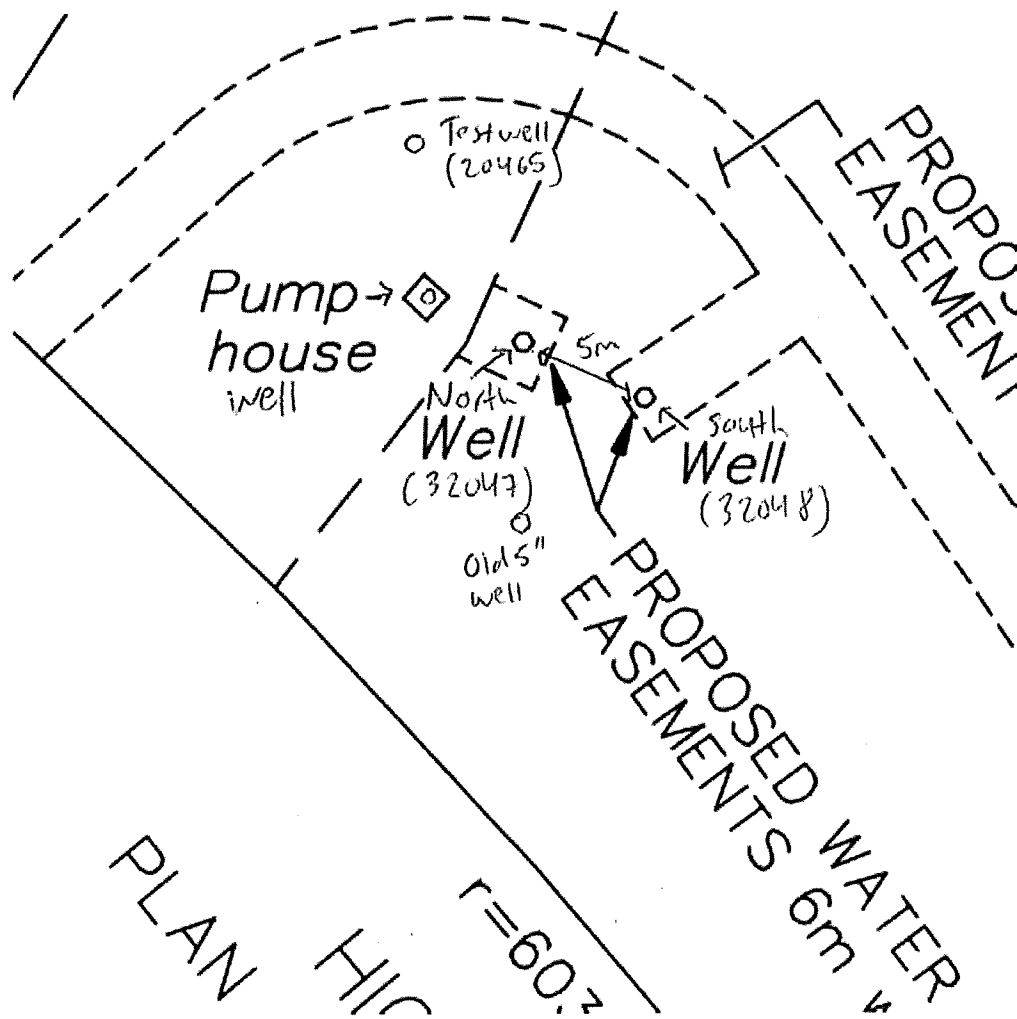
APPENDIX B: SITE PLANS



Site Plan with Well Locations



Close-up View of Well Locations
(locations are approximate)



May 29, 2015
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Mountain Shadows Developments Ltd. Subdivision
- 12 -

APPENDIX C: 2015 PUMPING TEST RESULTS



Table C-1:
Pumping Test Data for WPID 32048



Well ID:	South Well (Well 1)	Static Water Level (mbtoc)	8.90	
Start Date/Time	5/6/14 1:00 PM	Pre-Test Water Level (mbtoc)	9.26	
Client	Mike Palumbo	Total Well Depth (m)	22.46	
Project	2015-8086	Pump Intake Depth (mbtoc)	19.46	
Test	Constant Rate	Pump Used	Monsoon (120 ft DTW)	
Contractor	Summit Environmental	Pumping Rate (L/s)	0.10	
Clock Time	Time Elapsed (min)	Depth to Water (m)	Drawdown (m)	Comments
5/6/15 13:00:00	0.00	9.26	0.00	
5/6/15 13:00:30	0.50	9.50	0.24	
5/6/15 13:01:00	1.00	9.67	0.41	
5/6/15 13:03:00	3.00	10.01	0.75	
5/6/15 13:04:00	4.00	10.07	0.81	
5/6/15 13:05:00	5.00	10.18	0.92	
5/6/15 13:06:00	6.00	10.33	1.07	
5/6/15 13:07:30	7.50	10.54	1.28	
5/6/15 13:08:30	8.50	10.67	1.41	
5/6/15 13:09:00	9.00	10.73	1.47	
5/6/15 13:10:00	10.00	10.84	1.58	
5/6/15 13:12:00	12.00	11.07	1.81	
5/6/15 13:14:30	14.50	11.32	2.06	
5/6/15 13:16:00	16.00	11.47	2.21	
5/6/15 13:18:00	18.00	11.65	2.39	
5/6/15 13:20:00	20.00	11.82	2.56	
5/6/15 13:25:00	25.00	12.23	2.97	
5/6/15 13:30:00	30.00	12.60	3.34	
5/6/15 13:35:00	35.00	12.93	3.67	
5/6/15 13:40:00	40.00	13.20	3.94	
5/6/15 13:45:00	45.00	13.49	4.23	
5/6/15 13:50:00	50.00	13.73	4.47	
5/6/15 14:09:00	69.00	14.47	5.21	
5/6/15 14:10:30	70.50	14.52	5.26	
5/6/15 14:20:00	80.00	14.80	5.54	
5/6/15 14:30:00	90.00	15.05	5.79	
5/6/15 14:50:00	110.00	15.48	6.22	
5/6/15 15:01:00	121.00	15.67	6.41	
5/6/15 15:20:00	140.00	15.91	6.65	
5/6/15 15:40:00	160.00	15.90	6.64	
5/6/15 16:00:00	180.00	15.79	6.53	Battery dying on pump - hooked up to truck battery
5/6/15 16:25:00	205.00	16.24	6.98	
5/6/15 17:10:00	250.00	16.67	7.41	
5/6/15 18:00:00	300.00	16.89	7.63	
5/6/15 18:50:00	350.00	16.96	7.70	
5/6/15 19:44:00	404.00	17.03	7.77	
5/6/15 20:00:00	420.00	17.02	7.76	Shut off pump - Recovery
5/6/15 20:00:30	420.50	16.83	7.57	
5/6/15 20:01:30	421.50	16.64	7.38	

Table C-1:
Pumping Test Data for WPID 32048



Clock Time	Time Elapsed (min)	Depth to Water (m)	Drawdown (m)	Comments
5/6/15 20:02:00	422.00	16.56	7.30	
5/6/15 20:03:00	423.00	16.40	7.14	
5/6/15 20:04:00	424.00	16.26	7.00	
5/6/15 20:05:30	425.50	16.08	6.82	
5/6/15 20:06:00	426.00	16.02	6.76	
5/6/15 20:07:00	427.00	15.90	6.64	
5/6/15 20:08:00	428.00	15.79	6.53	
5/6/15 20:09:00	429.00	15.69	6.43	
5/6/15 20:10:00	430.00	15.58	6.32	
5/6/15 20:15:00	435.00	15.10	5.84	
5/6/15 20:20:00	440.00	14.68	5.42	
5/6/15 20:25:00	445.00	14.22	4.96	
5/6/15 20:30:00	450.00	13.95	4.69	
5/6/15 20:40:00	460.00	13.34	4.08	
5/6/15 20:50:00	470.00	12.84	3.58	
5/6/15 21:00:30	480.50	12.39	3.13	
5/6/15 21:20:00	500.00	11.72	2.46	
5/6/15 21:40:00	520.00	11.20	1.94	
5/6/15 22:00:00	540.00	10.79	1.53	
5/6/15 23:00:00	600.00	10.01	0.75	
5/6/15 23:17:00	617.00	9.86	0.60	
5/6/15 23:18:00	618.00	9.96	0.70	23:32 start pumphouse well (Well 3)
5/6/15 23:40:00	640.00	9.71	0.45	
5/6/15 23:45:00	645.00	9.68	0.42	
5/6/15 23:50:00	650.00	9.65	0.39	
5/6/15 23:55:00	655.00	9.61	0.35	
5/7/15 0:00:00	660.00	9.59	0.33	
5/7/15 0:05:00	665.00	9.56	0.30	
5/7/15 0:10:00	670.00	9.52	0.26	
5/7/15 0:15:00	675.00	9.51	0.25	
5/7/15 0:20:00	680.00	9.48	0.22	
5/7/15 0:25:00	685.00	9.46	0.20	
5/7/15 0:30:00	690.00	9.44	0.18	
5/7/15 0:35:00	695.00	9.42	0.16	
5/7/15 0:40:00	700.00	9.39	0.13	
5/7/15 0:45:00	705.00	9.37	0.11	
5/7/15 0:50:00	710.00	9.35	0.09	
5/7/15 0:55:00	715.00	9.33	0.07	
5/7/15 1:00:00	720.00	9.32	0.05	
5/7/15 1:05:00	725.00	9.30	0.04	
5/7/15 1:10:00	730.00	9.28	0.02	
5/7/15 1:15:00	735.00	9.27	0.01	
5/7/15 1:20:00	740.00	9.26	0.00	100% Recovered
5/7/15 1:25:00	745.00	9.24	-0.02	
5/7/15 1:30:00	750.00	9.23	-0.03	
5/7/15 1:35:00	755.00	9.22	-0.04	

Table C-1:
Pumping Test Data for WPID 32048



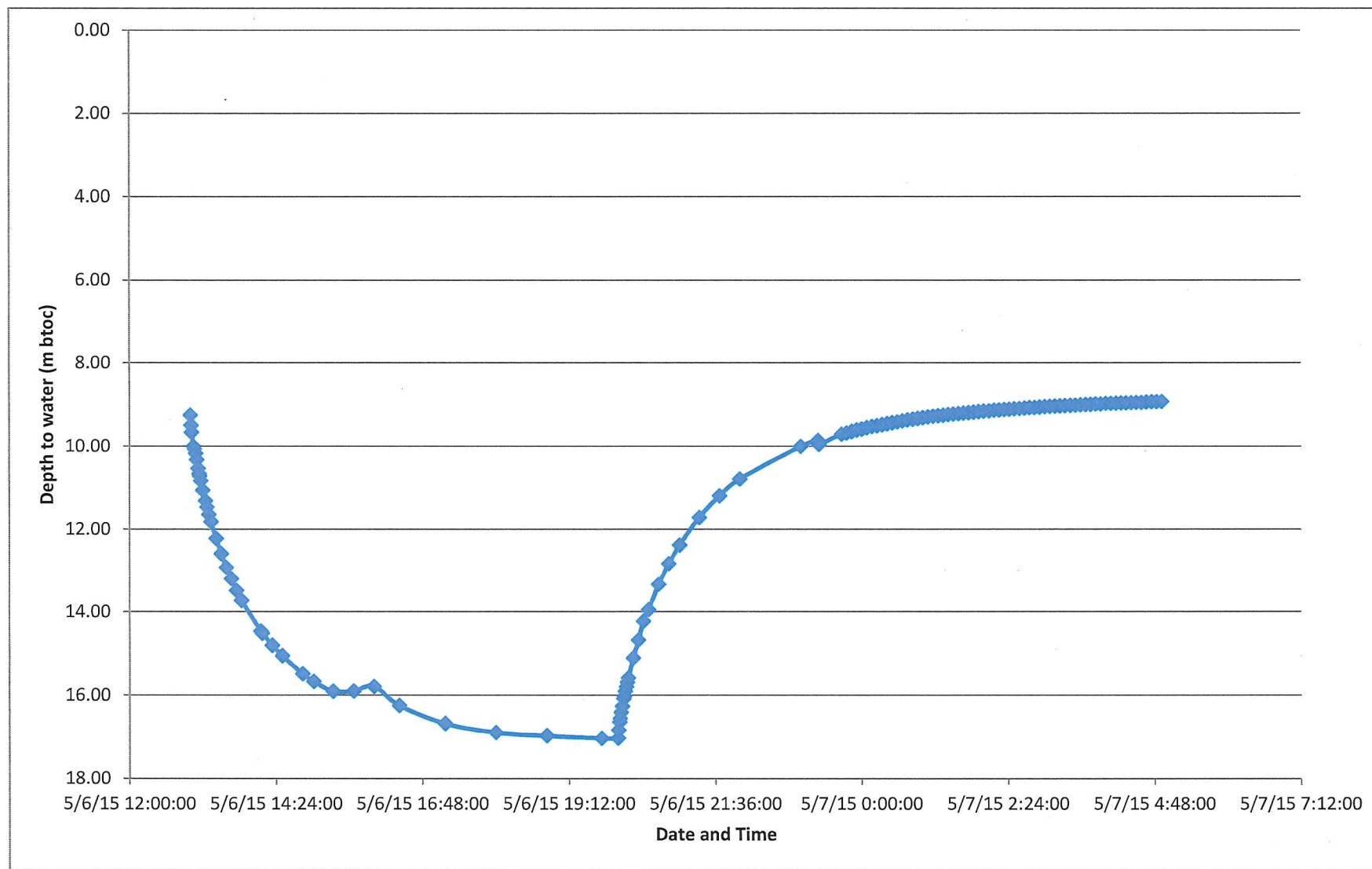
Clock Time	Time Elapsed (min)	Depth to Water (m)	Drawdown (m)	Comments
5/7/15 1:40:00	760.00	9.21	-0.05	
5/7/15 1:45:00	765.00	9.19	-0.07	
5/7/15 1:50:00	770.00	9.18	-0.08	
5/7/15 1:55:00	775.00	9.17	-0.09	
5/7/15 2:00:00	780.00	9.16	-0.10	
5/7/15 2:05:00	785.00	9.16	-0.10	
5/7/15 2:10:00	790.00	9.14	-0.12	
5/7/15 2:15:00	795.00	9.13	-0.13	
5/7/15 2:20:00	800.00	9.12	-0.14	
5/7/15 2:25:00	805.00	9.11	-0.15	
5/7/15 2:30:00	810.00	9.11	-0.15	
5/7/15 2:35:00	815.00	9.10	-0.16	
5/7/15 2:40:00	820.00	9.09	-0.17	
5/7/15 2:45:00	825.00	9.08	-0.18	
5/7/15 2:50:00	830.00	9.08	-0.19	
5/7/15 2:55:00	835.00	9.06	-0.20	
5/7/15 3:00:00	840.00	9.05	-0.21	
5/7/15 3:05:00	845.00	9.05	-0.21	
5/7/15 3:10:00	850.00	9.04	-0.22	
5/7/15 3:15:00	855.00	9.03	-0.23	
5/7/15 3:20:00	860.00	9.03	-0.23	
5/7/15 3:25:00	865.00	9.03	-0.23	
5/7/15 3:30:00	870.00	9.02	-0.24	
5/7/15 3:35:00	875.00	9.01	-0.25	
5/7/15 3:40:00	880.00	9.01	-0.25	
5/7/15 3:45:00	885.00	9.00	-0.26	
5/7/15 3:50:00	890.00	8.99	-0.27	
5/7/15 3:55:00	895.00	8.99	-0.27	
5/7/15 4:00:00	900.00	8.98	-0.28	
5/7/15 4:05:00	905.00	8.98	-0.28	
5/7/15 4:10:00	910.00	8.97	-0.29	
5/7/15 4:15:00	915.00	8.97	-0.29	
5/7/15 4:20:00	920.00	8.97	-0.29	
5/7/15 4:25:00	925.00	8.96	-0.30	
5/7/15 4:30:00	930.00	8.95	-0.31	
5/7/15 4:35:00	935.00	8.95	-0.31	
5/7/15 4:40:00	940.00	8.94	-0.32	
5/7/15 4:45:00	945.00	8.94	-0.32	
5/7/15 4:50:00	950.00	8.94	-0.32	
5/7/15 4:55:00	955.00	8.93	-0.33	Start Pump Test on Well 2

**Table C-2:
Pumping Test Calculations for WPID 32048**

	Calculations using May 2015 static water level	Calculations using October 2011 static water level
PUMPING SPECIFICATIONS		
Pumping rate (L/s)	0.10	0.10
Test duration (hours)	7.00	7.00
Depth of pump intake (mbtoc)	19.46	19.46
Static water level (mbtoc)	8.90	13.70
Depth to top of screen (mbtoc)	unknown	unknown
Depth of well (mbgl)	22.46	22.46
RECOVERY		
Length of recovery (min)	320	320
% recovered	100	100
CPCN INPUTS		
Pumping rate (L/s)	0.10	0.10
Available drawdown ¹ (m)	9.95	5.15
Drawdown at 100 days (m)	10.4	10.4
CPCN OUTPUTS		
Specific capacity (L/s/m)	0.010	0.010
Sustainable pumping rate (L/s)	0.10	0.05
Sustainable pumping rate with BC safety factor of 30% (L/s)	0.07	0.03
Sustainable pumping rate (L/d)	8,268	4,280
Sustainable pumping rate with BC safety factor of 30% (L/d)	5,787	2,996
Sustainable pumping rate (USGPM)	1.5	0.8
Sustainable pumping rate with BC safety factor of 30% (USGPM)	1.1	0.5

Note:

1 - Available drawdown is calculated as the difference between the bottom of the well (22.46 m) and static water level. 3 m is then subtracted from this to account for pump intake above an assumed top of screen that is 2 m above bottom. A further 0.532 m (maximum drawdown observed in Well 2) and 0.071 m (maximum drawdown observed in Well 4) were subtracted.



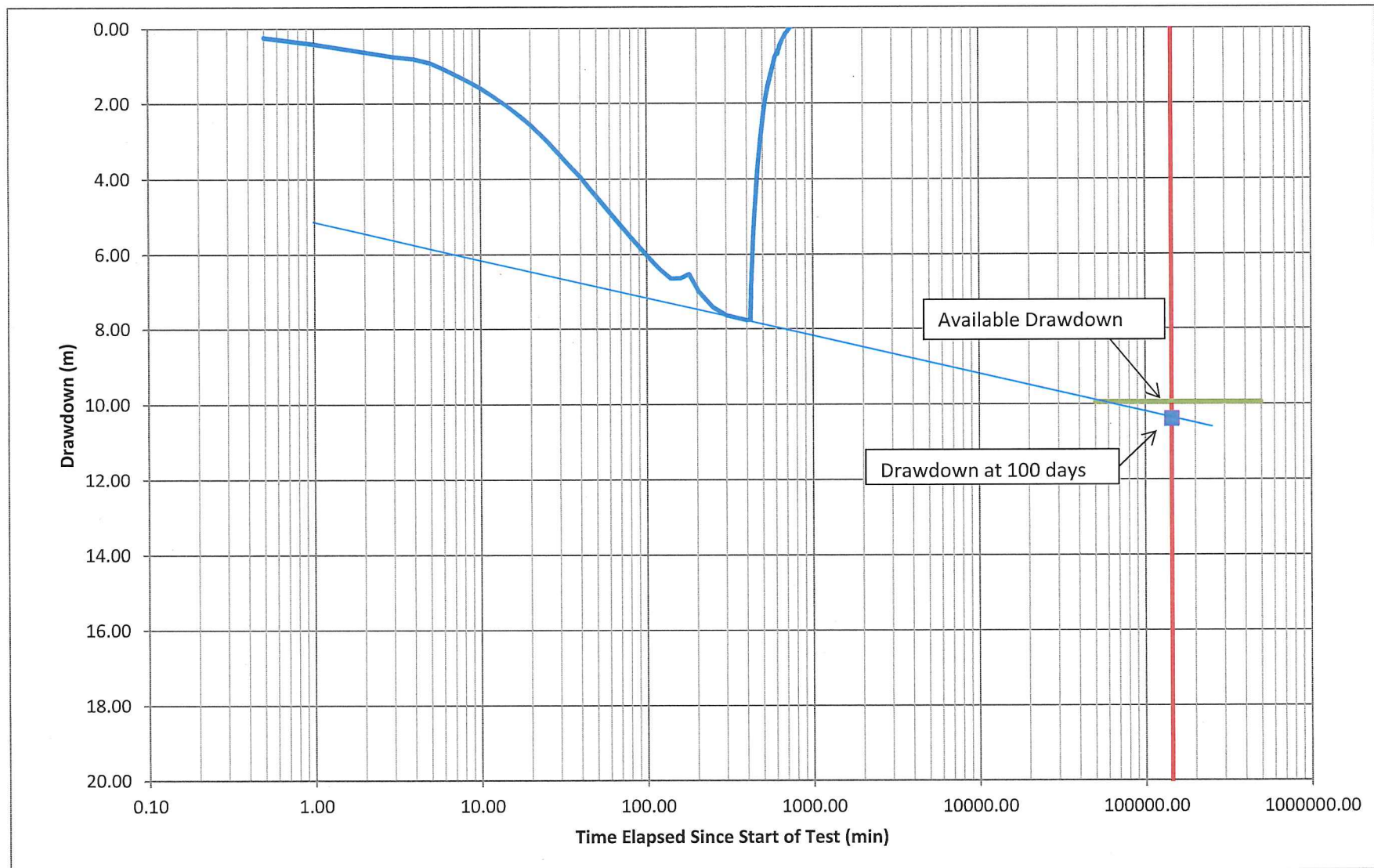


Table C-3:
Pumping Test Data for WPID 32047



Well ID:	WPID 32047 (North Well)	Static Water Level (mbtoc)	9.25	
Start Date/Time	5/7/15 4:55 AM	Pre-Test Water Level (mbtoc)	8.98	
Client	Mountain Shadows	Total Well Depth (m)	22.50	
Project	2015-8086.000.000	Pump Intake Depth (mbtoc)	unknown	
Test	Constant Rate	Pump Used	Existing Pump	
Contractor	Summit	Pumping Rate (L/s)	0.23	
Clock Time	Time Elapsed (min)	Depth to Water (m)	Drawdown (m)	Comments
5/7/15 4:55:00	0.00	8.98	0.00	Well 3 continuously pumping, started at 23:32 May 6, 2015
5/7/15 4:55:30	0.50	9.30	0.32	
5/7/15 4:56:00	1.00	9.55	0.57	
5/7/15 4:56:30	1.50	9.78	0.80	
5/7/15 4:57:00	2.00	10.00	1.02	
5/7/15 4:57:30	2.50	10.18	1.20	
5/7/15 4:58:00	3.00	10.34	1.36	
5/7/15 4:59:30	4.50	10.70	1.72	
5/7/15 5:00:00	5.00	10.79	1.81	
5/7/15 5:01:00	6.00	10.95	1.97	
5/7/15 5:02:00	7.00	11.06	2.08	
5/7/15 5:03:00	8.00	11.15	2.17	
5/7/15 5:04:00	9.00	11.21	2.23	
5/7/15 5:05:00	10.00	11.26	2.28	
5/7/15 5:07:00	12.00	11.33	2.35	
5/7/15 5:10:00	15.00	11.39	2.41	
5/7/15 5:13:00	18.00	11.41	2.44	
5/7/15 5:15:00	20.00	11.43	2.45	
5/7/15 5:20:00	25.00	11.45	2.47	
5/7/15 5:25:00	30.00	11.47	2.49	
5/7/15 5:30:00	35.00	11.48	2.51	
5/7/15 5:35:00	40.00	11.48	2.50	
5/7/15 5:45:00	50.00	11.50	2.52	
5/7/15 5:56:00	61.00	11.56	2.58	
5/7/15 6:05:00	70.00	11.57	2.59	
5/7/15 6:15:00	80.00	11.59	2.61	
5/7/15 6:25:00	90.00	11.60	2.62	
5/7/15 6:35:00	100.00	11.61	2.63	
5/7/15 6:55:00	120.00	11.64	2.66	
5/7/15 7:15:00	140.00	11.66	2.68	
5/7/15 7:25:00	150.00	11.66	2.68	
5/7/15 7:45:00	170.00	11.67	2.69	
5/7/15 7:45:30	170.50	11.67	2.69	Shut off pump - Recovery
5/7/15 7:46:00	171.00	11.37	2.39	
5/7/15 7:46:30	171.50	11.07	2.09	
5/7/15 7:47:00	172.00	10.83	1.85	
5/7/15 7:49:00	174.00	10.12	1.14	
5/7/15 7:51:00	176.00	9.70	0.72	
5/7/15 7:53:30	178.50	9.44	0.46	

Table C-3:
Pumping Test Data for WPID 32047



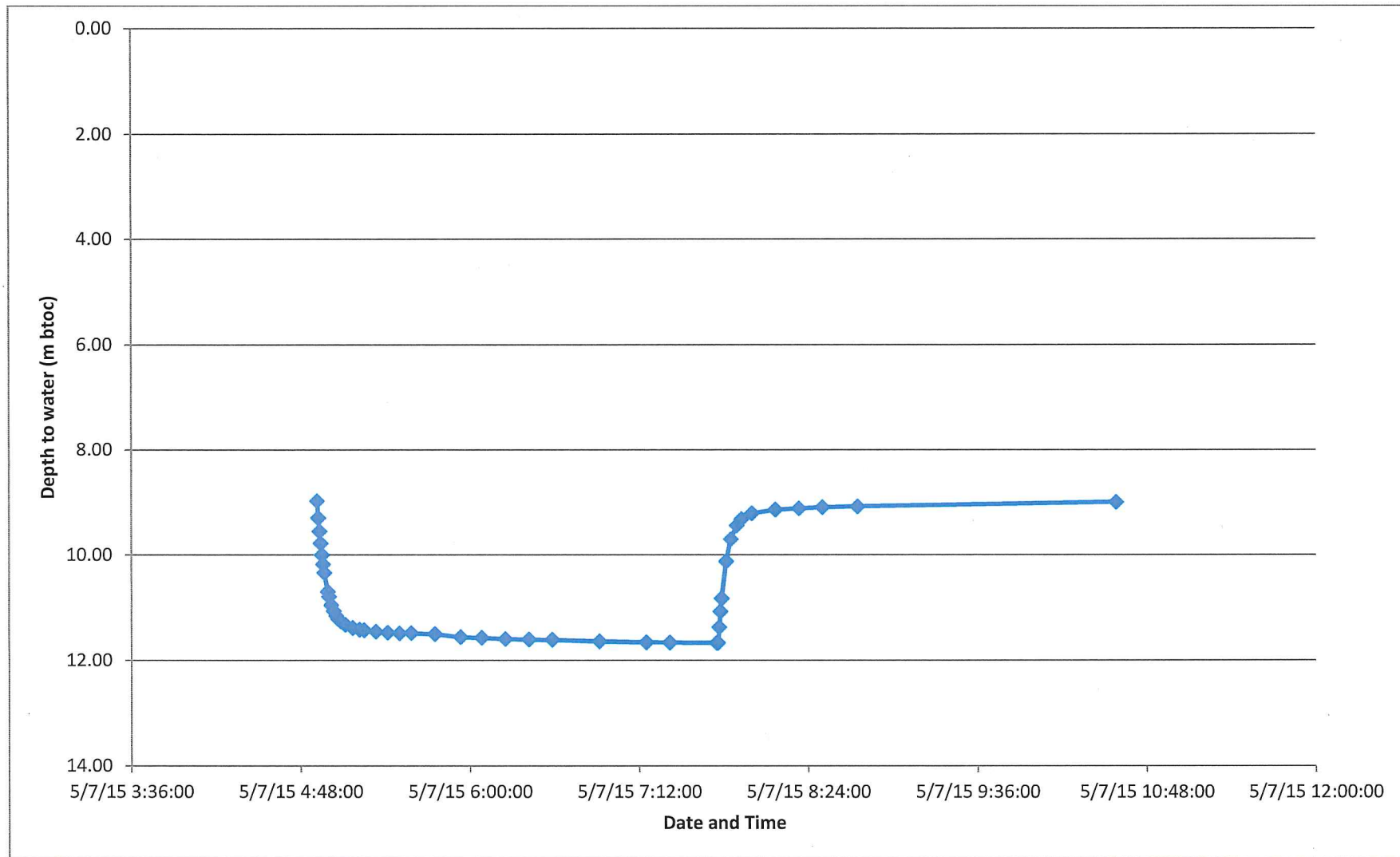
Clock Time	Time Elapsed (min)	Depth to Water (m)	Drawdown (m)	Comments
5/7/15 7:55:30	180.50	9.32	0.34	
5/7/15 8:00:00	185.00	9.21	0.23	
5/7/15 8:10:00	195.00	9.14	0.16	
5/7/15 8:20:00	205.00	9.12	0.14	
5/7/15 8:30:00	215.00	9.10	0.12	
5/7/15 8:45:00	230.00	9.08	0.10	Well 3 turned off automatically
5/7/15 10:35:00	340.00	9.00	0.02	

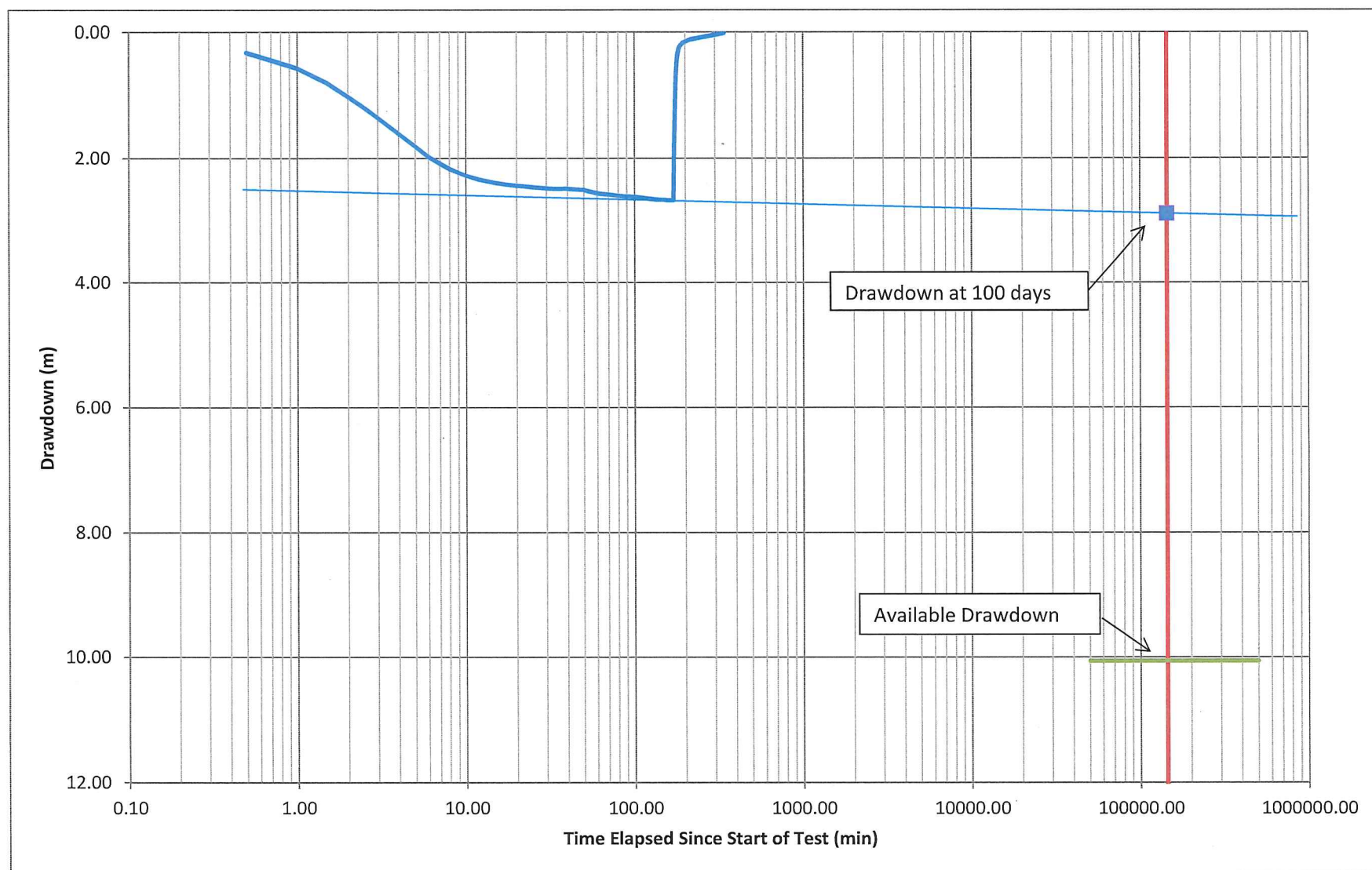
**Table C-4:
Pumping Test Calculations for WPID 32047**

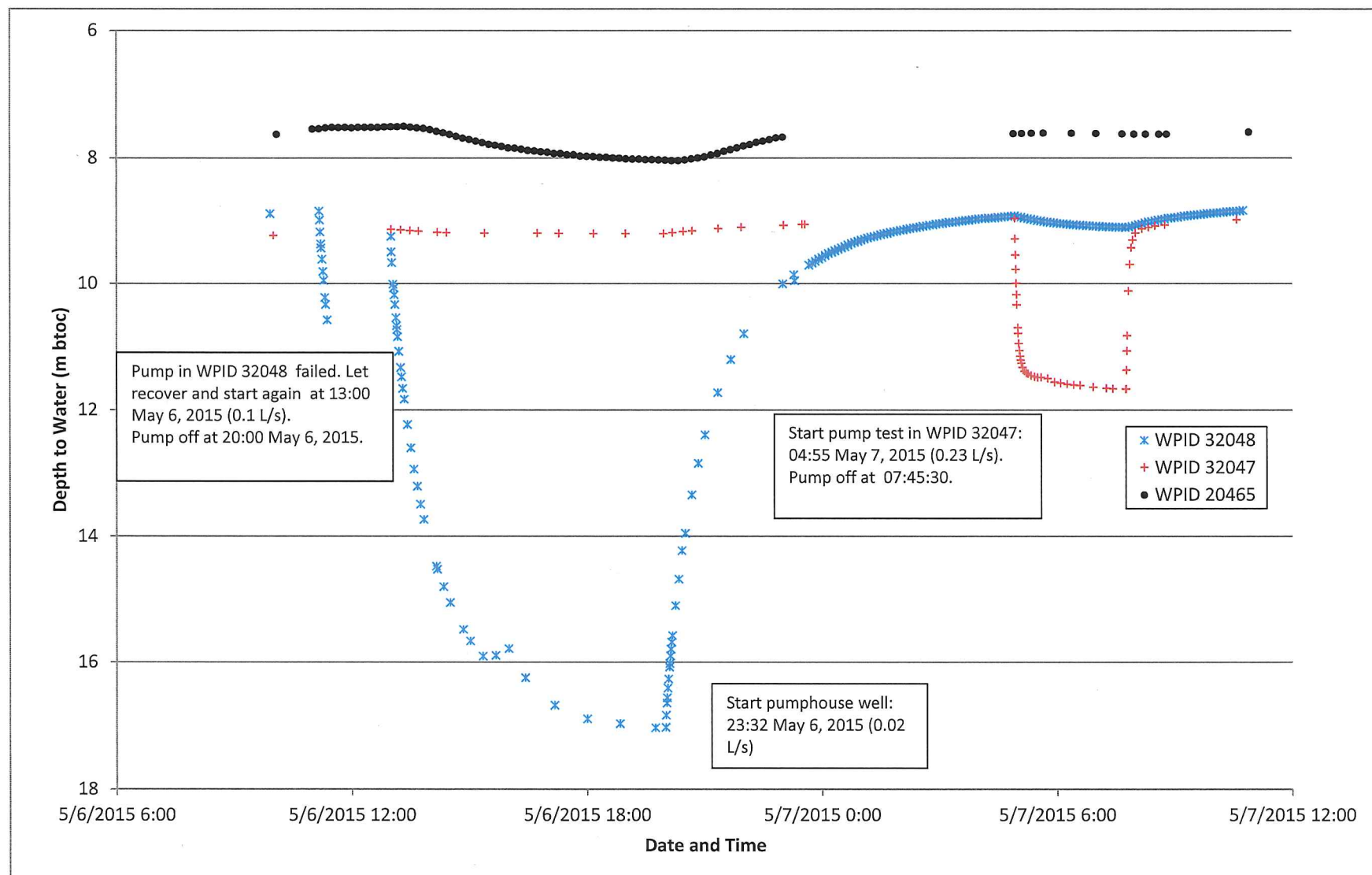
	Calculations using May 2015 static water level	Calculations using October 2011 static water level
PUMPING SPECIFICATIONS		
Pumping rate (L/s)	0.23	0.23
Test duration (hours)	2.84	2.84
Depth of pump intake (mbtoc)	unknown	unknown
Static water level (mbtoc)	9.25	15.5
Depth to top of screen (mbtoc)	unknown	unknown
Depth of well (mbgl)	22.50	22.50
RECOVERY		
Length of recovery (min)	170	170
% recovered	100	100
CPCN INPUTS		
Pumping rate (L/s)	0.23	0.23
Available drawdown (m) ¹	10.06	3.81
Drawdown at 100 days (m)	2.9	2.9
CPCN OUTPUTS		
Specific capacity (L/s/m)	0.079	0.079
Sustainable pumping rate (L/s)	0.79	0.30
Sustainable pumping rate with BC safety factor of 30% (L/s)	0.55	0.21
Sustainable pumping rate (L/d)	68,449	25,905
Sustainable pumping rate with BC safety factor of 30% (L/d)	47,915	18,133
Sustainable pumping rate (USGPM)	13	5
Sustainable pumping rate with BC safety factor of 30% (USGPM)	9	3

Note:

1 - Available drawdown is calculated as the difference between the bottom of the well and static water level. 3 m is then subtracted from this to account for pump intake above an assumed top of screen that is 2 m above bottom. A further 0.185 m (maximum drawdown observed in Well 1) and 0.007 m (maximum drawdown observed in Well 4) were subtracted.







May 29, 2015
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Mountain Shadows Developments Ltd. Subdivision
- 13 -

APPENDIX D: WATER QUALITY RESULTS COMPARED WITH DRINKING WATER GUIDELINES



Mountain Shadows Developments Ltd.

Water Quality Results

Sampling Location				Abbott Spring	WPID 32048	WPID 32047
Date Sampled						
Lab Sample ID						
Sample Type						
Analyte	Unit	Guideline				
		GCDWQ MAC	GCDWQ AO			
Field Results						
Conductivity	µS/cm	NG	NG	798	980	1160
Oxidation reduction potential	mV	NG	NG	495	94	773
pH		NG	6.5 - 8.5	7.54	7.41	7.21
Temperature	°C	NG	15	6.4	8.2	8.9
Turbidity	NTU	N ^{1.1}	NG	0.85	1.40	1.36
Lab Results						
General						
Alkalinity (total, as CaCO3)	mg/L	NG	NG	304	387	433
Chloride	mg/L	NG	250	1.30	23.2	35.4
Colour	CU	NG	15	<5	<5	<5
Conductivity	µS/cm	NG	NG	757	915	1070
Dissolved organic carbon	mg/L	NG	NG	2.9		
Fluoride	mg/L	1.5	NG	0.17	0.34	0.15
Hardness, total (dissolved as CaCO3)	mg/L	NG	NG		543	620
Hardness, Total (total as CaCO3)	mg/L	NG	NG	470	556	629
Microcystin-LR	mg/L	0.0015	NG	<0.00014		
pH		NG	6.5 - 8.5	8.02	7.97	7.93
Sulphate	mg/L	NG	500 ^{2.1}	154	161	179
Total dissolved solids	mg/L	NG	500	501	606	693
Total organic carbon	mg/L	NG	NG	2.9		
Turbidity	NTU	N ^{1.2}	NG	0.1	15.2	1.2
UV transmittance at 254 nm	%	NG	NG	90.9		
Metals						
Aluminum (dissolved)	mg/L	NG	N ^{2.2}		<0.05	<0.05
Aluminum (total)	mg/L	NG	N ^{2.3}	0.05	<0.05	<0.05
Antimony (dissolved)	mg/L	0.006	NG		<0.001	<0.001
Antimony (total)	mg/L	0.006	NG	<0.001	<0.001	<0.001
Arsenic (dissolved)	mg/L	0.010 ^{1.3}	NG		<0.005	<0.005
Arsenic (total)	mg/L	0.010 ^{1.4}	NG	<0.005	<0.005	<0.005
Barium (dissolved)	mg/L	1.0	NG		<0.05	<0.05
Barium (total)	mg/L	1.0	NG	<0.05	<0.05	<0.05
Beryllium (dissolved)	mg/L	NG	NG		<0.001	<0.001
Beryllium (total)	mg/L	NG	NG	<0.001	<0.001	<0.001
Bismuth (dissolved)	mg/L	NG	NG		<0.001	<0.001
Bismuth (total)	mg/L	NG	NG	<0.001	<0.001	<0.001
Boron (dissolved)	mg/L	5	NG		<0.04	0.04
Boron (total)	mg/L	5	NG	<0.04	<0.04	0.05
Cadmium (dissolved)	mg/L	0.005	NG		<0.0001	<0.0001

Mountain Shadows Developments Ltd.

Water Quality Results

Sampling Location				Abbott Spring	WPID 32048	WPID 32047
Date Sampled				07-May-15	06-May-15	07-May-15
Lab Sample ID				5050525-03	5050525-01	5050525-02
Sample Type				Normal	Normal	Normal
Analyte	Unit	Guideline				
		GCDWQ MAC	GCDWQ AO			
Cadmium (total)	mg/L	0.005	NG	<0.0001	<0.0001	<0.0001
Calcium (dissolved)	mg/L	NG	NG		73.2	91.3
Calcium (total)	mg/L	NG	NG	90.6	73.4	93.3
Chromium (dissolved)	mg/L	0.05	NG		<0.005	<0.005
Chromium (total)	mg/L	0.05	NG	<0.005	<0.005	<0.005
Cobalt (dissolved)	mg/L	NG	NG		<0.0005	<0.0005
Cobalt (total)	mg/L	NG	NG	<0.0005	<0.0005	<0.0005
Copper (dissolved)	mg/L	NG	1.0		<0.002	<0.002
Copper (total)	mg/L	NG	1.0	<0.002	<0.002	0.003
Iron (dissolved)	mg/L	NG	0.3		1.71	<0.10
Iron (total)	mg/L	NG	0.3	<0.10	2.25	0.49
Lead (dissolved)	mg/L	0.010	NG		<0.001	<0.001
Lead (total)	mg/L	0.010	NG	<0.001	<0.001	<0.001
Lithium (dissolved)	mg/L	NG	NG		0.013	0.013
Lithium (total)	mg/L	NG	NG	0.009	0.014	0.015
Magnesium (dissolved)	mg/L	NG	NG		87.5	95.1
Magnesium (total)	mg/L	NG	NG	59.2	90.4	96.2
Manganese (dissolved)	mg/L	NG	0.05		0.054	0.008
Manganese (total)	mg/L	NG	0.05	<0.002	0.054	0.026
Mercury (dissolved)	mg/L	0.001	NG		<0.0002	<0.0002
Mercury (total)	mg/L	0.001	NG	<0.0002	<0.0002	<0.0002
Molybdenum (dissolved)	mg/L	NG	NG		<0.001	<0.001
Molybdenum (total)	mg/L	NG	NG	0.001	<0.001	<0.001
Nickel (dissolved)	mg/L	NG	NG		<0.002	<0.002
Nickel (total)	mg/L	NG	NG	<0.002	<0.002	<0.002
Selenium (dissolved)	mg/L	0.05	NG		<0.005	<0.005
Selenium (total)	mg/L	0.05	NG	<0.005	<0.005	<0.005
Silicon (dissolved, as Si)	mg/L	NG	NG		11	12
Silicon (total, as Si)	mg/L	NG	NG	9	10	11
Silver (dissolved)	mg/L	NG	NG		<0.0005	<0.0005
Silver (total)	mg/L	NG	NG	<0.0005	<0.0005	<0.0005
Sodium (dissolved)	mg/L	NG	200		21.6	29.6
Sodium (total)	mg/L	NG	200	5.2	21.2	29.4
Strontium (dissolved)	mg/L	NG	NG		0.53	0.65
Strontium (total)	mg/L	NG	NG	0.35	0.52	0.64
Sulphur (dissolved)	mg/L	NG	NG		57	56
Sulphur (total)	mg/L	NG	NG	40	57	60
Tellurium (dissolved)	mg/L	NG	NG		<0.002	<0.002
Tellurium (total)	mg/L	NG	NG	<0.002	<0.002	<0.002
Thallium (dissolved)	mg/L	NG	NG		<0.0002	<0.0002
Thallium (total)	mg/L	NG	NG	<0.0002	<0.0002	<0.0002

Mountain Shadows Developments Ltd.

Water Quality Results

Sampling Location				Abbott Spring 07-May-15 5050525-03 Normal	WPID 32048 06-May-15 5050525-01 Normal	WPID 32047 07-May-15 5050525-02 Normal
Date Sampled						
Lab Sample ID						
Sample Type						
Analyte	Unit	Guideline				
		GCDWQ MAC	GCDWQ AO			
Thorium (dissolved)	mg/L	NG	NG		<0.001	<0.001
Thorium (total)	mg/L	NG	NG	<0.001	<0.001	<0.001
Tin (dissolved)	mg/L	NG	NG		<0.002	<0.002
Tin (total)	mg/L	NG	NG	<0.002	<0.002	<0.002
Titanium (dissolved)	mg/L	NG	NG		<0.05	<0.05
Titanium (total)	mg/L	NG	NG	<0.05	<0.05	<0.05
Uranium (dissolved)	mg/L	0.02	NG		0.0051	0.0077
Uranium (total)	mg/L	0.02	NG	0.0061	0.0053	0.0084
Vanadium (dissolved)	mg/L	NG	NG		<0.01	<0.01
Vanadium (total)	mg/L	NG	NG	<0.01	<0.01	<0.01
Zinc (dissolved)	mg/L	NG	5.0		<0.04	<0.04
Zinc (total)	mg/L	NG	5.0	<0.04	<0.04	<0.04
Zirconium (dissolved)	mg/L	NG	NG		<0.001	<0.001
Zirconium (total)	mg/L	NG	NG	<0.001	<0.001	<0.001
Microbiological						
E. coli (counts)	CFU/100 mL	0 ^{1.5}	NG	<1	<1	<1
Total coliforms (counts)	CFU/100 mL	0 ^{1.6}	NG	<1	<1	<1
Nutrients						
Nitrate (as N)	mg/L	10	NG	<0.010	<0.010	2.43
Nitrate + Nitrite (as N)	mg/L	10 ^{1.7}	NG	<0.020	<0.020	2.43
Nitrate + Nitrite (as N) (calculated)	mg/L	10 ^{1.8}	NG	<0.014	<0.014	2.43
Nitrite (as N)	mg/L	1	NG	<0.010	<0.010	<0.010
Phosphorus (dissolved, by ICPMS/ICPOES)	mg/L	NG	NG		<0.2	<0.2
Phosphorus (total, by ICPMS/ICPOES)	mg/L	NG	NG	<0.2	<0.2	<0.2
Potassium (dissolved)	mg/L	NG	NG		3.2	3.8
Potassium (total)	mg/L	NG	NG	2.1	3.6	4.2

Legend	
<	Less than reported detection limit
N	Narrative type of guideline or standard, or Result Note.
NG	No Guideline
GCDWQ AO	Highlighted value exceeds the Guidelines for Canadian Drinking Water Quality - Aesthetic Objectives
GCDWQ MAC	Highlighted value exceeds the Guidelines for Canadian Drinking Water Quality - Maximum Acceptable Concentrations



Mountain Shadows Developments Ltd.

Water Quality Results

Guideline Notes:

1. Notes for Guidelines for Canadian Drinking Water Quality - Maximum Acceptable Concentrations (GCDWQ MAC)

Note 1.1 for Turbidity:

Waterworks systems that use a surface water source or a groundwater source under the direct influence of surface water should filter the source water to meet health-based turbidity limits, as defined for specific treatment technologies. Where possible, filtration systems should be designed and operated to reduce turbidity levels as low as possible, with a treated water turbidity target of less than 0.1 NTU at all times. Where this is not achievable, the treated water turbidity levels from individual filters should meet the requirements described in GCDWQ.

For systems that use groundwater that is not under the direct influence of surface water, which are considered less vulnerable to faecal contamination, turbidity should generally be below 1.0 NTU.

For effective operation of the distribution system, it is good practice to ensure that water entering the distribution system has turbidity levels below 1.0 NTU.

Note 1.2 for Turbidity:

Waterworks systems that use a surface water source or a groundwater source under the direct influence of surface water should filter the source water to meet health-based turbidity limits, as defined for specific treatment technologies. Where possible, filtration systems should be designed and operated to reduce turbidity levels as low as possible, with a treated water turbidity target of less than 0.1 NTU at all times. Where this is not achievable, the treated water turbidity levels from individual filters should meet the requirements described in GCDWQ.

For systems that use groundwater that is not under the direct influence of surface water, which are considered less vulnerable to faecal contamination, turbidity should generally be below 1.0 NTU.

For effective operation of the distribution system, it is good practice to ensure that water entering the distribution system has turbidity levels below 1.0 NTU.

Note 1.3 for Arsenic (dissolved):

Every effort should be made to maintain arsenic levels in drinking water as low as reasonably achievable.

Note 1.4 for Arsenic (total):

Every effort should be made to maintain arsenic levels in drinking water as low as reasonably achievable.

Note 1.5 for E. coli (counts):

MAC is none detectable per 100 mL

Note 1.6 for Total coliforms (counts):

The maximum acceptable concentration (MAC) of total coliforms in water leaving a treatment plant and in non-disinfected groundwater leaving the well is none detectable per 100 mL.

Total coliforms should be monitored in the distribution system because they are used to indicate changes in water quality.

Detection of total coliforms from consecutive samples from the same site or from more than 10% of the samples collected in a given sampling period should be investigated.

Note 1.7 for Nitrate + Nitrite (as N):

The MAC for Nitrate (as N) is 10 mg/L

Note 1.8 for Nitrate + Nitrite (as N) (calculated):

The MAC for Nitrate (as N) is 10 mg/L

2. Notes for Guidelines for Canadian Drinking Water Quality - Aesthetic Objectives (GCDWQ AO)

Note 2.1 for Sulphate:

There may be a laxative effect in some individuals when sulphate levels exceed 500 mg/L. Health authorities should be notified of drinking water sources containing above 500 mg/L.

Note 2.2 for Aluminum (dissolved):

This is an operational guidance value, designed to apply only to drinking water treatment plants using aluminum-based coagulants. The operational guidance value of 0.1 mg/L applies to conventional treatment plants, and 0.2 mg/L applies to other types of treatment systems.

Note 2.3 for Aluminum (total):

This is an operational guidance value, designed to apply only to drinking water treatment plants using aluminum-based coagulants. The operational guidance value of 0.1 mg/L applies to conventional treatment plants, and 0.2 mg/L applies to other types of treatment systems.

May 29, 2015
Michael Palumbo
Mountain Shadows Developments Ltd. Subdivision
- 14 -

APPENDIX E: LABORATORY ANALYTICAL REPORT





CERTIFICATE OF ANALYSIS

REPORTED TO	Summit Environmental Consultants Inc. (Vernon) #200 - 2800 29th Street Vernon, BC V1T 9P9	TEL	(250) 545-3672
		FAX	(250) 545-3654
ATTENTION	Nicole Penner	WORK ORDER	5050525
PO NUMBER	2015-8086.000	RECEIVED / TEMP	May-07-15 15:42 / 4°C
PROJECT	2015-8086.000	REPORTED	May-28-15
PROJECT INFO	Mountain Shadows Well Test		

General Comments:

CARO Analytical Services employs methods which are conducted according to procedures accepted by appropriate regulatory agencies, and/or are conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts, except where otherwise agreed to by the client.

The results in this report apply to the samples analyzed in accordance with the Chain of Custody or Sample Requisition document. This analytical report must be reproduced in its entirety. CARO is not responsible for any loss or damage resulting directly or indirectly from error or omission in the conduct of testing. Liability is limited to the cost of analysis. Samples will be disposed of 30 days after the test report has been issued unless otherwise agreed to in writing.

Work Order Comments:

May 28 2015 This is an amended report. Please note the change in sample IDs - SG

Authorized By:

A handwritten signature in black ink, appearing to read "Brent Coates".

Brent Coates, B.Sc.
Division Manager, Richmond

Please contact CARO if more information is needed or to provide feedback on our services.

Locations:

#110 4011 Viking Way
Richmond, BC V6V 2K9
Tel: 604-279-1499 Fax: 604-279-1599

#102 3677 Highway 97N
Kelowna, BC V1X 5C3
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17225 109 Avenue
Edmonton, AB T5S 1H7
Tel: 780-489-9100 Fax: 780-489-9700

www.caro.ca



ANALYSIS INFORMATION

REPORTED TO PROJECT Summit Environmental Consultants Inc. (Vernon)
2015-8086.000

WORK ORDER REPORTED 5050525
May-28-15

Analysis Description	Method Reference	Technique	Location
Alkalinity (Total)	APHA 2320 B	Titration with H ₂ SO ₄ to pH 4.5	Kelowna
Anions in Water by IC	APHA 4110 B	Ion Chromatography with Chemical Suppression of Eluent Conductivity	Kelowna
Carbon, Dissolved Organic	APHA 5310 B	High Temperature Combustion, Infrared CO ₂ Detection	Kelowna
Carbon, Total Organic in Water	APHA 5310 B	High Temperature Combustion, Infrared CO ₂ Detection	Kelowna
Colour, True	APHA 2120 C	Spectrophotometry (456 nm)	Kelowna
Conductivity in Water	APHA 2510 B	Conductivity Meter	Kelowna
Cyanobacterial Toxins- Microcystin	Custom	N/A	Sublet
Dissolved Metals	APHA 3030 B / APHA 3125 B	0.45 µm Filtration / Inductively Coupled Plasma Mass Spectrometry (ICP-MS)	Richmond
E. coli (Partition)	APHA 9222 G	Membrane Filtration / Nutrient Agar with MUG	Kelowna
Hardness (as CaCO ₃)	APHA 2340 B	Calculation	N/A
pH in Water	APHA 4500-H+ B	Electrometry	Kelowna
Total Coliforms (Endo)	APHA 9222 B	Membrane Filtration / Endo Agar	Kelowna
Total Dissolved Solids (Gravimetric)	APHA 2540 C*	Gravimetry (Dried at 103-105C)	Kelowna
Total Recoverable Metals	APHA 3030E* / APHA 3125 B	HNO ₃ +HCl Hot Block Digestion / Inductively Coupled Plasma Mass Spectrometry (ICP-MS)	Richmond
Transmissivity at 254 nm	APHA 5910 B	Ultraviolet Absorption	Kelowna
Turbidity	APHA 2130 B	Nephelometry	Kelowna

Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method

Method Reference Descriptions:

APHA Standard Methods for the Examination of Water and Wastewater, 22nd Edition, American Public Health Association/American Water Works Association/Water Environment Federation

Glossary of Terms:

MRL	Method Reporting Limit
<	Less than the Reported Detection Limit (RDL) - the RDL may be higher than the MRL due to various factors such as dilutions, limited sample volume, high moisture, or interferences
AO	Aesthetic objective
MAC	Maximum acceptable concentration (health based)
OG	Operational guideline (treated water)
% T	Percent Transmittance
CFU/100 mL	Colony Forming Units per 100 millilitres
CU	Colour Units (referenced against a platinum cobalt standard)
mg/L	Milligrams per litre
NTU	Nephelometric Turbidity Units
pH units	pH < 7 = acidic, pH > 7 = basic
µg/L	Micrograms per litre
µS/cm	Microsiemens per centimetre



SAMPLE ANALYTICAL DATA

REPORTED TO Summit Environmental Consultants Inc. (Vernon)
PROJECT 2015-8086.000

WORK ORDER 5050525
REPORTED May-28-15

Analyte	Result / Recovery	MRL / Units Limits	Prepared	Analyzed	Notes
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Sample ID: WPID 32048 (5050525-01) [Water] Sampled: May-06-15 19:45

Anions

Chloride	23.2	0.10 mg/L	N/A	May-09-15	
Fluoride	0.34	0.10 mg/L	N/A	May-09-15	
Nitrate as N	< 0.010	0.010 mg/L	N/A	May-09-15	
Nitrite as N	< 0.010	0.010 mg/L	N/A	May-09-15	
Sulfate	161	1.0 mg/L	N/A	May-09-15	

General Parameters

Alkalinity, Total as CaCO ₃	387	1 mg/L	N/A	May-09-15	
Colour, True	< 5	5 CU	N/A	May-09-15	
Conductivity (EC)	915	2 µS/cm	N/A	May-09-15	
pH	7.97	0.01 pH units	N/A	May-12-15	HT2
Solids, Total Dissolved	606	10 mg/L	N/A	May-12-15	
Turbidity	15.2	0.1 NTU	N/A	May-08-15	

Calculated Parameters

Hardness, Total (Total as CaCO ₃)	556	5.0 mg/L	N/A	N/A	
Hardness, Total (Diss. as CaCO ₃)	543	5.0 mg/L	N/A	N/A	
Nitrate+Nitrite as N	< 0.020	0.020 mg/L	N/A	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.05	0.05 mg/L	N/A	May-14-15	
Antimony, dissolved	< 0.001	0.001 mg/L	N/A	May-14-15	
Arsenic, dissolved	< 0.005	0.005 mg/L	N/A	May-14-15	
Barium, dissolved	< 0.05	0.05 mg/L	N/A	May-14-15	
Beryllium, dissolved	< 0.001	0.001 mg/L	N/A	May-14-15	
Bismuth, dissolved	< 0.001	0.001 mg/L	N/A	May-14-15	
Boron, dissolved	< 0.04	0.04 mg/L	N/A	May-14-15	
Cadmium, dissolved	< 0.0001	0.0001 mg/L	N/A	May-14-15	
Calcium, dissolved	73.2	2.0 mg/L	N/A	May-14-15	
Chromium, dissolved	< 0.005	0.005 mg/L	N/A	May-14-15	
Cobalt, dissolved	< 0.0005	0.0005 mg/L	N/A	May-14-15	
Copper, dissolved	< 0.002	0.002 mg/L	N/A	May-14-15	
Iron, dissolved	1.71	0.10 mg/L	N/A	May-14-15	
Lead, dissolved	< 0.001	0.001 mg/L	N/A	May-14-15	
Lithium, dissolved	0.013	0.001 mg/L	N/A	May-14-15	
Magnesium, dissolved	87.5	0.1 mg/L	N/A	May-14-15	
Manganese, dissolved	0.054	0.002 mg/L	N/A	May-14-15	
Mercury, dissolved	< 0.0002	0.0002 mg/L	N/A	May-14-15	
Molybdenum, dissolved	< 0.001	0.001 mg/L	N/A	May-14-15	
Nickel, dissolved	< 0.002	0.002 mg/L	N/A	May-14-15	
Phosphorus, dissolved	< 0.2	0.2 mg/L	N/A	May-14-15	
Potassium, dissolved	3.2	0.2 mg/L	N/A	May-14-15	
Selenium, dissolved	< 0.005	0.005 mg/L	N/A	May-14-15	
Silicon, dissolved	11	5 mg/L	N/A	May-14-15	
Silver, dissolved	< 0.0005	0.0005 mg/L	N/A	May-14-15	
Sodium, dissolved	21.6	0.2 mg/L	N/A	May-14-15	
Strontium, dissolved	0.53	0.01 mg/L	N/A	May-14-15	



SAMPLE ANALYTICAL DATA

REPORTED TO Summit Environmental Consultants Inc. (Vernon)
PROJECT 2015-8086.000

WORK ORDER 5050525
REPORTED May-28-15

Analyte	Result / Recovery	MRL / Units Limits	Prepared	Analyzed	Notes
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Sample ID: WPID 32048 (5050525-01) [Water] Sampled: May-06-15 19:45, Continued

Dissolved Metals, Continued

Sulfur, dissolved	57	10 mg/L	N/A	May-14-15
Tellurium, dissolved	< 0.002	0.002 mg/L	N/A	May-14-15
Thallium, dissolved	< 0.0002	0.0002 mg/L	N/A	May-14-15
Thorium, dissolved	< 0.001	0.001 mg/L	N/A	May-14-15
Tin, dissolved	< 0.002	0.002 mg/L	N/A	May-14-15
Titanium, dissolved	< 0.05	0.05 mg/L	N/A	May-14-15
Uranium, dissolved	0.0051	0.0002 mg/L	N/A	May-14-15
Vanadium, dissolved	< 0.01	0.01 mg/L	N/A	May-14-15
Zinc, dissolved	< 0.04	0.04 mg/L	N/A	May-14-15
Zirconium, dissolved	< 0.001	0.001 mg/L	N/A	May-14-15

Total Recoverable Metals

Aluminum, total	< 0.05	0.05 mg/L	May-13-15	May-14-15
Antimony, total	< 0.001	0.001 mg/L	May-13-15	May-14-15
Arsenic, total	< 0.005	0.005 mg/L	May-13-15	May-14-15
Barium, total	< 0.05	0.05 mg/L	May-13-15	May-14-15
Beryllium, total	< 0.001	0.001 mg/L	May-13-15	May-14-15
Bismuth, total	< 0.001	0.001 mg/L	May-13-15	May-14-15
Boron, total	< 0.04	0.04 mg/L	May-13-15	May-14-15
Cadmium, total	< 0.0001	0.0001 mg/L	May-13-15	May-14-15
Calcium, total	73.4	2.0 mg/L	May-13-15	May-14-15
Chromium, total	< 0.005	0.005 mg/L	May-13-15	May-14-15
Cobalt, total	< 0.0005	0.0005 mg/L	May-13-15	May-14-15
Copper, total	< 0.002	0.002 mg/L	May-13-15	May-14-15
Iron, total	2.25	0.10 mg/L	May-13-15	May-14-15
Lead, total	< 0.001	0.001 mg/L	May-13-15	May-14-15
Lithium, total	0.014	0.001 mg/L	May-13-15	May-14-15
Magnesium, total	90.4	0.1 mg/L	May-13-15	May-14-15
Manganese, total	0.054	0.002 mg/L	May-13-15	May-14-15
Mercury, total	< 0.0002	0.0002 mg/L	May-13-15	May-14-15
Molybdenum, total	< 0.001	0.001 mg/L	May-13-15	May-14-15
Nickel, total	< 0.002	0.002 mg/L	May-13-15	May-14-15
Phosphorus, total	< 0.2	0.2 mg/L	May-13-15	May-14-15
Potassium, total	3.6	0.2 mg/L	May-13-15	May-14-15
Selenium, total	< 0.005	0.005 mg/L	May-13-15	May-14-15
Silicon, total	10	5 mg/L	May-13-15	May-14-15
Silver, total	< 0.0005	0.0005 mg/L	May-13-15	May-14-15
Sodium, total	21.2	0.2 mg/L	May-13-15	May-14-15
Strontium, total	0.52	0.01 mg/L	May-13-15	May-14-15
Sulfur, total	57	10 mg/L	May-13-15	May-14-15
Tellurium, total	< 0.002	0.002 mg/L	May-13-15	May-14-15
Thallium, total	< 0.0002	0.0002 mg/L	May-13-15	May-14-15
Thorium, total	< 0.001	0.001 mg/L	May-13-15	May-14-15
Tin, total	< 0.002	0.002 mg/L	May-13-15	May-14-15
Titanium, total	< 0.05	0.05 mg/L	May-13-15	May-14-15
Uranium, total	0.0053	0.0002 mg/L	May-13-15	May-14-15



SAMPLE ANALYTICAL DATA

REPORTED TO Summit Environmental Consultants Inc. (Vernon)
PROJECT 2015-8086.000

WORK ORDER 5050525
REPORTED May-28-15

Analyte	Result / Recovery	MRL / Units Limits	Prepared	Analyzed	Notes
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Sample ID: WPID 32048 (5050525-01) [Water] Sampled: May-06-15 19:45, Continued

Total Recoverable Metals, Continued

Vanadium, total	< 0.01	0.01 mg/L	May-13-15	May-14-15	
Zinc, total	< 0.04	0.04 mg/L	May-13-15	May-14-15	
Zirconium, total	< 0.001	0.001 mg/L	May-13-15	May-14-15	

Microbiological Parameters

Coliforms, Total	< 1	1 CFU/100 mL	May-07-15	May-08-15	
E. coli	< 1	1 CFU/100 mL	May-07-15	May-08-15	

Sample ID: WPID 32047 (5050525-02) [Water] Sampled: May-07-15 07:30

Anions

Chloride	35.4	0.10 mg/L	N/A	May-09-15	
Fluoride	0.15	0.10 mg/L	N/A	May-09-15	
Nitrate as N	2.43	0.010 mg/L	N/A	May-09-15	
Nitrite as N	< 0.010	0.010 mg/L	N/A	May-09-15	
Sulfate	179	1.0 mg/L	N/A	May-09-15	

General Parameters

Alkalinity, Total as CaCO ₃	433	1 mg/L	N/A	May-09-15	
Colour, True	< 5	5 CU	N/A	May-09-15	
Conductivity (EC)	1070	2 µS/cm	N/A	May-09-15	
pH	7.93	0.01 pH units	N/A	May-12-15	HT2
Solids, Total Dissolved	693	10 mg/L	N/A	May-12-15	
Turbidity	1.2	0.1 NTU	N/A	May-08-15	

Calculated Parameters

Hardness, Total (Total as CaCO ₃)	629	5.0 mg/L	N/A	N/A	
Hardness, Total (Diss. as CaCO ₃)	620	5.0 mg/L	N/A	N/A	
Nitrate+Nitrite as N	2.43	0.020 mg/L	N/A	N/A	

Dissolved Metals

Aluminum, dissolved	< 0.05	0.05 mg/L	N/A	May-14-15	
Antimony, dissolved	< 0.001	0.001 mg/L	N/A	May-14-15	
Arsenic, dissolved	< 0.005	0.005 mg/L	N/A	May-14-15	
Barium, dissolved	< 0.05	0.05 mg/L	N/A	May-14-15	
Beryllium, dissolved	< 0.001	0.001 mg/L	N/A	May-14-15	
Bismuth, dissolved	< 0.001	0.001 mg/L	N/A	May-14-15	
Boron, dissolved	0.04	0.04 mg/L	N/A	May-14-15	
Cadmium, dissolved	< 0.0001	0.0001 mg/L	N/A	May-14-15	
Calcium, dissolved	91.3	2.0 mg/L	N/A	May-14-15	
Chromium, dissolved	< 0.005	0.005 mg/L	N/A	May-14-15	
Cobalt, dissolved	< 0.0005	0.0005 mg/L	N/A	May-14-15	
Copper, dissolved	< 0.002	0.002 mg/L	N/A	May-14-15	
Iron, dissolved	< 0.10	0.10 mg/L	N/A	May-14-15	
Lead, dissolved	< 0.001	0.001 mg/L	N/A	May-14-15	
Lithium, dissolved	0.013	0.001 mg/L	N/A	May-14-15	
Magnesium, dissolved	95.1	0.1 mg/L	N/A	May-14-15	



SAMPLE ANALYTICAL DATA

REPORTED TO Summit Environmental Consultants Inc. (Vernon)
PROJECT 2015-8086.000

WORK ORDER 5050525
REPORTED May-28-15

Analyte	Result / Recovery	MRL / Units Limits	Prepared	Analyzed	Notes
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Sample ID: WPID 32047 (5050525-02) [Water] Sampled: May-07-15 07:30, Continued

Dissolved Metals, Continued

Manganese, dissolved	0.008	0.002 mg/L	N/A	May-14-15
Mercury, dissolved	< 0.0002	0.0002 mg/L	N/A	May-14-15
Molybdenum, dissolved	< 0.001	0.001 mg/L	N/A	May-14-15
Nickel, dissolved	< 0.002	0.002 mg/L	N/A	May-14-15
Phosphorus, dissolved	< 0.2	0.2 mg/L	N/A	May-14-15
Potassium, dissolved	3.8	0.2 mg/L	N/A	May-14-15
Selenium, dissolved	< 0.005	0.005 mg/L	N/A	May-14-15
Silicon, dissolved	12	5 mg/L	N/A	May-14-15
Silver, dissolved	< 0.0005	0.0005 mg/L	N/A	May-14-15
Sodium, dissolved	29.6	0.2 mg/L	N/A	May-14-15
Strontium, dissolved	0.65	0.01 mg/L	N/A	May-14-15
Sulfur, dissolved	56	10 mg/L	N/A	May-14-15
Tellurium, dissolved	< 0.002	0.002 mg/L	N/A	May-14-15
Thallium, dissolved	< 0.0002	0.0002 mg/L	N/A	May-14-15
Thorium, dissolved	< 0.001	0.001 mg/L	N/A	May-14-15
Tin, dissolved	< 0.002	0.002 mg/L	N/A	May-14-15
Titanium, dissolved	< 0.05	0.05 mg/L	N/A	May-14-15
Uranium, dissolved	0.0077	0.0002 mg/L	N/A	May-14-15
Vanadium, dissolved	< 0.01	0.01 mg/L	N/A	May-14-15
Zinc, dissolved	< 0.04	0.04 mg/L	N/A	May-14-15
Zirconium, dissolved	< 0.001	0.001 mg/L	N/A	May-14-15

Total Recoverable Metals

Aluminum, total	< 0.05	0.05 mg/L	May-13-15	May-14-15
Antimony, total	< 0.001	0.001 mg/L	May-13-15	May-14-15
Arsenic, total	< 0.005	0.005 mg/L	May-13-15	May-14-15
Barium, total	< 0.05	0.05 mg/L	May-13-15	May-14-15
Beryllium, total	< 0.001	0.001 mg/L	May-13-15	May-14-15
Bismuth, total	< 0.001	0.001 mg/L	May-13-15	May-14-15
Boron, total	0.05	0.04 mg/L	May-13-15	May-14-15
Cadmium, total	< 0.0001	0.0001 mg/L	May-13-15	May-14-15
Calcium, total	93.3	2.0 mg/L	May-13-15	May-14-15
Chromium, total	< 0.005	0.005 mg/L	May-13-15	May-14-15
Cobalt, total	< 0.0005	0.0005 mg/L	May-13-15	May-14-15
Copper, total	0.003	0.002 mg/L	May-13-15	May-14-15
Iron, total	0.49	0.10 mg/L	May-13-15	May-14-15
Lead, total	< 0.001	0.001 mg/L	May-13-15	May-14-15
Lithium, total	0.015	0.001 mg/L	May-13-15	May-14-15
Magnesium, total	96.2	0.1 mg/L	May-13-15	May-14-15
Manganese, total	0.026	0.002 mg/L	May-13-15	May-14-15
Mercury, total	< 0.0002	0.0002 mg/L	May-13-15	May-14-15
Molybdenum, total	< 0.001	0.001 mg/L	May-13-15	May-14-15
Nickel, total	< 0.002	0.002 mg/L	May-13-15	May-14-15
Phosphorus, total	< 0.2	0.2 mg/L	May-13-15	May-14-15
Potassium, total	4.2	0.2 mg/L	May-13-15	May-14-15
Selenium, total	< 0.005	0.005 mg/L	May-13-15	May-14-15



SAMPLE ANALYTICAL DATA

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Analyte	Result / Recovery	MRL / Units Limits	Prepared	Analyzed	Notes
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Sample ID: WPID 32047 (5050525-02) [Water] Sampled: May-07-15 07:30, Continued

Total Recoverable Metals, Continued

Silicon, total	11	5 mg/L	May-13-15	May-14-15	
Silver, total	< 0.0005	0.0005 mg/L	May-13-15	May-14-15	
Sodium, total	29.4	0.2 mg/L	May-13-15	May-14-15	
Strontium, total	0.64	0.01 mg/L	May-13-15	May-14-15	
Sulfur, total	60	10 mg/L	May-13-15	May-14-15	
Tellurium, total	< 0.002	0.002 mg/L	May-13-15	May-14-15	
Thallium, total	< 0.0002	0.0002 mg/L	May-13-15	May-14-15	
Thorium, total	< 0.001	0.001 mg/L	May-13-15	May-14-15	
Tin, total	< 0.002	0.002 mg/L	May-13-15	May-14-15	
Titanium, total	< 0.05	0.05 mg/L	May-13-15	May-14-15	
Uranium, total	0.0084	0.0002 mg/L	May-13-15	May-14-15	
Vanadium, total	< 0.01	0.01 mg/L	May-13-15	May-14-15	
Zinc, total	< 0.04	0.04 mg/L	May-13-15	May-14-15	
Zirconium, total	< 0.001	0.001 mg/L	May-13-15	May-14-15	

Microbiological Parameters

Coliforms, Total	< 1	1 CFU/100 mL	May-08-15	May-09-15	
E. coli	< 1	1 CFU/100 mL	May-08-15	May-09-15	

Sample ID: Abbott Spring (5050525-03) [Water] Sampled: May-07-15 10:10

Anions

Chloride	1.30	0.10 mg/L	N/A	May-09-15	
Fluoride	0.17	0.10 mg/L	N/A	May-09-15	
Nitrate as N	< 0.010	0.010 mg/L	N/A	May-09-15	
Nitrite as N	< 0.010	0.010 mg/L	N/A	May-09-15	
Sulfate	154	1.0 mg/L	N/A	May-09-15	

General Parameters

Alkalinity, Total as CaCO ₃	304	1 mg/L	N/A	May-09-15	
Carbon, Total Organic	2.9	0.5 mg/L	N/A	May-08-15	
Carbon, Dissolved Organic	2.9	0.5 mg/L	N/A	May-08-15	
Colour, True	< 5	5 CU	N/A	May-09-15	
Conductivity (EC)	757	2 µS/cm	N/A	May-09-15	
pH	8.02	0.01 pH units	N/A	May-12-15	HT2
Solids, Total Dissolved	501	10 mg/L	N/A	May-12-15	
Turbidity	0.1	0.1 NTU	N/A	May-08-15	
UV Transmittance @ 254nm	90.9	0.1 % T	N/A	May-09-15	

Calculated Parameters

Hardness, Total (Total as CaCO ₃)	470	5.0 mg/L	N/A	N/A	
Nitrate+Nitrite as N	< 0.020	0.020 mg/L	N/A	N/A	

Total Recoverable Metals

Aluminum, total	0.05	0.05 mg/L	May-13-15	May-14-15	
Antimony, total	< 0.001	0.001 mg/L	May-13-15	May-14-15	
Arsenic, total	< 0.005	0.005 mg/L	May-13-15	May-14-15	



SAMPLE ANALYTICAL DATA

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WORK ORDER 5050525
REPORTED May-28-15

Analyte	Result / Recovery	MRL / Units Limits	Prepared	Analyzed	Notes
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Sample ID: Abbott Spring (5050525-03) [Water] Sampled: May-07-15 10:10, Continued

Total Recoverable Metals, Continued

Barium, total	< 0.05	0.05 mg/L	May-13-15	May-14-15	
Beryllium, total	< 0.001	0.001 mg/L	May-13-15	May-14-15	
Bismuth, total	< 0.001	0.001 mg/L	May-13-15	May-14-15	
Boron, total	< 0.04	0.04 mg/L	May-13-15	May-14-15	
Cadmium, total	< 0.0001	0.0001 mg/L	May-13-15	May-14-15	
Calcium, total	90.6	2.0 mg/L	May-13-15	May-14-15	
Chromium, total	< 0.005	0.005 mg/L	May-13-15	May-14-15	
Cobalt, total	< 0.0005	0.0005 mg/L	May-13-15	May-14-15	
Copper, total	< 0.002	0.002 mg/L	May-13-15	May-14-15	
Iron, total	< 0.10	0.10 mg/L	May-13-15	May-14-15	
Lead, total	< 0.001	0.001 mg/L	May-13-15	May-14-15	
Lithium, total	0.009	0.001 mg/L	May-13-15	May-14-15	
Magnesium, total	59.2	0.1 mg/L	May-13-15	May-14-15	
Manganese, total	< 0.002	0.002 mg/L	May-13-15	May-14-15	
Mercury, total	< 0.0002	0.0002 mg/L	May-13-15	May-14-15	
Molybdenum, total	0.001	0.001 mg/L	May-13-15	May-14-15	
Nickel, total	< 0.002	0.002 mg/L	May-13-15	May-14-15	
Phosphorus, total	< 0.2	0.2 mg/L	May-13-15	May-14-15	
Potassium, total	2.1	0.2 mg/L	May-13-15	May-14-15	
Selenium, total	< 0.005	0.005 mg/L	May-13-15	May-14-15	
Silicon, total	9	5 mg/L	May-13-15	May-14-15	
Silver, total	< 0.0005	0.0005 mg/L	May-13-15	May-14-15	
Sodium, total	5.2	0.2 mg/L	May-13-15	May-14-15	
Strontium, total	0.35	0.01 mg/L	May-13-15	May-14-15	
Sulfur, total	40	10 mg/L	May-13-15	May-14-15	
Tellurium, total	< 0.002	0.002 mg/L	May-13-15	May-14-15	
Thallium, total	< 0.0002	0.0002 mg/L	May-13-15	May-14-15	
Thorium, total	< 0.001	0.001 mg/L	May-13-15	May-14-15	
Tin, total	< 0.002	0.002 mg/L	May-13-15	May-14-15	
Titanium, total	< 0.05	0.05 mg/L	May-13-15	May-14-15	
Uranium, total	0.0061	0.0002 mg/L	May-13-15	May-14-15	
Vanadium, total	< 0.01	0.01 mg/L	May-13-15	May-14-15	
Zinc, total	< 0.04	0.04 mg/L	May-13-15	May-14-15	
Zirconium, total	< 0.001	0.001 mg/L	May-13-15	May-14-15	

Microbiological Parameters

Microcystin-LR	< 0.14	0.14 µg/L	N/A	May-19-15	
Coliforms, Total	< 1	1 CFU/100 mL	May-08-15	May-09-15	
E. coli	< 1	1 CFU/100 mL	May-08-15	May-09-15	

Sample / Analysis Qualifiers:

HT2 The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.



QUALITY CONTROL DATA

REPORTED TO PROJECT Summit Environmental Consultants Inc. (Vernon)
2015-8086.000

WORK ORDER REPORTED 5050525
May-28-15

The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

- **Method Blank (Blk):** Laboratory reagent water is carried through sample preparation and analysis steps. Method Blanks indicate that results are free from contamination, i.e. not biased high from sources such as the sample container or the laboratory environment
- **Duplicate (Dup):** Preparation and analysis of a replicate aliquot of a sample. Duplicates provide a measure of the analytical method's precision, i.e. how reproducible a result is. Duplicates are only reported if they are associated with your sample data.
- **Blank Spike (BS):** A known amount of standard is carried through sample preparation and analysis steps. Blank Spikes, also known as laboratory control samples (LCS), are prepared from a different source of standard than used for the calibration. They ensure that the calibration is acceptable (i.e. not biased high or low) and also provide a measure of the analytical method's accuracy (i.e. closeness of the result to a target value).
- **Standard Reference Material (SRM):** A material of similar matrix to the samples, externally certified for the parameter(s) listed. Standard Reference Materials ensure that the preparation steps in the method are adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Anions, Batch B5E0472									
Blank (B5E0472-BLK1)					Prepared: May-09-15, Analyzed: May-09-15				
Chloride	< 0.10	0.10 mg/L							
Fluoride	< 0.01	0.10 mg/L							
Nitrate as N	< 0.010	0.010 mg/L							
Nitrite as N	< 0.010	0.010 mg/L							
Sulfate	< 0.5	1.0 mg/L							
Blank (B5E0472-BLK2)					Prepared: May-09-15, Analyzed: May-09-15				
Chloride	< 0.10	0.10 mg/L							
Fluoride	< 0.01	0.10 mg/L							
Nitrate as N	< 0.010	0.010 mg/L							
Nitrite as N	< 0.010	0.010 mg/L							
Sulfate	< 0.5	1.0 mg/L							
Blank (B5E0472-BLK3)					Prepared: May-09-15, Analyzed: May-09-15				
Chloride	< 0.10	0.10 mg/L							
Fluoride	< 0.01	0.10 mg/L							
Nitrate as N	< 0.010	0.010 mg/L							
Nitrite as N	< 0.010	0.010 mg/L							
Sulfate	< 0.5	1.0 mg/L							
LCS (B5E0472-BS1)					Prepared: May-09-15, Analyzed: May-09-15				
Chloride	16.0	0.10 mg/L	16.0		100	85-115			
Fluoride	3.97	0.10 mg/L	4.00		99	85-115			
Nitrate as N	3.99	0.010 mg/L	4.00		100	85-115			
Nitrite as N	2.01	0.010 mg/L	2.00		100	85-115			
Sulfate	15.8	1.0 mg/L	16.0		99	85-115			
LCS (B5E0472-BS2)					Prepared: May-09-15, Analyzed: May-09-15				
Chloride	16.2	0.10 mg/L	16.0		101	85-115			
Fluoride	3.97	0.10 mg/L	4.00		99	85-115			
Nitrate as N	4.00	0.010 mg/L	4.00		100	85-115			
Nitrite as N	2.01	0.010 mg/L	2.00		101	85-115			
Sulfate	16.0	1.0 mg/L	16.0		100	85-115			



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WORK ORDER REPORTED 5050525
May-28-15

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
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Anions, Batch B5E0472, Continued

LCS (B5E0472-BS3) Prepared: May-09-15, Analyzed: May-09-15

Chloride	15.9	0.10 mg/L	16.0		100	85-115			
Fluoride	3.95	0.10 mg/L	4.00		99	85-115			
Nitrate as N	3.86	0.010 mg/L	4.00		97	85-115			
Nitrite as N	2.01	0.010 mg/L	2.00		100	85-115			
Sulfate	16.0	1.0 mg/L	16.0		100	85-115			

Dissolved Metals, Batch B5E0762

Blank (B5E0762-BLK1) Prepared: May-14-15, Analyzed: May-14-15

Aluminum, dissolved	< 0.05	0.05 mg/L							
Antimony, dissolved	< 0.001	0.001 mg/L							
Arsenic, dissolved	< 0.005	0.005 mg/L							
Barium, dissolved	< 0.05	0.05 mg/L							
Beryllium, dissolved	< 0.001	0.001 mg/L							
Bismuth, dissolved	< 0.001	0.001 mg/L							
Boron, dissolved	< 0.04	0.04 mg/L							
Cadmium, dissolved	< 0.0001	0.0001 mg/L							
Calcium, dissolved	< 2.0	2.0 mg/L							
Chromium, dissolved	< 0.005	0.005 mg/L							
Cobalt, dissolved	< 0.0005	0.0005 mg/L							
Copper, dissolved	< 0.002	0.002 mg/L							
Iron, dissolved	< 0.10	0.10 mg/L							
Lead, dissolved	< 0.001	0.001 mg/L							
Lithium, dissolved	< 0.001	0.001 mg/L							
Magnesium, dissolved	< 0.1	0.1 mg/L							
Manganese, dissolved	< 0.002	0.002 mg/L							
Mercury, dissolved	< 0.0002	0.0002 mg/L							
Molybdenum, dissolved	< 0.001	0.001 mg/L							
Nickel, dissolved	< 0.002	0.002 mg/L							
Phosphorus, dissolved	< 0.2	0.2 mg/L							
Potassium, dissolved	< 0.2	0.2 mg/L							
Selenium, dissolved	< 0.005	0.005 mg/L							
Silicon, dissolved	< 5	5 mg/L							
Silver, dissolved	< 0.0005	0.0005 mg/L							
Sodium, dissolved	< 0.2	0.2 mg/L							
Strontium, dissolved	< 0.01	0.01 mg/L							
Sulfur, dissolved	< 10	10 mg/L							
Tellurium, dissolved	< 0.002	0.002 mg/L							
Thallium, dissolved	< 0.0002	0.0002 mg/L							
Thorium, dissolved	< 0.001	0.001 mg/L							
Tin, dissolved	< 0.002	0.002 mg/L							
Titanium, dissolved	< 0.05	0.05 mg/L							
Uranium, dissolved	< 0.0002	0.0002 mg/L							
Vanadium, dissolved	< 0.01	0.01 mg/L							
Zinc, dissolved	< 0.04	0.04 mg/L							
Zirconium, dissolved	< 0.001	0.001 mg/L							

Duplicate (B5E0762-DUP1) Source: 5050525-01 Prepared: May-14-15, Analyzed: May-14-15

Aluminum, dissolved	< 0.05	0.05 mg/L	< 0.05	16
Antimony, dissolved	< 0.001	0.001 mg/L	< 0.001	21
Arsenic, dissolved	< 0.005	0.005 mg/L	< 0.005	10
Barium, dissolved	< 0.05	0.05 mg/L	< 0.05	6
Beryllium, dissolved	< 0.001	0.001 mg/L	< 0.001	20
Bismuth, dissolved	< 0.001	0.001 mg/L	< 0.001	20
Boron, dissolved	< 0.04	0.04 mg/L	< 0.04	13
Cadmium, dissolved	< 0.0001	0.0001 mg/L	< 0.0001	24



QUALITY CONTROL DATA

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WORK ORDER 5050525
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Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
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Dissolved Metals, Batch B5E0762, Continued

Duplicate (B5E0762-DUP1), Continued		Source: 5050525-01		Prepared: May-14-15, Analyzed: May-14-15					
Calcium, dissolved	73.2	2.0 mg/L		73.2		< 1		10	
Chromium, dissolved	< 0.005	0.005 mg/L		< 0.005				7	
Cobalt, dissolved	< 0.0005	0.0005 mg/L		< 0.0005				12	
Copper, dissolved	< 0.002	0.002 mg/L		< 0.002				20	
Iron, dissolved	1.68	0.10 mg/L		1.71		2		10	
Lead, dissolved	< 0.001	0.001 mg/L		< 0.001				14	
Lithium, dissolved	0.013	0.001 mg/L		0.013		< 1		15	
Magnesium, dissolved	88.2	0.1 mg/L		87.5		< 1		9	
Manganese, dissolved	0.053	0.002 mg/L		0.054		3		10	
Mercury, dissolved	< 0.0002	0.0002 mg/L		< 0.0002				20	
Molybdenum, dissolved	0.001	0.001 mg/L		< 0.001				16	
Nickel, dissolved	< 0.002	0.002 mg/L		< 0.002				14	
Phosphorus, dissolved	< 0.2	0.2 mg/L		< 0.2				23	
Potassium, dissolved	3.5	0.2 mg/L		3.2		7		17	
Selenium, dissolved	0.005	0.005 mg/L		< 0.005				23	
Silicon, dissolved	12	5 mg/L		11				10	
Silver, dissolved	< 0.0005	0.0005 mg/L		< 0.0005				20	
Sodium, dissolved	21.1	0.2 mg/L		21.6		2		9	
Strontium, dissolved	0.53	0.01 mg/L		0.53		1		9	
Sulfur, dissolved	57	10 mg/L		57		2		27	
Tellurium, dissolved	< 0.002	0.002 mg/L		< 0.002				20	
Thallium, dissolved	< 0.0002	0.0002 mg/L		< 0.0002				12	
Thorium, dissolved	< 0.001	0.001 mg/L		< 0.001				20	
Tin, dissolved	< 0.002	0.002 mg/L		< 0.002				20	
Titanium, dissolved	< 0.05	0.05 mg/L		< 0.05				20	
Uranium, dissolved	0.0052	0.0002 mg/L		0.0051		1		11	
Vanadium, dissolved	< 0.01	0.01 mg/L		< 0.01				14	
Zinc, dissolved	< 0.04	0.04 mg/L		< 0.04				11	
Zirconium, dissolved	< 0.001	0.001 mg/L		< 0.001				20	

Reference (B5E0762-SRM1)		Prepared: May-14-15, Analyzed: May-14-15							
Aluminum, dissolved	0.25	0.05 mg/L	0.233		107		58-142		
Antimony, dissolved	0.050	0.001 mg/L	0.0430		117		75-125		
Arsenic, dissolved	0.451	0.005 mg/L	0.438		103		81-119		
Barium, dissolved	3.40	0.05 mg/L	3.35		101		83-117		
Beryllium, dissolved	0.209	0.001 mg/L	0.213		98		80-120		
Boron, dissolved	1.80	0.04 mg/L	1.74		103		74-117		
Cadmium, dissolved	0.225	0.0001 mg/L	0.224		100		83-117		
Calcium, dissolved	7.8	2.0 mg/L	7.69		101		76-124		
Chromium, dissolved	0.451	0.005 mg/L	0.437		103		81-119		
Cobalt, dissolved	0.138	0.0005 mg/L	0.128		108		76-124		
Copper, dissolved	0.934	0.002 mg/L	0.844		111		84-116		
Iron, dissolved	1.39	0.10 mg/L	1.29		108		74-126		
Lead, dissolved	0.131	0.001 mg/L	0.112		117		72-128		
Lithium, dissolved	0.106	0.001 mg/L	0.104		102		60-140		
Magnesium, dissolved	7.1	0.1 mg/L	6.92		102		81-119		
Manganese, dissolved	0.356	0.002 mg/L	0.345		103		84-116		
Molybdenum, dissolved	0.452	0.001 mg/L	0.426		106		83-117		
Nickel, dissolved	0.883	0.002 mg/L	0.840		105		74-126		
Phosphorus, dissolved	0.5	0.2 mg/L	0.495		97		68-132		
Potassium, dissolved	3.3	0.2 mg/L	3.19		103		74-126		
Selenium, dissolved	0.040	0.005 mg/L	0.0331		122		70-130		
Sodium, dissolved	19.6	0.2 mg/L	19.1		103		72-128		
Strontium, dissolved	0.92	0.01 mg/L	0.916		100		84-113		
Thallium, dissolved	0.0418	0.0002 mg/L	0.0393		106		57-143		
Uranium, dissolved	0.275	0.0002 mg/L	0.266		103		85-115		
Vanadium, dissolved	0.88	0.01 mg/L	0.869		101		87-113		



QUALITY CONTROL DATA

REPORTED TO PROJECT Summit Environmental Consultants Inc. (Vernon)
2015-8086.000

WORK ORDER REPORTED 5050525
May-28-15

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
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Dissolved Metals, Batch B5E0762, Continued

Reference (B5E0762-SRM1), Continued			Prepared: May-14-15, Analyzed: May-14-15						
Zinc, dissolved	0.91	0.04 mg/L	0.881		103	72-128			

General Parameters, Batch B5E0433

Blank (B5E0433-BLK1)			Prepared: May-08-15, Analyzed: May-08-15						
Carbon, Total Organic	< 0.5	0.5 mg/L							
Carbon, Dissolved Organic	< 0.5	0.5 mg/L							
Blank (B5E0433-BLK2)			Prepared: May-08-15, Analyzed: May-08-15						
Carbon, Total Organic	< 0.5	0.5 mg/L							
Carbon, Dissolved Organic	< 0.5	0.5 mg/L							
LCS (B5E0433-BS1)			Prepared: May-08-15, Analyzed: May-08-15						
Carbon, Total Organic	8.9	0.5 mg/L	10.0		89	78-116			
Carbon, Dissolved Organic	8.7	0.5 mg/L	10.0		87	80-120			
LCS (B5E0433-BS2)			Prepared: May-08-15, Analyzed: May-08-15						
Carbon, Total Organic	9.1	0.5 mg/L	10.0		91	78-116			
Carbon, Dissolved Organic	8.5	0.5 mg/L	10.0		85	80-120			
Duplicate (B5E0433-DUP1)			Source: 5050525-03		Prepared: May-08-15, Analyzed: May-08-15				
Carbon, Total Organic	2.9	0.5 mg/L		2.9			1	16	
Carbon, Dissolved Organic	2.7	0.5 mg/L		2.9			6	15	

General Parameters, Batch B5E0454

Blank (B5E0454-BLK1)			Prepared: May-12-15, Analyzed: May-12-15						
Solids, Total Dissolved	< 10	10 mg/L							
Reference (B5E0454-SRM1)			Prepared: May-12-15, Analyzed: May-12-15						
Solids, Total Dissolved	218	10 mg/L	240		91	85-115			

General Parameters, Batch B5E0469

Blank (B5E0469-BLK1)			Prepared: May-08-15, Analyzed: May-08-15						
Turbidity	< 0.1	0.1 NTU							
LCS (B5E0469-BS1)			Prepared: May-08-15, Analyzed: May-08-15						
Turbidity	38.5	0.1 NTU	40.0		96	85-115			

General Parameters, Batch B5E0529

Blank (B5E0529-BLK1)			Prepared: May-09-15, Analyzed: May-09-15						
Alkalinity, Total as CaCO ₃	< 1	1 mg/L							
Conductivity (EC)	< 2	2 µS/cm							
LCS (B5E0529-BS1)			Prepared: May-09-15, Analyzed: May-09-15						
Alkalinity, Total as CaCO ₃	104	1 mg/L	100		104	96-108			
LCS (B5E0529-BS2)			Prepared: May-09-15, Analyzed: May-09-15						
Conductivity (EC)	1390	2 µS/cm	1410		98	93-104			

General Parameters, Batch B5E0548



QUALITY CONTROL DATA

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2015-8086.000

WORK ORDER REPORTED 5050525
May-28-15

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
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General Parameters, Batch B5E0548, Continued

Blank (B5E0548-BLK1)			Prepared: May-13-15, Analyzed: May-13-15						
Colour, True	< 5	5 CU							
Blank (B5E0548-BLK2)			Prepared: May-13-15, Analyzed: May-13-15						
Colour, True	< 5	5 CU							
LCS (B5E0548-BS1)			Prepared: May-13-15, Analyzed: May-13-15						
Colour, True	10	5 CU	10.0		101	85-115			
LCS (B5E0548-BS2)			Prepared: May-13-15, Analyzed: May-13-15						
Colour, True	11	5 CU	10.0		106	85-115			

General Parameters, Batch B5E0589

Blank (B5E0589-BLK1)			Prepared: May-09-15, Analyzed: May-09-15						
UV Transmittance @ 254nm	< 0.1	0.1 % T							
Reference (B5E0589-SRM1)			Prepared: May-09-15, Analyzed: May-09-15						
UV Transmittance @ 254nm	87.5	0.1 % T	80.2		109	90-110			

General Parameters, Batch B5E0617

Reference (B5E0617-SRM1)			Prepared: May-12-15, Analyzed: May-12-15						
pH	6.98	0.01 pH units	7.00		100	98-102			

Microbiological Parameters, Batch B5E0374

Blank (B5E0374-BLK1)			Prepared: May-07-15, Analyzed: May-08-15						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							

Microbiological Parameters, Batch B5E0458

Blank (B5E0458-BLK1)			Prepared: May-08-15, Analyzed: May-09-15						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Blank (B5E0458-BLK2)			Prepared: May-08-15, Analyzed: May-09-15						
Coliforms, Total	< 1	1 CFU/100 mL							
E. coli	< 1	1 CFU/100 mL							
Duplicate (B5E0458-DUP1)			Source: 5050525-02		Prepared: May-08-15, Analyzed: May-09-15				
Coliforms, Total	< 1	1 CFU/100 mL	< 1				53		RS2
Duplicate (B5E0458-DUP2)			Source: 5050525-03		Prepared: May-08-15, Analyzed: May-09-15				
E. coli	< 1	1 CFU/100 mL	< 1				79		RS2

Total Recoverable Metals, Batch B5E0769

Blank (B5E0769-BLK1)			Prepared: May-13-15, Analyzed: May-14-15						
Aluminum, total	< 0.05	0.05 mg/L							
Antimony, total	< 0.001	0.001 mg/L							
Arsenic, total	< 0.005	0.005 mg/L							
Barium, total	< 0.05	0.05 mg/L							
Beryllium, total	< 0.001	0.001 mg/L							
Bismuth, total	< 0.001	0.001 mg/L							



QUALITY CONTROL DATA

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2015-8086.000

WORK ORDER REPORTED 5050525
May-28-15

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
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Total Recoverable Metals, Batch B5E0769, Continued

Blank (B5E0769-BLK1), Continued

Prepared: May-13-15, Analyzed: May-14-15

Boron, total	< 0.04	0.04 mg/L
Cadmium, total	< 0.0001	0.0001 mg/L
Calcium, total	< 2.0	2.0 mg/L
Chromium, total	< 0.005	0.005 mg/L
Cobalt, total	< 0.0005	0.0005 mg/L
Copper, total	< 0.002	0.002 mg/L
Iron, total	< 0.10	0.10 mg/L
Lead, total	< 0.001	0.001 mg/L
Lithium, total	< 0.001	0.001 mg/L
Magnesium, total	< 0.1	0.1 mg/L
Manganese, total	< 0.002	0.002 mg/L
Mercury, total	< 0.0002	0.0002 mg/L
Molybdenum, total	< 0.001	0.001 mg/L
Nickel, total	< 0.002	0.002 mg/L
Phosphorus, total	< 0.2	0.2 mg/L
Potassium, total	< 0.2	0.2 mg/L
Selenium, total	< 0.005	0.005 mg/L
Silicon, total	< 5	5 mg/L
Silver, total	< 0.0005	0.0005 mg/L
Sodium, total	< 0.2	0.2 mg/L
Strontium, total	< 0.01	0.01 mg/L
Sulfur, total	< 10	10 mg/L
Tellurium, total	< 0.002	0.002 mg/L
Thallium, total	< 0.0002	0.0002 mg/L
Thorium, total	< 0.001	0.001 mg/L
Tin, total	< 0.002	0.002 mg/L
Titanium, total	< 0.05	0.05 mg/L
Uranium, total	< 0.0002	0.0002 mg/L
Vanadium, total	< 0.01	0.01 mg/L
Zinc, total	< 0.04	0.04 mg/L
Zirconium, total	< 0.001	0.001 mg/L

Blank (B5E0769-BLK2)

Prepared: May-13-15, Analyzed: May-14-15

Aluminum, total	< 0.05	0.05 mg/L
Antimony, total	< 0.001	0.001 mg/L
Arsenic, total	< 0.005	0.005 mg/L
Barium, total	< 0.05	0.05 mg/L
Beryllium, total	< 0.001	0.001 mg/L
Bismuth, total	< 0.001	0.001 mg/L
Boron, total	< 0.04	0.04 mg/L
Cadmium, total	< 0.0001	0.0001 mg/L
Calcium, total	< 2.0	2.0 mg/L
Chromium, total	< 0.005	0.005 mg/L
Cobalt, total	< 0.0005	0.0005 mg/L
Copper, total	< 0.002	0.002 mg/L
Iron, total	< 0.10	0.10 mg/L
Lead, total	< 0.001	0.001 mg/L
Lithium, total	< 0.001	0.001 mg/L
Magnesium, total	< 0.1	0.1 mg/L
Manganese, total	< 0.002	0.002 mg/L
Mercury, total	< 0.0002	0.0002 mg/L
Molybdenum, total	< 0.001	0.001 mg/L
Nickel, total	< 0.002	0.002 mg/L
Phosphorus, total	< 0.2	0.2 mg/L
Potassium, total	< 0.2	0.2 mg/L
Selenium, total	< 0.005	0.005 mg/L
Silicon, total	< 5	5 mg/L



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2015-8086.000

WORK ORDER REPORTED 5050525
May-28-15

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
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Total Recoverable Metals, Batch B5E0769, Continued

Blank (B5E0769-BLK2), Continued

Prepared: May-13-15, Analyzed: May-14-15

Silver, total	< 0.0005	0.0005 mg/L							
Sodium, total	< 0.2	0.2 mg/L							
Strontium, total	< 0.01	0.01 mg/L							
Sulfur, total	< 10	10 mg/L							
Tellurium, total	< 0.002	0.002 mg/L							
Thallium, total	< 0.0002	0.0002 mg/L							
Thorium, total	< 0.001	0.001 mg/L							
Tin, total	< 0.002	0.002 mg/L							
Titanium, total	< 0.05	0.05 mg/L							
Uranium, total	< 0.0002	0.0002 mg/L							
Vanadium, total	< 0.01	0.01 mg/L							
Zinc, total	< 0.04	0.04 mg/L							
Zirconium, total	< 0.001	0.001 mg/L							

Duplicate (B5E0769-DUP1)

Source: 5050525-02

Prepared: May-13-15, Analyzed: May-14-15

Aluminum, total	< 0.05	0.05 mg/L		< 0.05				27	
Antimony, total	< 0.001	0.001 mg/L		< 0.001				24	
Arsenic, total	< 0.005	0.005 mg/L		< 0.005				14	
Barium, total	< 0.05	0.05 mg/L		< 0.05				16	
Beryllium, total	< 0.001	0.001 mg/L		< 0.001				20	
Bismuth, total	< 0.001	0.001 mg/L		< 0.001				20	
Boron, total	0.04	0.04 mg/L		0.05				15	
Cadmium, total	< 0.0001	0.0001 mg/L		< 0.0001				40	
Calcium, total	95.7	2.0 mg/L		93.3			3	14	
Chromium, total	< 0.005	0.005 mg/L		< 0.005				17	
Cobalt, total	< 0.0005	0.0005 mg/L		< 0.0005				17	
Copper, total	0.005	0.002 mg/L		0.003				30	
Iron, total	0.48	0.10 mg/L		0.49				28	
Lead, total	< 0.001	0.001 mg/L		< 0.001				19	
Lithium, total	0.015	0.001 mg/L		0.015			1	18	
Magnesium, total	93.0	0.1 mg/L		96.2			3	13	
Manganese, total	0.023	0.002 mg/L		0.026			14	19	
Mercury, total	< 0.0002	0.0002 mg/L		< 0.0002				40	
Molybdenum, total	< 0.001	0.001 mg/L		< 0.001				24	
Nickel, total	0.002	0.002 mg/L		0.002				33	
Phosphorus, total	< 0.2	0.2 mg/L		< 0.2				24	
Potassium, total	3.9	0.2 mg/L		4.2			7	22	
Selenium, total	< 0.005	0.005 mg/L		< 0.005				21	
Silicon, total	11	5 mg/L		11				25	
Silver, total	< 0.0005	0.0005 mg/L		< 0.0005				23	
Sodium, total	29.0	0.2 mg/L		29.4			1	17	
Strontium, total	0.63	0.01 mg/L		0.64			2	11	
Sulfur, total	54	10 mg/L		60			12	41	
Tellurium, total	< 0.002	0.002 mg/L		< 0.002				31	
Thallium, total	< 0.0002	0.0002 mg/L		< 0.0002				21	
Thorium, total	< 0.001	0.001 mg/L		< 0.001				46	
Tin, total	< 0.002	0.002 mg/L		< 0.002				30	
Titanium, total	< 0.05	0.05 mg/L		< 0.05				60	
Uranium, total	0.0084	0.0002 mg/L		0.0084			< 1	17	
Vanadium, total	< 0.01	0.01 mg/L		< 0.01				27	
Zinc, total	< 0.04	0.04 mg/L		< 0.04				26	
Zirconium, total	< 0.001	0.001 mg/L		< 0.001				60	

Reference (B5E0769-SRM1)

Prepared: May-13-15, Analyzed: May-14-15

Aluminum, total	0.32	0.05 mg/L	0.296	108	81-129
Antimony, total	0.054	0.001 mg/L	0.0505	107	88-114
Arsenic, total	0.128	0.005 mg/L	0.122	105	88-114



QUALITY CONTROL DATA

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May-28-15

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
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Total Recoverable Metals, Batch B5E0769, Continued

Reference (B5E0769-SRM1), Continued

Prepared: May-13-15, Analyzed: May-14-15

Barium, total	0.68	0.05 mg/L	0.777		87	72-104			
Beryllium, total	0.050	0.001 mg/L	0.0488		102	76-131			
Boron, total	3.79	0.04 mg/L	3.40		111	75-121			
Cadmium, total	0.0526	0.0001 mg/L	0.0490		107	89-111			
Calcium, total	9.8	2.0 mg/L	10.2		96	86-121			
Chromium, total	0.258	0.005 mg/L	0.242		107	89-114			
Cobalt, total	0.0389	0.0005 mg/L	0.0366		106	91-113			
Copper, total	0.551	0.002 mg/L	0.487		113	91-115			
Iron, total	0.54	0.10 mg/L	0.469		116	77-124			
Lead, total	0.212	0.001 mg/L	0.193		110	92-113			
Lithium, total	0.427	0.001 mg/L	0.390		109	85-115			
Magnesium, total	3.6	0.1 mg/L	3.31		109	78-120			
Manganese, total	0.116	0.002 mg/L	0.109		106	90-114			
Mercury, total	0.0049	0.0002 mg/L	0.00456		107	50-150			
Molybdenum, total	0.214	0.001 mg/L	0.197		109	90-111			
Nickel, total	0.259	0.002 mg/L	0.242		107	90-111			
Phosphorus, total	0.2	0.2 mg/L	0.233		92	85-115			
Potassium, total	6.2	0.2 mg/L	5.93		105	84-113			
Selenium, total	0.116	0.005 mg/L	0.115		101	85-115			
Sodium, total	8.3	0.2 mg/L	7.64		109	82-123			
Strontium, total	0.38	0.01 mg/L	0.363		106	88-112			
Thallium, total	0.0881	0.0002 mg/L	0.0794		111	91-114			
Uranium, total	0.0210	0.0002 mg/L	0.0192		109	85-120			
Vanadium, total	0.39	0.01 mg/L	0.376		103	86-111			
Zinc, total	2.53	0.04 mg/L	2.42		105	85-111			

Reference (B5E0769-SRM2)

Prepared: May-13-15, Analyzed: May-14-15

Aluminum, total	0.33	0.05 mg/L	0.296		113	81-129			
Antimony, total	0.053	0.001 mg/L	0.0505		105	88-114			
Arsenic, total	0.125	0.005 mg/L	0.122		103	88-114			
Barium, total	0.67	0.05 mg/L	0.777		87	72-104			
Beryllium, total	0.050	0.001 mg/L	0.0488		102	76-131			
Boron, total	3.80	0.04 mg/L	3.40		112	75-121			
Cadmium, total	0.0532	0.0001 mg/L	0.0490		109	89-111			
Calcium, total	10.0	2.0 mg/L	10.2		98	86-121			
Chromium, total	0.256	0.005 mg/L	0.242		106	89-114			
Cobalt, total	0.0395	0.0005 mg/L	0.0366		108	91-113			
Copper, total	0.548	0.002 mg/L	0.487		112	91-115			
Iron, total	0.54	0.10 mg/L	0.469		115	77-124			
Lead, total	0.213	0.001 mg/L	0.193		110	92-113			
Lithium, total	0.428	0.001 mg/L	0.390		110	85-115			
Magnesium, total	3.6	0.1 mg/L	3.31		109	78-120			
Manganese, total	0.115	0.002 mg/L	0.109		105	90-114			
Mercury, total	0.0051	0.0002 mg/L	0.00456		112	50-150			
Molybdenum, total	0.215	0.001 mg/L	0.197		109	90-111			
Nickel, total	0.258	0.002 mg/L	0.242		107	90-111			
Phosphorus, total	0.2	0.2 mg/L	0.233		103	85-115			
Potassium, total	6.1	0.2 mg/L	5.93		102	84-113			
Selenium, total	0.102	0.005 mg/L	0.115		89	85-115			
Sodium, total	8.2	0.2 mg/L	7.64		107	82-123			
Strontium, total	0.38	0.01 mg/L	0.363		106	88-112			
Thallium, total	0.0877	0.0002 mg/L	0.0794		110	91-114			
Uranium, total	0.0208	0.0002 mg/L	0.0192		108	85-120			
Vanadium, total	0.38	0.01 mg/L	0.376		102	86-111			
Zinc, total	2.53	0.04 mg/L	2.42		105	85-111			

**QUALITY CONTROL DATA**

REPORTED TO Summit Environmental Consultants Inc. (Vernon)
PROJECT 2015-8086.000

WORK ORDER 5050525
REPORTED May-28-15

QC Qualifiers:

RS2 Reported Detection Limits (RDL) for this sample have been raised due to limited sample volume.

Date: May 28, 2015

Legal Description: Lot 3, Sec 6, Twp 27, R 21, W5M, Kootenay District, Plan 16263

Property Owner: **Mike Palumbo**

Please note that all percolation testing, soils analysis and calculations are based on information Ministry of Health "Sewerage System Standard Practice Manual").

The daily effluent discharge calculations for each proposed lot are based on a 4-bedroom house using a Type 1 System with 0.6m wide trenches spaced 1.8m on-centre and slopes under 5% as per the provided by the Interior Health – Health Protection "Subdivision Guidelines".

Proposed Lot # **Remainder**

Slope: 18%

Calculated Hydraulic Loading Rate: 29 litres / m² / day

Total trench length necessary would be: 196m

The Primary and reserve field would consist of # 8 lines at 24.5 m long.

(If the Reserve field has different variables they must also be listed).

The minimum total area that would be required for both the Primary and Reserve fields for a 4-bedroom house using a Type 1 System on this Proposed Lot would be: 323 m²

The additional 10% area for construction increases the required total area to: 355.3 m²

(If additional area is required due to slopes over 5% they must also be identified).

An additional 18% added for the slope over 5% will bring the total area to 419 m²

An example of a possible size for the dispersal area for this Proposed Lot would be: 28 m long by 15 m wide.

Attached is the soils analysis for the Proposed Lot # **Remainder**. As the Authorized Person for this site evaluation, I confirm, to the best of my ability, that the soils on this proposed lot are appropriate for a Type 1 discharge system serving a 4 bedroom house as per the requirements of the Ministry of Health "Sewerage System Standard Practice Manual" and the Interior Health Subdivision Guidelines.

Signed and Stamped,



The information provided is NOT a septic system design. It is provided for the use of the Public Health Officer for subdivision review purposes ONLY. If you have any questions or require additional information, please contact the undersigned.

Lot 1 – Primary System

Fine loamy sand, approx 0% slope.

Hydraulic Loading Rate (HLR) – Based on Spm Table 2-8

- Fine sand texture
- Single Grain Structure
- loose Consistence
- HLR from table 2-8 assigns an HLR of 25 litres/m²/day

System Sizing – Based on Appendix 2 – Discharge area Sizing, Interior Health Subdivision Guideline HPK9040 June 2007.

- Base area for primary and reserve fields - 381m² for an HLR of 25 litres/m²/day

Calculations:

Base Area for both fields		381m ²
Base area for 1 field	381m ² /2	190m ²

Configuration of field:

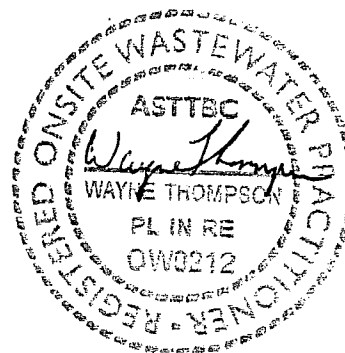
Appendix 2 requires 113 m of .61m wide trenches.

To meet Spm linear loading rates (SPM table 2-11) the system must be a minimum of 25 metres in length. To attain this length, 4 lateral sections of 28.2 metres are required.

System Dimensions:

Length	28.2m +6 for construction	34.2m
Width	190m (area required) divided by 28.2 min system length 6.7m + 6 for construction	12.7m

Dimensions of Lot 1 Primary System: 34.2 metres X 12.7 metres



Lot 1 – Reserve System

Silt Loam, approx 20% slope.

Hydraulic Loading Rate (HLR) – Based on Spm Table 2-8

- Sandy Loam Texture
- Moderate Angular Blocky Structure
- Friable Consistence
- HLR from table 2-8 assigns an HLR of 25 litres/m²/day

System Sizing – Based on Appendix 2 – Discharge area Sizing, Interior Health Subdivision Guideline HPK9040 June 2007.

- Base area for primary and reserve fields over 10% - 419 m² for an HLR of 25 litres/m²/day

Calculations:

Base Area for both fields		419m ²
Base area for 1 field	419m ² /2	209m ²
Addition for slope >10%	(209 X.2)+209	251m ² of area required for primary field

Configuration of field:

Appendix 2 requires 113 m of .61m wide trenches.
4 lateral sections of 28.2 metres in length

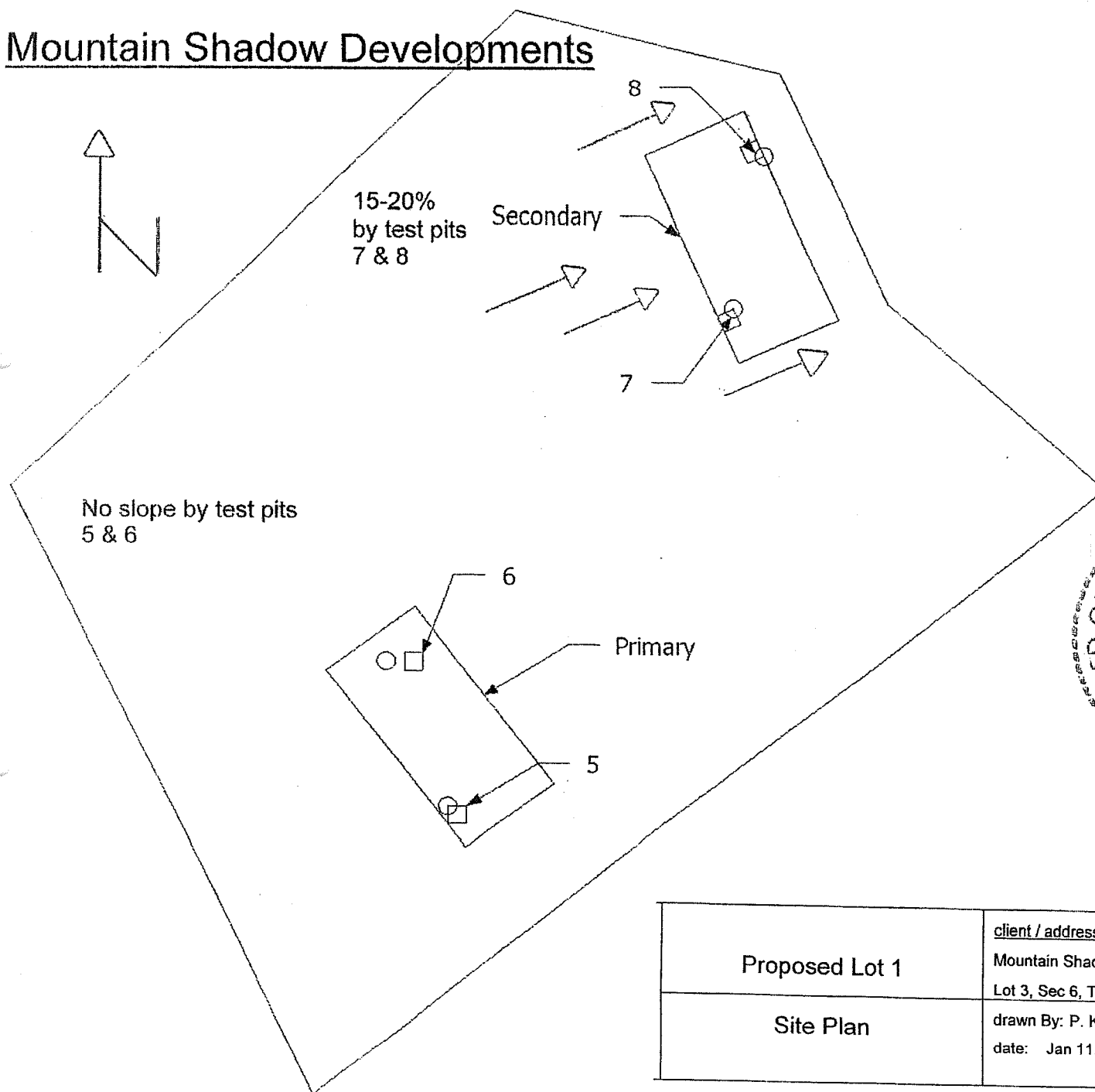
System Dimensions:

Length	28.2m +6 for construction	34.2m
Width	251m (area required) divided by 28.2 min system length 8.9m + 6 for construction	14.9m

Dimensions of Lot 1 Reserve System: 54.2 metres X 14.9 metres

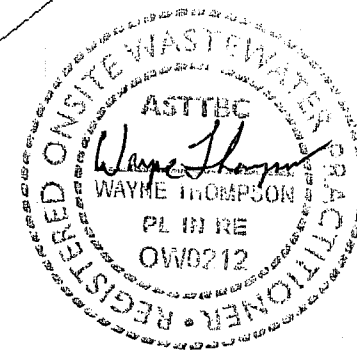


Mountain Shadow Developments



Notes:

- Property is heavily treed with fir and other native forest plants.
- Property has no well. Remainder parcel has a well. See "Over-all Site Plan" drawing for locations and setback distances.
- See attached test pit logs and perc test results.
- Driveway is only temporary...pending final approvals.

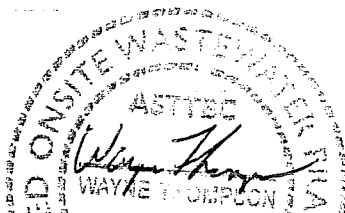


Proposed Lot 1	<u>client / address</u> Mountain Shadow Developments Lot 3, Sec 6, Twp 27, plan 16263, rge 21, Kootenay Ld
Site Plan	drawn By: P. Koekkoek date: Jan 11, 2012

Observed Soil Conditions

Test Pit Logs										
Date:		12-Aug-11		Proposed Subdivision Lot 1 Primary		Logged by: Paul Koekkoek				
Test Pit #:		5		Location:		Lot 3 Sec 6 Twp 27 W5M Plan 16263 rge 21 Kootenay LD		Slope (%): 0%		
Soil Horizons (depths measured in cm)										
Depth (cm)	from	to	Colour	Texture	Structure	Rupture resistance (or density)	Coarse gravel (%)	Roots size & quantity	Mottles size & quantity	Moisture seepage
0	7		black	organics	-	loose	0	many m-f	none	moist
7	40		reddish brown	sandy loam	abiky mod	friable	0	many m-f	none	moist
40	122		grey	med sand	s/g	loose	0	few c-f	none	moist
Notes:										

Test Pit Logs										
Date:		12-Aug-11		Proposed Subdivision Lot 1 Primary		Logged by: Paul Koekkoek				
Test Pit #:		6		Location:		Lot 3 Sec 6 Twp 27 W5M Plan 16263 rge 21 Kootenay LD		Slope (%): 0%		
Soil Horizons (depths measured in cm/in)										
Depth (cm)	from	to	Colour	Texture	Structure	Rupture resistance (or density)	Coarse gravel (%)	Roots size & quantity	Mottles size & quantity	Moisture seepage
0	15		black	organics	-	loose	0	many m-f	none	moist
15	66		brown	sandy loam	abiky mod	friable	0	many f-vf	none	moist
66	122		grey	fine-med sand	s/g	loose	0	few m-f	none	moist



Percolation Tests

Lot 1 - Primary

Date: 12-Aug-11

Customer Name: Mountain Shadows Developments

Civic Address:

Legal Address: Lot 3, Sec 6, Twp 27, W5M, Plan 16263, Rge 21 Kootenay LD

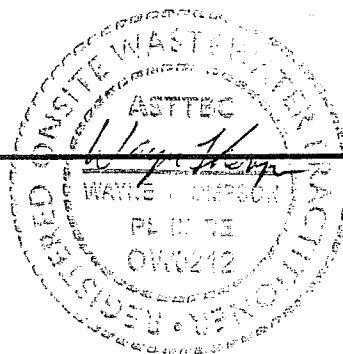
Perc hole # 5	
	7 min/inch
	8 min/inch
	8 min/inch
	9 min/inch
Total	<u>32</u>
8 Average perc rate	

Perc hole #6	
	6 min/inch
	7 min/inch
	8 min/inch
	8 min/inch
Total	<u>29</u>
7 Average perc rate	

Perc hole #	
	min/inch
	min/inch
	min/inch
	min/inch
Total	<u> </u>
Average perc rate	

Perc hole #	
	min/inch
	min/inch
	min/inch
	min/inch
Total	<u> </u>
Average perc rate	

8 Average Perc Rate



Observed Soil Conditions

Test Pit Logs

Date: 12-Aug-11 Proposed Subdivision **Lot 1 Reserve** Logged by: Paul Koekkoek
 Test Pit #: 7 Location: Lot 3 Sec 6 Twp 27 W5M Plan 16263 rge 21 Kootenay LD Slope (%): 15-20%

Soil Horizons (depths measured in cm)

Depth (cm)		Colour	Texture	Structure	Rupture resistance (or density)	Coarse gravel (%)	Roots size & quantity	Mottles size & quantity	Moisture seepage
from	to								
0	8	black	organics	-	loose	0	many m-f	none	dry
8	50	redish brown	sandy loam	ablkly mod	slightly hard	5	many m-f	none	dry
50	81	grey	fine sand	s/g	loose	10	many f-vf	none	dry
81	122	grey	fine sand	s/g	loose	5	few f-vf	none	dry

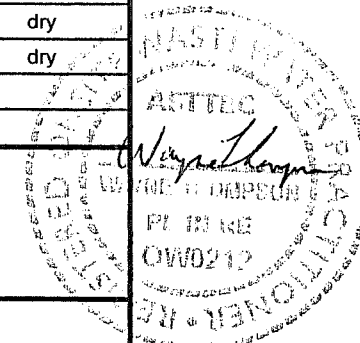
Notes:

Test Pit Logs

Date: 12-Aug-11 Site: Proposed Subdivision **Lot 1 Reserve** Logged by: Paul Koekkoek
 Test Pit #: 8 Location: Lot 3 Sec 6 Twp 27 W5M Plan 16263 rge 21 Kootenay LD Slope (%) 15-20%

Soil Horizons (depths measured in cm/in)

Depth (cm)		Colour	Texture	Structure	Rupture resistance (or density)	Coarse gravel (%)	Roots size & quantity	Mottles size & quantity	Moisture seepage
from	to								
0	5	black	organics	-	loose	0	many c-f	none	dry
5	30	black-brown	sandy loam	ablkly mod	soft	0	many c-f	none	dry
30	101	grey	sandy loam	ablkly mod	slightly hard	0	many c-f	none	dry
101	122	light grey	sandy loam	ablkly mod	slightly hard	0	few f	none	dry



Percolation Tests

Lot 1 - Reserve

Date: 12-Aug-11

Customer Name: Mountain Shadows Developments

Civic Address:

Legal Address: Lot 3, Sec 6, Twp 27, W5M, Plan 16263, Rge 21 Kootenay LD

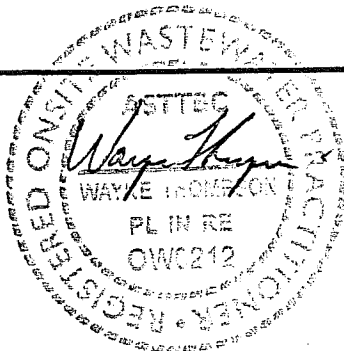
Perc hole # 7	
	7 min/inch
	7 min/inch
	7 min/inch
	8 min/inch
Total	29
7 Average perc rate	

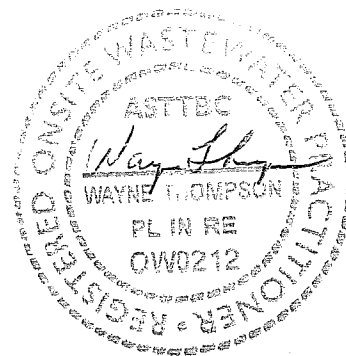
Perc hole #8	
	7 min/inch
	7 min/inch
	8 min/inch
	8 min/inch
Total	30
8 Average perc rate	

Perc hole #	
	min/inch
	min/inch
	min/inch
	min/inch
Total	
Average perc rate	

Perc hole #	
	min/inch
	min/inch
	min/inch
	min/inch
Total	
Average perc rate	

8 Average Perc Rate





Mountain Shadows Developments Ltd
C/O Mike Polumbo
Box 1846
Golden, BC
V0A 1H0
(250) 344-8385

May 2, 2012

RE: SEWERAGE SYSTEM FEASIBILITY REPORT FOR SUBDIVISION

Property: Lot 3, Sec 6, Twp 27 W5M plan 16263 Rge 21 Kootenay LD

Notes:

All information in this report is based upon the "Interior Health Subdivision Guideline HPK9040 June 2007", and "Sewerage System Standard Practice Manual Version 2, 2007"

All calculations are based on residential strength type 1 effluent

The system sizing is based on Appendix 2 – Discharge Area Sizing, of the Interior Health Subdivision Guideline HPK 9040 June 2007.

Please refer to the enclosed soils profiles report, and the percolation test reports which are attached to this letter.

This information in this report is not intended to be a septic system design, but only a reference for the Health Officer to review for subdivision approval of the above mentioned lot (s). This report is not to be used for any other reason except what is listed above.

Proposed lot 1

The proposed lot 1 has no well on site. The only water source in the vicinity is on the remainder portion of the subdivision plan. A 30 metre radius is drawn on the "Over-all Site Plan" drawing, which clearly shows that the well is far out-side of the 30 metre minimum setback.

The only driveway into lot one is a temporary road which is subject to change once the subdivision is finalized.

Proposed lot 1 has very good soils for a septic system. Test pits for the primary system reveal a fine loamy sand texture, with a single grain structure, and loose consistence. No restrictive layers were found to a depth of 122 cm.

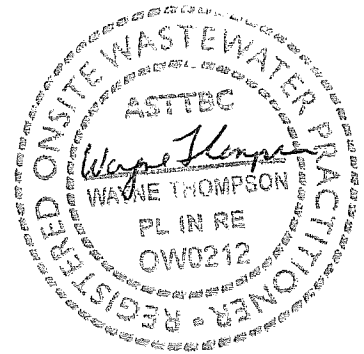
Test pits for the reserve system on lot 1 show a sandy loam texture with a moderate angular blocky structure, friable consistence. No restrictive layers were found to a depth of 122 cm.

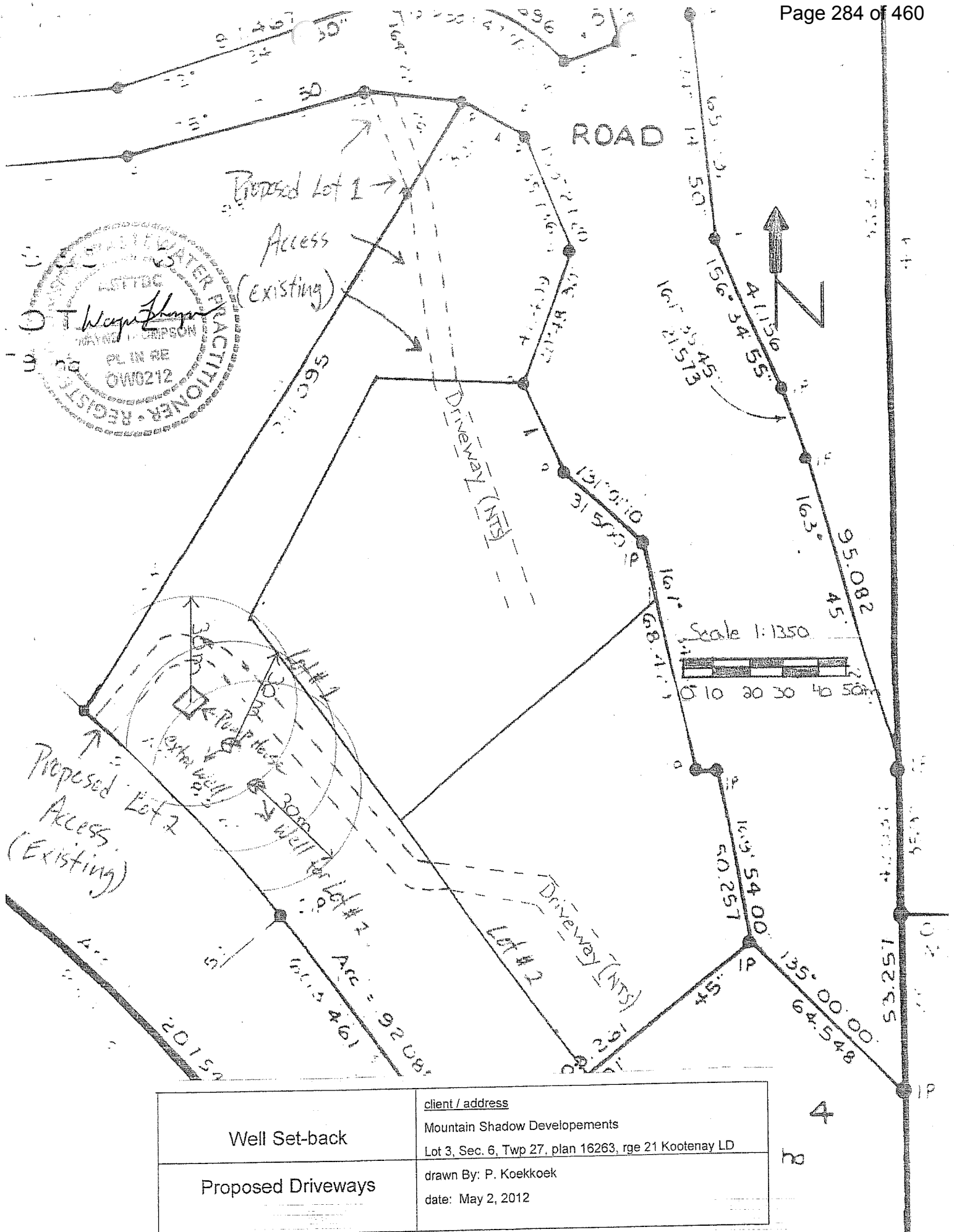
Proposed lot 2

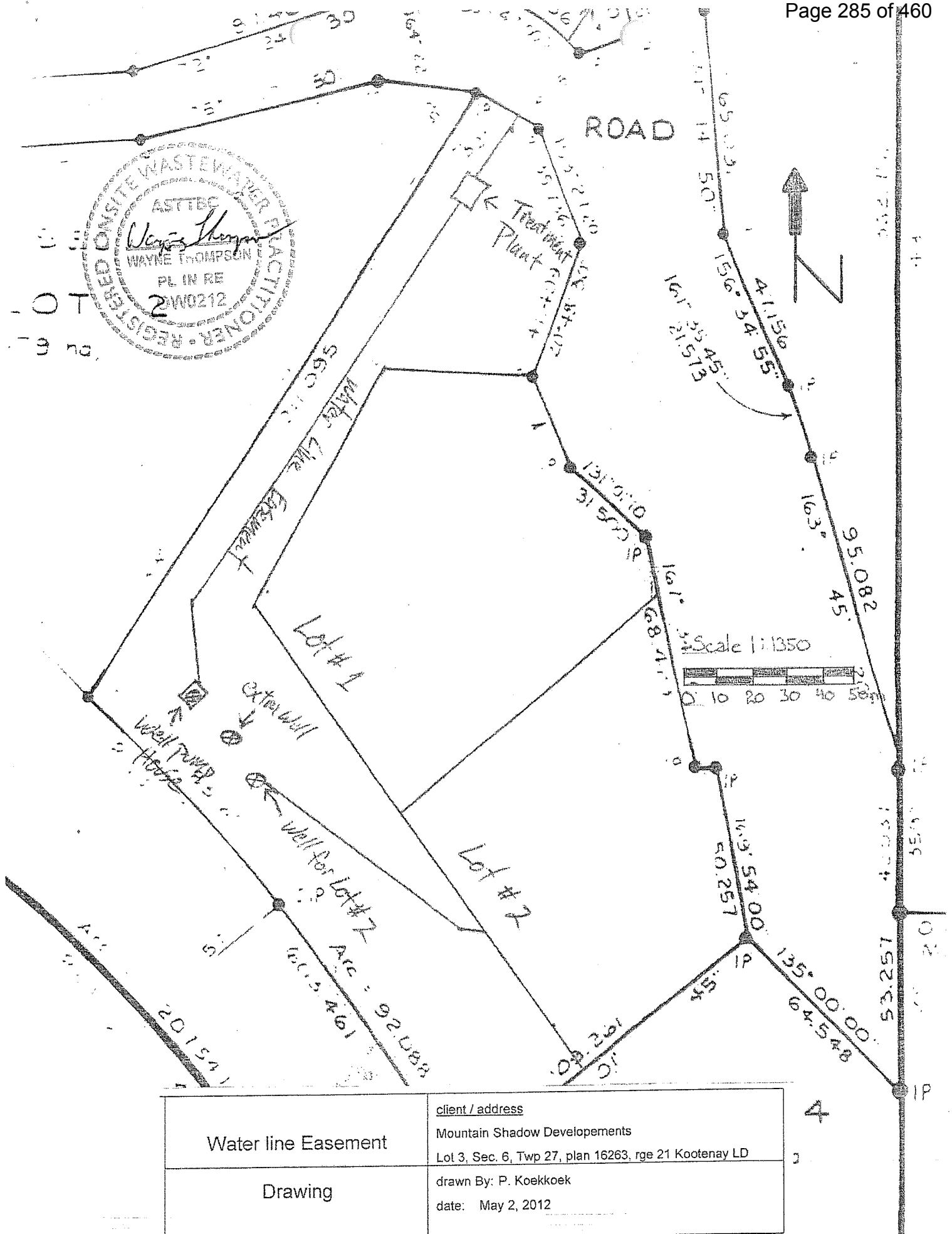
Proposed lot 2 has a well which has been drilled, but is non-productive and will be decommissioned. The location of this well is illustrated on the site plan for "bearing" purposes only. Since it is non-productive and will be decommissioned the 30 metre setback was not a consideration in positioning the potential system.

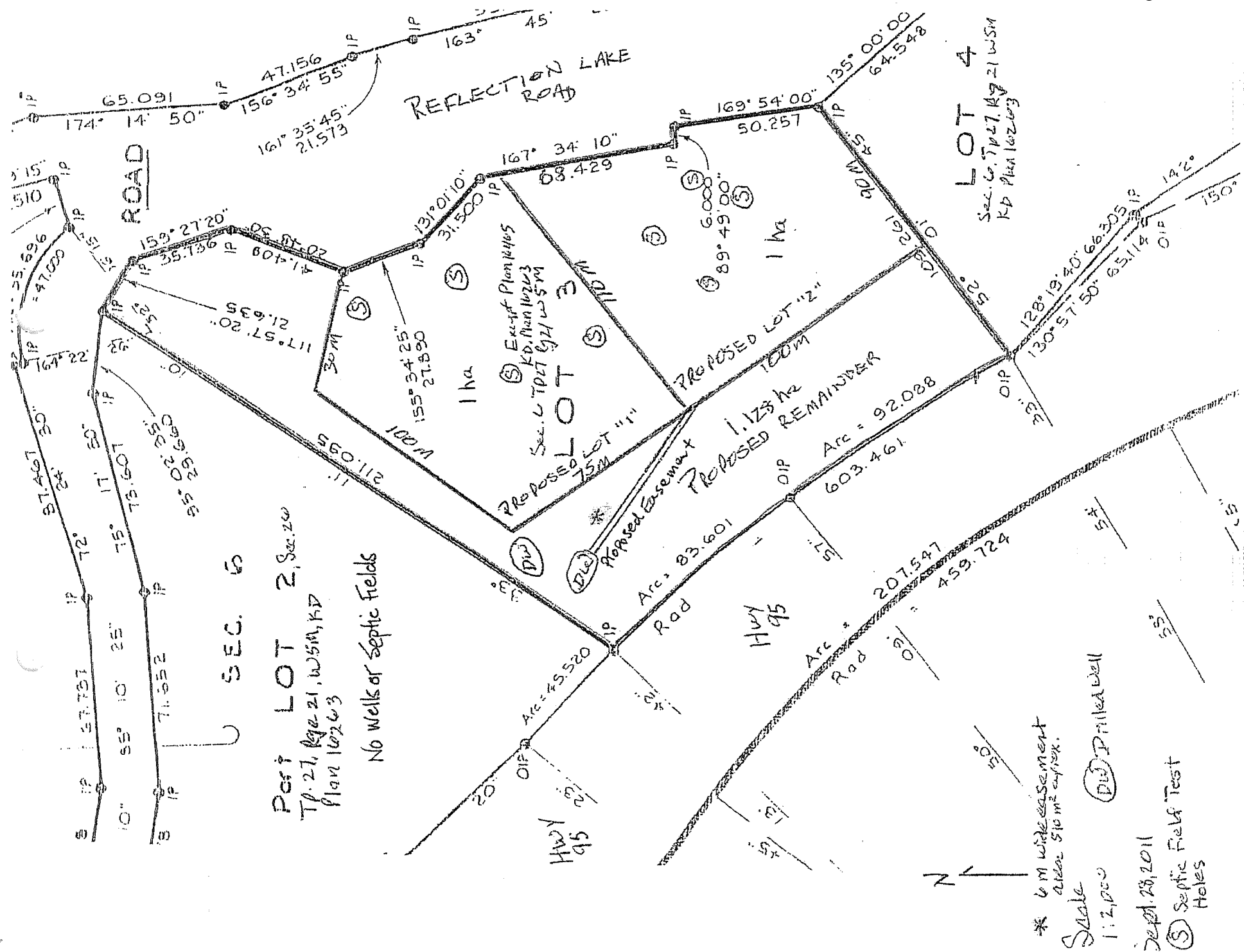
Soils analysis show that the horizons below the infiltrative surface (below 61 cm) are predominately a silty loam. Test pits also revealed a restrictive clay layer at 130 cm at test pit 1, and 124 cm at test pit 5. Even with this restrictive layer, the vertical separation of 61 cm (122 cm total permeable non-saturated soil) is met on proposed lot 2.

Wayne Thompson
ROWP









Mountain Shadows Developments Ltd
C/O Mike Polumbo
Box 1846
Golden, BC
V0A 1H0
(250) 344-8385

January 11, 2012

RE: SEWERAGE SYSTEM FEASIBILITY REPORT FOR SUBDIVISION

Property: Lot 3, Sec 6, Twp 27 W5M plan 16263 Rge 21 Kootenay LD

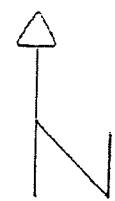
Please note that the above captioned "Sewerage Feasibility Report For Subdivision" did not include information for the "remainder lot"

In my opinion the remainder lot has many of the same characteristics as lot A and B and would most likely be suitable for a septic system, however, since the weather has now turned feasibility report can't be completed until spring thaw.

Wayne Thompson
ROWP



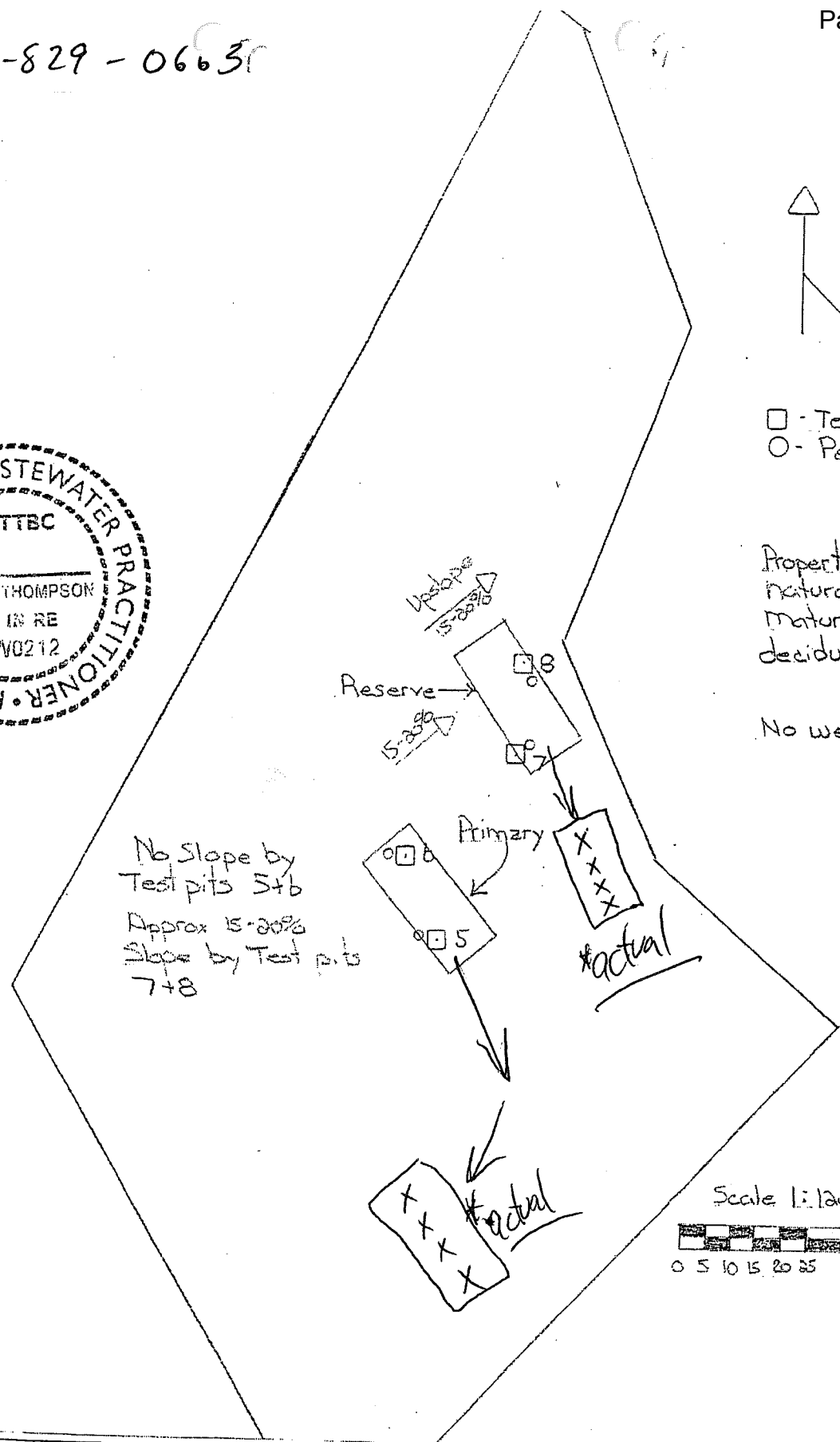
250-829-0663



- - Test Pit
- - Perc Test

Property is all natural forest mature fir & deciduous trees

No well on site



Proposed Lot A	<u>client / address</u> Mountain Shadow Developments Lot 3, Sec 6, Twp 27, plan 16263, Rg 21, Kootenay Ld
Site Plan	drawn By: P. Koekoek date: August 12, 2011



BOARD REPORT

TO:
Chair and Directors

File No: DVP641-25 PL20170025

SUBJECT:

Electoral Area C: Development Variance Permit No. 641-25 (Franklin)

DESCRIPTION:

 Report from Jennifer Sham, Planner, dated May 18, 2017.
 3700 & 3710 Sunnybrae-Canoe Point Road, Sunnybrae

RECOMMENDATION:

THAT: in accordance with Section 498 of the Local Government Act, Development Variance Permit No. 641-25, for Lot 1 and 2 Section 2 and 11 Township 21 Range 10 West of the 6th Meridian Kamloops Division Yale District Plan KAP82925, varying Schedule "A" – Levels of Service of Subdivision Servicing Bylaw No. 641, as amended, to allow a subdivision which would create a fee simple lot (new Lot 1) with a parcel size of less than 1 ha serviced by a community water system and an on-site sewerage disposal system, as shown on Schedule B, subject to registration of a suitably worded Section 219 covenant on title of the new Lot 1 requiring connection to a community sewer system when it becomes available, be approved for issuance this 15th day of June, 2017.

SHORT SUMMARY:

The subject properties are located in Sunnybrae at 3700 & 3710 Sunnybrae-Canoe Point Road in Electoral Area C, and is located within the Secondary Settlement Area of the Electoral Area 'C' Official Community Plan Bylaw No. 725 (Bylaw No. 725). The owner has made application for a boundary line adjustment subdivision between two lots. New Lot 1 will be serviced by a community water system and an on-site septic system and will be under 1 ha in size. The owner is applying for a Development Variance Permit to waive the Levels of Service requirements in Schedule "A" of Subdivision Servicing Bylaw No. 641, as amended (Bylaw No. 641), to allow the creation of new Lot 1 which is located within the Secondary Settlement Area, proposed to be serviced by an on-site septic system, and is smaller than 1 ha in size (Lot 1 = 0.837 ha).

VOTING:

 Unweighted
Corporate

☐

 LGA Part 14
(Unweighted)

☒

 Weighted
Corporate

☐

 Stakeholder
(Weighted)

☐
BACKGROUND:

 REGISTERED OWNER:
Linda Franklin

 AGENT:
Mark Wilson, Franklin Engineering Ltd.

 ELECTORAL AREA:
C

LEGAL DESCRIPTIONS:

Lot 1 Sections 2 and 11 Township 21 Range 10 W6M KDYD Plan KAP82925; and,
Lot 2 Sections 2 and 11 Township 21 Range 10 W6M KDYD Plan KAP82925

CIVIC ADDRESSES:

3700 & 3710 Sunnybrae-Canoe Point Road, Sunnybrae

SURROUNDING LAND USE PATTERN:

North = Sunnybrae-Canoe Point Road, Tappen Sunnybrae Fire Hall, Residential

South = Shuswap Lake

East = Rural Residential, Shuswap Lake

West = Residential, Shuswap Lake

CURRENT & PROPOSED USE:

Rural Residential

PARCEL SIZE:

Lot 1 = 0.967 ha

Lot 2 = 0.977 ha

PROPOSED PARCEL SIZE:

New Lot 1 = 0.837 ha

New Lot 2 = 1.107 ha

DESIGNATIONS:

Electoral Area C Official Community Plan Bylaw No. 725

SSA Secondary Settlement Area

RR Rural Residential

ZONE:

Land = N/A

Lakes Zoning Bylaw No. 900

FR1 Foreshore Residential 1

ALR:

0 %

SITE COMMENTS: Staff did not conduct a site visit. According to orthophotos, the waterfront properties are well treed and both lots have a dock; Lot 1 (3700) is vacant and Lot 2 (3710) has a single family dwelling and an accessory building. See "Maps_Plans_DVP641-25" attached.

POLICY:

Electoral Area 'C' Official Community Plan Bylaw No. 725

See "BL725_Policies_DVP641-25" attached.

Subdivision Servicing Bylaw No. 641

Part 5 Servicing Requirements for Subdivisions

Servicing Requirements

5.1 Prior to subdivision approval, the owner must provide:

c) works and services not within a highway within a proposed subdivision to the level described in Schedule "A" of this bylaw;

Schedule "A" Levels of Service

All properties in the Secondary Settlement designation must be serviced by a Water Supply System and a Community Sewer System, if the proposed lot size is smaller than 1 ha. If a proposed lot is 1 ha or larger, an On-site Sewage disposal system may be utilized if approved pursuant to the Public Health Act.

FINANCIAL:

There are no financial implications to the CSRD with regard to this application.

KEY ISSUES/CONCEPTS:

The owner has applied for a boundary line adjustment subdivision to create a 0.837 ha lot and a 1.105 ha lot for "better road access to Lot 2." Schedule "A" of Bylaw No. 641 requires all new lots within the Secondary Settlement area that are less than 1 ha in size connect to a community water system and a community sewer system; this is not possible as the community of Sunnybrae does not currently have a community sewer system. The owner has applied for a Development Variance Permit to vary Schedule "A" requirements. Staff is recommending that approval of issuance be subject to the registration of a suitably worded Section 219 covenant requiring that new Lot 1 shall connect to a community sewer system when it is available.

Both properties will be serviced by a community water system (CSRD Sunnybrae Waterworks) and individual on-site septic systems (protected by covenant from a previous subdivision). Staff is in receipt of a letter from Franklin Engineering dated September 12, 2016 stating that "sufficient space with level ground that is suitable for dispersal will still be present on each lot after the proposed boundary adjustment. No changes to the existing septic systems or the covenants in place will be necessary to ensure [Interior Health] requirements are still met." See "Franklin_Engineering_Ltd_letter_2016-09-12_DVP641-25" attached.

SUMMARY:

The owner is requesting that the Board consider waiving the requirements of Schedule "A" - Levels of Service that all new parcels created by subdivision within the Secondary Settlement Area, serviced by an On-site Sewage Disposal System, and smaller than 1 ha in size, for new Lot 1 only.

Staff is recommending issuance of DVP641-25 for the following reasons:

- Interior Health has no objections to the subdivision;
- both lots will be serviced by a community water system;
- Franklin Engineering Ltd. has confirmed that the existing septic systems are adequate for the future and existing residence on each lot and both systems are in good working order;
- the sewage disposal area for Lot 1 is protected by a covenant (LB025564) and the boundary line adjustment subdivision will not reduce the area for the future system; and,
- Registration of a Section 219 covenant will ensure that the new Lot 1 will be serviced by a community sewer system in the future when a system is installed and a connection is available.

IMPLEMENTATION:

If the Board approves issuance of this DVP as recommended, a suitably worded Section 219 covenant will be required regarding future connection to a community sewer system for new Lot 1. After the condition for registration of said covenant has been completed, the owner will continue with the subdivision process, and the DVP will be registered on the title of new Lot 1 when the lot is created.

COMMUNICATIONS:

Property owners and tenants in occupation within 100 m of the subject property were notified of this DVP application by mail, prior to consideration by the Board. If the Board approves issuance of the DVP, the owner will be advised of the Board's decision, and the documentation will be forwarded to Land Title Office for registration on the title of new Lot 1.

Advisory Planning Commission C recommended approval of this application.

Interior Health had no objections to this application. See "Interior_Health_comments_2017-04-24_DVP641-25" attached.

DESIRED OUTCOMES:

That the Board endorse staff recommendation.

BOARD'S OPTIONS:

1. *Endorse the Recommendation.*
2. *Deny the Recommendation.*
3. *Defer.*
4. *Any other action deemed appropriate by the Board.*

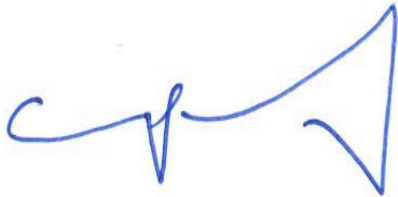
LIST NAME OF REPORT(S) / DOCUMENT(S) AVAILABLE FROM STAFF:

1. Electoral Area 'C' Official Community Plan Bylaw No. 725
2. Subdivision Servicing Bylaw No. 641, as amended
3. Advisory Planning Commission C Meeting minutes from April 24, 2017
4. Application

Report Approval Details

Document Title:	2017-06-15_Board_DS_DVP641-25_Franklin.docx
Attachments:	<ul style="list-style-type: none"> - DVP641-25.pdf - BL725_Policies_DVP641-25.pdf - Franklin_Engineering_Ltd_letter_2016-09-12_DVP641-25.pdf - Interior_Health_comments_2017-04-24_DVP641-25.pdf - Maps_Plans_DVP641-25.pdf
Final Approval Date:	Jun 5, 2017

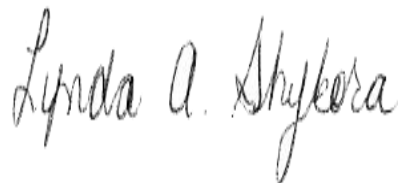
This report and all of its attachments were approved and signed as outlined below:



Corey Paiement - May 24, 2017 - 12:16 PM



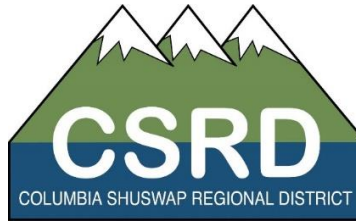
Gerald Christie - May 30, 2017 - 8:56 AM



Lynda Shykora - May 30, 2017 - 9:29 AM



Charles Hamilton - Jun 5, 2017 - 11:09 AM



DEVELOPMENT VARIANCE PERMIT NO. 641-25

1. OWNER: Lot 1 & 2, Plan KAP82925: Linda Franklin
3710 Sunnybrae Canoe Point Road
Tappen BC V0E 2X1
2. This permit applies only to the lands described below:

Lot 1, Sections 2 and 11, Township 21, Range 10, West of the 6th Meridian, Kamloops
Division Yale District, EPP _____ (PID _____),
which the parent properties are more particularly shown outlined in bold on the map
attached hereto as Schedule 'A'.
3. The Subdivision Servicing Bylaw No. 641, is hereby varied as follows:

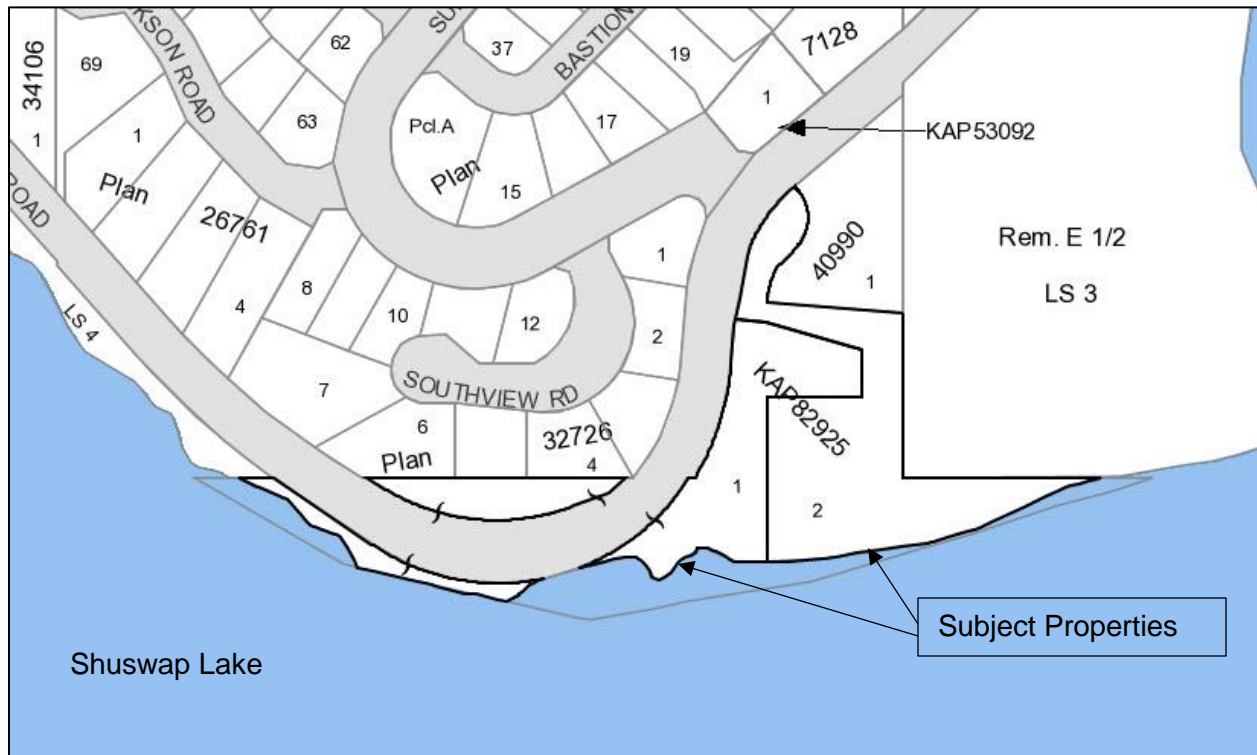
Schedule 'A' – Levels of Service, Minimum Parcel Size for new subdivisions within a
Secondary Settlement Area where not serviced by both a Community Water System and
a Community Sewer System is varied from 1.0 ha to a minimum of 0.837 ha for new Lot
1, EPP _____ of the proposed 2 lot boundary adjustment subdivision, as shown on
Schedule 'B'.
4. This is NOT a building permit.

AUTHORIZED AND ISSUED BY the Columbia Shuswap Regional District Board on the 15th day
of June, 2017.

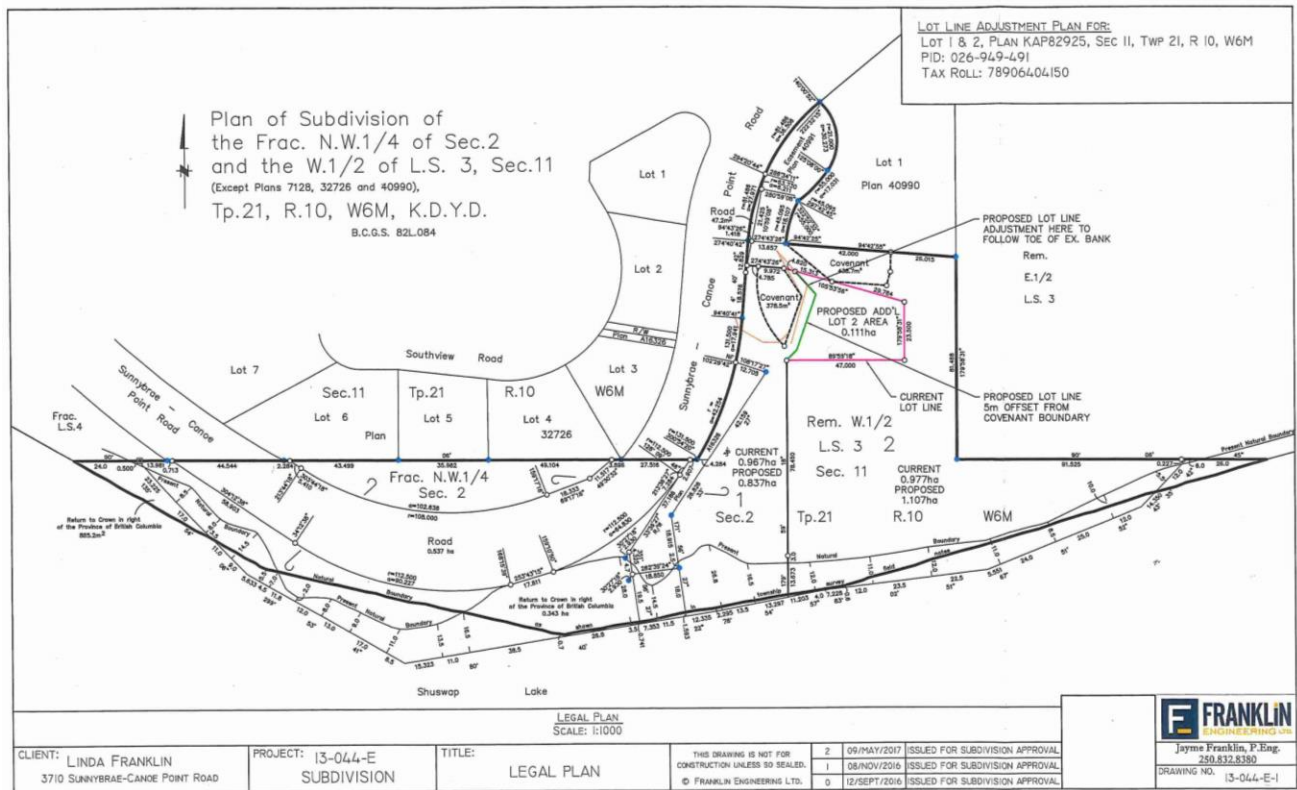
CORPORATE OFFICER

NOTE: Subject to Section 504 of the Local Government Act, if the development of the subject property is not
substantially commenced within two years after the issuance of this permit, the permit automatically lapses.

DVP 641-25
Schedule A



DVP 641-25
Schedule B



Bylaw No. 725 Policies

Section 1. Plan Vision and Framework

1.2 Sustainable Planning Principles

Principle 2 – To maintain large areas of rural landscape throughout the South Shuswap while encouraging gradual, sustainable, moderate and efficient development in the existing settled areas.

Section 2. Protecting Our Lake Community

2.1 Water Quality of Shuswap Lake

2.1.2 Policies

- .1 Regardless of the level or type of treatment, the discharge of liquid waste (human, agricultural, industrial) into Shuswap Lake, White Lake, and other natural waterbodies is unacceptable. In the event that a sewer system is available, properties within the service area will be required to connect to the system.
- .2 Any new commercial, industrial, and institutional development must connect to a community sewage system. Existing residential development must connect to a community sewage system, when capacity is available.

2.3 Shoreline Environment

2.3.2 Policies

- .1 Non-moorage uses other than passive recreation are not acceptable on the foreshore. These include facilities such as beach houses, storage sheds, patios, sun decks, and hot tubs. Additionally, no commercial uses, including houseboat storage or camping, are acceptable on the foreshore.
- .2 Land owners must not alter the natural habitat and shoreline processes unless specifically authorized. The placement of fill and the dredging of aquatic land are not generally acceptable.

Section 3. Growing Gradually and Wisely

3.1 General Land Use Management

3.1.2 Policies

- .3 – Secondary Settlement Areas in the South Shuswap area established on Schedules B and C, as Blind Bay, Sunnybrae, White Lake and Eagle Bay.
- .5 – Development will only be considered in areas with lower environmental values within the Village Centre and Secondary Settlement Areas, thereby allowing for the protection of areas within higher environmental values as well as agricultural lands.

3.4 Residential

3.4.1 Policies

- .1 New residential development will be directed to the Village Centre and Secondary Settlement Areas identified on Schedules B and C. Outside these areas, residential development is discouraged unless co-located with an agricultural use.
- .2 Residential development is subject to the following land use designations, housing forms and maximum densities:

Land Use Designation	Housing Form	Maximum Density
Medium Density (MD)	Detached	5 units/ac (1 unit/0.2 ac) 12 units/ha (1 unit/0.08 ha)
	Semi-detached	8 units/ac (1 unit/0.13 ac) 20 units/ha (1 unit/0.05 ha)
	Townhouse	12 units/ac (1 unit/0.13 ac) 30 units/ha (1 unit/0.03 ha)
Neighbourhood Residential (NR)	Detached, Semi-detached	2 units per 1 acre (1 unit/0.2 ha)
Country Residential (CR)	Detached, Semi-detached	1 unit per 1 acre (0.4 ha)
Rural Residential (RR)	Detached, Semi-detached	1 unit per 2.5 acres (1 ha)
Rural Residential 2 (RR2)	Detached, Semi-detached	1 unit per 5 acres (2 ha)
Small Holdings (SH)	Detached, Semi-detached	1 unit per 10 acres (4 ha)
Medium Holdings (MH)	Detached, Semi-detached	1 unit per 20 acres (8 ha)
Large Holdings (LH)	Detached, Semi-detached	1 unit per 25 acres (10 ha)
Rural Holdings (RH)	Detached, Semi-detached	1 unit per 148 acres (60 ha)

Section 12. Development Permit Areas

12.4 Riparian Areas Regulation Development Permit Area

Electoral Area 'C' OCP designates all areas within 30 m of a watercourse as Riparian Areas Regulation Development Permit Areas. The purpose of this designation is to protect the natural environment, its ecosystems and biological diversity. A Development Permit may be issued when the following guidelines have been met:

- Assessment by a Qualified Environmental Professional (QEP) in accordance with the Riparian Areas Regulation established by the Provincial and Federal Governments; and,
- Provincial notification that a QEP has submitted a report certifying that he or she is qualified to carry out the assessment, that the assessment methods have been followed, and provides in their professional opinion that a lesser setback will not negatively affect the functioning of a watercourse or riparian area and that the criteria listed in the Riparian Areas Regulation has been fulfilled.

12.4.5.5 – Development requiring a Development Permit shall include, but may not be limited to, any of the following activities associated with or resulting from residential, commercial or industrial activities, subject to local government powers under the Local Government Act:

j. Subdivision as defined in the Land Title Act, and including the division of land into 2 or more parcels within 30 m of a watercourse.

Subdivision Servicing Report

Linda Franklin, 3700 & 3710 Sunnybrae Canoe Point Road
Lot 1 & 2, Plan KAP82925, Sec 11, Twp 21, R10, W6M KDYD

Sept 12, 2016

Prepared for submission to:

Interior Health Authority – Salmon Arm Health Centre
851 – 16th St. NE
Salmon Arm, BC
V1E 4N7

September 13, 2016

Dear Interior Health Authority,

The following document is a report of Franklin Engineering's findings regarding on-site servicing capability for the proposed boundary adjustment of the properties described below. The subject properties are located in Electoral Area 'C' of the Columbia Shuswap Regional District (CSRD).

Lot information

Address: 3700 & 3710 Sunnybrae Canoe Point Road

Legal Description: Lot 1 & 2, Plan KAP82925, Sec 11, Twp 21, R10, W6M KDYD

PID: 026-949-481 (3700) & 026-949-491 (3710)

MOT File: #2016-01028

Written Statement

In accordance with the Interior Health Authority's *Subdivision Report Criteria*, we have assessed the above noted properties and determined that they are feasibly serviced and suitable for boundary adjustment, according to the attached plans.

Report prepared by,



Mark Wilson

Authorized by,



PROFESSIONAL
ENGINEER
J. FRANKLIN
34134
BRITISH COLUMBIA

Jayme Franklin P.Eng

PROJECT BACKGROUND

Introduction and Contact Information

Franklin Engineering was retained by Linda Franklin to prepare this Subdivision Report for her properties at 3700 & 3710 Sunnybrae Canoe Point Road, to the north of Salmon Arm on the Shuswap Lake. The owner's intention is to adjust the boundary line between the two lots to remove an awkward panhandle and create a more logical division.

Owner's Contact Information:

Linda Franklin
3710 Sunnybrae Canoe Point Road
Sunnybrae, BC, V0E 2X1
250-832-8380

Our contact information:

Franklin Engineering Ltd.
420A 4th St NE, Box 2590
Salmon Arm, BC V1E 4R5
250-832-8380

Purpose of this Report

This report represents the findings of site investigations which demonstrate septic serviceability that meets Interior Health Authority requirements. It is provided to assist IHA in providing comments to MOT regarding the proposed boundary adjustment.

PROPERTY CHARACTERISTICS

General Site Information

The subject properties lie to the north of Salmon Arm in Sunnybrae, BC. The lots are directly on the shore of Shuswap Lake. They are lightly treed and slope gently toward the lake. 3710 currently has a house that is serviced by an existing septic system. 3700 has a permitted septic system in place for future construction.

Wells and Drinking Water

Domestic water on the lots is provided by the Sunnybrae Community Water System. Though this system is currently under a boil water advisory due to being previously abandoned, it has received \$1.7 million in federal funding this year from the Gas Tax General Strategic Priorities fund that will be used for upgrades to the system, including a new deep water intake, treatment plant, pump building, UV disinfection system, chlorination system, emergency power, and remote monitoring system. These upgrades will bring the water system well above IHA requirements.

Surface Water, Breakout Points, and other Topographic Limitations

Shuswap Lake is directly to the southeast of the lots. The septic systems are in accordance with the restrictions in the SPM table II-19 with regards to setbacks from the lake. There are no surface water bodies on either of the lots, and there are no significant areas with greater than 15% slope.

Existing Septic Systems

There is an existing septic disposal system on each lot with a septic tank and dispersal field. We have provided along with this report a Performance Inspection Report for the systems as well as the existing system permits. As stated in the aforementioned inspection report, the systems conform to IHA and SPM requirements.

Suitable Locations for Type 1 Septic Disposal

Based on the above listed site constraints and the locations of existing buildings, we have determined that the areas held in existing septic covenants on the properties are suitable for disposal of septic effluent. These areas are indicated on the attached site plan.

The following criteria apply to all of the covenanted areas as marked on the plan:

- Slope: Identified areas are under 15% slope.
- Breakout Points: All areas are >7.5m from potential breakout points.
- Water: Shuswap Lake is >30m from all potential disposal areas.
- Floodplain: The lot lies outside the 20-year flood plain. New septic systems shall be installed away from areas at risk of erosion under extreme weather.
- Wells: There are no wells on the subject properties.
- Covenants/Easements/Rights of Ways: Section 219 Septic Covenants are already in place for the proposed system areas. There are no easements or ROWs that will conflict with the proposed areas.

SOILS INVESTIGATION

Soils Investigation Program

The identified sewerage disposal areas were investigated for their soil structure and texture, to determine suitability for on-site effluent disposal. Soils characteristics are based on previous septic permit investigations.

Soils Characteristics:

- 0mm – 50mm – Top Soil, organics, roots of trees and grasses, loose, dark, damp.
- 50mm – 1200mm+ – Sandy loams of a fair structure and consistence category, loose, dark brown, lots of cobbles, damp.

Avg. Slowest Percolation rate (3700): 24.5 min/in

Avg. Slowest Percolation rate (3710): 24 min/in

Soils Classification:

- Based on soils structure a hydraulic loading rate of 23 L/m²/day can be concluded for this site.

Soils Summary

There are soils suitable for septic infiltration on the proposed lot. The subsurface is generally characterized by topsoil above sandy loam soil. No ground water or signs of a Seasonal High Water Table were observed to a depth of 1.2m in any prior investigations.

With reference to Tables II-21 and II-22 in the BC Sewerage System *Standard Practice Manual* V3, a hydraulic loading rate of 23 L/m²/day can be applied to all areas investigated.

- Water Table: > 1.2m vertical separation, no water table observed.
- Rock/Limiting Layer: No limiting layer reached in any test pit, although boulders and cobbles are present
- Hydraulic Loading Rate: 23 L/m²/day

SEPTIC SERVICING REQUIREMENTS

On-Site Disposal Criteria

Using the preceeding information, we can determine a suitable size for a Type 1 trench dispersal field that will sustainably serve existing buildings or a typical 4-bedroom house, as per the Interior Health Authority *Subdivision Report Criteria*.

Discharge Area Identification

Typical values of 1600 LPD per household, per current standard practice, and hydraulic loading rate of 23 L/m²/Day are used to determine the appropriate sizing for a trench field area.

To provide enough area for this configuration, as typical for a type 1 trench dispersal system, the following field area is indicated:

- 25.5m x 5.5m = 140 m² per field

As the existing septic covenants are 378.5m² (4700), and 438.7m² (4710), there is ample area within the covenants to locate both primary and backup dispersal field areas with setbacks.

Septic tanks and pump chambers are to be located adjacent to the proposed field location, to allow for gravity outfall. Detailed design and IHA filing must be completed following standard practices if future construction is ever planned.

The attached site plan demonstrates the potential location of septic field areas within the existing septic covenants.

SUMMARY AND KEY FINDINGS

Key Findings: Lot Characteristics and Limitations

Sufficient space with level ground that is suitable for dispersal will still be present on each lot after the proposed boundary adjustment. No changes to the existing septic systems or the covenants in place will be necessary to ensure IHA requirements are still met.

Summary of Septic Servicing Feasibility

The investigation has shown that both lots can still be feasibly serviced by Type 1 septic trench dispersal after the proposed boundary adjustment.



PO Box 2590, 420A 4th Street NE
Salmon Arm, BC, V1E 4R5
Phone 250.832.8380

Clare Audet, Environmental Health Officer
Interior Health Authority c/o Salmon Arm Health Unit
851 16th St. NE.
Salmon Arm, BC V1E 4N7

September 12, 2016

RE: SEPTIC PERFORMANCE INSPECTION AT 3710 SUNNYBRAE CANOE POINT ROAD.

At the request of Interior Health, we conducted a **Performance Inspection** of the onsite sewerage system at 3710 Sunnybrae Canoe Point Road on September 12, 2016. The system serves a three bedroom home with an estimated daily flow of 1300L/day.

Description of Sewage System:

The system consists of a 1000 IGAL concrete septic tank and a seepage bed that is approximately 4.3m by 15.5m. The seepage bed is located 171m from the high water mark of Shuswap Lake. All other horizontal setbacks are within standard practice guidelines.

Evaluation of System Condition:

Concrete Septic Tank:

Inspection of the inside of the tank revealed it to be free of leaks and functioning properly. There is no sign of cracking or degradation of the tank walls. The inlet and outlet pipes are in good condition and do not appear to be obstructed. The inlet baffle is properly installed and oriented. There was no scum residue found above the normal operating levels that would indicate a backup since the tank was last pumped.

Seepage Bed:

The seepage bed is an area approximately 4.3m by 15.5m to the north of the residence. The bed area is covered with desirable grass cover and gently sloped to shed surface water. There were no wet areas or other signs of breakout on or below the bed area.

Summary of System Performance

Our inspection found that all components of the system are in good working condition and that wastewater travels through the system in standard fashion. Based on these observations we conclude that the system is operating in the intended manner according to its design.



PO Box 2590, 420A 4th Street NE
Salmon Arm, BC, V1E 4R5
Phone 250.832.8380

Recommendations:

We do not recommend that the owners take any action regarding the septic system at this time. A regular maintenance and service schedule should be followed to ensure continued operation of the system. We have attached standard recommended maintenance and operations guidelines here for convenience.

Conclusions:

This system is adequate to serve the existing residence and is operating normally for its intended design. The components are in good working order and not in need of any repair. If you have any questions about the information contained in this report or the accompanying site plan please contact my office.

Prepared by,

A handwritten signature in black ink, appearing to be 'Mark Wilson'.

Mark Wilson

Reviewed by,

A handwritten signature in blue ink, appearing to be 'Jayme Franklin', is written over a circular professional seal. The seal is blue and contains the text 'PROFESSIONAL ENGINEER' around the top and bottom edges, 'PROVINCE OF BRITISH COLUMBIA' around the middle, and 'J. FRANKLIN # 34134' in the center.

Jayme Franklin, P.Eng



PO Box 2590, 420A 4th Street NE
Salmon Arm, BC, V1E 4R5
Phone 250.832.8380

Recommended Maintenance and Operations Guidelines

1. Surface drainage above the disposal area should always be directed away from system.
2. Do not park, drive, or pile snow on the tank or disposal area.
3. Large animals such as horses and livestock should be kept off the disposal area.
4. Disposal surface area should be seeded with grass, rather than trees or shrubs, to prevent erosion. Grasses should be properly maintained as appropriate during the specific season. Water sparingly, and don't saturate the area with automatic sprinkling.
5. Effluent filter should be cleaned every six (6) Months of usage, or as deemed necessary by maintenance provider.
6. Tank should be pumped out every three to five (3-5) years depending on usage, or as deemed necessary by the maintenance provider.
7. Water conditioners, water softeners, or hot tub water CANNOT be flushed into the system.
8. Try not to stress the system with multiple loads of laundry on one day.
9. Do not use chemical drain cleaners.
10. Practice water conservation by using low flush toilets, water saving faucets and shower heads, dishwashers only when full, repair any leaks, and use biodegradable products whenever possible.
11. Take hazardous wastes to approved disposal centers. Don't allow toxic cleaners or chemicals to enter the system, including left over antibiotics.
12. Don't use your toilet or drains as a trash can. Cooking grease, fats, cigarette butts, disposable diapers, sanitary napkins, hair, plastics, lint, metal, rubber, solvents, coffee/tea grounds and cat litter should be kept out of the wastewater system and disposed of in the garbage.



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Salmon Arm, BC, V1E 4R5
Phone 250.832.8380

Clare Audet, Environmental Health Officer
Interior Health Authority c/o Salmon Arm Health Unit
851 16th St. NE.
Salmon Arm, BC V1E 4N7

September 12, 2016

RE: SEPTIC PERFORMANCE INSPECTION AT 3700 SUNNYBRAE CANOE POINT ROAD.

At the request of Interior Health, we conducted a **Performance Inspection** of the onsite sewerage system at 3700 Sunnybrae Canoe Point Road on September 12, 2016. The system is designed to eventually serve a three bedroom home with an estimated daily flow of 1300L/day. The system is currently not operational as the house has not yet been constructed.

Description of Sewage System:

The system consists of a 800 IGAL concrete septic tank and a seepage bed that is approximately 5.5m by 15.5m. The seepage bed is located 105m from the high water mark of Shuswap Lake. All other horizontal setbacks are within standard practice guidelines.

Evaluation of System Condition:

Concrete Septic Tank:

Inspection of the inside of the tank revealed it no sign of cracking or degradation of the tank walls. The inlet and outlet pipes are in good condition and do not appear to be obstructed. The inlet baffle is properly installed and oriented. As the tank has never been in operation there is no residue to inspect.

Seepage Bed:

The seepage bed is an area approximately 5.5m by 15.5m to the north of the eventual location of the residence. The bed area is covered with desirable grass cover and gently sloped to shed surface water. There were no wet areas or other signs of breakout on or below the bed area.

Summary of System Performance

Our inspection found that all components of the system are in good working condition and that when commissioned the system should allow wastewater to pass through in a standard fashion. Based on these observations we conclude that the system will operate in the intended manner according to its design.



PO Box 2590, 420A 4th Street NE
Salmon Arm, BC, V1E 4R5
Phone 250.832.8380

Recommendations:

We do not recommend that the owners take any action regarding the septic system at this time. Once commissioned, a regular maintenance and service schedule should be followed to ensure continued operation of the system. We have attached standard recommended maintenance and operations guidelines here for convenience.

Conclusions:

This system is adequate to serve the eventual residence and will operate normally for its intended design. The components are in good working order and not in need of any repair. If you have any questions about the information contained in this report or the accompanying site plan please contact my office.

Prepared by,

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Mark Wilson

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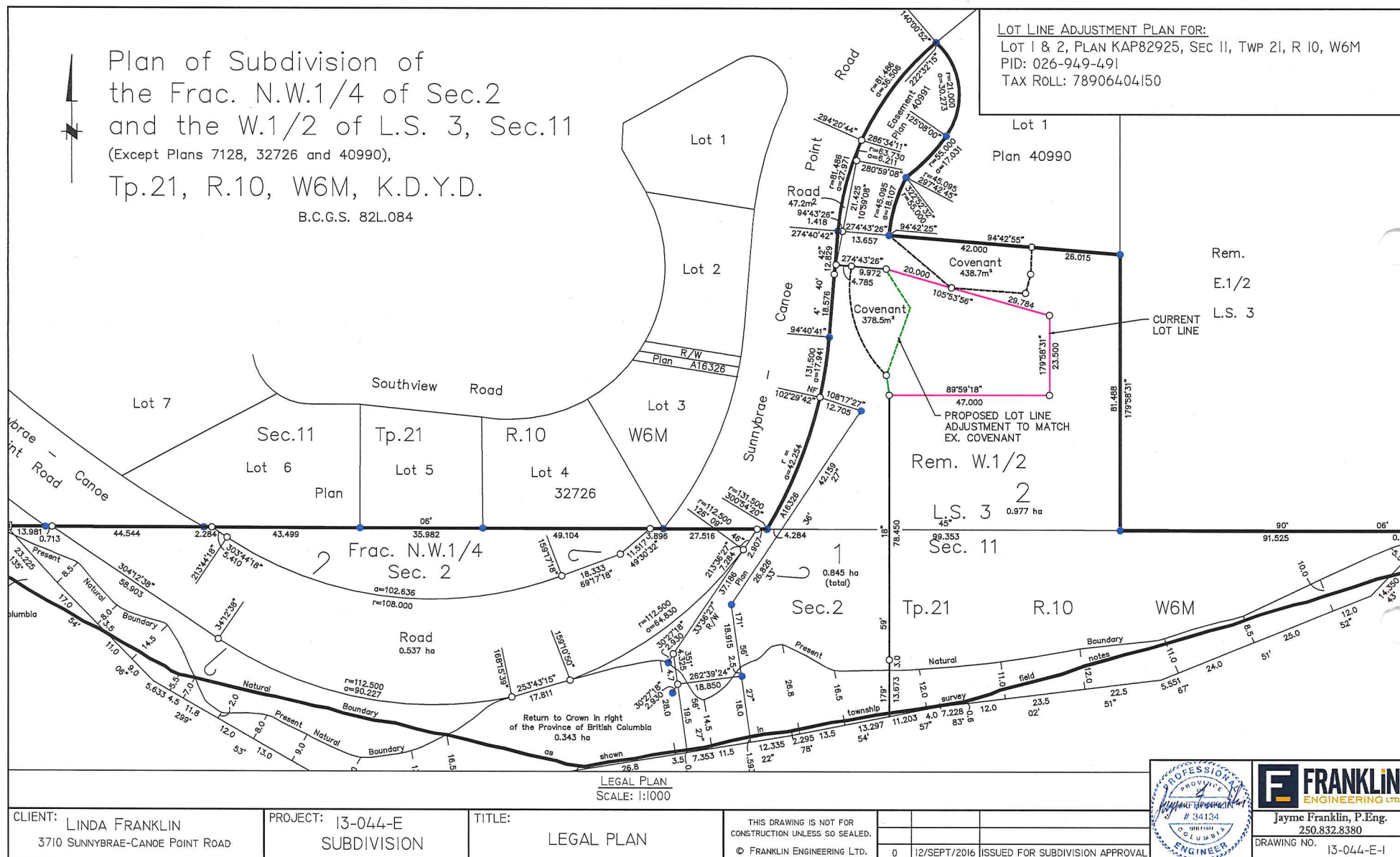
Jayme Franklin, P.Eng

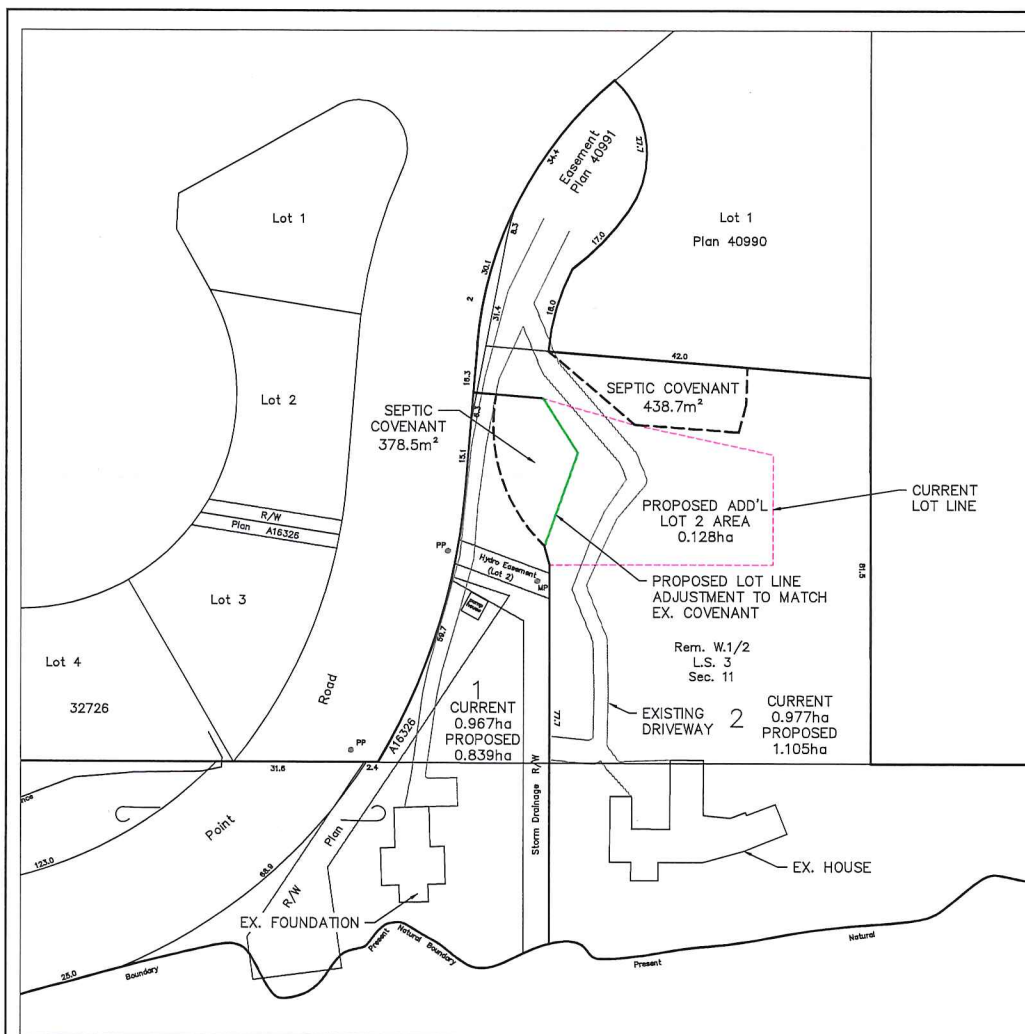


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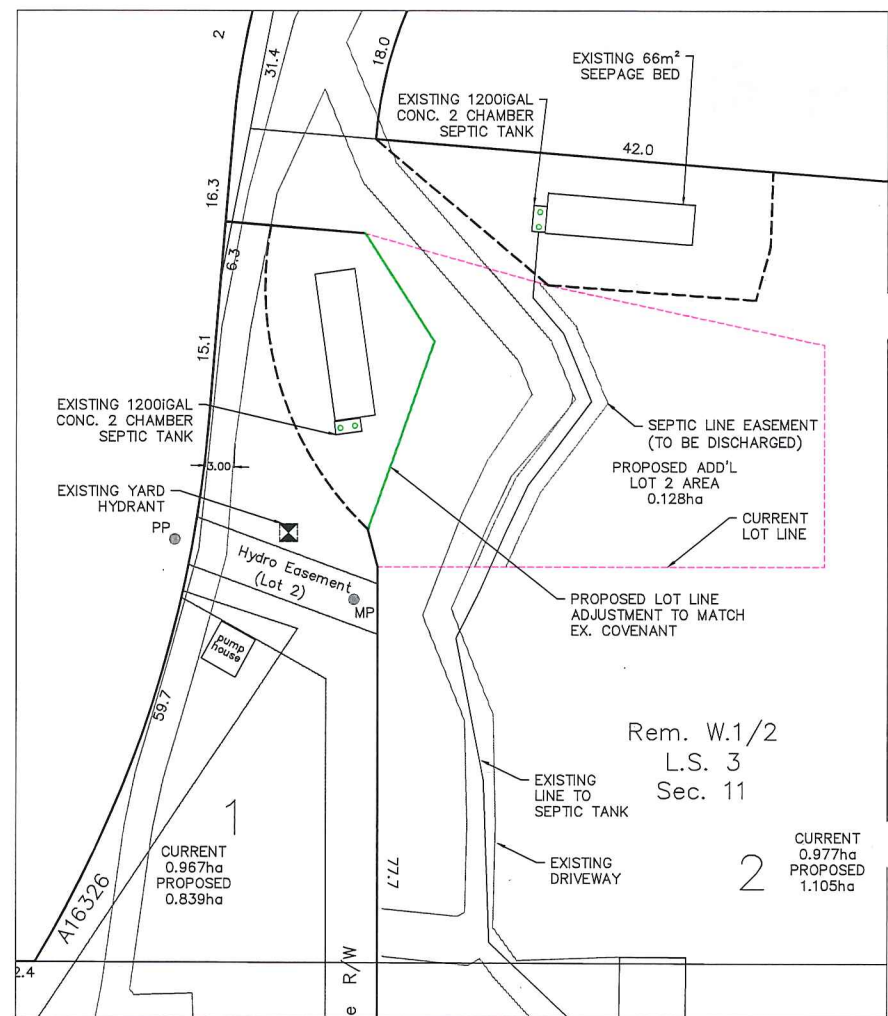
Recommended Maintenance and Operations Guidelines

1. Surface drainage above the disposal area should always be directed away from system.
2. Do not park, drive, or pile snow on the tank or disposal area.
3. Large animals such as horses and livestock should be kept off the disposal area.
4. Disposal surface area should be seeded with grass, rather than trees or shrubs, to prevent erosion. Grasses should be properly maintained as appropriate during the specific season. Water sparingly, and don't saturate the area with automatic sprinkling.
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LOT LINE ADJUSTMENT PLAN
SCALE 1:1000



SEPTIC DETAIL PLAN
SCALE 1:500

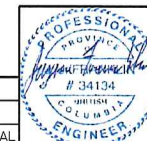
CLIENT: LINDA FRANKLIN
3710 SUNNYBRAE-CANOE POINT ROAD

PROJECT: 13-044-E
SUBDIVISION

TITLE:
LOT LINE ADJUSTMENT PLAN

THIS DRAWING IS NOT FOR
CONSTRUCTION UNLESS SO SEALED.
© FRANKLIN ENGINEERING LTD.

0	12/SEPT/2016	ISSUED FOR SUBDIVISION APPROVAL
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FRANKLIN
ENGINEERING LTD.
Jayme Franklin, P.Eng.
250.832.8380
DRAWING NO. 13-044-E-2


COLUMBIA SHUSWAP REGIONAL DISTRICT

P.O. Box 978 SALMON ARM, BC V1E 4P1

Telephone: 1-250-832-8194 Fax: 1-250-832-3375

Staff Contact: Jennifer Sham
jsham@csrd.bc.ca

DVP No. 641-52

DATE: 2017-04-06

RESPONSE SUMMARY

☐ Approval Recommended for Reasons
Outlined Below

☐ Interests Unaffected by Bylaw

☐ Approval Recommended Subject to
Conditions Below

☐ Approval not Recommended Due
To Reasons Outlined Below

☒ No Objections

The Development Variance Permit is to vary the levels of service requirements in the Subdivision Servicing for a parcel under 1 hectare in size.

Interior Health has reviewed this proposal with respect to the change in the existing land use. The parcel was approved as an existing 2 parcel development with land title covenant that protect the sole area for onsite sewerage dispersal.

The lot line adjustment should not affect the sustainability of the parcels for onsite sewerage dispersal.

Signed By: 

Title Environmental Health Officer

Date: April 24,, 2017

Agency Interior Health

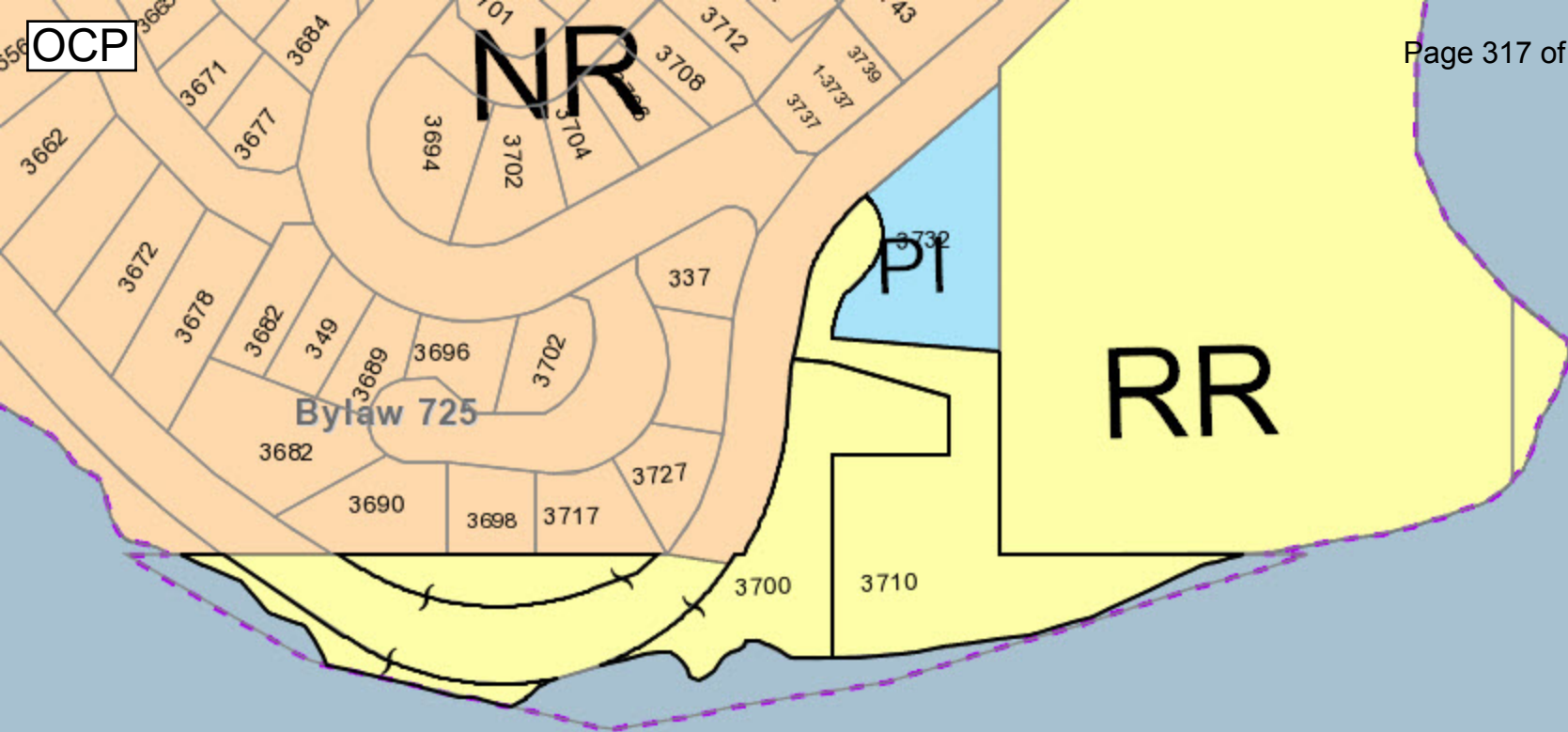
Location

Page 316 of 460



Shuswap Lake

Subject Properties



Shuswap Lake



Shuswap Lake



BOARD REPORT

TO:
Chair and Directors

File No:	DVP 641-26 PL2017052
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SUBJECT:

Electoral Area E: Development Variance Permit No. 641-26 (Handley)

DESCRIPTION:

Report from Candice Benner, Development Services Assistant, dated May 16, 2017.

2405 and 2485 Samuelson Road, Cambie-Solsqua

RECOMMENDATION:

THAT: in accordance with Section 498 of the Local Government Act, Development Variance Permit No. 641-26, for that part of:

1. Lot 1, Sections 7 and 8, Township 22, Range 7, W6M, KDYD, Plan 18189;
2. The Northeast Quarter of Section 7, Township 22, Range 7, W6M, KDYD, Except (1) The South Half of the South Half of Legal Subdivision 10, (2) Part Included in SRW Plan 15917, and (3) Part Included in Plan 18189 and NEP 22490; and
3. Lot A, Section 7, Township 22, Range 7, W6M, KDYD, Plan NEP 22490,

varying Subdivision Servicing Bylaw No. 641, by waiving the requirement that a surface water source proposed for an Independent On-Site Water System must be included on the List of Eligible Sources, contained in Schedule D of Bylaw No. 641; which will allow:

- Proposed lot 2, EPP68797 to obtain domestic water from Holms Creek and Enquist Spring; and,
- Proposed lot 1 & 3, EPP68797 to obtain domestic water from Holms Creek,

for a proposed subdivision under application No. 2014-06104E,

 be issued this 15th day of June, 2017, subject to receipt of water quality analyses for all subject parcels that meet the requirements of Subdivision Servicing Bylaw No. 641.

SHORT SUMMARY:

The subject property is in the Cambie-Solsqua area of Electoral Area E. The owners have applied for a boundary adjustment subdivision for three lots. Two lots have existing surface water licences for Holms Creek and one lot has an existing licence for Holms Creek and Enquist Spring. Neither of these surface water sources are listed on Schedule D – List of Eligible Sources in Bylaw No. 641 and therefore a Development Variance Permit is required to authorize these water sources for the new lots in order for the subdivision to be approved.

VOTING:

 Unweighted ☐ Corporate

 LGA Part 14 ☒ (Unweighted)

 Weighted ☐ Corporate

 Stakeholder ☐ (Weighted)

BACKGROUND:

REGISTERED OWNERS:
Sally and Dean Handley

ELECTORAL AREA:
E

LEGAL DESCRIPTION:

1. Lot 1 Sections 7 and 8 Township 22 Range 7 W6M KDYD Plan 18189 (PID: 013-140-868);
2. The Northeast Quarter of Section 7 Township 22 Range 7 W6M KDYD Except (1) The South Half of the South Half of Legal Subdivision 10, (2) Part Included in SRW Plan 15917 and (3) Part Included in Plan 18189 and NEP 22490 (PID: 011-987-057); and,
3. Lot A Section 7 Township 22 Range 7 W6M KDYD Plan NEP 22490 (PID: 023-234-253)

PROPOSED PROPERTY SIZES:

Lot 1: 34.9 ha
Lot 2: 19.1 ha
Lot 3: 5.46 ha

CURRENT AND PROPOSED USE:
Rural Residential

DESIGNATION AND ZONE:

Rural Sicamous Land Use Bylaw No. 2000
A Agriculture
R Rural

POLICY:

Subdivision Servicing Bylaw No. 641

Part 8 of Subdivision Servicing Bylaw No 641 (Bylaw No. 641) deals with assessment and demonstration of potable water for independent on-site water systems. Independent On-site Water System is defined as "a Domestic Water System that serves only one *Dwelling Unit*."

Section 8.2 requires that all new parcels created by subdivision must be provided with an Independent On-Site Water System.

Schedule "D" List of Eligible Sources

The provincial Water Stewardship Division produced a list of eligible sources for surface water to the CSRD in a memorandum dated October 21, 2011. The surface water sources on this list have been identified and approved by the province as having sufficient volumes of water to accommodate domestic use sustainably.

Examples of approved water sources listed for Electoral Area E include Eagle River, Malakwa Creek, Craigellachie (Gorge) Creek, Perry River, Trout Lake.

FINANCIAL:

No financial implications to the CSRD.

KEY ISSUES/CONCEPTS:

The owners are going through the boundary adjustment subdivision process and the servicing requirements for Subdivision Servicing Bylaw No. 641 must be met, including proof of an acceptable water source.

Under the existing parcel configuration, the domestic water source for two parcels is Holms Creek and for one lot both Holms Creek and Enquist Spring; neither water source is listed in Schedule "D" – List of Eligible Sources in Bylaw No. 641 as an approved surface water source with the provincial Water Stewardship Division and therefore requires a Development Variance Permit.

The owners have existing domestic water licences for all three parcels that meet the requirements of Bylaw No. 641; they have submitted an application to the province to amend these licences to match the proposed parcel configurations. Prior to CSRD providing final comments for the subdivision application, the owners will be required to provide confirmation that the province will approve the water licence amendments.

The owners are in the process of obtaining water quality analyses for the parcels; prior to CSRD staff providing final comments for the subdivision application, staff will be in receipt of these results and will also require a Section 219 covenant be placed on the titles ensuring provisions of potable water are met for all parcels. If water quality analyses indicate potability concerns, the owners will be required to hire a qualified professional to ensure a water treatment system is feasible for the parcels that ensures the source is potable water and that the covenant reflects this assessment.

SUMMARY:

The property owners have applied for a Development Variance Permit to waive the requirement that the surface water source must be listed in Schedule D – List of Eligible Sources for the subject property. Staff are recommending approval of the Development Variance Permit for the following reasons:

- the owners have current and Ministry approved water licenses for Holms Creek and Enquist Spring that meet the requirements of Bylaw No. 641;
- the owners must meet water quality requirements of Bylaw No. 641 prior to issuance of this DVP;
- the owners must continue to satisfy all requirements of Bylaw No. 641 prior to subdivision completion, including registering a Section 219 covenant on the certificates of title ensuring provisions of potable water are met for all parcels.

IMPLEMENTATION:

If the Board issues DVP641-26, staff will forward the documentation to Land Title Office for registration on the title for all subject parcels.

COMMUNICATIONS:

Property owners and tenants in occupation within 100 m of the subject property were given notification a minimum of 10 days prior to the CSRD Board of Directors considering this application. All interested parties have had the opportunity to provide comments regarding this application prior to the Board Meeting.

DESIRED OUTCOMES:

That the Board endorse staff recommendation.

BOARD'S OPTIONS:

1. *Endorse the Recommendation.*
2. *Deny the Recommendation.*
3. *Defer.*
4. *Any other action deemed appropriate by the Board.*

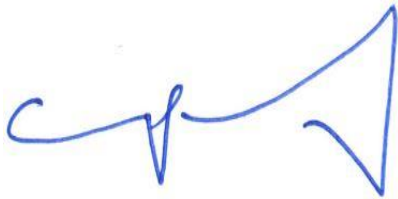
LIST NAME OF REPORT(S) / DOCUMENT(S) AVAILABLE FROM STAFF:

1. Subdivision Servicing Bylaw No. 641, as amended
2. Water Licences

Report Approval Details

Document Title:	2017-06-15_Board_DS_DVP641-26_Handley.docx
Attachments:	- DVP641-26.pdf - Maps_Plans_DVP641-26.pdf
Final Approval Date:	Jun 7, 2017

This report and all of its attachments were approved and signed as outlined below:



Corey Paiement - Jun 6, 2017 - 11:00 AM



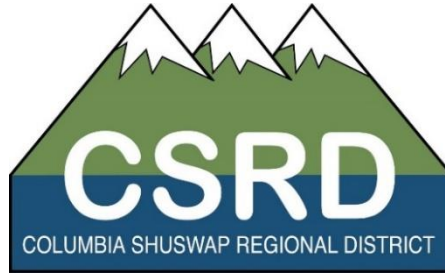
Gerald Christie - Jun 6, 2017 - 12:27 PM

No Signature - Task assigned to Lynda Shykora was completed by assistant Emily Johnson

Lynda Shykora - Jun 6, 2017 - 3:54 PM



Charles Hamilton - Jun 7, 2017 - 8:28 AM



DEVELOPMENT VARIANCE PERMIT NO. 641-26

1. OWNERS: Sally Handley
Dean Handley
Site 15 Comp 7 RR1
Sicamous BC V0E 2V0

As Joint Tenants

2. This permit applies only to the lands described below:

1. Lot 1 Sections 7 and 8 Township 22 Range 7 W6M KDYD Plan 18189 (PID: 013-140-868);
2. The Northeast Quarter of Section 7 Township 22 Range 7 W6M KDYD Except (1) The South Half of the South Half of Legal Subdivision 10, (2) Part Included in SRW Plan 15917 and (3) Part Included in Plan 18189 and NEP 22490 (PID: 011-987-057); and,
3. Lot A Section 7 Township 22 Range 7 W6M KDYD Plan NEP 22490 (PID: 023-234-253) which property is more particularly shown outlined in bold on the Location Map, attached hereto as Schedule 'A'.

3. The Subdivision Servicing Bylaw No. 641, is hereby varied as follows:

By waiving the requirement that a surface water source proposed for an Independent On-Site Water System must be included on the List of Eligible Sources, contained in Schedule D of Bylaw No. 641, for a proposed subdivision under application No. 2014-06104E.

4. Proposed Lots 1 and 3, EPP68797, will obtain domestic water from Holms Creek, and Proposed Lot 2, EPP68797, will obtain domestic water from Holms Creek and Enquist Spring.

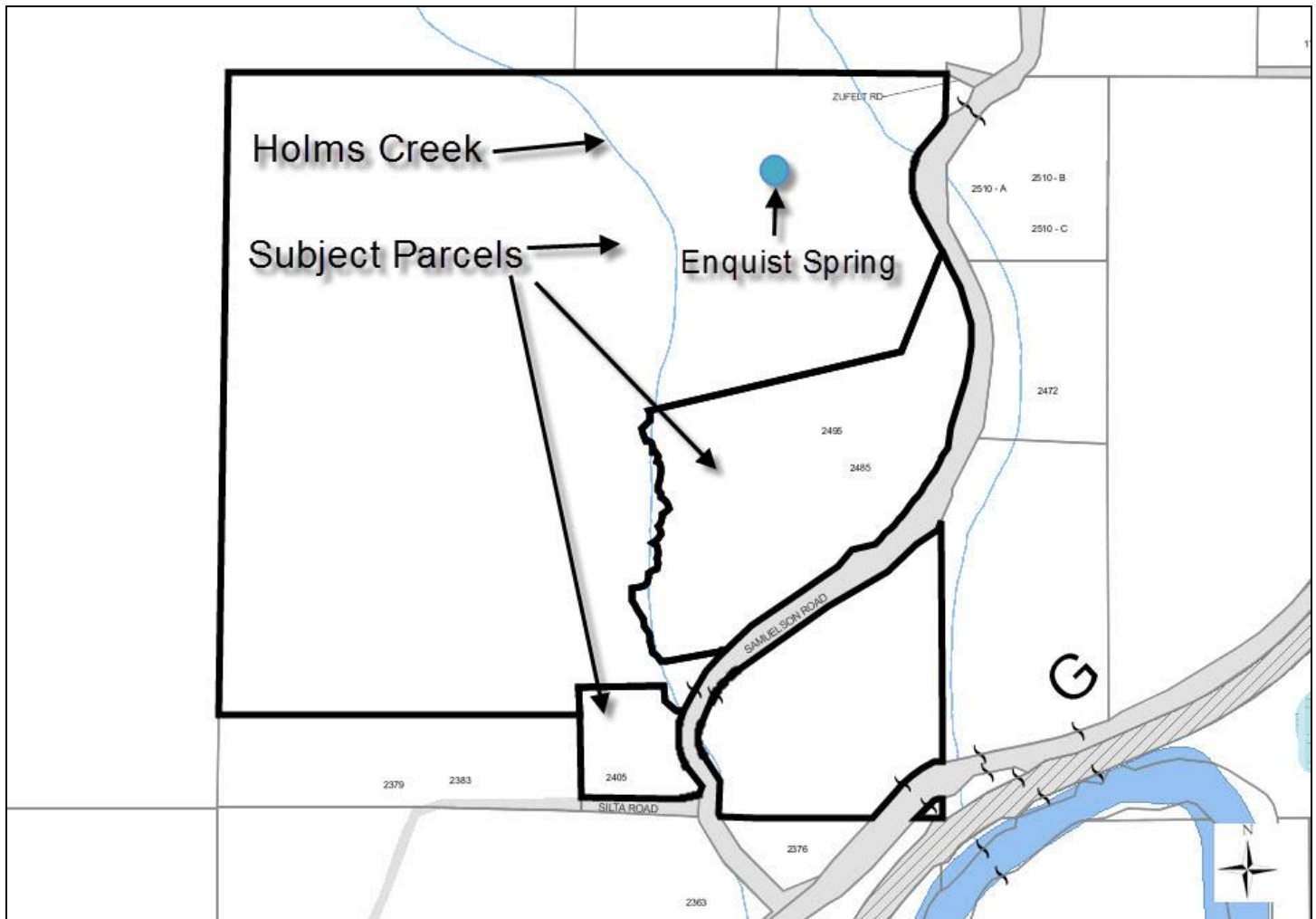
5. This is NOT a building permit.

AUTHORIZED AND ISSUED BY RESOLUTION NO. _____ of the Columbia Shuswap Regional District Board on the _____ day of _____, 2017.

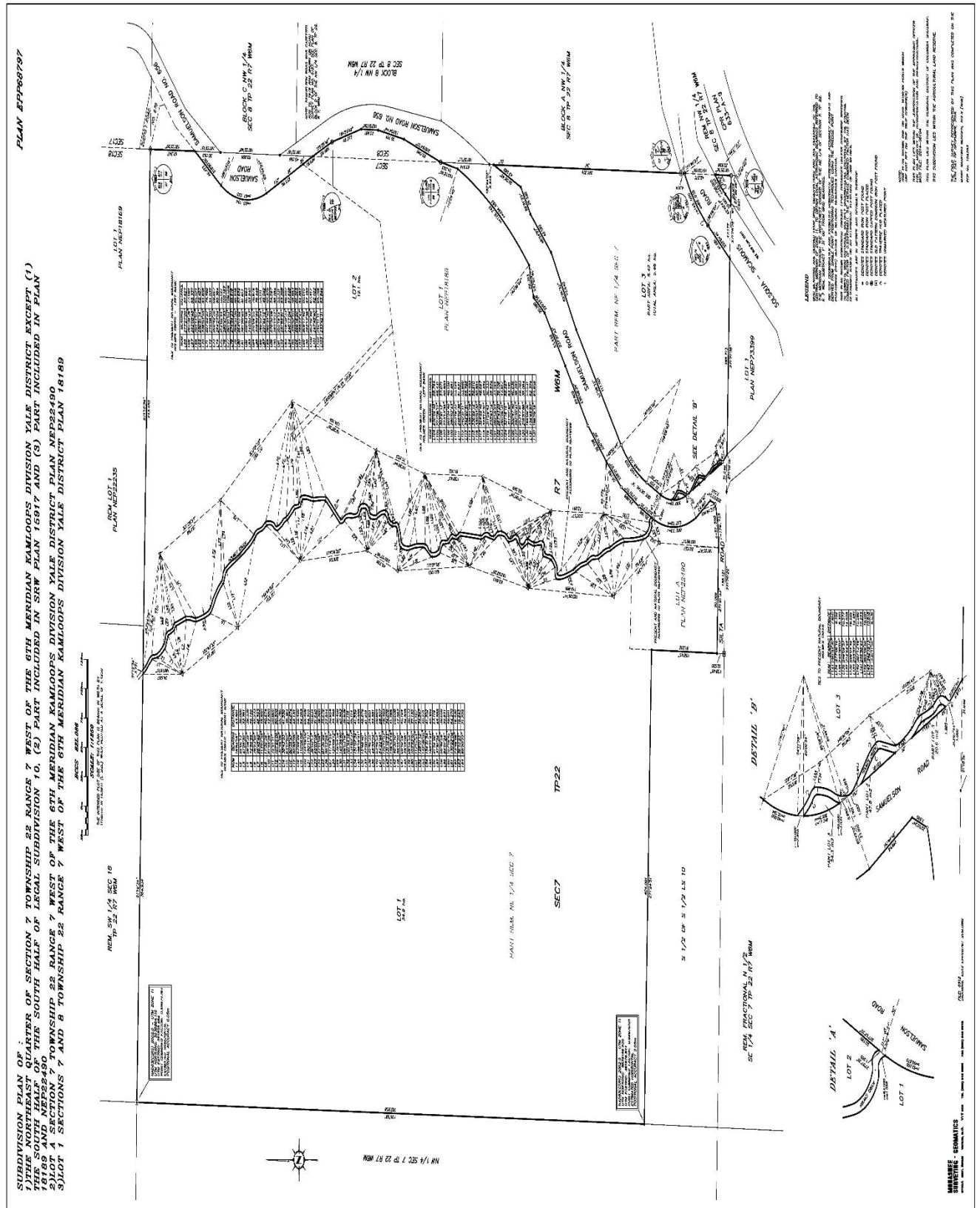
CORPORATE OFFICER

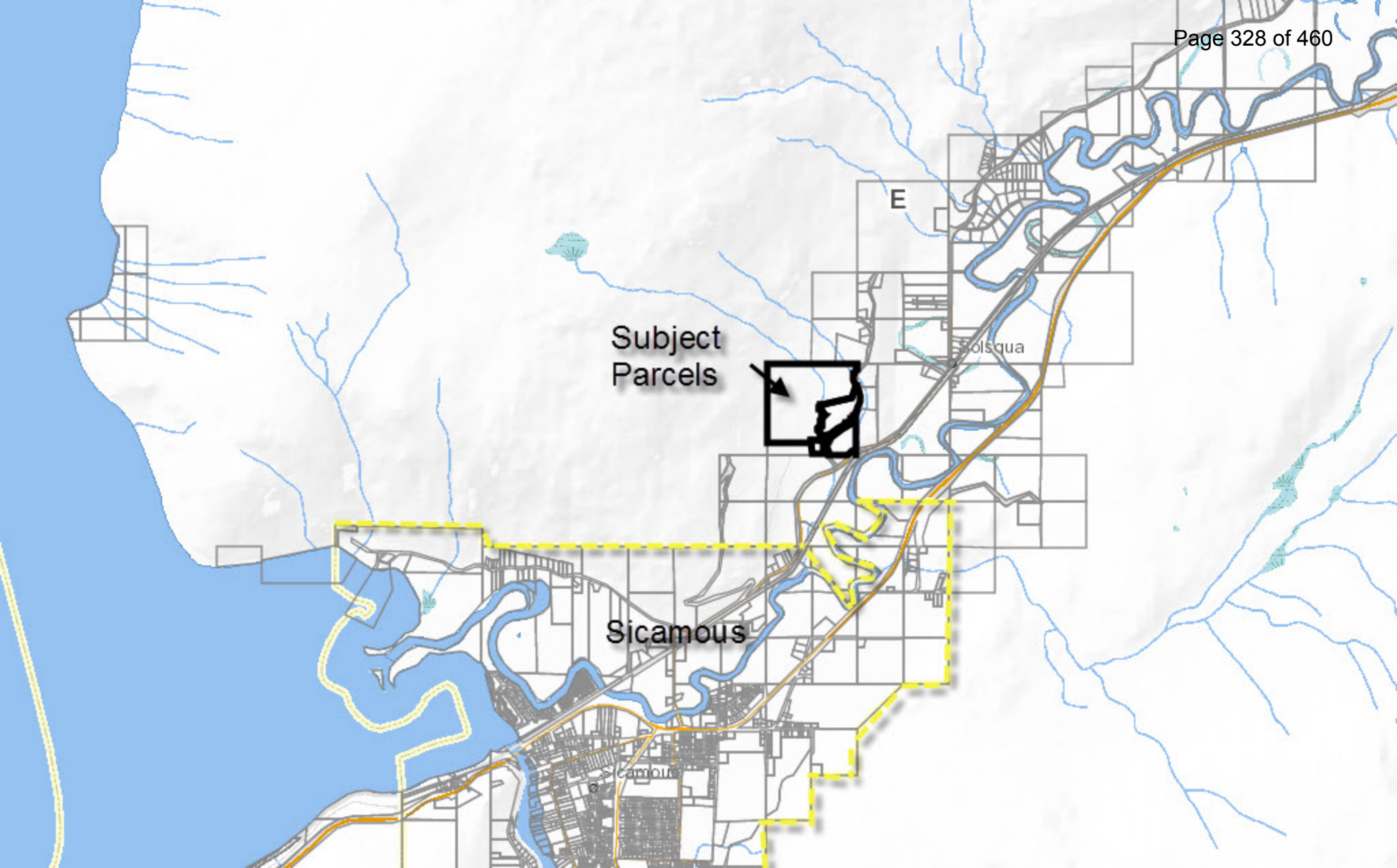
NOTE: Subject to Section 504 of the Local Government Act, if the development of the subject property is not substantially commenced within two years after the issuance of this permit, the permit automatically lapses.

Schedule 'A'
Location Map



Schedule 'B' Proposed Subdivision Plan





Subject
Parcels



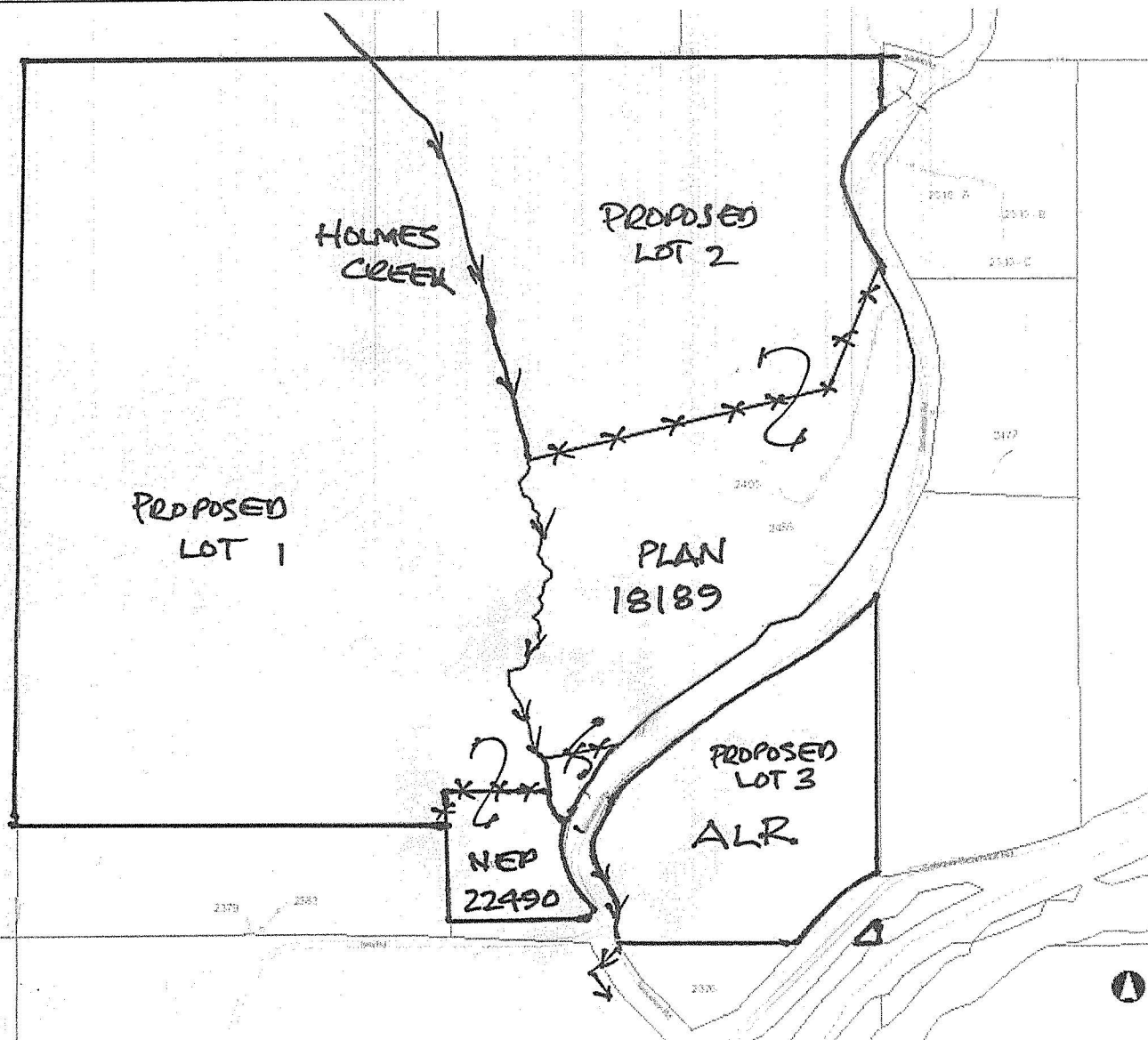
Sicamous

Sicamous





CSRD Property Map



Legend

- ☐ CSRD Boundary Simple
- CSRD Parks
- Hook
- Property Access
- ☐ Property Boundaries

PROPOSED
SUBDIVISION
SAULY & DEAN
HANDLEY
2495 SAMUELSON
ROAD
SICAMOUS
VDE 2VS

LEGEND

- PROPOSED BOUNDARY REMOVAL
- CREEK

September 09, 2014

Scale 1:9,028

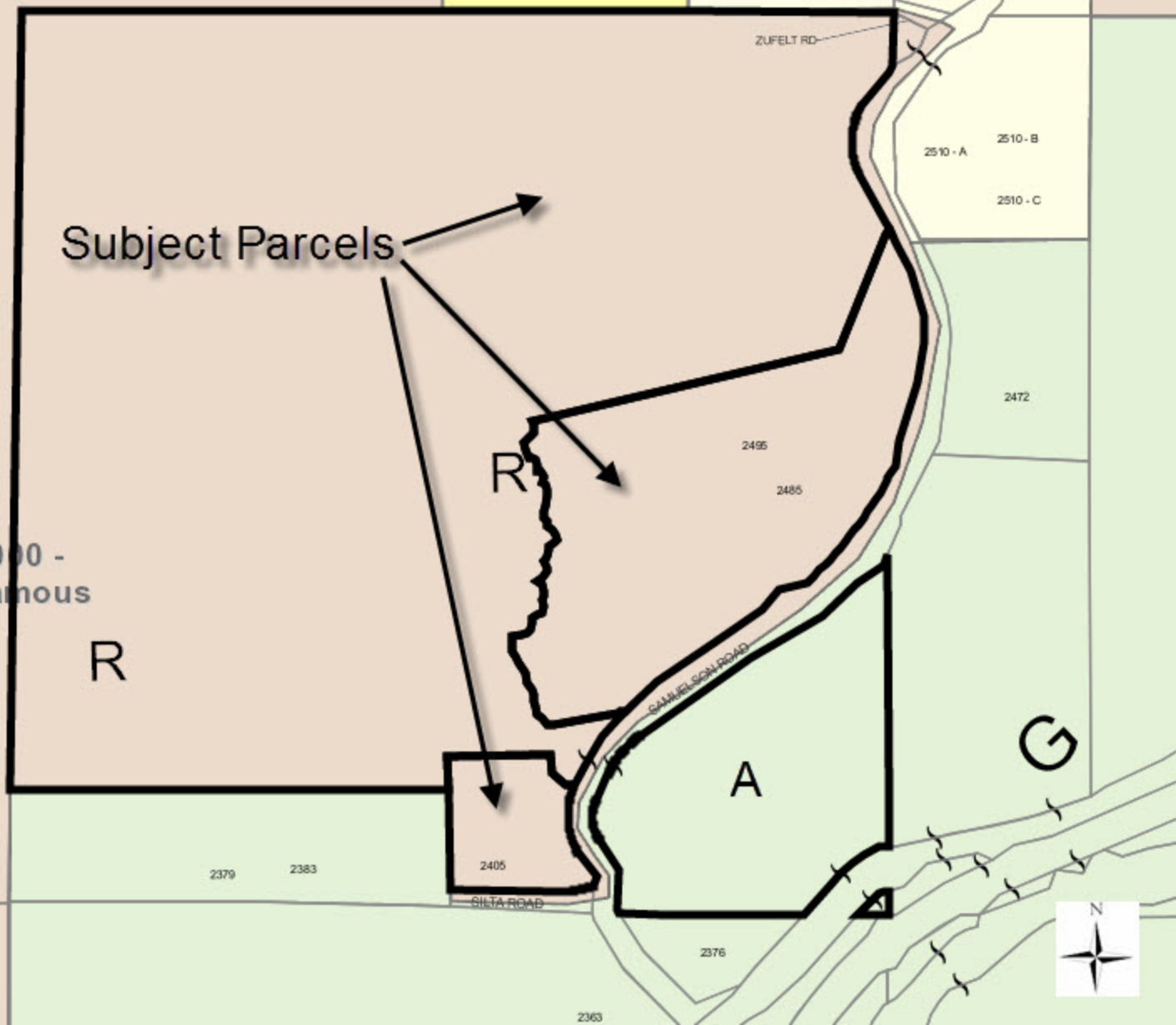
0.5 0 0.23 0.5 Kilometers

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Bylaw 2000 -
Rural Sicanous

Subject Parcels



**SURVEY PLAN CERTIFICATION
PROVINCE OF BRITISH COLUMBIA**

PAGE 1 OF 2 PAGES

By incorporating your electronic signature into this form you are also incorporating your electronic signature into the attached plan and you

(a) represent that you are a subscriber and that you have incorporated your electronic signature to the attached electronic plan in accordance with section 168.73 (3) of the Land Title Act, RSBC 1996 c.250; and

(b) certify the matters set out in section 168.73 (4) of the Land Title Act,
Each term used in this representation and certification is to be given the meaning ascribed to it in part 10.1 of the Land Title Act.

Mark Budgen
7MSXYJ

Digitally signed by
Mark Budgen 7MSXYJ
Date: 2016.12.15
14:29:40 -08'00'

1. BC LAND SURVEYOR: (Name, address, phone number)

Import Profile

Mark Sanford Budgen
3710A - 28th Street

Telephone: 250-545-5990
mbudgen@monasheesurveying.com

Vernon

BC V1T 9X2

☐ Surveyor General Certification [For Surveyor General Use Only]

2. PLAN IDENTIFICATION:

Control Number: **149-497-6348**

Plan Number: **EPP68797**

This original plan number assignment was done under Commission #: **856**

3. CERTIFICATION:

☒ Form 9

☐ Explanatory Plan

☐ Form 9A

I am a British Columbia land surveyor and certify that I was present at and personally superintended this survey and that the survey and plan are correct.

The field survey was completed on:	2016	December	14	(YYYY/Month/DD)	The checklist was filed under ECR#:
The plan was completed and checked on:	2016	December	15	(YYYY/Month/DD)	194283

☒ None ☐ Strata Form S

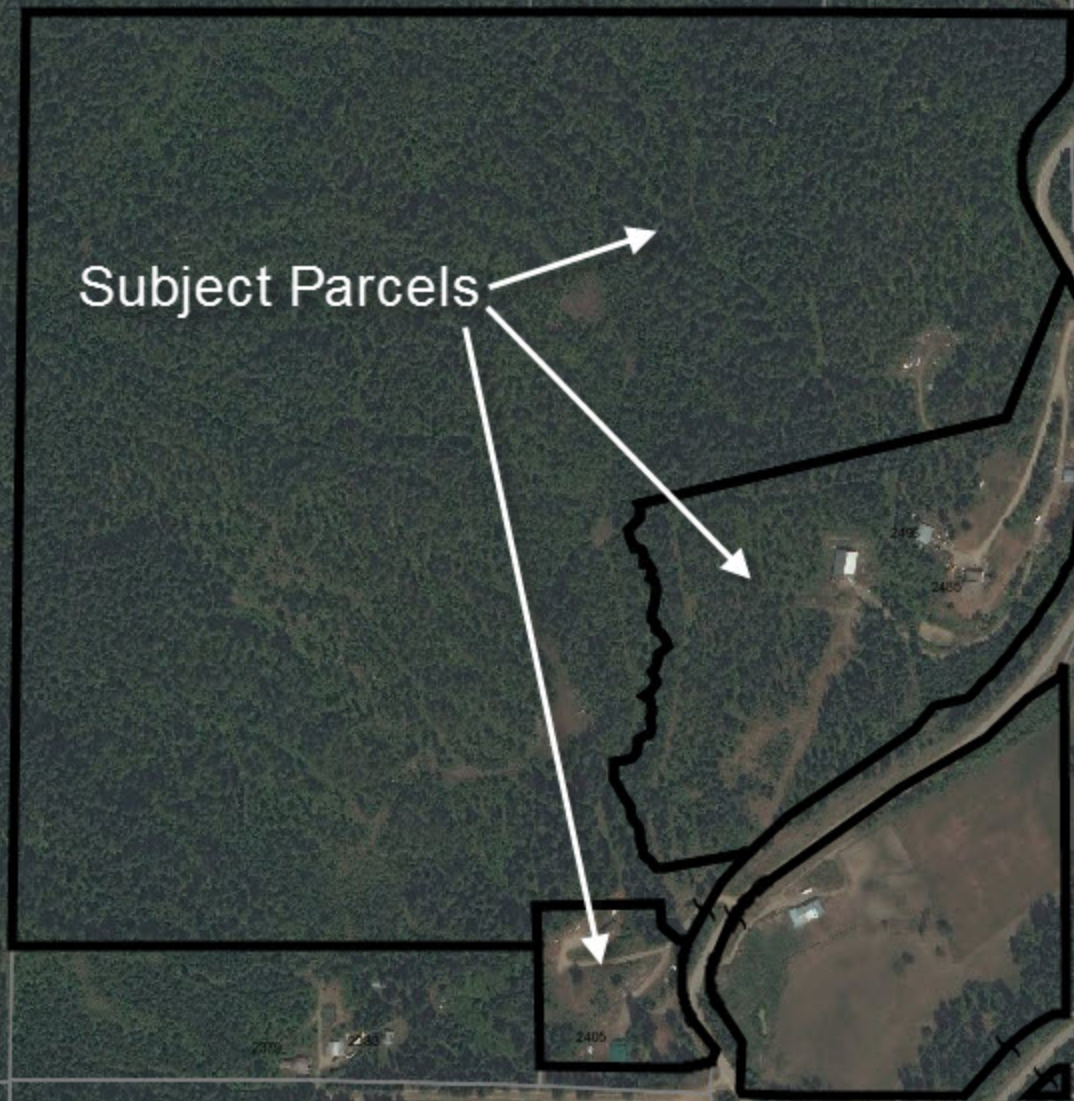
☒ None ☐ Strata Form U1 ☐ Strata Form U1/U2

Arterial Highway ☐

Remainder Parcel (Airspace) ☐

4. ALTERATION: ☐

Subject Parcels





BOARD REPORT

TO:
Chair and Directors

File No:	DVP800-18 PL20140166
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SUBJECT:

Electoral Area F: Development Variance Permit No. 800-18 (Magnavista Estates Ltd.)

DESCRIPTION:

 Report from Jennifer Sham, Planner, dated May 19, 2017.
6471 Lindsay Road, Magna Bay

RECOMMENDATION:

 THAT: in accordance with Section 498 of the Local Government Act, Development Variance Permit No. 800-18 for Lot A Section 13 Township 23 Range 10 W6M KDYD Plan 29439 Except Plans 29668 and 30666 varying the rear parcel setback from 4.5 m to 1.09 m for the steel control bin and vault (components of the water system) located on the subject property, be approved for issuance this 15th day of June, 2017.

SHORT SUMMARY:

The subject property is located in Magna Bay off Lindsay Road and is subject to Electoral Area 'F' Official Community Plan Bylaw No. 830 and Magna Bay Zoning Bylaw No. 800. The agent is requesting a variance to the rear parcel setback for an existing steel control bin and vault which are part of a water system that services the shared interest development. The water system was created in 2010 without the appropriate permits through Interior Health and this is the subject of a bylaw enforcement case.

VOTING:

 Unweighted ☐

 LGA Part 14 ☒
(Unweighted)

 Weighted ☐

 Stakeholder ☐
(Weighted)

BACKGROUND:
REGISTERED OWNER:

Magnavista Estates Ltd. (Shared Interest: Magnavista Land Owners Association)

AGENT:

Dave Cunliffe

ELECTORAL AREA:

F

LEGAL DESCRIPTION:

Lot A, Section 13, Township 23, Range 10, West of the 6th Meridian, Kamloops Division Yale District Plan 29439 Except Plans 29668 and 30666

CIVIC ADDRESS:

6471 Lindsay Road, Magna Bay

SURROUNDING LAND USE PATTERN:

North = Agriculture

South = Residential

East = Rural Residential
 West = Rural Residential, Treed

CURRENT AND PROPOSED USE:
 Residential (Shared Interest)

PARCEL SIZE:
 ~21.77 ha

DESIGNATION:
 Electoral Area 'F' Official Community Plan Bylaw No. 830
 RSC Rural and Resource

ZONE:
 Magna Bay Zoning Bylaw No. 800
 MSR Multi Single Family Residential

Agricultural Land Reserve:
 0%

Site Comments:

A site visit was conducted on May 25, 2011 and again on August 8, 2013. The property is a shared interest development with 43 interests/shares. The water system is located near the north boundary of the property; the steel control bin is located within the rear setback and close to the fence line. A surveyed plan by Andrew Roop, BCLS, confirms the steel control bin is 1.09 m (3.58 ft) from the property line, and the vault is within the 4.5 m rear setback.

POLICY:

Electoral Area 'F' Official Community Plan Bylaw No. 830
 11.4 Rural and Resource Lands (RSC)

Section 13 Development Permit Areas
 Development of the property will require a Hazardous Lands Development Permit (DPA 2 Steep Slope)

Magna Bay Zoning Bylaw No. 800
 MSR – Multi-Single Family Residential
 Permitted uses:

- single family dwelling
- home business
- accessory use

Minimum setback from:

- front parcel boundary = 4.5 m
- interior side parcel boundary = 2 m
- exterior side parcel boundary = 4.5 m
- rear parcel boundary = 4.5 m

FINANCIAL:

There may be financial implications to the CSRD if the DVP is not issued, as this DVP application was the result of bylaw enforcement action.

KEY ISSUES/CONCEPTS:

In 2010, the CSRD was made aware of a water system being constructed, without permits/approval, on the subject property. In February of 2011, the CSRD received a DVP application to vary the rear parcel boundary of the steel control bin. A surveyed plan by Andrew Roop, BCLS, was received in October of 2011 and confirmed that the steel control bin and the vault were both within the rear parcel boundary setback. Since then, staff has been waiting for Interior Health's Public Health Engineer to issue a construction permit for the water system. To date, no construction permit has been issued however, in a letter dated July 15, 2016 from the agent, Mr. Cunliffe confirms that there will be "no change or further development within the 4.5 m rear yard setback as outlined in Magna Bay Zoning Bylaw 800 for properties zoned MSR ... [and] the location plan prepared by Andrew Roop BCLS on October 16, 2011 is still valid." Staff note that if additional buildings or structures are required, additional permits, such as a building permit and a Development Permit (for steep slopes) will be required. Further, if the DVP is issued, any changes to the siting of the water system components must comply with the DVP or a new DVP will be required.

This application was forwarded to Interior Health in January 2017. Interior Health responded that they support the variance and that "Magnavista Estates requires the variance to complete their water system."

SUMMARY:

The agent has applied to vary the rear parcel boundary setback for the siting of the steel control bin and the vault, which are both part of the existing water system for Magna Vista Estates.

Staff recommends issuance of DVP800-18 for the following reasons:

- Interior Health recommends approval; and,
- The steel control bin and vault are necessary components of the water system and their locations are permanent. No other buildings or structures (except the water reservoirs) are located near the bin or vault.

IMPLEMENTATION:

If the Board denies issuance of DVP800-18, Bylaw Enforcement will proceed.

If the Board chooses to issue DVP800-18, the agent will be notified of the Board's decision, and the DVP will be registered on title of the subject property.

COMMUNICATIONS:

Property owners and tenants in occupation within 100 m of the subject property will be given notification a minimum of 10 days prior to the CSRD Board Meeting at which the variance will be considered. All interested parties will have the opportunity to provide comments regarding this application prior to the Board Meeting.

Interior Health recommends approval of issuance of the variance permit.

CSRD Operations Management have no concerns and note that a construction permit from Interior Health will still be required.

DESIRED OUTCOMES:

That the Board endorse staff recommendation.

BOARD'S OPTIONS:

1. *Endorse the Recommendation.*
2. *Deny the Recommendation.*
3. *Defer.*
4. *Any other action deemed appropriate by the Board.*

LIST NAME OF REPORT(S) / DOCUMENT(S) AVAILABLE FROM STAFF:

1. Electoral Area F Official Community Plan Bylaw No. 830
2. Magna Bay Zoning Bylaw No. 800

Report Approval Details

Document Title:	2017-06-15_Board_DS_DVP800-18_Magnavista.docx
Attachments:	<ul style="list-style-type: none">- DVP800-18.pdf- Referral_Agency_Responses_DVP800-18.pdf- Maps_plans_photos_DVP800-18.pdf
Final Approval Date:	Jun 5, 2017

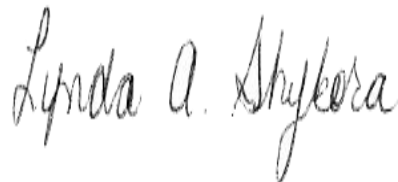
This report and all of its attachments were approved and signed as outlined below:



Corey Paiement - May 24, 2017 - 3:29 PM



Gerald Christie - May 31, 2017 - 2:14 PM



Lynda Shykora - May 31, 2017 - 3:38 PM



Charles Hamilton - Jun 5, 2017 - 10:26 AM



COLUMBIA SHUSWAP REGIONAL DISTRICT

DEVELOPMENT VARIANCE PERMIT NO. 800-18

1. OWNERS: Magnavista Estates Ltd. Inc. No. BC0472903
PO Box 98
Sorrento BC V0E 2W0
2. This permit applies only to the land described below:

Lot A, Section 13, Township 23, Range 10, W6M, KDYD, Plan 29439 Except Plans 29668 and 30666 (PID: 004-318-706),

which property is more particularly shown on the map attached hereto as shown outlined in bold on Schedule A.
3. Section 5.6(2) (d) Minimum setback from rear parcel boundary from 4.5 m to 1.09 m for the existing steel control bin and vault only, on the subject property,

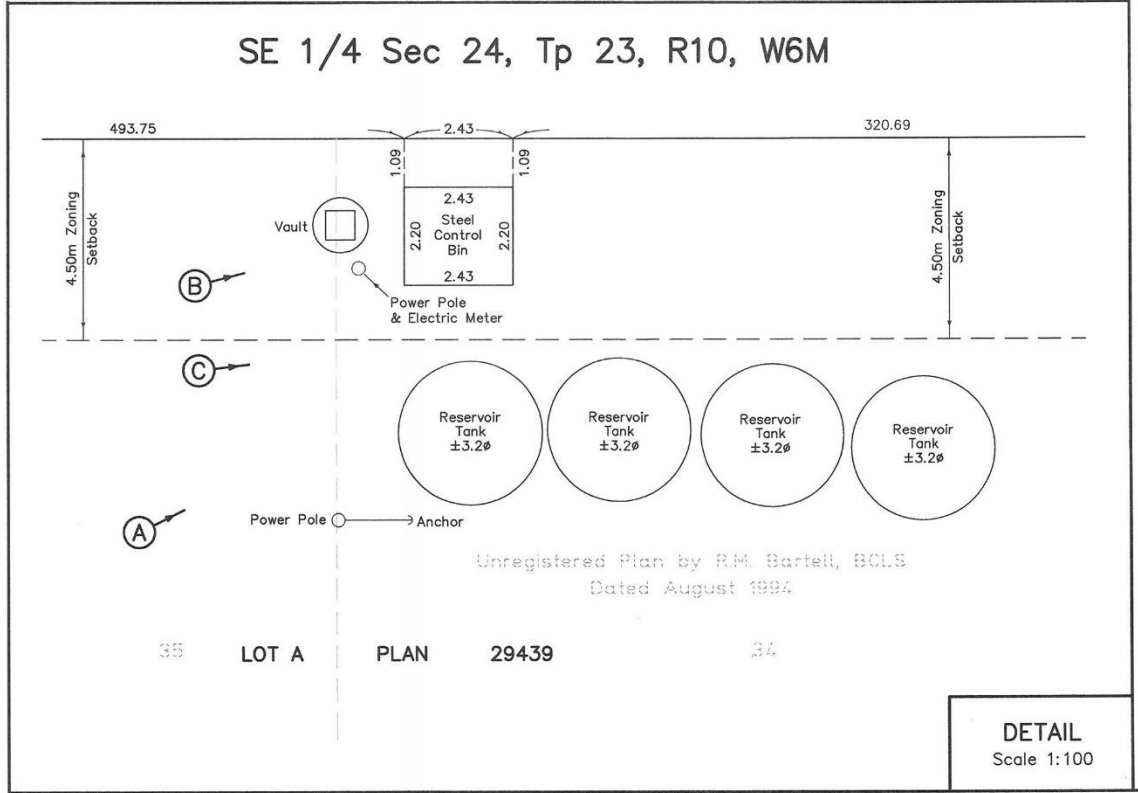
as more particularly shown on the site plan attached as Schedule B.
4. This permit is NOT a building permit.

AUTHORIZED FOR ISSUANCE BY RESOLUTION of the Columbia Shuswap Regional District Board on the 15th day of June, 2017.

CORPORATE OFFICER

NOTE: Subject to Section 504 of the Local Government Act, if the development of the subject property is not substantially commenced within two years after the issuance of this permit, the permit automatically lapses.



DVP 800-18
Schedule B


COLUMBIA SHUSWAP REGIONAL DISTRICT

P.O. Box 978 SALMON ARM, BC V1E 4P1

Telephone: 1-250-832-8194 Fax: 1-250-832-3375

Staff Contact: Jennifer Sham
jsham@csrd.bc.ca

DVP No: 800-18

DATE: 2017-01-05

RESPONSE SUMMARY

☒ Approval Recommended for Reasons
Outlined Below

☐ Interests Unaffected by Bylaw

☐ Approval Recommended Subject to
Conditions Below

☐ Approval not Recommended Due
To Reasons Outlined Below

☐ No Objections

The owners are proposing to vary the rear parcel boundary setback for the siting of the steel control bin and the vault, which are both part of the existing water system for Magna Vista Estates.

Interior Health supports the variance. Magnavista Estates requires the variance to complete their water system.

Please contact our office if you have any questions or concerns.

Signed By: 

Title Environmental Health Officer

Date: January 18, 2017

Agency Interior Health


COLUMBIA SHUSWAP REGIONAL DISTRICT

P.O. Box 978 SALMON ARM, BC V1E 4P1
 Telephone: 1-250-832-8194 Fax: 1-250-832-1083

FILE NO.

DVP800-18

DATE RECEIVED:

Jan 5, 2017

OPERATIONS MANAGEMENT

Comments: Jennifer Sham

Terry Langlois
 Team Leader Utilities

A construction permit from Interior Health will still be required

Sean Coubrough
 Assistant Regional Fire Chief
 Fire Services

No Concerns

Ben Van Nostrand
 Team Leader
 Environmental Health

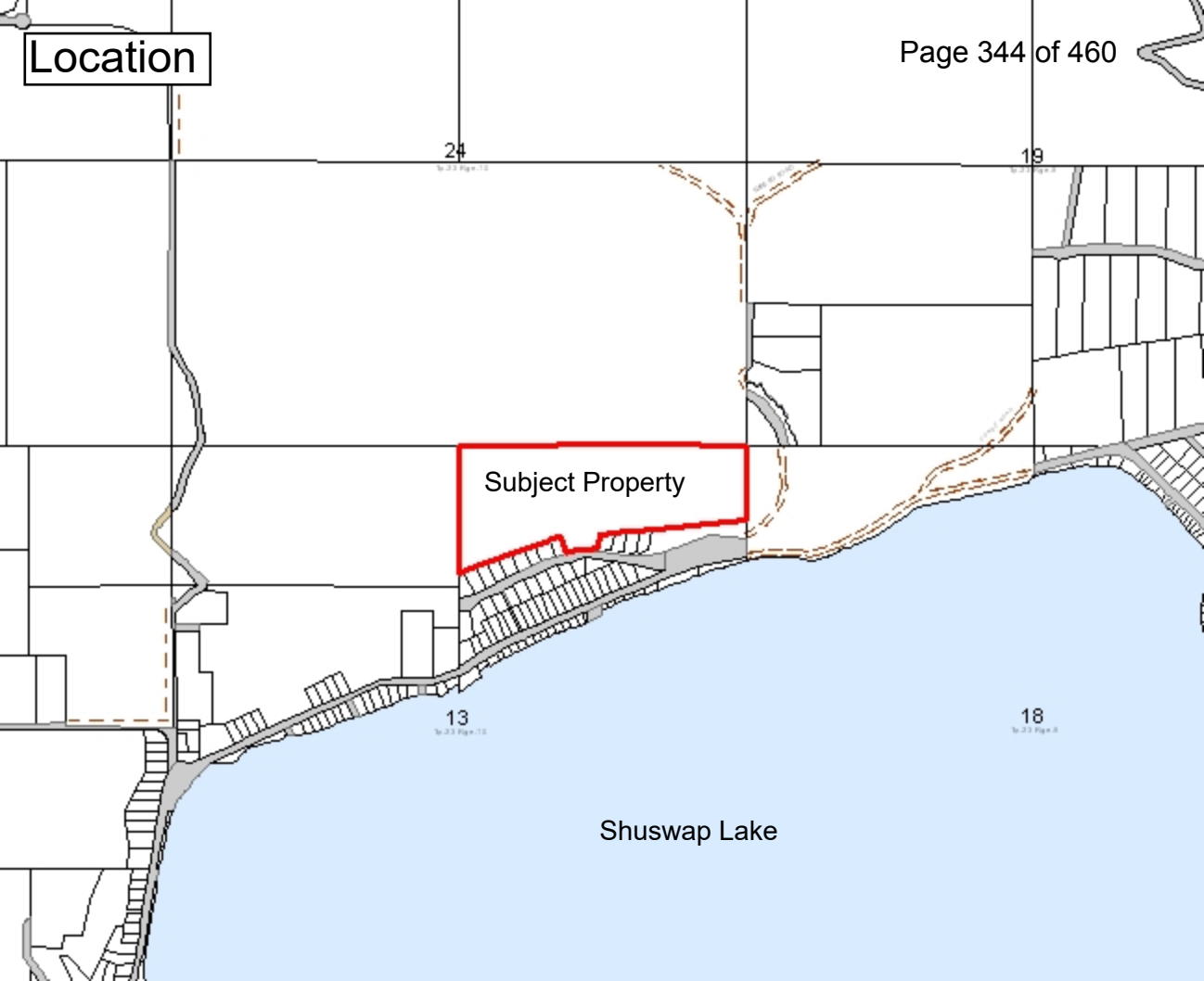
No Concerns

Susan Abbott / Ryan Nitchie
 Community Parks /
 Community Services

No concerns for CSRD Parks

Darcy Mooney
 Manager
 Operations Management

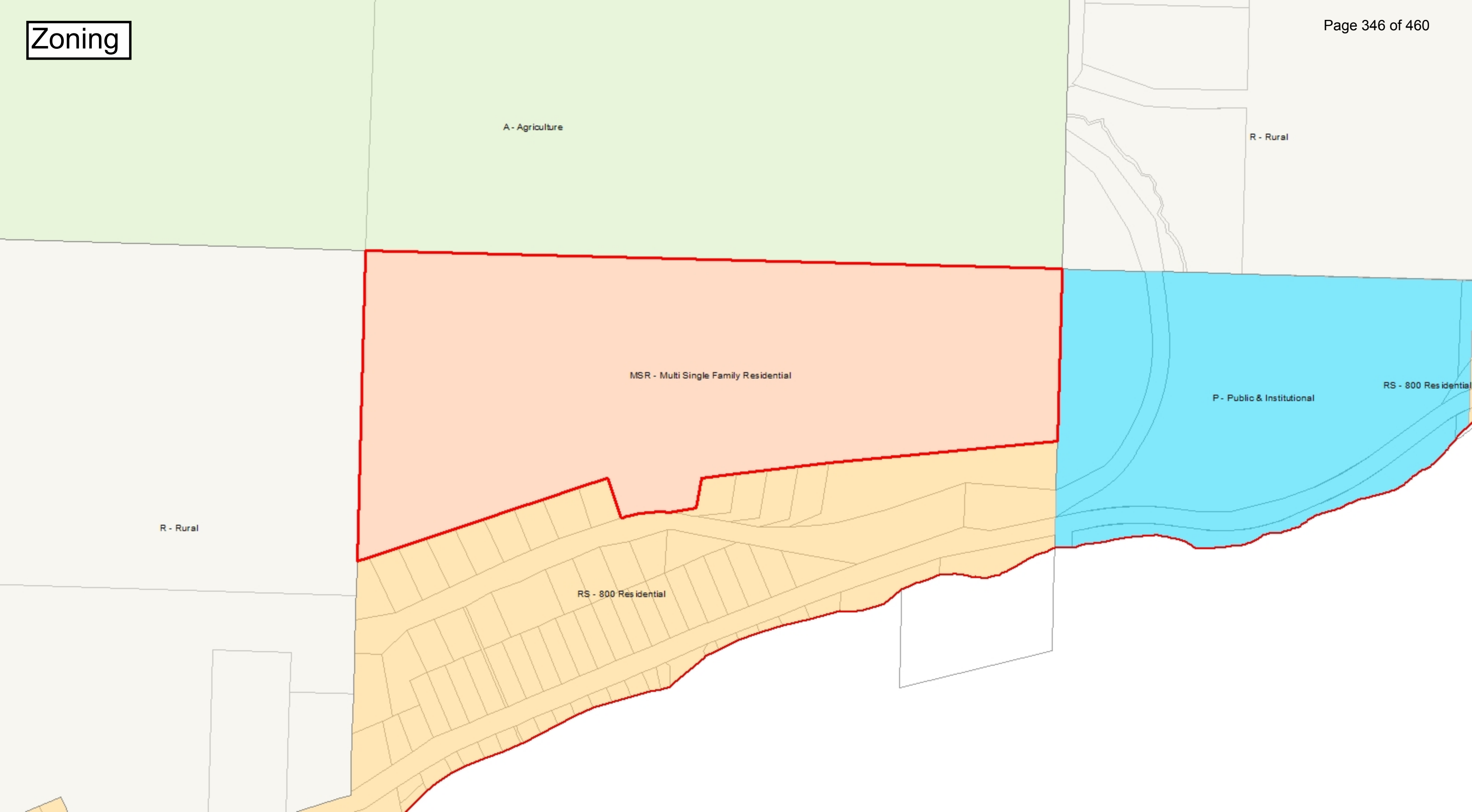
no additional concerns



Subject Property

Shuswap Lake

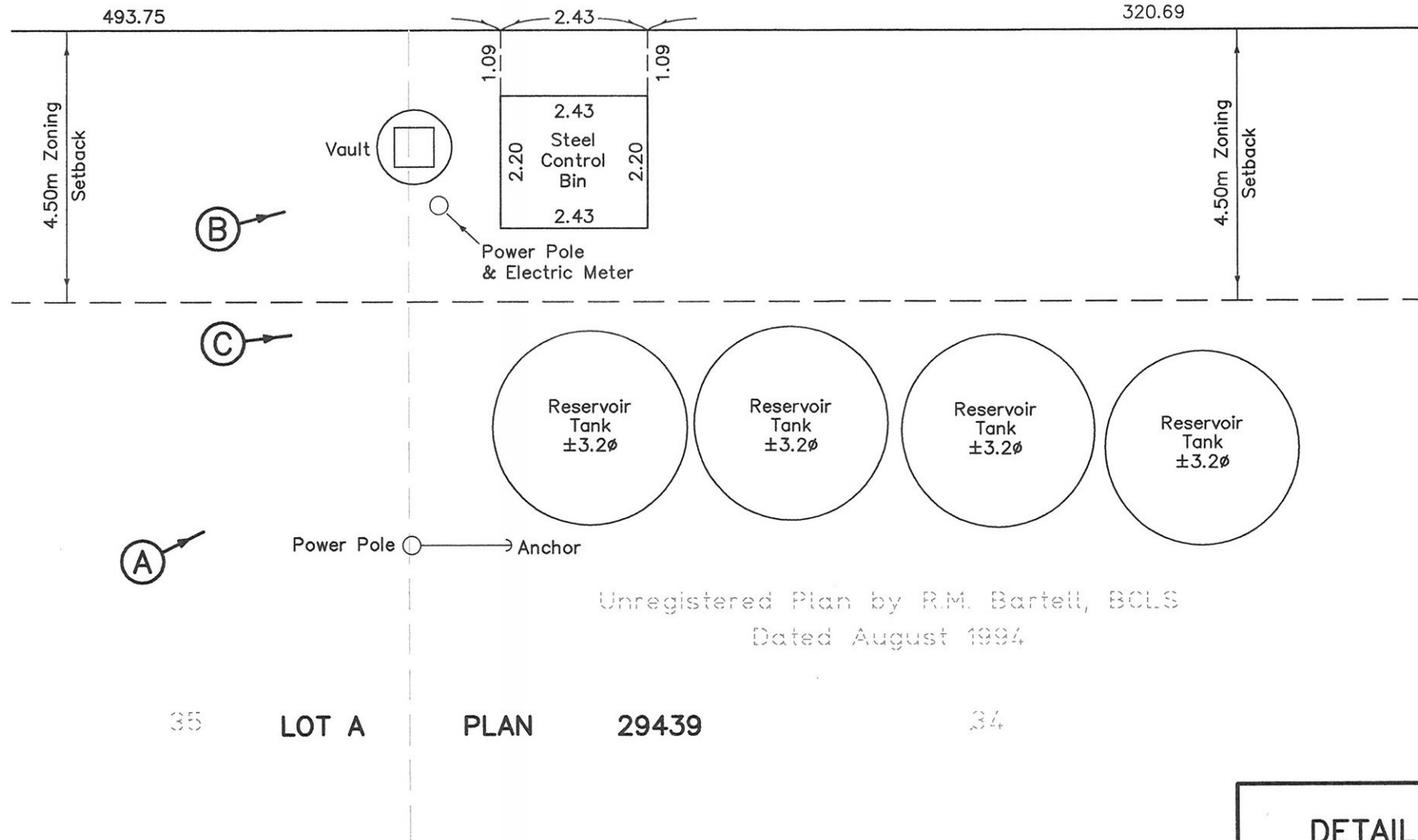




Site Plan

SE 1/4 Sec 24, Tp 23, R10, W6M

Page 347 of 460



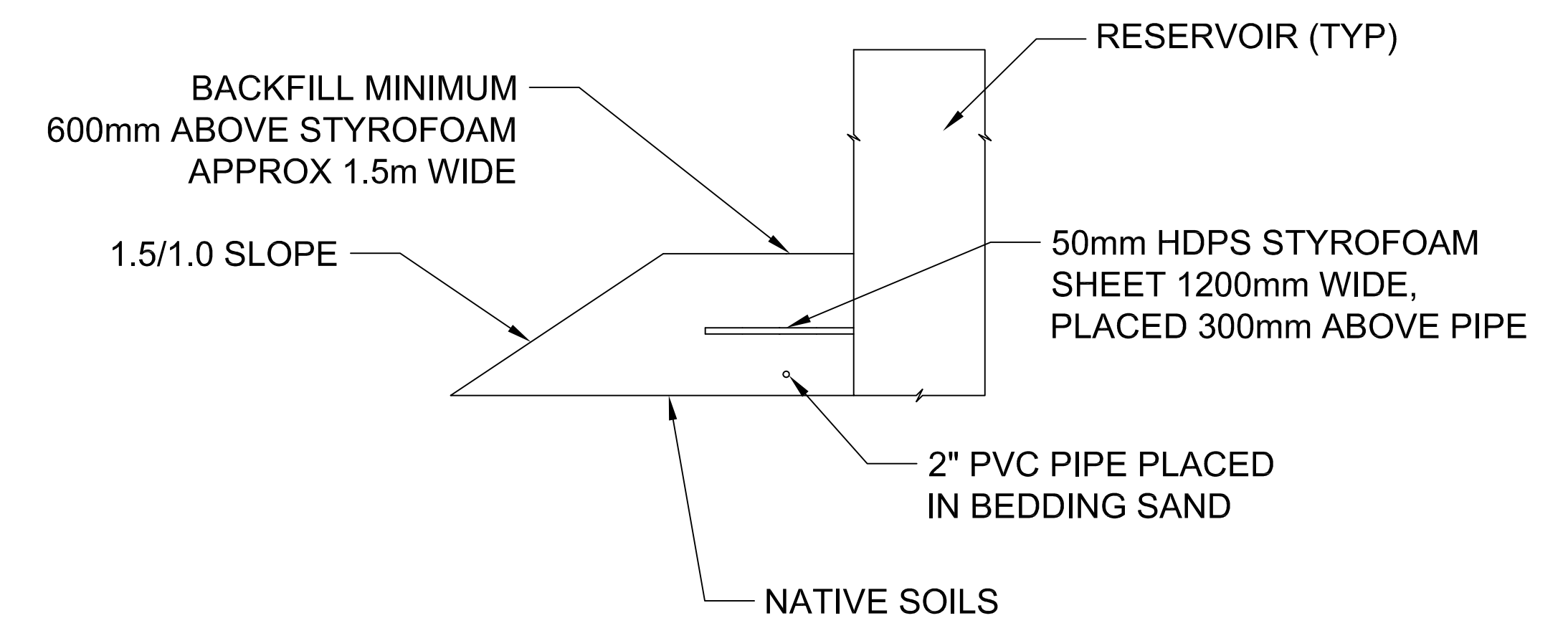
SCALE: N.T.S.



THIS WATER SYSTEM IS INTENDED FOR DISTRIBUTION OF WATER FOR DOMESTIC USE WITHIN MAGNA VISTA ESTATES.

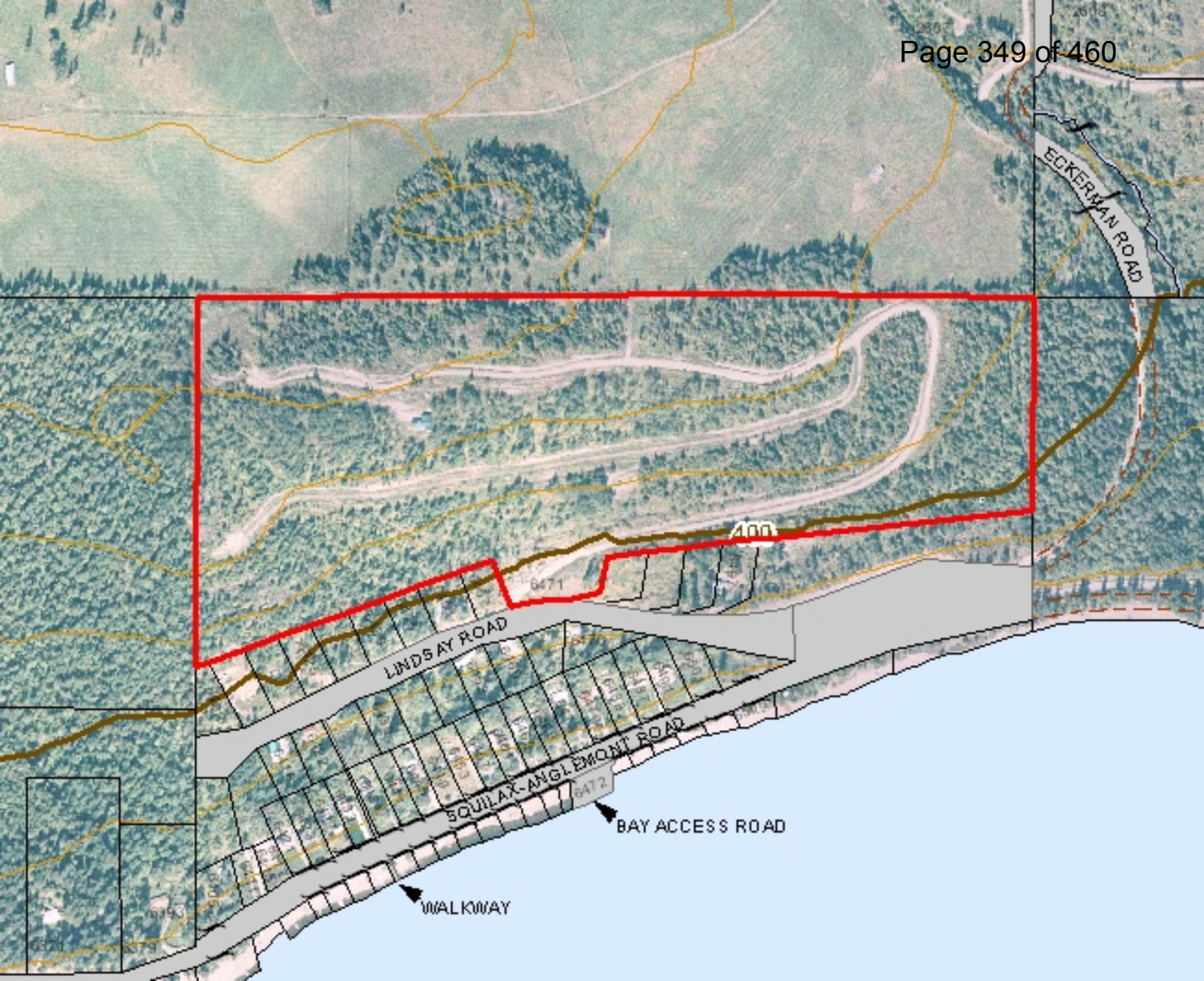
- RESERVOIRS 2 THROUGH TO 4 WILL BE MANUALLY DRAINED BEFORE THE WINTER AND THEREFORE DO NOT NEED TO BE INSULATED/HEATED. RESERVOIR 1 WILL BE PREVENTED FROM FREEZING BY WAY OF AN IMMERSION HEATER. HEATER TO BE SPECIFIED AT A LATER DATE.

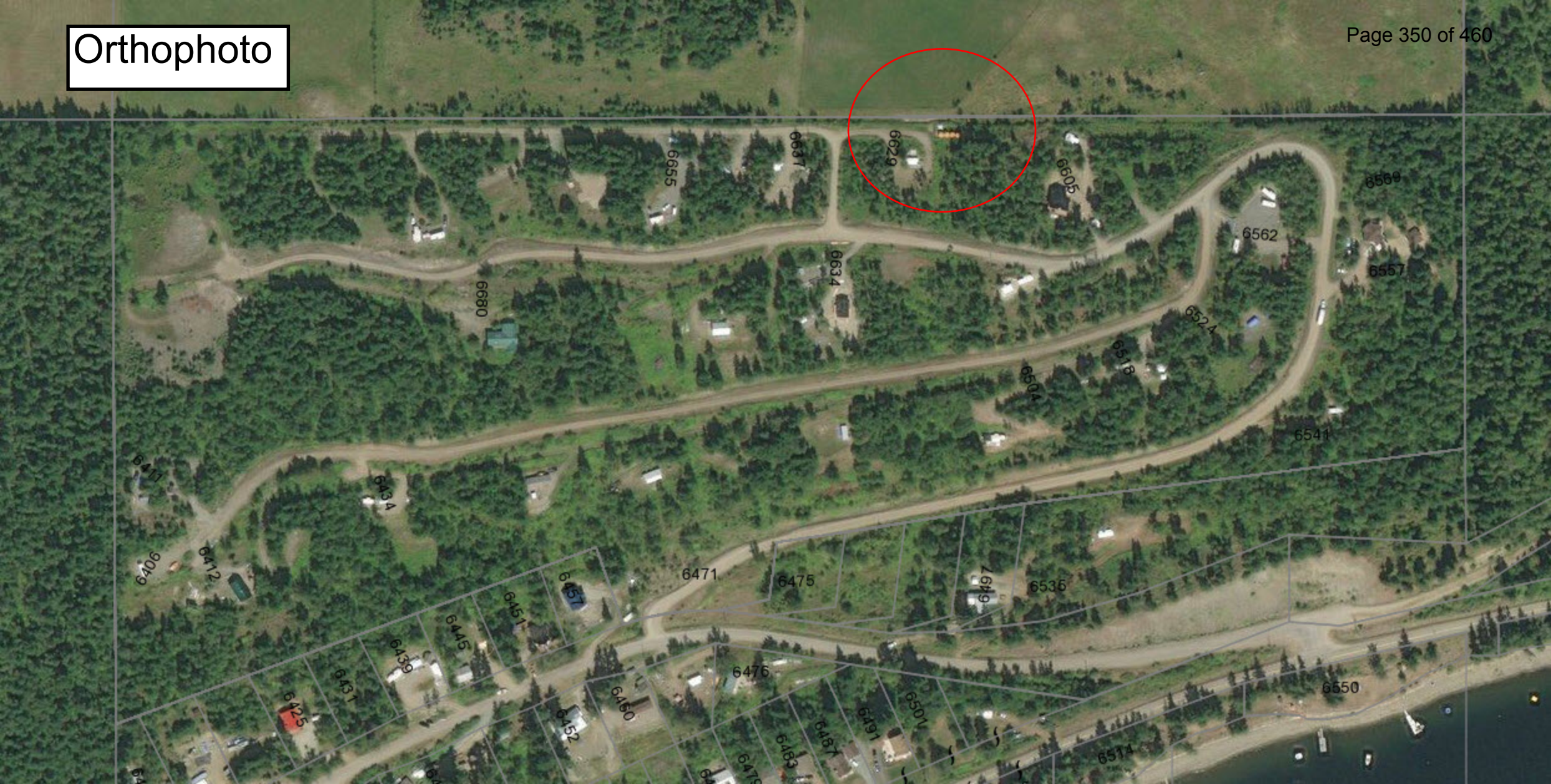
3 INLINE BOOSTER PUMPS WILL BE PLACED IN PARALLEL INSTALLATION. THE PUMPS WILL BE SET AT DIFFERENT OPERATION PRESSURES (65psi, 63psi AND 61psi) AND OPERATE DEPENDING ON THE WATER DEMAND. IT IS RECOMMENDED TO SWAP THE PRESSURE SWITCHES AT A MINIMUM OF ONCE PER YEAR TO ESTABLISH EVEN WEAR AND TEAR BETWEEN THE PUMPS. RECOMMENDED PUMP: FRANKLIN ELECTRIC SUBDRIVE INLINE 1100 OR EQUIVALENT.

SCALE: N.T.S.



3	JVL	09-FEB-16	ISSUED FOR CONSTRUCTION PERMIT APPLICATION	Benchmark	CLIENT	SPOONER INDUSTRIAL		 <div>OMEGA ENGINEERING SALMON ARM LLP CONSULTING CIVIL & STRUCTURAL ENGINEERS</div> <div><div>□ 9094 YOUNG ROAD CHILLIWACK, BC P 604.795.8652 F 604.795.6642</div><div>□ #105-6395 198 STREET LANGLEY, BC V2Y 3A5 P 604.532.8802 F 604.532.8893</div><div>■ #202-121 HUDSON AVENUE SALMON ARM, BC P 250.833.5643 F 250.833.5641</div></div>		DRAWN JVL DATE 14-NOV-14 DESIGNED JVL DATE 14-NOV-14 APPROVED/CHECKED TD DATE	TITLE WATER SUPPLY PLANT SCHEMATIC AND SPECIFICATIONS	DRAWING NO. 2014-436-C-02
2	JVL	09-NOV-15	ISSUED FOR DISCUSSION WITH IH	PROJECT	MAGNA VISTA ESTATES MAGNA VISTA ESTATES		SHEET			2 OF 2		
1	JVL	18-DEC-14	2nd DRAFT FOR REVIEW									
0	JVL	25-NOV-14	DRAFT FOR REVIEW									
REV.	BY:	CH:	DATE	REVISIONS	Scale	AS NOTED						









2011/05/25



2011/05/25



2011/05/25



2011/05/25



BOARD REPORT

TO:
Chair and Directors

File No:	BL900-19 PL20170056
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SUBJECT:

Electoral Area E: Lakes Zoning Amendment (Layden)
Bylaw No. 900-19

DESCRIPTION:

Report from Christine LeFloch, Development Services Assistant, dated May 8, 2017.
655 Swanbeach Road, Swansea Point

**RECOMMENDATION
#1:**

THAT: "Lakes Zoning Amendment (Layden) Bylaw No. 900-19" be read a first time this 15th day of June, 2017;

AND THAT: The Board utilize the simple consultation process for Bylaw No. 900-19 and it be referred to the following agencies and First Nations:

- Department of Fisheries and Oceans;
- Navigation Canada;
- Ministry of Forests Lands and Natural Resource Operations – Lands Branch
- CSR D Operations Management; and
- All relevant First Nations Bands and Councils.

SHORT SUMMARY:

The foreshore area proposed to be rezoned is located in the Swansea Point area of Electoral Area E. The applicants have applied to amend Lakes Zoning Bylaw No. 900 to recognize the existing fixed dock associated with 655 Swanbeach Road. This dock is not currently sited in compliance with the required setbacks. The proposed amendment would add a special regulation to the FR1 Foreshore Residential Zone, which would apply to the portion of Mara Lake lying adjacent to the property legally described as Lot 4, Section 11, Township 21, Range 8, W6M, KDYD, Plan 9181, which contains the existing fixed dock.

VOTING:	Unweighted Corporate	<input type="checkbox"/>	LGA Part 14 (Unweighted)	<input checked="" type="checkbox"/>	Weighted Corporate	<input type="checkbox"/>	Stakeholder (Weighted)	<input type="checkbox"/>
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BACKGROUND:
AGENT:

Nexus Dock and Marina c/o Lorna Eng

REGISTERED OWNER:

Terry Layden

ELECTORAL AREA:

E

LEGAL DESCRIPTION:

Lot 4, Section 11, Township 21, Range 8, West of the 6th Meridian, Kamloops Division Yale District, Plan 9181

CIVIC ADDRESS:

655 Swanbeach Road

SURROUNDING LAND USE PATTERN:

North: Mara Lake

South: Residential

East: Residential

West: Residential

CURRENT & PROPOSED USE:

Single Family Dwelling, fixed dock, mooring buoy

PARCEL SIZE:

.086 Ha (0.2 ac)

OCP/ZONING - Rural Sicamous Land Use Bylaw No. 2000:

RS – Residential

CURRENT FORESHORE ZONING – Lakes Zoning Bylaw No. 900:

FR1 - Foreshore Residential 1

PROPOSED LAKE ZONING:

FR1 – Foreshore Residential 1 with site specific regulation permitting a fixed dock setback a minimum of 1.8 m from the west property boundary.

AQUATIC HABITAT INDEX RATING:

Low

SHORE TYPE & VEGETATION:

Gravel beach with imported sand

SITE COMMENTS:

The subject property is located on Swanbeach Road in the Swansea Point area. The property is developed with a single family dwelling and has 15.24 m of lake frontage. The five lots immediately to the east are part of the same subdivision plan and all have the same amount of lake frontage. The two lots immediately to the west were formerly three lots in the same subdivision plan, but the boundaries were realigned to create two larger lots which have more lake frontage. The majority of the lots along this stretch of beach have fixed docks with long walkways and fingers. There are a few exceptions to this rule, including the adjacent property to the west which recently installed a floating dock which meets the size and siting requirements of Bylaw No. 900. Many of these houses are sited very close to the high water mark and there are a few dock walkways that lead all the way to the house.

POLICY:**Rural Sicamous Land Use Bylaw No. 2000****Part 1.4 POLICIES****1.4.1 General Form and Character of Development**

(o) Two separate types of OCP designations providing for private and public uses supporting water-based recreation uses. It is intended that these two land use categories will only be applied to the foreshore and water of Shuswap and Mara Lakes. The Foreshore Water OCP designation primarily provides for uses associated with existing residential development that is located on parcels contiguous with the natural boundary and where the uses will be compatible with the uses and character of the land above the natural boundary. The Foreshore Water Commercial OCP designation is intended to be limited to those locations where there is a commercial land use category on a parcel that is contiguous with the area in the Foreshore Water Commercial OCP designation and where the uses will be compatible with the uses and character of the land above the natural boundary.

Lakes Zoning Bylaw No. 900**Definitions:**

BERTH is a moorage space for a single vessel at a fixed or floating dock.

FIXED DOCK is a structure used for the purpose of mooring boat(s) which may include multiple berths and may have permanent links to the shore and lakebed, such as piles or fixed decks.

FLOATING DOCK is a structure used for the purpose of mooring boat(s) which may include multiple berths but which does not include permanent physical links to shore or lakebed, except cables.

PRIVATE MOORING BUOY is a small floating structure used for the purpose of boat moorage, typically composed of rigid plastic foam or rigid molded plastic, and specifically manufactured for the intended use of boat moorage, but does not include a fixed or floating dock or swimming platform.

SWIMMING PLATFORM is a floating structure used for non-motorized recreational activities, such as swimming, diving and sun-bathing, but not boat mooring.

FR1 – Foreshore Residential 1 Zone**Permitted uses:**

- 1 floating dock, including removable walkway that is accessory to a permitted use on an adjacent waterfront parcel. The floating dock surface must not exceed 24 m² in total upward facing surface area (not including removable walkway), and 3 m in width for any portion of the dock. Removable walkway surface must not exceed 1.5 m in width.

The minimum setback of a floating dock, private mooring buoy or boat lift accessory to an adjacent waterfront parcel (and adjacent semi-waterfront parcel in the case of private mooring buoys) is as follows:

- 5 m from the side parcel boundaries of that waterfront parcel (and adjacent semi-waterfront parcel in the case of private mooring buoys), projected onto the foreshore and water.
- 6 m from a Foreshore Park (FP) zone or park side parcel boundaries projected onto the foreshore and water.

Additional setbacks for private mooring buoys:

- 20 m from any existing structures on the foreshore or water.
- 50 m from any boat launch ramp or marina.
- Private mooring buoy(s) that is accessory to a permitted use on an adjacent waterfront parcel or an adjacent semi-waterfront parcel. (1 per adjacent semi-waterfront parcel, 1 per adjacent waterfront parcel having a lake boundary length of less than 30 m, and 2 per adjacent waterfront parcel having a lake boundary length of 30 m or more).
- Boat lift(s) that is accessory to a permitted use on an adjacent waterfront parcel.

The surface of the lake adjacent to the subject property is currently zoned FR1. The FR1 zone permits one floating dock with a maximum upward facing surface area of 24 m², and 1 private mooring buoy for the subject property as it has less than 30 m of lake frontage.

The proposal would add a site specific regulation to the FR1 Zone to permit the existing fixed dock in association with the subject property only, and to include a variance to the required setbacks to allow it to remain in its existing location.

FINANCIAL:

The rezoning is the result of a bylaw enforcement action. If the Board does not adopt the proposed amending bylaw, and the owner does not bring the property into compliance by replacing the fixed dock with a floating dock of the required size, the Board may then wish to direct staff to seek a legal opinion regarding possible court action. Costs for the legal opinion and possible court action, although partially recoverable through court, could nonetheless be substantial. Staff involvement in legal action is not recoverable.

KEY ISSUES/CONCEPTS:

The owner of the subject property has indicated that there has been a fixed dock in this location since prior to his purchase of the property in 2000. He has a current Provincial license of occupation #338293. The former wooden dock was grounding on the foreshore so the dock was replaced in the same configuration and location but using new materials and including "feet" that would prevent the dock from grounding during low water.

Nexus Docks, acting as agent for the owner, contacted CSRD staff two years ago to ask whether the dock design was acceptable. At that time, staff advised that the regulations of the FR1 Zone were applicable, and provided the definitions for floating and fixed docks for clarity. The applicant also contacted Front Counter BC and made application for a Specific Permission for the proposed dock.

Front Counter BC did not refer the Specific Permission application to the CSRD during their processing and CSRD staff did not hear anything further regarding the new dock until Bylaw Enforcement was called to investigate the installation of a new fixed dock at the subject property. Throughout the investigation the agent contended that what they had installed was a "floating dock" despite the fact that it was constructed using pilings.

Lakes Zoning Bylaw No. 900 defines a floating dock as a dock *"which does not include permanent physical links to shore or lakebed, except cables"*, and a fixed dock as a dock *"which may include multiple berths and may have permanent links to the shore and lakebed, such as piles or fixed decks"*. However, the Province considers a dock to be floating as long as it has the ability to rise and fall with the water level, even if pilings are used. The applicant claims that the mistake was due to a

misunderstanding of the CSRD bylaw. Staff note that if the application for Specific Permission had been referred to the CSRD this error would have been caught prior to dock installation.

The new dock was installed using the existing pilings. However, these pilings are not located in compliance with either Provincial or CSRD setbacks. The required setback is 5 m from both side parcel boundaries. The dock is currently sited 1.8 m from the west property boundary and 6 m from the east property boundary. Due to the dock being constructed using "fingers" oriented at right angles to the walkway there is not enough room for the dock to meet the required setbacks on both sides.

There are a few ways that better compliance with the required setbacks could be achieved:

1. The dock could be reconfigured with the dock platform oriented straight from the end of the walkway, and the fingers removed. This configuration would result in the ability to relocate the dock in compliance with the required 5 m setbacks on both sides with an additional 2 metres to spare.
2. The dock could be reconfigured with the dock platform oriented in a 'T' at the end of the walkway, and the fingers removed. This configuration would result in the ability to relocate the dock in compliance with the 5 m setback on one side, but would require a reduction in setback for the other side from 5 m to 4.24 m to be included in the site specific regulation.
3. If the dock remains in its current configuration with the dock platform and fingers oriented at right angles to the walkway, it could be moved 1 m east of its current location and still meet the setback requirements on the east side. However it still would fall short of the required setback on the west side by 2.2 m therefore a reduction in setback from 5 m to 2.8 m would need to be included in the site specific regulation.

All of the above scenarios would involve relocating the existing pilings.

4. Finally, the site specific zoning regulation could include a reduction in setback for the west side setback from 5 m to 1.8 m to allow the dock to remain where it is currently sited.

It is noted that the property to the east also has a large fixed dock that is sited 2.9 m from the Layden property line and the property to the west has a new floating dock that was designed and placed in compliance with Bylaw No. 900 regulations. This dock is sited 5.79 m from the Layden property line.

At this time staff is recommending that the bylaw amendment not include any reduction in setbacks as it is possible to reconfigure the dock and relocate it to meet the required setbacks. However, it is recognized that as the bylaw moves through the amendment process feedback may be received from agencies, neighbours and the general public which may result in changes to this recommendation. The staff recommendation suggests that the bylaw be given first reading and referred out to applicable agencies and first nations for comments. Amendments to the bylaw may be made at future readings at the discretion of the Board.

This property is located four lots to the west of the Remington property which recently completed a similar rezoning process. In that case the dock was sited at 0 m from the west property line. The Province had ordered the property owner to move the dock into compliance with the required 5 m setback which was noted on their Specific Permission document. The CSRD supported the Province's requirement for the dock to comply with the 5 m setback and also required the dock to be relocated in compliance with the required 5 m setback from the west side. A reduction to the setback on the east side was included in the specific permission. In that case the east side of the property is adjacent to a CSRD park which requires an additional metre of setback distance which the dock was not able to comply with. The Remingtons have arranged to have their dock relocated in fall 2017.

While each application is looked at based on its own merits, staff feel that a consistent approach to dealing with dock siting issues should be taken wherever possible. The suggested approach is to attempt to achieve the Bylaw No. 900 setback requirements.

IMPLEMENTATION:

Consultation Process

CSRD Policy P-18 regarding Consultation Processes-Bylaws, indicates that a simple consultation process can be followed. Neighbouring property owners will become aware of the application following first reading when a Notice of Development sign is posted on the property.

COMMUNICATIONS:

If the Board gives Bylaw No. 900-19 first reading, the bylaw will be sent out to referral agencies. Referral responses will be provided to the Board with a future Board report, prior to delegation of a public hearing.

DESIRED OUTCOMES:

That the Board endorse the staff recommendation.

BOARD'S OPTIONS:

1. *Endorse the Recommendation. Bylaw No. 900-19 will be given first reading, and will be sent out for referrals.*
2. *Decline first reading. Bylaw No. 900-19 will be defeated. The file would be referred to Bylaw Enforcement staff for follow up.*
3. *Defer.*
4. *Any other action deemed appropriate by the Board.*

LIST NAME OF REPORT(S) / DOCUMENT(S) AVAILABLE FROM STAFF:

1. Lakes Zoning Bylaw No. 900

Report Approval Details

Document Title:	2017-06-15_Board_DS_BL900-19_Layden.docx
Attachments:	<ul style="list-style-type: none">- BL900-19 - Maps and Plans.pdf- BL900-19 - Photos.pdf- BL900-19 - First.pdf
Final Approval Date:	Jun 7, 2017

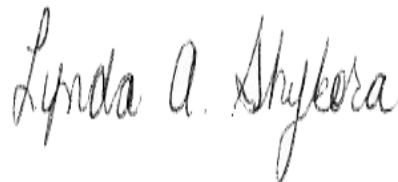
This report and all of its attachments were approved and signed as outlined below:



Corey Paiement - Jun 6, 2017 - 9:05 AM



Gerald Christie - Jun 6, 2017 - 9:31 AM



Lynda Shykora - Jun 7, 2017 - 10:16 AM



Charles Hamilton - Jun 7, 2017 - 10:25 AM

Report Approval Details

Document Title:	2017-06-15_Board_DS_BL900-19_Layden.docx
Attachments:	<ul style="list-style-type: none">- BL900-19 - Maps and Plans.pdf- BL900-19 - Photos.pdf- BL900-19 - First.pdf
Final Approval Date:	Jun 9, 2017

This report and all of its attachments were approved and signed as outlined below:



Corey Paiement - Jun 8, 2017 - 1:32 PM



Gerald Christie - Jun 8, 2017 - 1:33 PM

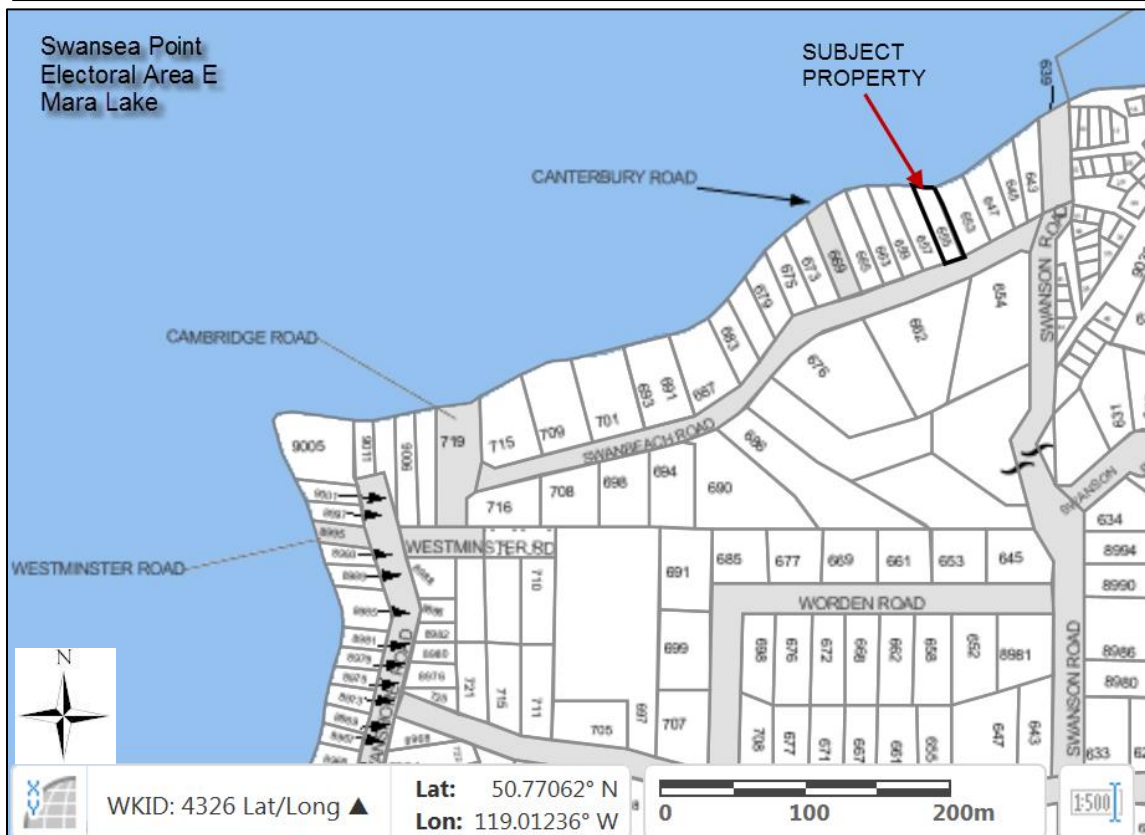
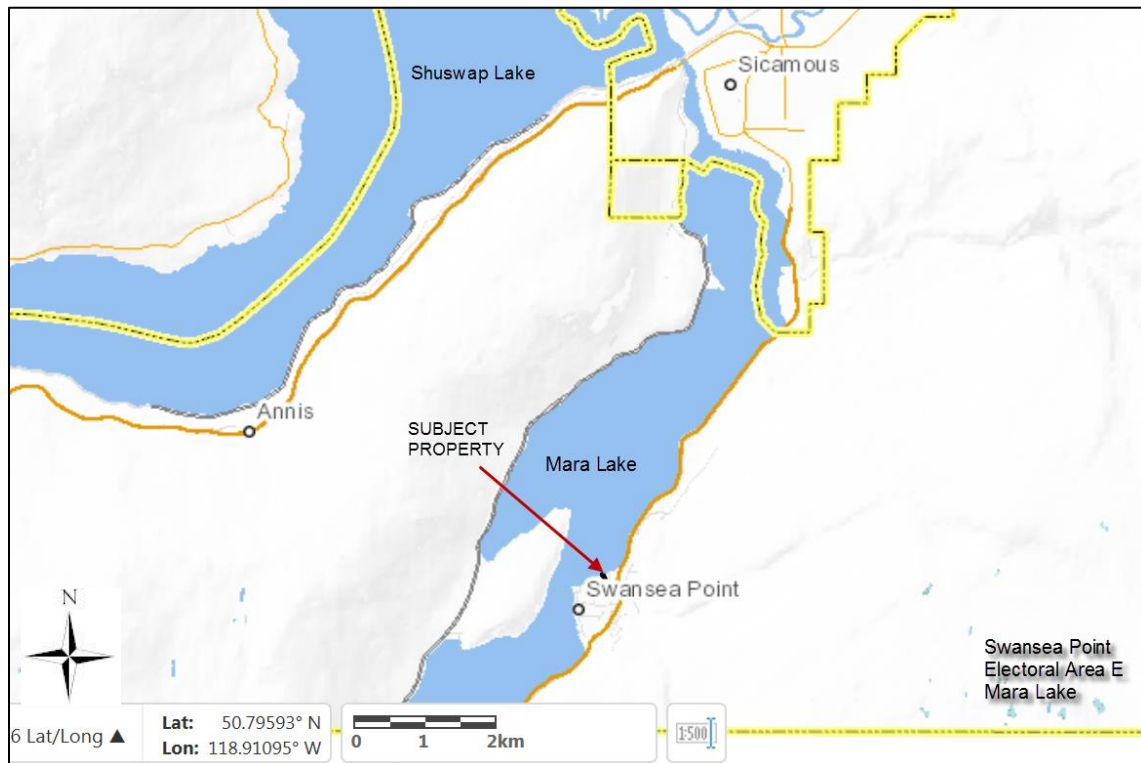
No Signature - Task assigned to Lynda Shykora was completed by assistant Emily Johnson

Lynda Shykora - Jun 9, 2017 - 8:11 AM

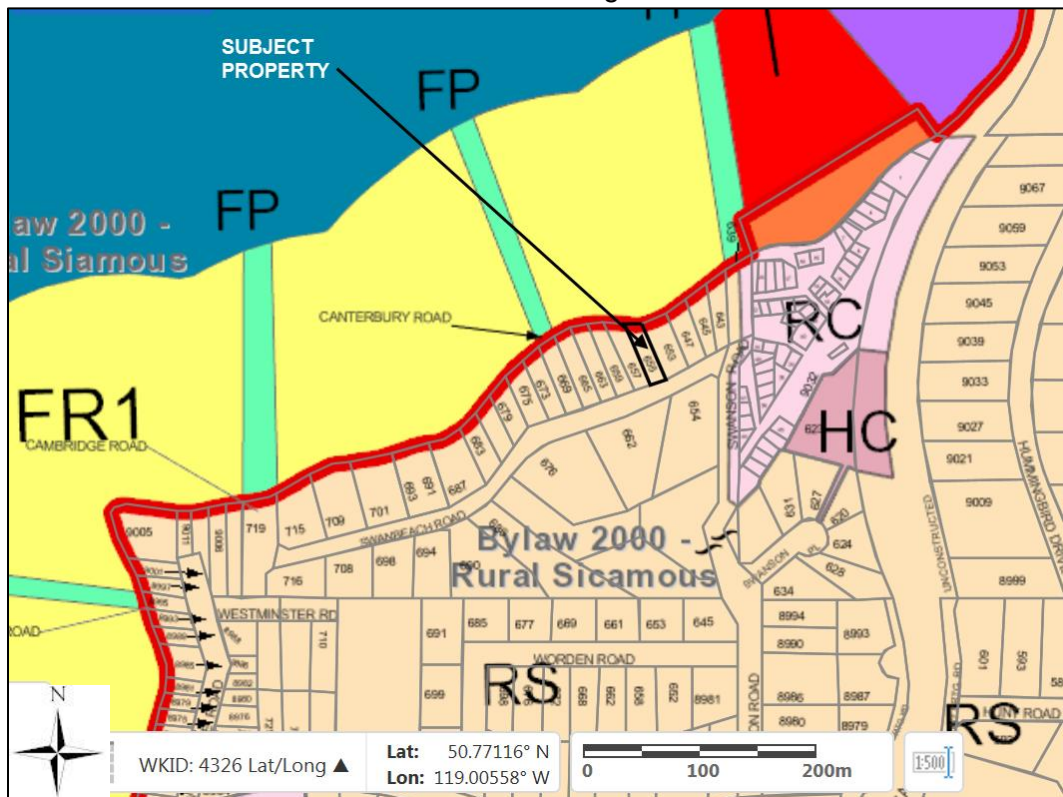


Charles Hamilton - Jun 9, 2017 - 8:33 AM

Location



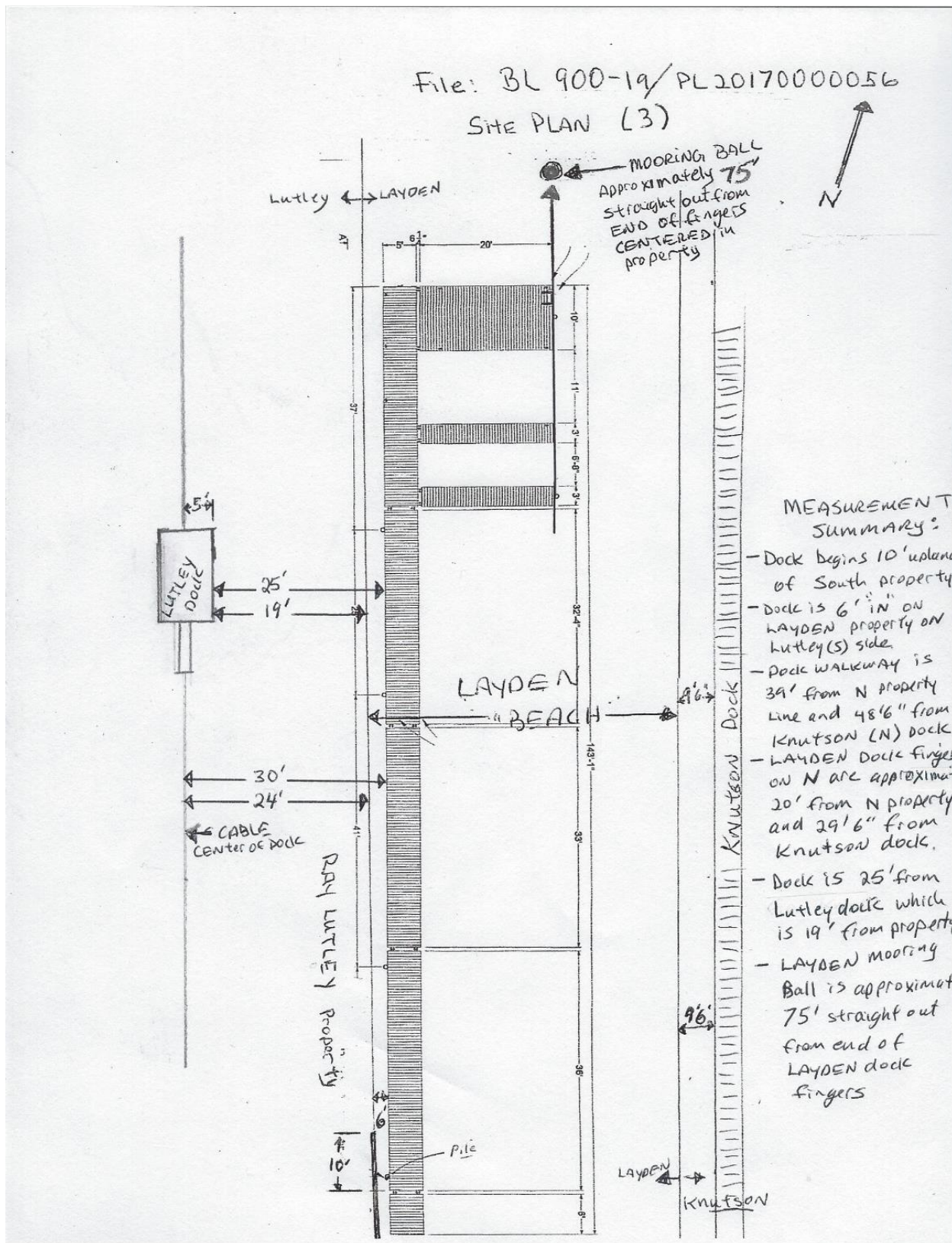
OCP/Zoning



Orthophotograph



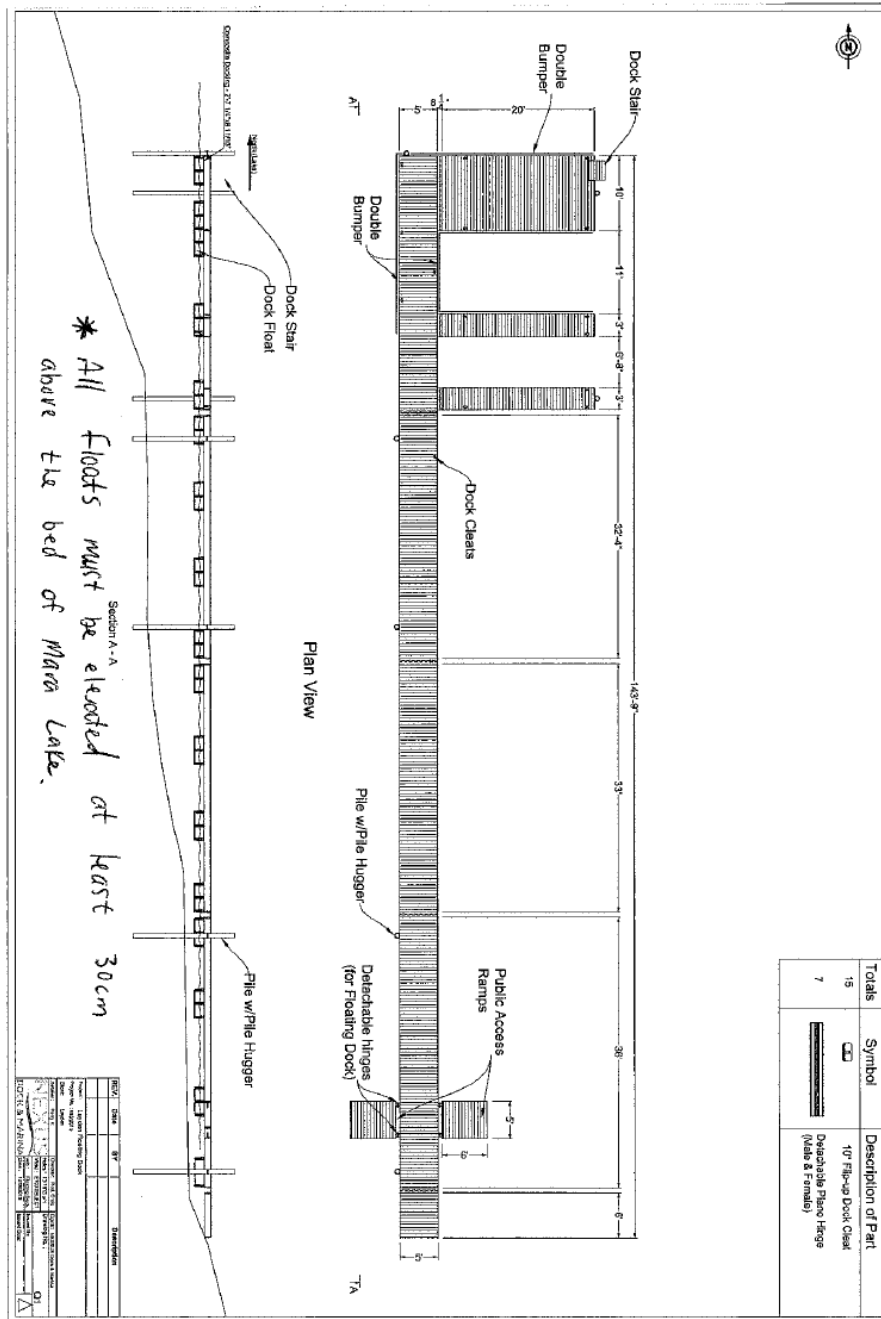
Site Plan



Specific Permission #3404832

File: 3404832

MANAGEMENT PLAN



Signed on behalf of

by a duly authorized signatory

Date

HER MAJESTY THE QUEEN IN RIGHT
OF THE PROVINCE OF BRITISH
COLUMBIA,
by its authorized representative

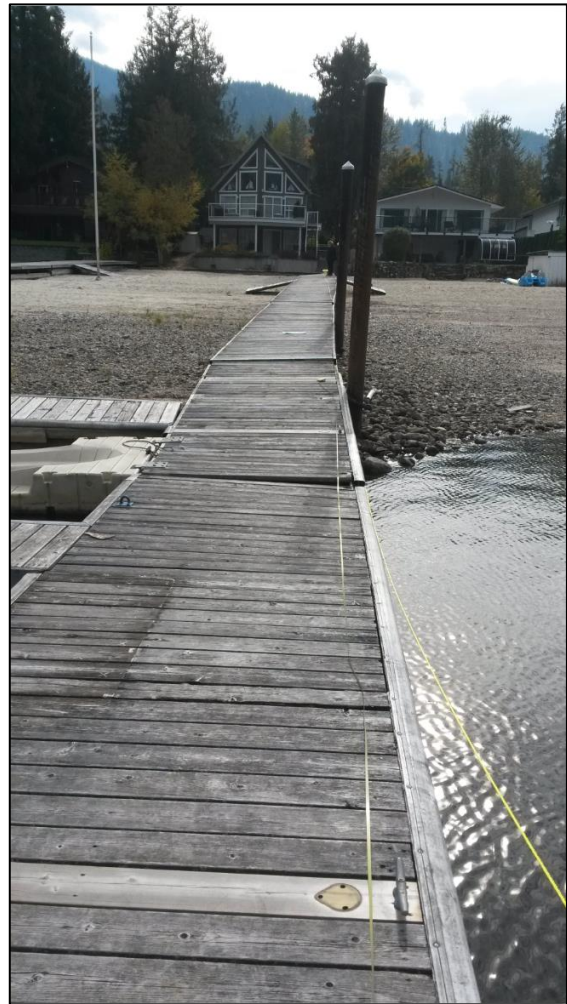
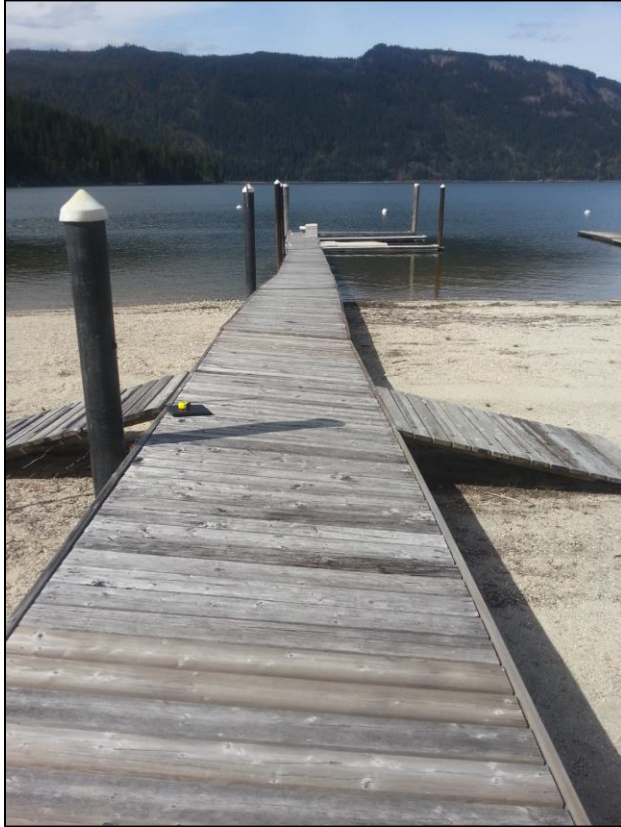
Katie Wein

December 7, 2015

Date

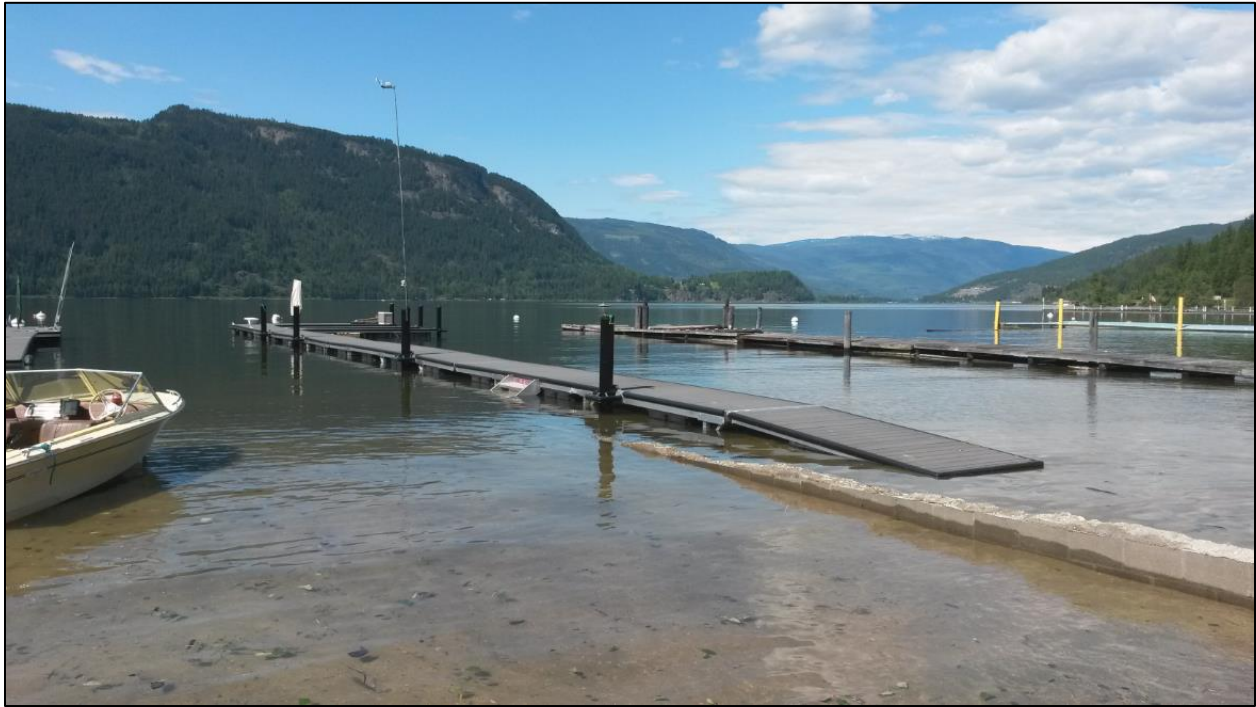
BL900-19 - Photos

Original dock



BL900-19 - Photos

New dock



BL900-19 - Photos

New dock in relation to neighbouring dock to the west



BL900-19 - Photos

Properties to the west

*The floating dock adjacent to Layden property was not in place at the time photo was taken



COLUMBIA SHUSWAP REGIONAL DISTRICT

LAKES ZONING AMENDMENT

(Layden) BYLAW NO. 900-19

A bylaw to amend the "Lakes Zoning Bylaw No. 900"

WHEREAS the Board of the Columbia Shuswap Regional District adopted Bylaw No.900;

AND WHEREAS the Board deems it appropriate to amend Bylaw No. 900;

NOW THEREFORE the Board of the Columbia Shuswap Regional District, in open meeting assembled, HEREBY ENACTS as follows:

1. Bylaw No. 900 cited as "Lakes Zoning Bylaw No. 900" is hereby amended as follows:

A. TEXT AMENDMENT

1. Schedule A, Zoning Bylaw Text, Part 4 Zones, Section 4.4, Foreshore Residential 1 Zone is hereby amended by:

i) Adding the following after subsection (c) Location and Siting:

"(d) Site Specific Permitted Uses

For the surface of the *lake* adjacent to Lot 4, Section 11, Township 21, Range 8, W6M, KDYD, Plan 9181, a *fixed dock* with a maximum upward facing surface area of 24 m² and a maximum walkway width of 1.52 is a permitted use. {Swanbeach Road}

2. This bylaw may be cited as "Lakes Zoning Amendment (Layden) Bylaw No. 900-19."

READ a first time this _____ day of _____, 2017.

READ a second time this _____ day of _____, 2017.

PUBLIC HEARING held this _____ day of _____, 2017.

READ a third time this _____ day of _____, 2017.

ADOPTED this _____ day of _____, 2017.

CORPORATE OFFICER

CHAIR

CERTIFIED a true copy of Bylaw No. 900-19
as read a third time.

CERTIFIED a true copy of Bylaw No. 900-19
as adopted.

Corporate Officer

Corporate Officer



BOARD REPORT

TO:
Chair and Directors

File No: BL 830-18 BL 800-30 PL20170079
--

SUBJECT:

Electoral Area F Official Community Plan Amendment (Isley) Bylaw No. 830-18, Magna Bay Zoning Amendment (Isley) Bylaw No. 800-30

DESCRIPTION:

Report from Dan Passmore, Senior Planner dated May 12, 2017.
 6929 Squilax-Anglemont Road and 2556 McClaskey Road, Magna Bay.

**RECOMMENDATION
#1:**

THAT: "Electoral Area F Official Community Plan Amendment (Isley) Bylaw No. 830-18" be read a first time this 15th day of June, 2017;

AND THAT:

the Board utilize the simple consultation process for Bylaw No. 830-18 and it be referred to the following agencies and First Nations:

- Interior Health;
- Ministry of Forests, Lands and Natural Resource Operations - Archaeology Branch;
- CSRD Operations Management; and,
- Relevant First Nations Bands and Councils.

**RECOMMENDATION
#2:**

THAT: "Magna Bay Zoning Amendment (Isley) Bylaw No. 800-30" be read a first time this 15th day of June 2017;

AND THAT:

the Board utilize the simple consultation process for Bylaw No. 800-30 and it be referred to the following agencies and First Nations:

- Interior Health;
- Ministry of Forests, Lands and Natural Resource Operations - Archaeology Branch;
- CSRD Operations Management; and,
- Relevant First Nations Bands and Councils.

SHORT SUMMARY:

The applicant has submitted an application to re-designate and rezone the subject properties, to allow a subdivision of the land, and to permit the use of proposed Lot 1 to be changed to construct a "Toy Storage" facility as well as to allow outdoor storage of recreational vehicles and boats and trailers. Proposed Lot 2 would be rezoned to IG Industrial Gravel Processing to allow an expansion of the existing gravel extraction operation. Magna Bay Zoning Bylaw No. 800 currently has no zone where this use is permitted and no adequate definition for the permitted use. To accomplish this, staff are proposing a new CDF 2 Comprehensive Development 2 zone.

VOTING:	Unweighted Corporate	<input type="checkbox"/>	LGA Part 14 (Unweighted)	<input checked="" type="checkbox"/>	Weighted Corporate	<input type="checkbox"/>	Stakeholder (Weighted)	<input type="checkbox"/>
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BACKGROUND:

PROPERTY OWNERS: Robert and Evelyn Isley/Jemco Excavating Ltd.

APPLICANT: Greg Darroch

ELECTORAL AREA: F

CIVIC ADDRESS: 6929 Squilax-Anglemont Road, and 2556 McClaskey Road, Magna Bay

LEGAL DESCRIPTION: Part W1/2 of the NW 1/4, Section 17, Township 23, Range 9, W6M, KDYD, Except Plan B7633 (PID: 014-009-552)
Lot 1, Section 18, Township 23, Range 9, W6M, KDYD, Plan KAP56704 (PID: 023-385-243)

SIZE OF PROPERTY: 30.53 ha (79.3 ac)
4.24 ha (10.48 ac)

DESIGNATION: Electoral Area F Official Community Plan Bylaw No. 830
RSC Rural and Resource
RR Rural Residential

ZONE: Magna Bay Zoning Bylaw No. 800
A – Agriculture
IG – Industrial Gravel Processing

CURRENT USE: Ross Creek General Store and Campground/Gravel Pit/Vacant

PROPOSED USE: Toy Storage, Gravel Pit

SURROUNDING LAND USE PATTERN:
North: Gravel Pit
South: Rural Residential
East: Agricultural/Rural Resource/Rural Residential
West: Residential/Resort Campground

POLICY:

See attached Policy and Zoning information.

FINANCIAL:

There are no financial implications to the CSRD with regard to this application.

KEY ISSUES/CONCEPTS:**Proposed Subdivision:**

The applicant has applied to subdivide the subject properties. The current zoning would not support the subdivision proposal as the proposed lots do not meet the minimum parcel size requirements. The subdivision would separate existing Part W1/2 of the NW 1/4, Section 17 south of Ross Creek which currently is where the Ross Creek General Store and Campground is located, from the remainder of the property north of Ross Creek. North of Ross Creek proposed Lot 1 would gain highway access from McClaskey Road via a long panhandle driveway through current Lot 1, Plan KAP56704. A small portion of Lot 1, Plan KAP56704 in its southeast corner, would be used for a caretaker residence and serve as security control in and out of the main portion of the proposed Lot 1 for the proposed Toy Storage facility. Proposed Lot 2 would be a consolidation of the remainder of the portion of Part W1/2 of the NW 1/4, Section 17 north of Ross Creek, with the remainder of Lot 1, Plan KAP 56704.

A plan showing the proposed plan of subdivision has been included in the Maps attachment to this report for reference.

Proposed Use

The use contemplated for proposed Lot 1 is unique to Magna Bay Zoning Bylaw No. 800, and therefore staff are proposing to include a new definition describing the use as follows:

TOY STORAGE is the *commercial* use of land, *buildings* and structures to provide separate, individual self-storage units inside a *building*, each with a separate entrance designed to be rented or leased to the general public for private storage of personal goods, materials or equipment but which does not include commercial use of the individual storage units.

The applicant runs 2 businesses in the area with similar uses, Boys with Toys Storage in Sicamous, and Scotch Creek Mini Storage in Scotch Creek.

Staff are also proposing to include a definition to describe commercial use, as follows:

COMMERCIAL is an occupation, service, employment or enterprise that is carried on for gain or monetary profit by any individual, business or organization.

Proposed Lot 2 is proposed to be rezoned from A – Agriculture to IG – Industrial Gravel Processing to reflect that it is partially currently being used as a gravel pit. Rezoning to IG is supported by the OCP as it has been designated as Rural and Resource. It is anticipated that the owner will expand his gravel extraction operation further onto this property in the future. The IG zone allows the following permitted uses:

- Sand and gravel processing

- Concrete batching
- *Accessory use*, except asphalt batching

Proposed CDF -2 Zone

The CDF – 2 zone will be unique to proposed Lot 1 and is proposed to contain 2 separate Development Areas. Development Area 1 is for the storage facility buildings and will also allow for outdoor storage of recreational vehicles and boats and trailers. The individual storage facility buildings, would be restricted from use by commercial business operations. Development Area 2 will be where a caretaker residence will be located together with the main security gate with card-lock access to the storage facility.

Access:

Access to the proposed storage facility will be from McClaskey Road through the proposed panhandle driveway portion of proposed Lot 1. Proposed Lot 2 fronts on McClaskey Road, where there is an existing access as well as an access from the north from Charleson Road.

Sewer Servicing and Drinking Water

The Toy Storage buildings will feature a central washroom facility, while the caretaker residence will be a full time residential use. The applicant has provided no details to this point of proposed servicing.

No options exist in the area for either Community Water or Sewer servicing to the property, so all servicing will need to be on-site. Site servicing options will impose constraints on the physical features available within the storage buildings.

Storm Drainage

The applicant has provided no information with respect to on-site storm drainage.

Riparian Area Regulation Issues/History

As a condition of the rezoning of the part of the property south of Ross Creek for the Ross Creek General Store and Campground, the property owner applied for a Development Permit (DP 830-45). DP 830-45 was issued for RAR and for flood hazard issues concerning Ross Creek. The applicant had a Riparian Area Assessment Report (RAAR) completed by a Qualified Environmental Professional (QEP), dated March 29, 2011, by Bill Rublee, R.P.Bio. of Triton Environmental Consultants Ltd. Use of the area for boat and trailer storage will be outside of the established Streamside Protection and Enhancement Area (SPEA) of 30.0 m for Ross Creek. Staff have included buffer requirements within the new CDF 2 zone which will protect the SPEA.

Temporary Use Permit 830-2

The Board just considered and approved issuance of a Temporary Use Permit (No. 830-2) for a small portion of proposed Lot 1 for a parking area for boats and trailers, for use by guests of the adjacent Magna Bay Resort. The proposed rezoning would also include outdoor storage of recreational vehicles and boats and trailers as a principal use.

Buffers

Staff has included in the proposed new zone the requirement for a buffer to screen the proposed storage facility from adjacent residential properties.

Ross Creek

The lands proposed to be rezoned fall within the Ross Creek Flooding and Debris Flow Hazard Lands Development Permit Area. Prior to subdivision of the property, as proposed and construction of the proposed storage buildings, the applicant will be required to have a Development Permit issued. The applicant has already hired an Engineering firm to provide a report on the potential hazard.

OCP Bylaw No. 830

The property intended for the toy storage facility is just outside of the Secondary Settlement Area, and the use is a commercial type of use, staff have required the applicant to submit an application to re-designate proposed Lot 1 to Secondary Settlement Area. The Secondary Settlement Area does not require a form and character Development Permit, for commercial development.

SUMMARY:

The applicant has applied to re-designate and rezone the subject properties to support a subdivision proposal and to allow for the use of proposed Lot 1 for a Toy Storage operation.

Staff is recommending that the Board can consider the OCP amendment bylaw for first reading for the following reasons:

- Residential zones in the Magna Bay Zoning Bylaw No. 800 and Anglemont Zoning Bylaw No. 650 limit Accessory Building floor areas to 55 m².
- Topography in the Magna Bay and Anglemont areas severely restrict property owner's ability to construct accessory buildings on a large number of properties.
- Topography in these areas also restrict access to the areas of properties where these kind of structures would typically be located.
- Geotechnical and slope stability considerations severely impact on an owners feasibility of constructing an accessory building. Further, construction of large accessory buildings could lead to additional slope stability issues.
- Seasonal use of properties in Magna Bay and Anglemont create security issues for property owners wanting to use their properties for storage of recreational vehicles and boats.
- Many owners in the area only have recreational properties with no ability to construct this kind of secured storage on site.
- A centralized secure storage facility will reduce the pressure on existing residential areas to support construction of larger and more elaborate accessory buildings.
- The use of the facility is limited to storage and no other more commercial uses will be permitted on the site.

Staff are also recommending that the Board can consider the rezoning amendment bylaw and directing staff to forward both bylaws to referral agencies and First Nations.

IMPLEMENTATION:**Consultation Process**

As per CSRD Policy No. P-18 regarding Consultation Processes-Bylaws, staff recommends the simple consultation process. Neighbouring property owners will first become aware of the application for zoning amendments when a notice of development sign is posted on the property.

COMMUNICATIONS:

Referral Process

The following list of referral agencies is recommended:

- Interior Health Authority – Community Care Licensing
- Ministry of Forests, Lands and Natural Resource Operations, Archaeology Branch;
- CSRD Operations Management; and,
- All relevant First Nations.
 - Adams Lake Indian Band
 - Little Shuswap Indian Band
 - Neskonlith Indian Band
 - Coldwater Indian Band
 - Cooks Ferry Indian Band
 - Esh-kn-am Cultural Resources Management Services
 - Lower Similkameen Indian Band
 - Nlaka'pamux Nation Tribal Council
 - Okanagan Indian Band
 - Okanagan Nation Alliance
 - Penticton Indian Band
 - Siska Indian Band
 - Splots'in First Nation

DESIRED OUTCOMES:

That the Board endorse staff recommendation.

BOARD'S OPTIONS:

1. *Endorse the Recommendation. Bylaw No. 830-18 and 800-30 will be given first reading and sent out to referral agencies.*
2. *Deny the Recommendation. Bylaw No. 830-18 and 800-30 will be defeated.*
3. *Defer.*
4. *Any other action deemed appropriate by the Board.*

LIST NAME OF REPORT(S) / DOCUMENT(S) AVAILABLE FROM STAFF:

1. List reports

Report Approval Details

Document Title:	2017-06-15_Board_DS_BL800-30_Isley.docx
Attachments:	<ul style="list-style-type: none">- APPENDIX-A-Policies.docx- BL800-30-Report Attachments.docx- BL830-18 First.docx- BL800-30-First.docx
Final Approval Date:	Jun 7, 2017

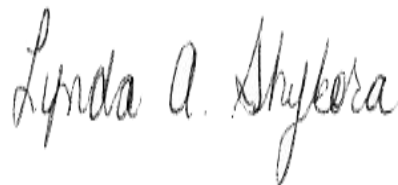
This report and all of its attachments were approved and signed as outlined below:



Corey Paiement - Jun 2, 2017 - 9:54 AM



Gerald Christie - Jun 5, 2017 - 7:35 AM



Lynda Shykora - Jun 7, 2017 - 9:47 AM



Charles Hamilton - Jun 7, 2017 - 10:31 AM

APPENDIX 'A'

Applicable OCP Policies and Zoning Regulation

Electoral Area 'F' Official Community Plan Bylaw No. 830**2.4 Hazardous Areas**

Objective 1

To identify natural and human-made hazardous conditions, and closely regulate any new development in these areas.

Policy 1

Development within an identified or suspected hazardous area or down slope from a hazardous area is generally discouraged and encouraged to be re-sited.

Policy 2

Where re-siting of the development is not feasible, low intensity uses, such as natural areas, park or agriculture, should locate in or adjacent to hazardous areas, and higher intensity uses should locate away from these areas.

Policy 3

At the time of subdivision, the Regional District may recommend that the Approving Officer request information regarding flooding, erosion, landslip or rockfall and place a restrictive covenant on affected areas to minimize damage and to warn future property owners of a potential hazard.

Policy 4

Where the hazard area falls within a Development Permit Area, development proposals are required to meet those guidelines.

Section 7 A More Diversified Economy

A vibrant economy with year-round employment is important to residents of the North Shuswap.

Objective 1

To support traditional resource employment sectors in the North Shuswap, including forestry, mining, and agriculture.

Objective 2

To develop the North Shuswap into a year-round tourist destination, with a focus on eco-tourism.

Objective 3

To ensure there are opportunities for residents to work from their homes.

7.1 Economic Diversity

Policy 1

The Regional District will work with the North Shuswap business community to develop a long-term economic development strategy that focuses solely on the needs of the North Shuswap.

Economic diversification should be a major component of any economic development strategy. Local banking should also be encouraged.

7.2 Resource Industries

Policy 1

The Regional District, in consultation with the North Shuswap community, will develop a strategy to facilitate the production of valued-added forest and agricultural projects through such measures as small scale related processing facilities and limited direct resource sales.

Policy 2

The Regional District will be guided principally by the Okanagan–Shuswap Land and Resource Management Plan and relevant CSRD and Provincial BC policies/regulations.

Policy 3

The Board will consider creating a Soil Removal and Deposit Bylaw to regulate and require permitting for new gravel extraction and other similar uses.

7.3 Tourism

Policy 1

The Regional District will support the vision of the Shuswap Tourism Development Plan (March 2010) which includes the following components:

Green and Sustainable

- eco-friendly
- pristine lakes
- controlled backcountry access
- integrated land use

Four Season Destination

- world-class service
- authentic experiences
- destination recognition
- agri-tourism
- diverse accommodation options

Regional Cooperation

- collaborating communities
- tourism awareness
- strong sense of community
- Superhost community

Embracing Culture & Sport

- expanded events
- sport tourism
- family-oriented
- multi-cultural

Quality Infrastructure

- gateway visitor centres
- quality highways
- transit options
- scheduled air service
- quality recreation amenities

10.4 Stormwater Management

Objective 1

To encourage responsible storm water drainage for development in the North Shuswap.

Policy 1

Landowners are encouraged to use pervious surfaces on driveways, parking lots and access roads, as well as to take other measures such as xeriscaping, infiltration basins, and green roofs in order to reduce overland runoff.

11.1 General Land Use

The policies of this Plan aim to protect the rural character of the North Shuswap, yet allow modest growth in areas that are, or will be, serviced by community water and sewer systems.

By directing growth to the Settlement Areas, there will be less impact on the rural and natural areas of the community, thereby protecting agricultural land and natural habitat, and preserving the area's highly valued rural character. This settlement pattern will also facilitate shorter vehicle trips, as well as encourage more walking, bicycling and, potentially, the introduction of public transit.

The land use designations of this Plan generally reflect the present pattern of land use in which residential, commercial and public uses are concentrated in settlement areas, leaving most of the land for forestry, agriculture, and other resource uses. This plan identifies one Primary Settlement Area (Scotch Creek) and six Secondary Settlement Areas. The term Primary Settlement Area is synonymous with Scotch Creek in this plan and should be interpreted as referring to the same area.

Objective 1

To be thoughtful and careful stewards of the lands and waters of the North Shuswap to ensure that future generations will appreciate and benefit from wise choices made by today's elected decision-makers.

Objective 2

To direct growth and development in an organized and desirable manner, reinforcing established settlement patterns and discouraging development outside these settled areas.

Objective 3

To provide a clear separation between rural and non-rural lands to preserve both rural and non-rural lifestyle choices.

Objective 4

To ensure that public infrastructure, community amenities and utilities are planned and implemented in advance of development.

Objective 5

To ensure that land use and development will not negatively affect environmental features and functions, both inside and outside of settlement areas.

Policy 1

The Primary and Secondary Settlement Areas are delineated on Schedules B & C. This Plan directs growth and development to these areas. The Plan does not support significant growth and development outside the Primary and Secondary Settlement Areas.

Policy 2

Except in exceptional situations, no public funds will be expended for the capital cost of extending servicing of water, sewer, and stormwater/rainwater systems to lands outside the Settlement Areas.

Policy 3

Scotch Creek is the Primary Settlement Area. The Regional District will encourage residential, commercial, and light industrial growth in Scotch Creek that is consistent with the policies of this plan. All new development must be connected to community water and sewer systems.

Policy 4

As the CSRD's resources allow, the Regional District will undertake a Local Area Plan for Seymour Arm, in full consultation with area residents and businesses.

Policy 5

Lee Creek, Celistia, Magna Bay, Anglemont, St. Ives, and Seymour Arm are designated Secondary Settlement Areas. Low density residential and neighbourhood convenience commercial uses are appropriate in these Secondary Settlement Areas. All new development must be connected to community water and sewer services, except in Seymour Arm. The following land uses are generally acceptable in the Secondary Settlement Areas:

1. Detached and Duplex Residential
2. Recreational Residential
3. Commercial
4. Public and Institutional
5. Park and Protected Area
6. Foreshore and Water
7. Agriculture
8. Commercial Public Utility

Policy 6

Outside the boundaries of the Primary and Secondary Settlement Areas, the following uses are appropriate in certain locations.

1. Waterfront Residential
2. Public and Institutional
3. Park and Protected Area
4. Agriculture
5. Rural Residential
6. Rural and Resource
7. Foreshore and Water

Policy 7

Maintaining public views of Shuswap Lake is important. All development, regardless of its use or location, is limited to three storeys along Shuswap Lake. This height limit will be given a numerical value in the zoning bylaw.

Policy 8

The land use policies of this Plan will lead to review and revision to some aspects of the existing zoning bylaws. Where there are no zoning bylaws in place, the CSRD will prepare zoning bylaws. These activities will be undertaken in consultation with residents and landowners of Electoral Area 'F'.

11.4 Rural and Resource Lands (RSC)***Objective 1***

To support forestry, agricultural, mining and recreational uses provided they follow all Provincial regulatory requirements, and avoid conflicts with residential areas.

Policy 1

The Rural and Resource land use designation is established on Schedules B & C.

Policy 2

Forestry, mineral, and aggregate extraction and outdoor recreational uses are appropriate in this area.

Policy 3

Lands designated as Rural and Resource should be maintained as large land parcels.

Policy 4

The Regional District encourages responsible land use practices on Rural and Resource lands:

Forestry should be managed in accordance with the Okanagan Shuswap Land and Resource Management Plan (OSLRMP). The Ministry of Forests, Lands and Natural Resource Operations is encouraged to use its regulatory authority to ensure that best management practices are followed by logging operations in order to minimize erosion and protect, to the greatest extent possible, the attractive viewscales associated with the natural tree cover in the area. There should be no clear-cutting of large tracts of forest land that are visible from Shuswap Lake.

Aggregate operations are subject to the licensing requirements of the Ministry of Energy and Mines. Aggregate operators must conduct their activities in accordance with the Aggregate Operators Best Management Practices Handbook for British Columbia which addresses specific community issues such as noise, dust, traffic, hours of operation, viewscales and sets out specific practices designed to minimize impact on the environment. Schedule E, showing the extent of aggregate potential, is sourced from the Ministry of Energy and Mines.

Policy 5

The Regional District encourages the Ministry of Energy and Mines to refer sand and gravel/quarry proposals to the Regional District and give due consideration to the impact of extraction and processing activities on surrounding land uses and developments. In particular, the Regional District encourages the Ministry not to issue new surface permits for sand and gravel/quarry processing near residential areas unless the applicant demonstrates how mitigation measures will minimize or nullify the effects of the proposed activity.

Policy 6

Resource extraction operations, including forestry and mining, are responsible for restoring the landscape upon completion of the operations.

11.8 Secondary Settlement Areas (SSA)

Detached, semi-detached and duplex

Policy 1

Detached, semi-detached and duplex housing forms are acceptable residential land uses in the Primary and Secondary Settlement Areas.

Policy 2

All new detached, semi-detached and duplex housing units with a density greater than 1 housing unit per 2.5 acres (1 unit per hectare) must be connected to both a community water system and a community sewer system.

Policy 3

Applicants for new, detached dwellings are encouraged to consider net density in the range of 3 to 5 units per acre (8 to 13 units per hectare). The zoning bylaw will establish additional conditions related to such matters as lot line setbacks, lot coverage and parking.

Policy 4

Applicants for new semi-detached and duplex dwellings are encouraged to consider net density in the range of 6 to 8 units per acre (15 to 20 units per hectare). The zoning bylaw will establish additional conditions related to such matters as lot size, lot coverage, setbacks, and parking.

Recreational Residential

Recreational Residential refers to recreational vehicles, modular homes and recreational cabins located in a park-like setting with shared amenities.

Policy 1

All development applicants for recreational residential development should demonstrate quality building design, attractive landscaped parking areas and road boulevards, and safe and attractive connections for pedestrians and cyclists to nearby areas.

Policy 2

Any proposal for recreational residential development should be encouraged to locate within the Primary or Secondary Settlement Areas.

Policy 3

New developments must be serviced by a community water and a community sewage system.

Policy 4

Applicants for new recreational residential dwellings are encouraged to consider a net density in the range of 10 to 12 units per acre (25 to 30 units per hectare).

11.9 Rural Residential (RR)*Policy 1*

The Rural Residential land use designation is established on Schedules B & C. Detached dwellings are acceptable within the Rural Residential designation, provided they comply with the requirements of the zoning bylaw.

Policy 2

The maximum density permitted in the Rural Residential designation is 1 unit per hectare (0.4 units per acre).

Policy 3

Residential development in rural areas will provide the Regional District with the appropriate technical information about on-site sewage disposal and water servicing.

11.10 Commercial (C)*Objective 1*

To encourage a range of commercial services that meets the needs of North Shuswap residents and tourists.

Policy 1

New commercial development is directed to Primary and Secondary Settlement Areas.

Policy 2

All new commercial development must be serviced by community water and sewer systems (except in Seymour Arm) and have provisions made for the appropriate management of storm water by the time of occupancy.

Policy 3

If requested by local businesses, the Regional District will assist in the development of a Scotch Creek Business Improvement Association to help improve the viability of businesses and the attractiveness of Scotch Creek as a destination.

Policy 4

Commercial land use policies for the Scotch Creek Primary Settlement Area are described in Section 12.

Policy 5

In Secondary Settlement Areas, a limited range of retail, business and professional services and community services that meet the daily needs of residents and tourists is acceptable.

11.11 Major Destination Resort*Policy 1*

No area is designated as Major Destination Resort. Any proposal for a Major Destination Resort will be considered on its merits and will be required to undertake impact studies as part of the review process.

Policy 2

Major Destination Resort proposals should be directed to areas of least sensitivity. Any proposal will be sited and designed to avoid adverse impacts on nearby residential areas, existing commercial development, environmentally sensitive areas and fish habitat.

Policy 3

In light of the environmentally sensitive conditions associated with the foreshore of Lee Creek and the mouth of the Adams River, a Major Destination Resort is inappropriate in this area.

Policy 4

Major Destination Resorts are not supported in Seymour Arm.

Policy 5

Any Major Destination Resort must be connected to community water and sewer, and have provisions made for the appropriate management of storm water by the time of occupancy.

Policy 6

The applicant for a Major Destination Resort will be required to undertake impact studies as part of the review process and to satisfy relevant Development Permit requirements. Additionally, the CSRD will require the applicant to demonstrate how provision will be made for the housing of seasonal workers associated with the resort's operations.

11.12 Public & Institutional (PI)*Policy 1*

Existing institutional uses, both public and private, are acknowledged by this Plan.

Policy 2

Public and private institutional uses are encouraged to locate in the Primary and Secondary Settlement Areas. Institutional uses include schools, health facilities, cemeteries, religious facilities, government offices, libraries, and community halls as well as infrastructure required for public utility systems.

11.13 Parks and Recreation (PK)*Policy 1*

The Parks and Recreation designation includes federal, provincial, and regional parks, and associated park uses, as well as public and private recreation facilities.

13.1 Hazardous Lands Development Permit Areas**13.1 (a) Purpose**

The Hazardous Lands DPA is designated under the Local Government Act for the purpose of protecting development from hazardous conditions. Three hazardous lands categories have been established under this permit area: (1) Flooding and Debris Flow, (2) Steep Slope and (3) Interface Fire.

13.1 (b) Justification

Whereas evidence of past flooding and debris flow exists on the watercourses named in the Area section that follows, whereas steep slopes pose a potential landslide risk and whereas interface fire pose a risk to life and property, a Hazardous Lands DPA is justified to:

- protect against the loss of life;
- minimize property damage, injury and trauma associated with flooding and debris flow events;
- ensure that development in steep slope areas is designed and engineered to provide a high level of protection from ground instability and/or slope failure; and
- plan and manage development in fire interface areas in a way that minimizes the risk of damage to property or people from interface fire hazards and mitigates interface fire hazards.

13.1.1 Hazardous Lands Development Permit Area 1 (DPA 1 Flooding and Debris Flow Potential)

13.1.1.(a) Area

The area within 100 m (328 ft.) of Adams River, Corning Creek (a.k.a. Lee Creek), Hudson Creek, Onyx Creek, Ross Creek, Scotch Creek, and Seymour River is designated as Hazardous Lands DPA 1 (*Flooding and Debris Flow Potential*).

[Note: Due to limited detailed hazard mapping, the CSRD may require additional lands to be investigated if evidence exists of flooding and debris flow potential beyond the 100 m (328 ft) that may impact or be impacted by the proposed development.]

13.1.1.(b) Guidelines

To protect against the loss of life and to minimize property damage associated with flooding and debris flow events, the CSRD encourages low intensity uses, such as conservation (natural) areas, agriculture, park and open-space recreation, in flood susceptible lands.

Where flood and debris flow susceptible lands are required for development, the construction and siting of buildings and structures to be used for habitation, business or the storage of goods damageable by floodwaters shall be flood-proofed at a minimum to those standards specified by the Ministry of Environment's *Flood Hazard Area Land Use Management Guidelines*, or, if greater, to standards set out by a Qualified Professional registered with the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC).

DPs addressing Flooding and Debris Flow Potential shall be in accordance with the following:

- .1 Prior to construction of, addition to or alteration of a building or other structure or prior to subdivision approval, the applicant shall submit a report, prepared by a qualified professional registered with the APEGBC with experience in geotechnical engineering and preferably also with experience in hydraulic engineering. The report, which the Regional District will use to determine the conditions and requirements of the DP, must certify that the "land may be used safely for the use intended" as provided under the Local Government Act.
- .2 The report should include the following types of analysis and information:
 - i. site map showing area of investigation, including existing and proposed: buildings, structures, septic tank & field locations, drinking water sources and natural features;
 - ii. inspections of up-stream channels and flood ways, including channel confinement and creek gradients;
 - iii. debris dams and characteristics, culverts;
 - iv. sources of alluvium (channels and eroded banks), protection of groundwater resources, and related hydrologic features, which are factors that may affect the field defined limit of flooding and related erosion and deposition, as well as the potential for debris torrents;
 - v. slope and stream profiles with documentation of slope stability, the limits and types of instability, should be indicated along with changes in stability that may be

- induced by forest clearing, and the mobilization and run out limits of debris in creeks; and
- vi. comments regarding cut and fill slope stability with reference to required surface or subsurface drainage, culverts, and special reference to the stability of fills required for steep gully crossings should be provided

- .3 A Covenant may be registered on title identifying the hazard and remedial requirements as specified in the geotechnical or engineering reports for the benefit and safe use of future owners.

13.4 Riparian Areas Regulation (RAR) Development Permit Area

13.4.1 Purpose

The RAR DPA is designated under the Local Government Act, and applicable provisions of the Community Charter for the protection of the natural environment, its ecosystems and biological diversity. The RAR regulations place considerable emphasis on Qualified Environmental Professionals (QEPs) to research established standards for the protection of riparian areas. The presence of the QEP, Ministry of Environment (MOE) and Department of Fisheries and Oceans in the review process reduces the extent to which the CSRD will be involved in the technical details of the permitting process. Essentially, the role of the QEP means that CSRD involvement is more administrative in nature.

13.4.2 Area

The RAR DPA is comprised of riparian assessment areas for fish habitat, which include all watercourses and adjacent lands shown on Provincial TRIM map series at 1:20,000, as well as unmapped watercourses.

As illustrated in Figure 13.1, the area comprises:

- o Within 30m (98.4 feet) of the high water mark of the watercourse;
- o Within 30m (98.4 feet) of the top of the ravine bank in the case of a ravine less than 60m (196.8 feet) wide; &
- o Within 10m (32.8 feet) of the top of a ravine bank for ravines 60 metres (196.8 feet) or greater in width that link aquatic and terrestrial ecosystems that exert an influence on the watercourse.

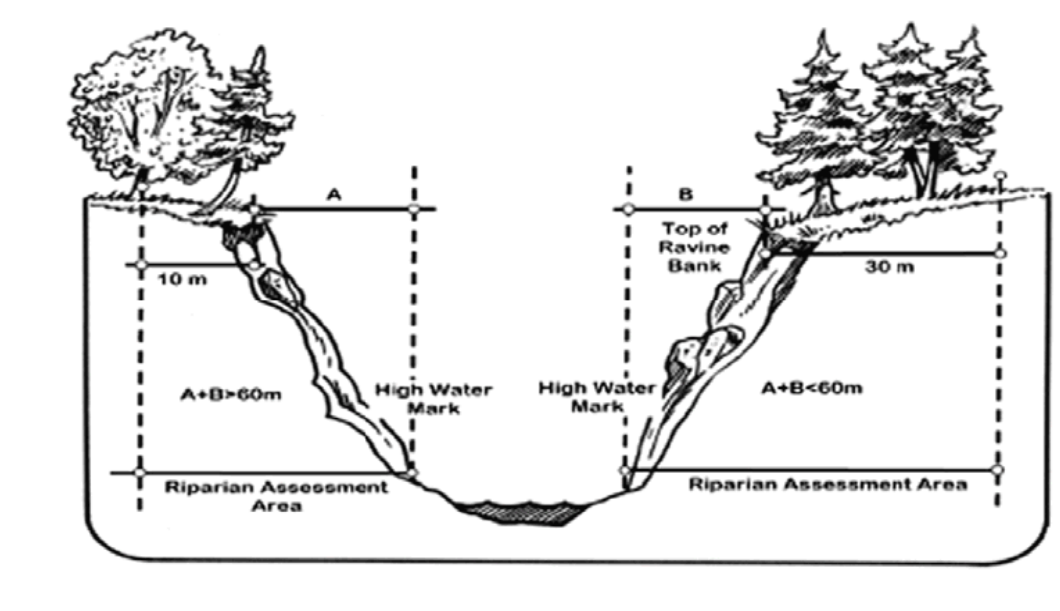


Figure 13.1

Unless the proposed development or alteration of land is clearly outside the riparian assessment area the location of the development shall be determined accurately by survey in relation to the RAR DPA to determine whether a DP application is required.

13.4.3 Justification

The primary objective of the RAR DPA designation is to regulate development activities in watercourses and their riparian areas in order to preserve natural features, functions and conditions that support fish life processes. Development impact on watercourses can be minimized by careful project examination and implementation of appropriate measures to preserve environmentally sensitive riparian areas.

13.4.4 Guidelines

(a) A DP is required, except where exempt for development or land alteration on land identified as a riparian assessment area within the RAR DPA. Development requiring a DP shall include, but may not be limited to, any of the following activities associated with or resulting from residential, commercial or industrial activities or ancillary activities, subject to local government powers under the Local Government Act:

- (i) Removal, alteration, disruption or destruction of vegetation within 30 m (98.4 ft) of a watercourse.
- (ii) Disturbance of soils within 30 m (98.4 ft) of a watercourse;
- (iii) Construction or erection of buildings and structures within 30 m (98.4 ft) of a watercourse;
- (iv) Creation of non-structural impervious or semi-impervious surfaces within 30 m (98.4 ft) of a watercourse.
- (v) Flood protection works within 30 m (98.4 ft) of a watercourse;
- (vi) Construction of roads, trails, docks, wharves and bridges within 30 m (98.4 ft) of a watercourse;

- (vii) Provision and maintenance of sewer and water services within 30 m (98.4 ft) of a watercourse;
- (viii) Development of drainage systems within 30 m (98.4 ft) of a watercourse;
- (ix) Development of utility corridors within 30 m (98.4 ft) of a watercourse; and
- (x) Subdivision as defined in the Land Title Act, and including the division of land into 2 or more parcels within 30 m (98.4 ft) of a watercourse.

(b) A DP may be issued once the following guidelines have been met:

- (i) Assessment by a QEP in accordance with the RAR established by the Provincial and/or Federal Governments; and
- (ii) Provincial notification that a QEP has submitted a report certifying that he or she is qualified to carry out the assessment, that the assessment methods have been followed, and provides in their professional opinion that a lesser setback will not negatively affect the functioning of a watercourse or riparian area and that the criteria listed in the RAR has been fulfilled.

13.4.5 *Exemptions*

The RAR DPA does not apply to the following:

- (a) Construction, alteration, addition, repair, demolition and maintenance of farm buildings;
- (b) Clearing of land for agriculture;
- (c) Institutional development containing no residential, commercial or industrial aspect;
- (d) Reconstruction, renovation or repair of a legal permanent structure if the structure remains on its existing foundation in accordance with provisions of the relevant section of the Local Government Act. Only if the existing foundation is moved or extended into a riparian assessment area would a RAR DPA be required;
- (e) An area where the applicant can demonstrate that the conditions of the RAR DPA have already been satisfied, or a DP for the same area has already been issued in the past and the conditions in the DP have all been met, or the conditions addressed in the previous DP will not be affected; and
- (f) Development to which RAR does not apply, as confirmed in writing by a QEP.

Magna Bay Zoning Bylaw No. 800

Section 5.2 Agriculture - A

Permitted Uses

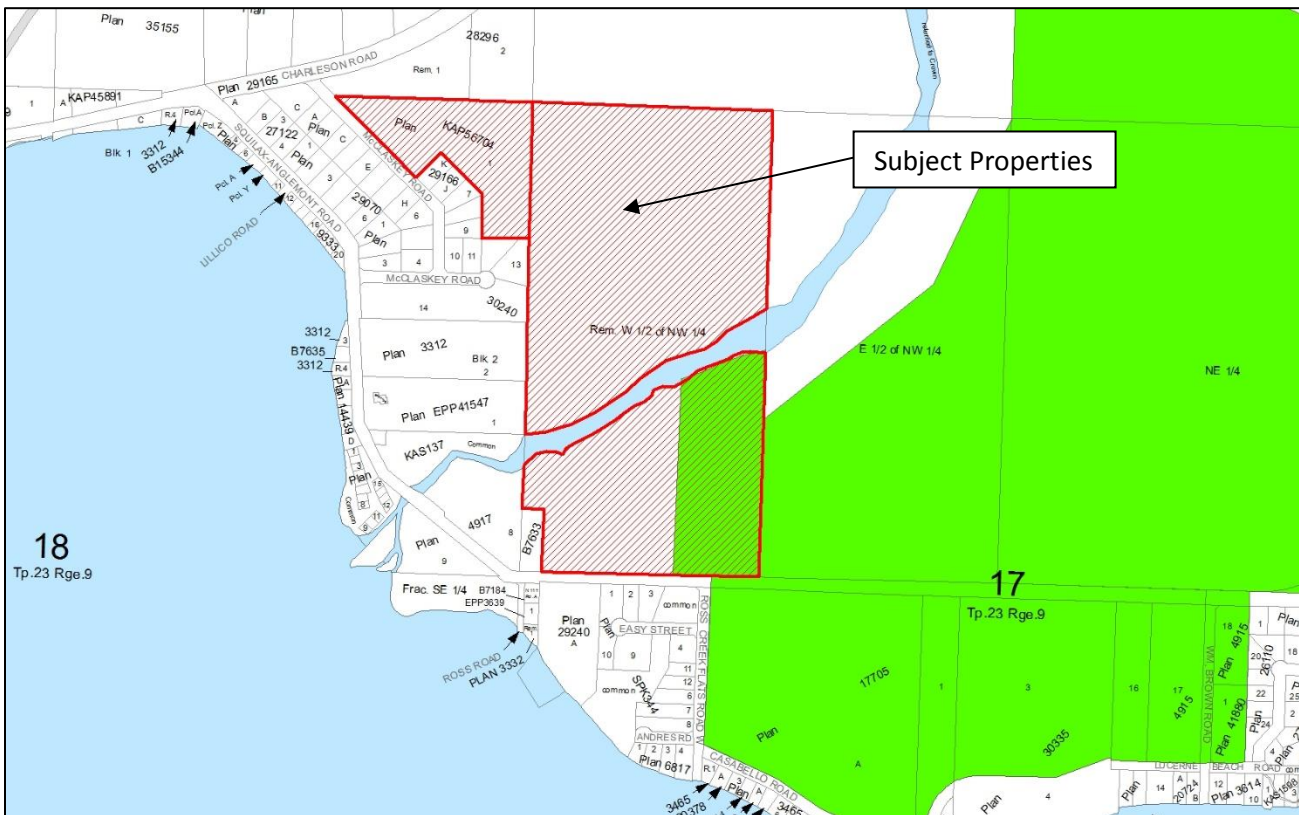
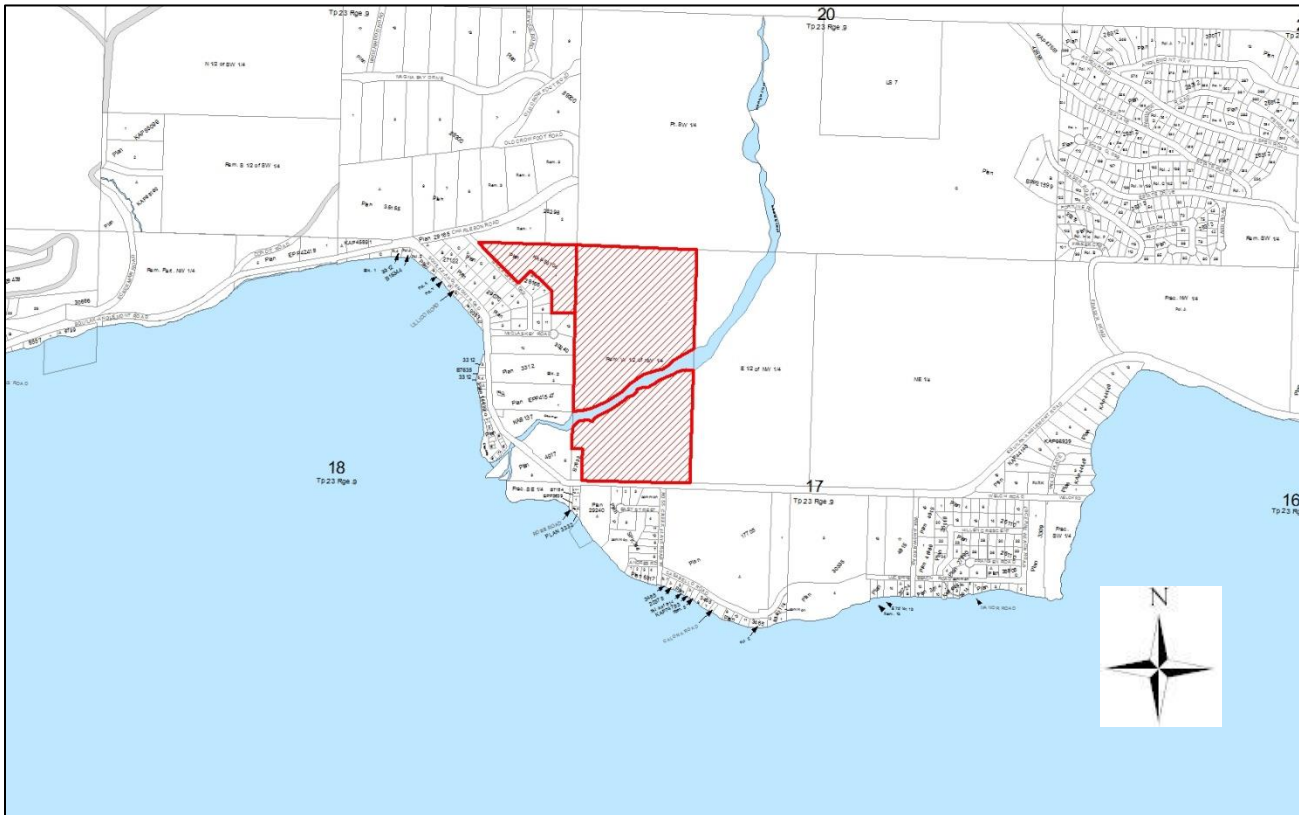
- (a) Agriculture
- (b) Aquaculture
- (c) Bed and breakfast, permitted on a parcel 1 ha (2.47 ac.) or larger.
- (d) Home business
- (e) Home industry, permitted on a parcel 4000 m² (0.99 ac.) or larger.
- (f) Kennel, permitted on a parcel 2 ha (4.94 ac) or larger. Buildings and structures, including runs must be a minimum of 30 m (98.43 ft.) from a parcel boundary.
- (g) Residential campsite
- (h) Single family dwelling
- (i) Standalone residential campsite
- (j) Accessory use

Section 5.8 Industrial Gravel Processing - IG

Permitted Uses

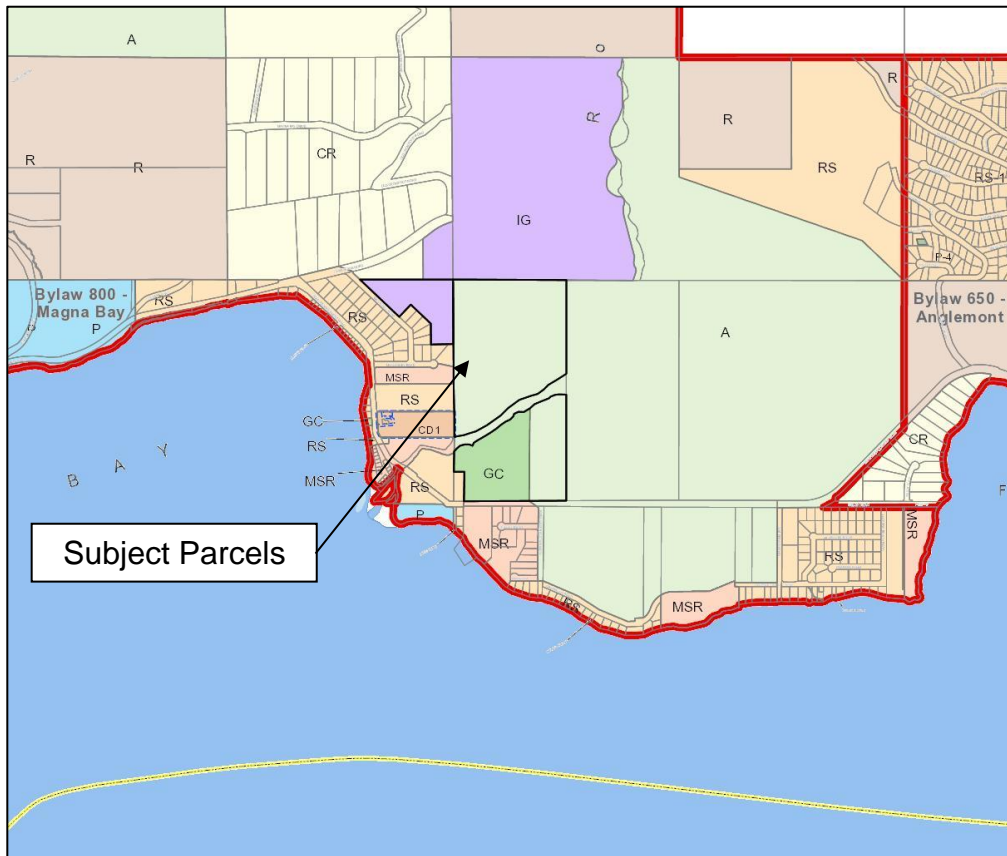
- (a) Sand and gravel processing
- (b) Concrete batching
- (c) Accessory use, except asphalt batching

Location

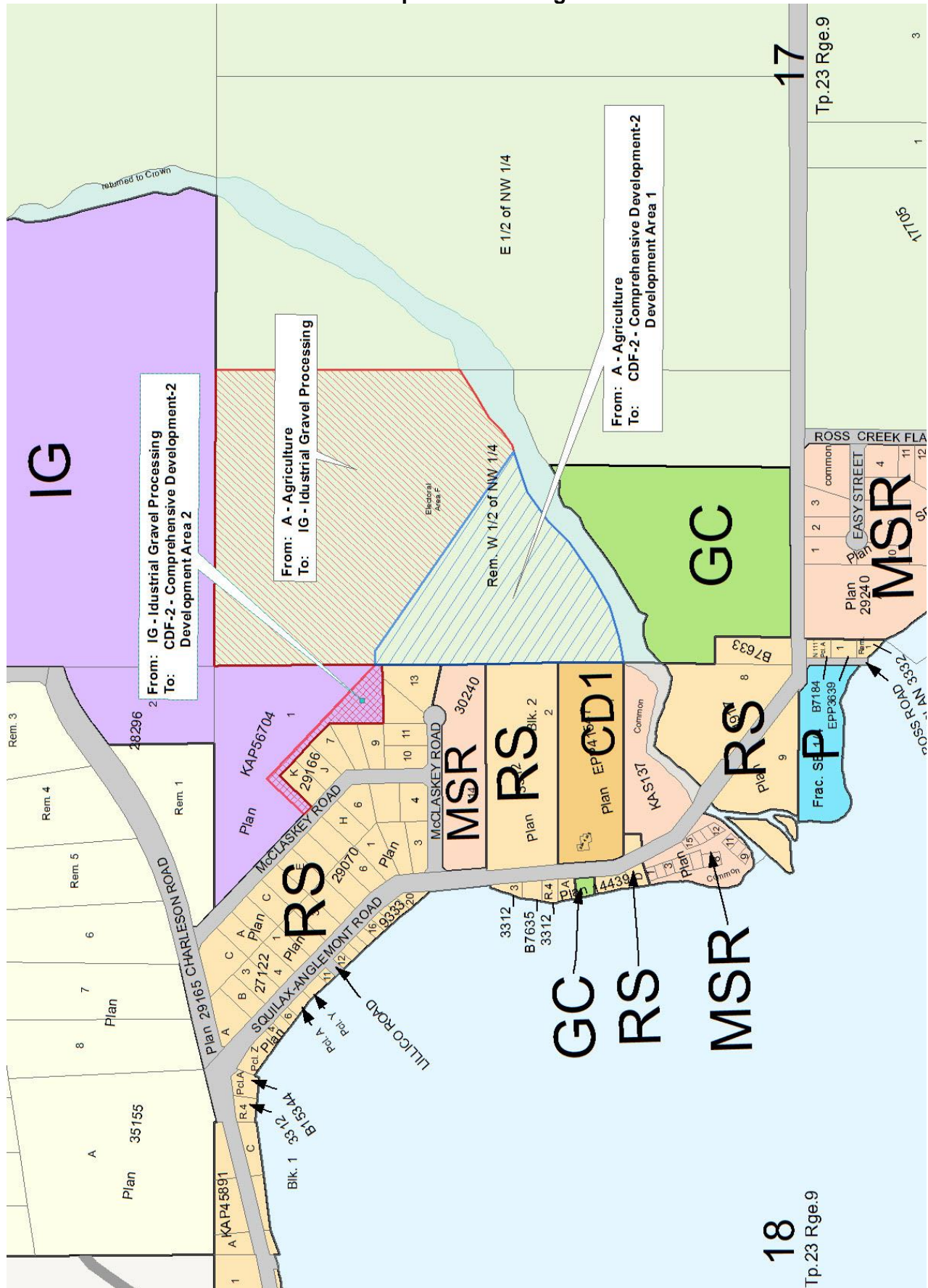




Zoning



Proposed Rezoning



Orthophoto



Orthophoto



COLUMBIA SHUSWAP REGIONAL DISTRICT

ELECTORAL AREA 'F' OFFICIAL COMMUNITY PLAN
AMENDMENT (SCOTCH CREEK DEVELOPMENTS) BYLAW NO. 830-18

A bylaw to amend the "Electoral Area 'F' Official Community Plan No. 830"

WHEREAS the Board of the Columbia Shuswap Regional District adopted Bylaw No. 830;

AND WHEREAS the Board deems it appropriate to amend Bylaw No. 830;

NOW THEREFORE the Board of the Columbia Shuswap Regional District, in open meeting assembled, HEREBY ENACTS as follows:

1. "Electoral Area 'F' Official Community Plan Bylaw No. 830" is hereby amended as follows:

A. MAP AMENDMENT

- i) Schedule B (Land Use Designations – Overview Map) which forms part of "Electoral Area 'F' Official Community Plan Bylaw No. 830" is amended by redesignating those portions of Part W1/2 of the NW 1/4, Section 17, Township 23, Range 9, W6M, KDYD, Except Plan B7633 (PID: 014-009-552), which are more particularly shown outlined in bold blue and hatched on Schedule 1 attached hereto and forming part of this bylaw from RSC Rural and Resource Lands to SSA Secondary Settlement Area.
- ii) Schedule C (Land Use Designations - Mapsheets) which forms part of "Electoral Area 'F' Official Community Plan Bylaw No. 830" is amended by redesignating those portions of Lot B, Section 28, Township 22, Range 11, West of 6th Meridian, KDYD, Plan 34450, Except Plans 42553, KAP48913, KAP53004, KAP57959, and KAP77293, which are more particularly shown outlined in bold and cross-hatched on Schedule 1 attached hereto and forming part of this bylaw from LD Low Density Residential, Scotch Creek Primary Settlement Area to CPU Commercial Public Utility Scotch Creek Primary Settlement Area..

Bylaw No. 830-18

Page 2

2. This bylaw may be cited as "Electoral Area 'F' Official Community Plan Amendment (Isley) Bylaw No. 830-18."

READ a first time this _____ day of _____, 2017.

READ a second time this _____ day of _____, 2017.

PUBLIC HEARING held this _____ day of _____, 2017.

READ a third time this _____ day of _____, 2017.

ADOPTED this _____ day of _____, 2017.

CORPORATE OFFICER

CHAIR

CERTIFIED true copy of Bylaw
830-18 as read a third time.

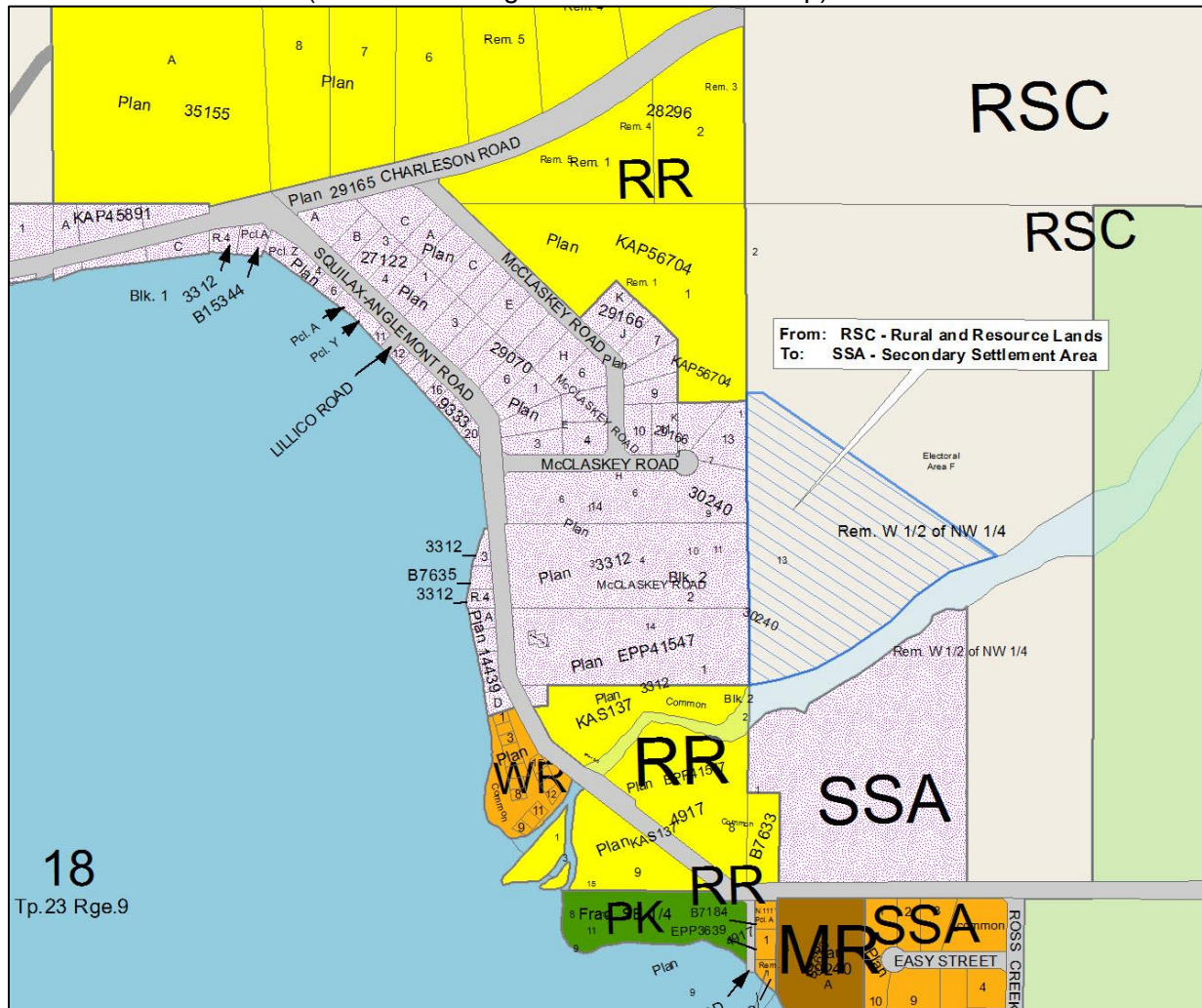
CERTIFIED true copy of Bylaw No.
830-18 as adopted.

Corporate Officer

Corporate Officer

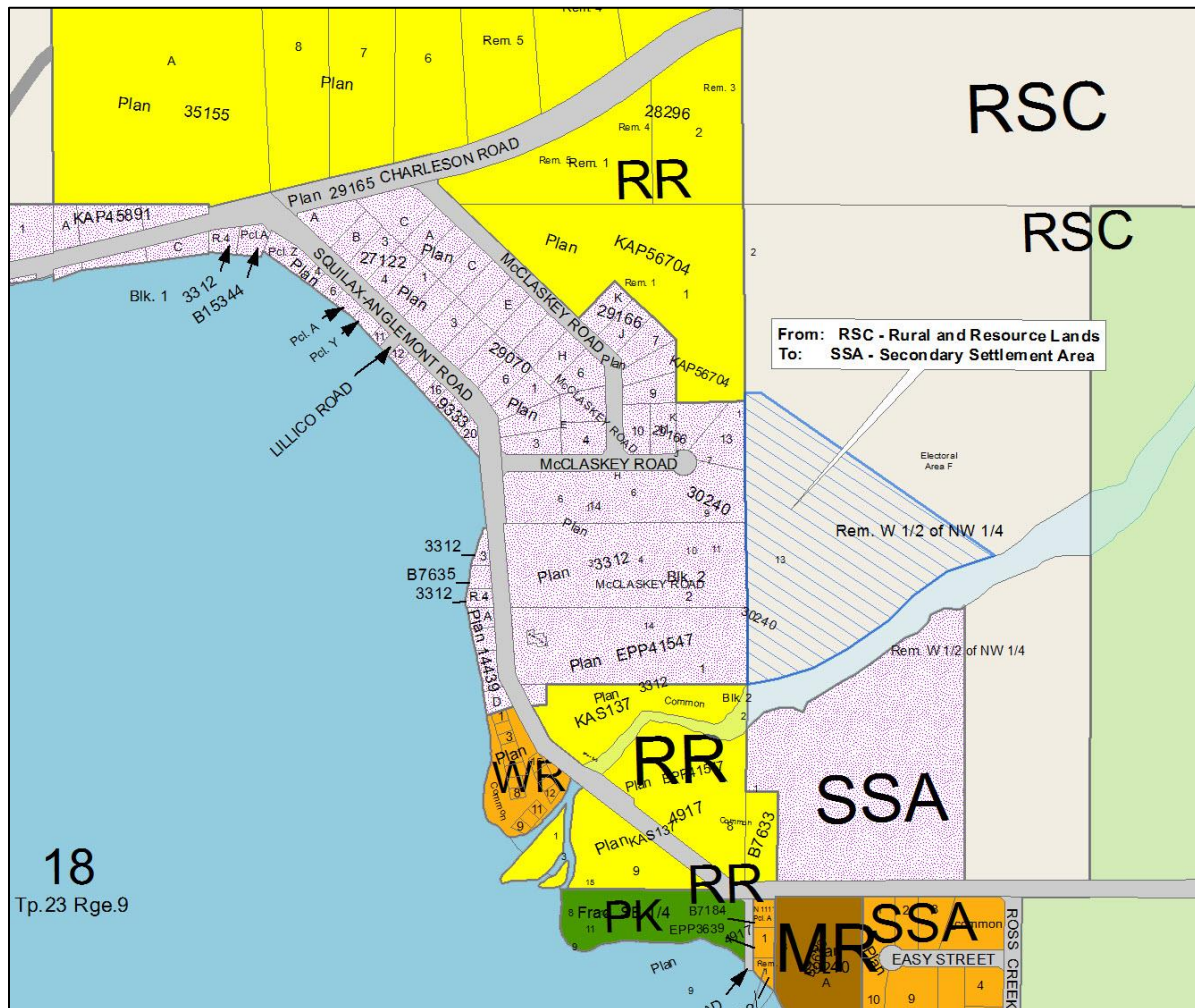
SCHEDULE 1

ELECTORAL AREA 'F'
OFFICIAL COMMUNITY PLAN AMENDMENT
(ISLEY) BYLAW NO. 830-18
(Land Use Designations - Overview Map)



SCHEDULE 2

ELECTORAL AREA 'F'
OFFICIAL COMMUNITY PLAN AMENDMENT
(ISLEY) BYLAW NO. 830-18
(Land Use Designations - Mapsheets)



COLUMBIA SHUSWAP REGIONAL DISTRICTMAGNA BAY ZONING AMENDMENT(ISLEY) BYLAW NO. 800-30A bylaw to amend the "Magna Bay Zoning Bylaw No. 800"

WHEREAS the Board of the Columbia Shuswap Regional District adopted Bylaw No. 800;

AND WHEREAS the Board deems it appropriate to amend Bylaw No. 800;

NOW THEREFORE the Board of the Columbia Shuswap Regional District, in open meeting assembled, HEREBY ENACTS as follows:

1. "Magna Bay Zoning Bylaw No. 800" is hereby amended as follows:

A. TEXT AMENDMENT

1. Schedule A, Zoning Bylaw Text, which forms part of the "Magna Bay Zoning Bylaw No. 800" is hereby amended as follows:

i. Part 1 Definitions, Section 1.0 is hereby amended by adding the following new definitions:

"COMMERCIAL is an occupation, service, employment or enterprise that is carried on for gain or monetary profit by any individual, business or organization;" after "CAMPING UNIT"; and,

"TOY STORAGE is the *commercial* use of land, *buildings* and structures to provide separate, individual self-storage units inside a *building*, each with a separate entrance designed to be rented or leased to the general public for private storage of personal goods, materials or equipment, but which does not include commercial use of the individual storage units;" after "TEMPORARY".

2. Schedule A, Zoning Bylaw Text, which forms part of the "Magna Bay Zoning Bylaw No. 800" is hereby amended as follows:

i. Table of Contents, Part 5 Zones, is amended by adding "5.12 Comprehensive Development 2", after "5.11 Comprehensive Development 1", and showing the appropriate page number.

ii. Section 4.6 Table 1 Required Off Street Parking Spaces and Off Street Loading Spaces is hereby amended by adding "*Toy Storage*" in Column 1 "Use", and adding "1 per 10 *toy storage* units", in Column 2 "Minimum Required Number of Off Street Parking Spaces", after "*Single family dwellings*".

iii. Part 5 Zones, Section 5.0 Establishment of Zones, Table 2 is amended by adding "Comprehensive Development 2" in "Column 1 Zone Title", after

“Comprehensive Development 1”, and “CDF-2”, in “Column 2 Zone Symbol”, after “CD-1”.

- iv. Part 5 Zones is amended by adding the new Comprehensive Development 2 zone, as follows:

“

Zone Title **COMPREHENSIVE DEVELOPMENT 2**

Zone Symbol – **CDF-2**

5.12 Development Area 1

(1) Permitted Uses

The uses stated in this subsection and no others are permitted in the Comprehensive Development Zone 2 Development Area 1 except as stated in Part 3: General Regulations:

- (a) *Toy Storage*
- (b) *Outdoor Storage of Recreational Vehicles, Boats, and Trailers*

(2) Regulations

On a parcel zoned Comprehensive Development 2 within Development Area 1, no land shall be used; no *building* or *structure* shall be constructed, located or altered; and no plan of subdivision approved; that contravenes the regulations stated in this subsection, except as stated in Part 3: General Regulations and Part 4 Off Street Parking and Off Street Loading Regulations.

COLUMN 1 MATTER REGULATED	COLUMN 2 REGULATION
(a) Minimum <i>parcel</i> size created by subdivision	5.5 ha (13.59 ac)
(b) Maximum <i>parcel</i> coverage	50%
(c) Maximum <i>height</i> for: <ul style="list-style-type: none"> • Principal <i>buildings</i> and structures 	10.0 m (32.81 ft)
(e) Minimum setback from: <ul style="list-style-type: none"> • <i>front parcel boundary</i> • <i>interior side parcel boundary</i> • <i>rear parcel boundary</i> 	5.0 m (16.4 ft) 5.0 m (16.4 ft.) 6.0 m (19.69 ft.)

(3) Screening

Landscaped screening formed by a row of shrubs and trees,

supplemented with a wooden fence, masonry wall, or chain link fence with visual screening to a minimum height of 3.0 m is required along the west and south side property lines.

- (4) Silt and run-off control measures are required.

Development Area 2

(3) Permitted Uses

The uses stated in this subsection and no others are permitted in the Comprehensive Development Zone 1 Development Area 2 except as stated in Part 3: General Regulations:

- (a) *Accessory Single Family Dwelling (caretaker dwelling unit)*
- (b) *Accessory Use*

(4) Regulations

On a parcel zoned Comprehensive Development 2 within Development Area 2, no land shall be used; no *building* or *structure* shall be constructed, located or altered; and no plan of subdivision approved; that contravenes the regulations stated in this subsection, except as stated in Part 3: General Regulations and Part 4 Off Street Parking and Off Street Loading Regulations.

COLUMN 1 MATTER REGULATED	COLUMN 2 REGULATION
(a) Maximum number of <i>Accessory Single Family Dwellings</i> per parcel	1
(b) Maximum <i>height</i> for: <ul style="list-style-type: none"> • Principal <i>buildings</i> and structures • <i>Accessory buildings</i> 	<ul style="list-style-type: none"> • 8.0 m (26.25 ft) • 6 m (19.69 ft)
(e) Minimum setback from: <ul style="list-style-type: none"> • <i>front parcel boundary</i> • <i>interior side parcel boundary</i> • <i>rear parcel boundary</i> 	5.0 m (16.4 ft) 5.0 m (16.4 ft.) 6.0 m (19.69 ft.)

“

B. MAP AMENDMENTS

- i. Schedule B of Magna Bay Zoning Bylaw No. 800 is amended by:

- (a) rezoning that portion of Part W1/2 of the NW 1/4, Section 17, Township 23, Range 9, W6M, KDYD, Except Plan B7633, which part is more particularly shown outlined in blue and hatched on Schedule 1 attached hereto and forming part of this bylaw from, A - AGRICULTURE to CDF-2-COMPREHENSIVE DEVELOPMENT-1, DEVELOPMENT AREA 1;

- (b) rezoning that portion of Lot 1, Section 18, Township 23, Range 9, W6M, KDYD, Plan KAP56704, which part is more particularly shown outlined in red and crosshatched on Schedule 1, attached hereto and forming part of this bylaw from IG – Industrial Gravel Processing to CDF-2 – COMPREHENSIVE DEVELOPMENT – 2, DEVELOPMENT AREA 2; and,
- (b) rezoning that portion of of Part W1/2 of the NW 1/4, Section 17, Township 23, Range 9, W6M, KDYD, Except Plan B7633 which part is more particularly shown outlined in red and hatched on Schedule 1 attached hereto and forming part of this bylaw from, A - AGRICULTURE to IG – INDUSTRIAL GRAVEL PROCESSING;

2. This bylaw may be cited as "Magna Bay Zoning Amendment (Isley) Bylaw No. 800-30."

READ a first time this _____ day of _____, 2017.

READ a second time this _____ day of _____, 2017.

PUBLIC HEARING held this _____ day of _____, 2017.

READ a third time this _____ day of _____, 2017.

ADOPTED this _____ day of _____, 2017.

Corporate Officer

Chair

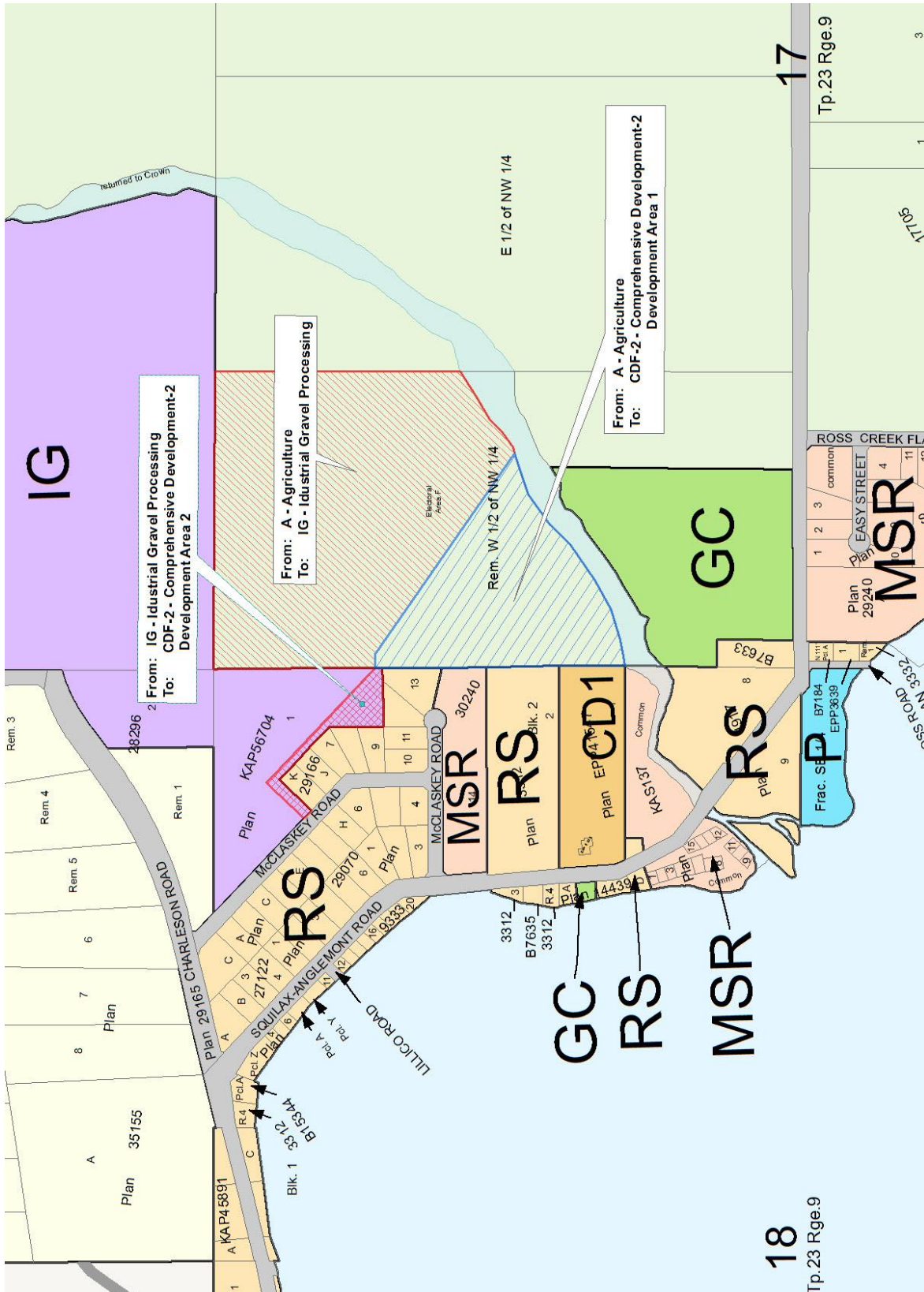
Certified true copy of Bylaw No. 800-30
as read a third time.

Certified true copy of Bylaw No. 800-30
as adopted.

Corporate Officer

Corporate Officer

Bylaw No. 800-30
Schedule 1





BOARD REPORT

TO:

Chair and Directors

File No:	BL 825-34
	BL 800-26
	BL 650-11
	BL 2064
	BL 701-83

SUBJECT:

Electoral Areas C, E, and F: Housekeeping Amendments – Floodplain Management, Intersection Sightlines, and Panhandle lots (CSR D Zoning Bylaws)

DESCRIPTION:

Report from Dan Passmore, Senior Planner, dated April 12, 2017.

RECOMMENDATION #1:

THAT: "Scotch Creek Zoning Amendment (CSR D) Bylaw No. 825-34' be read a second time, as amended, this 15th day of June, 2017;

RECOMMENDATION #2:

THAT: "Magna Bay Zoning Amendment (CSR D) Bylaw No. 800-26" be read a second time, as amended, this 15th day of June, 2017;

RECOMMENDATION #3:

THAT: "Anglemont Zoning Amendment (CSR D) Bylaw No. 650-11" be read a second time, as amended, this 15th day of June, 2017;

RECOMMENDATION #4:

THAT: "Rural Sicamous Land Use Amendment (CSR D) Bylaw No. 2064" be read a second time, as amended, this 15th day of June, 2017;

RECOMMENDATION #5:

THAT: "South Shuswap Zoning Amendment (CSR D) Bylaw No.701-83" be read a second time, as amended, this 15th day of June, 2017;

RECOMMENDATION #6:

THAT: a public hearing to hear representations on Scotch Creek Zoning Amendment (CSR D) Bylaw No. 825-34, Magna Bay Zoning Amendment (CSR D) Bylaw No. 800-26, Anglemont Zoning Amendment (CSR D) Bylaw No. 650-11, Rural Sicamous Land Use Amendment (CSR D) Bylaw No. 2064, and South Shuswap Zoning Amendment (CSR D) Bylaw No.701-83, be held;

AND FURTHER THAT: notice of the public hearing be given by staff of the Regional District on behalf of the Board in accordance with Section 466 of the Local Government Act;

AND FURTHER THAT: the holding of the public hearing be delegated to Director Rhona Martin, as Chairman of the Board of the CSR D, or Director Paul Demenok, if Director Martin is absent, and the Director give a report of the public hearing to the Board.

SHORT SUMMARY:

Amendments are proposed to the floodplain management provisions of Anglemont Zoning Bylaw No. 650, Magna Bay Zoning Bylaw No. 800, Scotch Creek/Lee Creek Zoning Bylaw No. 825, Rural Sicamous Land Use Bylaw No. 2000, and South Shuswap Zoning Bylaw No. 701. The proposed amendments would change the location of measurement for floodplain setbacks in Bylaw Nos. 650, 800, 825 and 2000 from the natural boundary of Shuswap Lake to the 348.3 m GSC datum and edit the list of exemptions for structures that are not required to meet the floodplain setback and flood construction level in all of the bylaws so that the regulations are consistent for all areas. General housekeeping amendments are also proposed for the floodplain management sections of these bylaws.

Staff have amended the bylaws to include additional exemptions from the floodplain setbacks. Staff are proposing to exempt detached accessory buildings that are not used for human habitation, electrical or mechanical equipment, stairways not connected to other structures, and storage of goods not damageable by floodwater.

Staff are also proposing the addition of regulations for subdivision of panhandle lots to the bylaw amendments.

The Board gave Bylaws No. BL 825-34, BL 800-26, BL 650-11, BL 2064, and BL 701-83 first readings at the March 17, 2016 regular meeting, and directed staff to utilize the simple consultation process. No development notice was required to be posted in accordance with Development Services Procedures Bylaw No. 4001. Staff has referred the bylaw to affected Ministries, agencies and First Nations and comments received have been summarised in this report. It is now appropriate for the Board to consider second readings, as amended, and to delegate Public Hearings.

VOTING:

Unweighted
Corporate ☐

LGA Part 14 ☒
(Unweighted)

Weighted
Corporate ☐

Stakeholder ☐
(Weighted)

BACKGROUND:

Section 524 of the Local Government Act allows the CSRD to designate floodplains by bylaw. Such bylaws allow the CSRD to specify the flood level for waterbodies, which regulates the flood construction levels to be met for new construction adjacent to waterbodies, and the setbacks required from the waterbodies. The Province allows the CSRD to consider a number of factors to establish these flood construction levels and floodplain setbacks, as follows;

- (a) different areas of a flood plain;
- (b) different zones;
- (c) different uses within a zone or an area of a flood plain;
- (d) different types of geological or hydrological features;
- (e) different standards of works and services;
- (f) different siting circumstances;
- (g) different types of buildings or other structures and different types of machinery, equipment or goods within them;
- (h) different uses within a building or other structure

There are currently five separate zoning bylaws regulating land use surrounding Shuswap Lake. All of these bylaws designate floodplains for Shuswap Lake and Bylaw No. 2000 for Mara Lake. South Shuswap Zoning Bylaw No. 701 requires that floodplain setbacks be measured from the 348.3 m contour, which is the mean annual high water mark for Shuswap Lake established by the Ministry of Environment (MoE). The remaining four bylaws require that floodplain setbacks for Shuswap Lake be measured from the natural boundary of the lake. This bylaw amendment proposes to amend Anglemont Zoning Bylaw No. 650, Magna Bay Zoning Bylaw No. 800, Scotch Creek Zoning Bylaw No. 825 and Rural Sicamous Land Use Bylaw No. 2000 to create consistency in how setbacks are measured across all areas of Shuswap Lake, i.e.: from the mean annual high water mark of 348.3m GSC Datum.

While consistency is the goal, it is also difficult to justify requiring developers and landowners in the North Shuswap and Rural Sicamous areas to hire a BC Land Surveyor to establish the natural boundary of Shuswap or Mara Lake in order to apply the floodplain specifications. Whereas a developer or land owner in the South Shuswap can hire a survey technician to find a contour and measure floodplain specifications from the contour.

Additionally, over time, the exact location of the natural boundary can vary as natural shoreline processes occur. In a significant numbers of cases, staff has noted that natural boundaries established by surveyor for legal purposes no longer reflects the current natural boundary, as re-development of lots occurs, and development along the lake front alters the shorelines. Use of an elevation to measure floodplain specifications from eliminates any variability. Should the mean annual high water mark change, as established by the MoE, then a simple amendment to the bylaw can adjust for the new contour level, creating greater flexibility.

Within the various zoning bylaws the regulations differ with regard to which types of structures may be exempted from meeting the required floodplain setback. With this in mind, staff have added some additional items to be considered for exemption. Staff are proposing amendments to create consistency between all of the bylaw areas. The proposed amendments will also address some minor housekeeping issues within the floodplain specifications of the various bylaws.

In addition to the proposed amendments to the floodplain specifications, staff have included amendments to these zoning bylaws to establish a set of regulations for subdivision of panhandle lots. Panhandle lots are lots created by using a narrow neck of land between the main body of the lot and the fronting highway. These bylaws all lack such regulations and since the Approving Authority does not have regulations, have resulted in approval of subdivisions which are extremely irregular.

POLICY:

Staff presented applicable floodplain regulations from each Zoning Bylaw proposed to be amended in the report previously viewed by the Board, at the March 17, 2016 regular meeting.

There are no current regulations included in any of the Bylaws proposed to be amended that regulate panhandle lots. Visual clearance regulations at intersections are only currently within South Shuswap Zoning Bylaw No. 701.

FINANCIAL:

This bylaw amendment is not the result of bylaw enforcement action. There are no financial implications associated with this bylaw amendment.

KEY ISSUES/CONCEPTS:Measurement of Flood Construction Level and Floodplain Setback

Staff are proposing to amend Bylaw No. 650, 800, 825, and 2000 whereby the floodplain setback and flood construction level would be required to be measured from the mean annual high water mark of Shuswap Lake rather than the natural boundary. The mean annual high water mark for Shuswap Lake is defined as 348.3 m Geodetic Survey of Canada Datum (GSC Datum) which is a contour line that runs around the perimeter of Shuswap Lake. Staff are also proposing to amend Bylaw No. 2000 to include floodplain specifications to be measured from the 348.4 m GSC Datum contour for Mara Lake.

'Natural boundary' is defined as: "*the visible high water mark of any lake, river, stream or other body of water where the presence and action of the water are so common and usual, and so long continued in all ordinary years, as to mark on the soil of the bed of the body of water a character distinct from that of its banks, in vegetation, as well as in the nature of the soil itself*". The only persons able to determine the location of the Natural Boundary are BC Land Surveyors (BCLS). However, this definition is open to interpretation and may mean that different surveyors could come up with different locations for natural boundary. Also, since the location is subject to natural processes, it is highly variable.

In contrast, a geodetic elevation is a discreet value and is consistent via survey. This makes it clear for a surveyor, or a survey technician as to how to establish the correct floodplain setback and have consistency for such setbacks from one property to another. It also gives homeowners and developers flexibility in who they hire to illustrate compliance with the floodplain setback requirement. A BCLS is licensed in the Province, by the Surveyors General Office to create and re-survey legal parcels, and a survey technician is only able to provide building location certificates.

Owners/developers will still have their choice who they hire, but will have greater flexibility in the choice depending on which is available, or provides the better price to do the work.

Currently, South Shuswap Zoning Bylaw No. 701 is the only bylaw in the CSRD that requires that floodplain setbacks be measured from the mean annual high water mark (HWM), however, from a practical perspective it appears that most surveyors are defaulting to the 348.3 m (or 348.4 m in the case of Mara Lake) contour when preparing surveys in other areas as well. In a letter to the CSRD dated August 12, 2009, Fisheries and Oceans Canada (DFO) advised that the mean annual high water marks for Shuswap Lake and Mara Lake being used by both the Ministry of Environment and DFO were 348.3 m and 348.4 m GSC datum respectively. The letter notes that the use of these standardized elevations has reduced uncertainty caused by the previous, highly variable "natural boundary" standard. Staff recommend that all of the zoning bylaws for areas surrounding Shuswap and Mara Lakes be amended to reflect this practice in order to create a consistent and level playing field for all waterfront property owners on these lakes.

Exemptions from Flood Construction Level and Floodplain Setback Requirements

The types of structures that are listed in the exemptions from flood construction level requirements are fairly consistent across all of the bylaws, but there are some differences in wording as to what types of structures are exempt from the floodplain setback requirements.

For example, works constructed to stabilize the shoreline of a waterbody or the banks of a watercourse are exempted under Bylaw No. 800, 825 and 2000, but are not exempted under Bylaws 650 and 701. This means that property owners in Anglemont and the South Shuswap wishing to construct flood proofing works to protect their property from flooding must apply for a Floodplain Exemption and have a report completed by a Geotechnical Engineer prior to proceeding with construction, while property owners in Magna Bay, Scotch Creek, and Rural Sicamous do not need to make this type of application.

Further, on-loading and off-loading facilities associated with water-oriented industry and portable sawmills are exempted under Bylaw No. 701 but are not exempt under any of the other bylaws. Roof overhangs and cantilevered decks where no supporting structural components are located within the setback area, and ground level patios are not currently exempted in any of the bylaws and at the present time would trigger the need for a floodplain exemption application although they would typically not either be subject to damage from inundation or be compromised structurally themselves by the erosive effects and wave action of flooding.

Similarly, staff are also proposing amendments at second reading to exempt the following from floodplain setbacks:

- Detached accessory buildings or structures that do not include human habitation;
- Exterior stairway not forming part of a building or attached in any way to another structure, provided it does not extend below the parcel boundary, or the natural boundary
- Electrical or mechanical equipment; and,
- Storage of goods not subject to damage from floodwaters.

Some of the bylaws currently exempt carports and garages that are attached to a principal building. The proposed changes would allow detached accessory structures like these, as well as storage sheds, provided there is no habitation within these structures. Electrical or mechanical equipment, like lighting, pumps and lift stations, would also be exempt.

Staff are proposing to include these in the list of exemptions and amend all of the bylaws covering lands abutting Shuswap Lake and Mara Lake so that the list of exemptions from both setbacks and flood construction levels is consistently measured across all bylaw areas.

Flood Proofing Works and Retaining Structures

Bylaw No. 701 currently makes a distinction between Retaining Structures and Landscape Retaining Structures. The distinction was made to clear up some setback interpretation issues. Retaining structures are subject to zone setbacks except when they are physically and structurally connected to the principal building and landscape retaining structures are exempted. Landscape retaining structures are defined as a particular type of retaining structure which is under 1.2 m in height. The chief difference is that the retaining structure requires structural engineering under the BC Building Code while the landscape retaining structure does not.

Homeowners currently use both types of these structures to provide flood proofing for their properties. These types of structures are particularly useful where the homeowner is trying to create more yard space on sloped properties. However, as a structure designed to retain earth, they are subject to the effects of earth pressure behind them as they tend to be more vertical facing. This

means that they are more susceptible to toppling due to soil erosion at their base and the effects of wave action at their toe. Water pressure from groundwater behind the face of the wall is also a factor in toppling.

Other methods of flood proofing are also used such as reinforced earth or rip-rapping placed over an earthen bank to protect the natural earthen slopes from erosive damage. These types of flood proofing works are less structural in nature than retaining structures, and do not usually benefit the homeowner in creating additional level yard areas, except for retaining existing yard areas. Also, armoring is not typically subject to water pressure from groundwater behind the structure. So there is rationale to exempt such flood proofing methods from the floodplain specifications.

In order to foster an exemption for specific flood proofing structures, a new definition will need to be added to Bylaw No. 701, as follows;

"FLOOD PROOFING PROTECTION means the installation of improvements provided they are upland of the current natural boundary, that are specifically designed to prevent damage to existing earthen banks caused by erosive effects of water and wave action by armouring the soil surface through the use of geotextile materials and some combination of rip-rap or other protective surfacing materials. *Retaining Structures* and *Landscape Retaining Structures* are not included under this definition."

Additionally the definitions for *flood proofing protection*, *retaining structures*, and *landscaping retaining structures* are being added to all bylaws, other than Bylaw No. 701 for consistency of application. Since, flood-proofing protection is not considered a structure, they are not subject to zone setbacks in any of the bylaws.

Definition of Watercourse

It is important to include a definition for "watercourse" to ensure clarity in terms of what the floodplain specifications apply to and what they do not apply to, i.e.: a ditch vs. a creek. There are some minor differences between the various bylaws regarding the definition of "watercourse" as noted in the policy section above. It is proposed to amend each of the bylaws to include the following definition in order to foster a clear and consistent approach between all bylaw areas. This would include deleting the definition of "water body" in Bylaws No. 800 and No. 2000.

"WATERCOURSE is a natural depression with banks and a bed of 0.6 m (1.97 ft.) or more below the surrounding land and 1 of the following, a) serving to give direction to a current of water for at least 6 months of the year, b) having a drainage area of 2 km² (494 ac.) or more, c) an area designated as a watercourse by the Province, and includes lake, pond, river, stream, creek, spring, ravine, swamp, and wetland."

Because of the impact of the Province's Riparian Area Regulation, the duty to determine if a given water feature is a waterbody, would be determined by a Qualified Environmental Professional (QEP).

Setback Exceptions

With the proposed addition of definitions for Retaining Structure, Landscape Retaining Structure, and Flood Proofing Protection, the siting exceptions provided in the General Regulations sections in Bylaws No. 650, No. 800, No. 825, and No. 2000 will also need to be amended.

HWM vs. Natural Boundary vs. Property Boundary

As indicated earlier, the goal of the proposed bylaw amendments is to provide a consistent measurement for the HWM, and to measure the floodplain setback from this discreet measurement, as opposed to the Natural Boundary. Establishment of property boundaries through the subdivision process relies on the BCLS to establish a current natural boundary. Once this has been established it becomes the mark from which compliance with setbacks is determined. Since natural boundary is something that can, and often does change over time due to natural processes, it can be difficult to determine if an intended flood proofing work is actually within the confines of the legal parcel. Unfortunately, it is critical to do so, because the CSRD does not have jurisdiction to approve improvements below the natural boundary, which can be variable. For this reason the exemption proposed must be subject to the works being constructed upland of the natural boundary.

Vision Clearance at Intersections

The definition for Sight Triangle and General Regulations for Sight Triangles are proposed to be added to the other bylaws for consistency. This will enhance safety at intersections by ensuring that sight obstructions, such as trees and bushes, retaining walls and fences are not placed in these areas.

Panhandle Lots and Subdivision

Currently the only Provincial Regulation describing standards for panhandle subdivision proposals is under the Local Services Act, Subdivision Regulations (BC Reg. 262/70). The following regulations can act as a guideline when the Provincial Approving Officer is reviewing an application for subdivision:

Panhandle lots

6.09

Without limiting the generalities of section 4.01 and notwithstanding the requirements of section 6.08, where a parcel is a panhandle lot capable of further subdivision, the approving officer shall be satisfied that the panhandle is adequate to provide a future highway.

Panhandle not part of minimum parcel area

6.10

Notwithstanding the requirements of sections 6.01 to 6.05, inclusive, where a parcel is a panhandle lot, the access strip or panhandle shall not be calculated as part of the minimum parcel area.

However, the regulations do not apply to subdivisions occurring where the Local Government has a Subdivision Servicing Bylaw. There is an exemption which applies to a Subdivision Servicing Bylaw that advises that where such a bylaw does not regulate a matter then the Regulation applies. However, in the case of panhandle lots, the ability to regulate the shape, dimensions and area, and minimum parcel sizes can only be enacted by a Regional District under a Zoning Bylaw and not a Subdivision Servicing Bylaw.

The proposed amendments will add these two areas of established regulation into the bylaws to ensure that they are regulated. Additionally, other matters, including the following are proposed to be addressed:

- Minimum width of 10.0 m for the panhandle driveway
- restrictions on building within the panhandle driveway;
- configuration of the panhandle; and,
- the proximity of occurrence of such lots (no more than 2 panhandle driveways adjacent to each other.

Staff are proposing to add these regulations through a combination of definitions and general regulations, together with a diagram which illustrates the intent.

Minor Housekeeping

Staff are also proposing additional minor amendments to ensure consistency between the floodplain regulations in all of the Shuswap area zoning bylaws, e.g. amend language to 'gender neutral' and tidy up the formatting.

SUMMARY:

Staff are recommending that the Board consider the bylaws, as amended for second readings, and delegate public hearings.

IMPLEMENTATION:

Consultation Process

Considering the minor and technical nature of these amendments, as per CSRD Policy No. P-18 regarding Consultation Processes-Bylaws, staff recommended the simple consultation process. Property owners will first become aware of these bylaw amendments when a notice is placed in the newspapers regarding the public hearings.

COMMUNICATIONS:

If the Board supports second readings, as amended, of the bylaws, and delegates a Public Hearing in accordance with the staff recommendation for one all-encompassing joint Public Hearing for all bylaw amendments, staff will proceed with advertising the Public Hearings in Electoral Areas C, E, and F, as set out in the Local Government Act.

Referral agencies have provided their comments, they are attached as Appendix A to this report.

DESIRED OUTCOMES:

That the Board endorse staff recommendations.

BOARD'S OPTIONS:

1. *Endorse the recommendations. Bylaw No. 701-83, Bylaw No. 825-34, Bylaw No. 800-26, Bylaw 650-11, and Bylaw 2064 will be given second readings, as amended and a single Public Hearing for all bylaws will be delegated.*

2. *Decline second readings, as amended, Bylaw No. 701-83, Bylaw No. 825-34, Bylaw No. 800-26, Bylaw 650-11 and Bylaw 2064 will be defeated. The current measurement standards for floodplain setbacks will continue to apply.*
3. *Defer.*
4. *Any other action deemed appropriate by the Board.*

Report Approval Details

Document Title:	2017-06-15_Board_DS_FloodplainAmendments_CSRD.docx
Attachments:	<ul style="list-style-type: none"> - APPENDIX-A-AgencyReferralResponses.docx - Bylaw 650-11 Second.docx - Bylaw 800-26 - Second.docx - Bylaw 825-34 - Second.docx - Bylaw 2064 Second.docx - Bylaw 701-83 Second.docx
Final Approval Date:	Jun 5, 2017

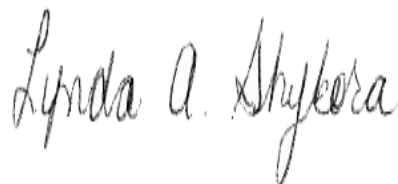
This report and all of its attachments were approved and signed as outlined below:



Corey Paiement - May 24, 2017 - 3:16 PM



Gerald Christie - May 30, 2017 - 9:11 AM



Lynda Shykora - May 30, 2017 - 9:57 AM



Charles Hamilton - Jun 5, 2017 - 11:06 AM

APPENDIX 'A'

Agency Referral Responses

Area 'C' Advisory Planning Commission	Recommended the Board approve the bylaws.
Area 'F' Advisory Planning Commission	Recommended approval.
Ministry of Forests Lands and Natural Resource Management	No response.
Ministry of Transportation and Infrastructure	Preliminary approval is granted for the rezoning for one year pursuant to section 52(3)(a) of the Transportation Act. The Ministry is prepared to endorse the bylaws after third reading.
Ministry of Environment – Environmental Protection Division	No response.
Department of Fisheries and Oceans	No response.
Ministry of Forests, Land and Natural Resource Operations	No response.
Ministry of Forests, Land and Natural Resource Operations – Water Rights Branch	No response.
Ministry of Forests Lands and Natural Resource Management - Water Stewardship Branch	No response.
Ministry of Forests Lands and Natural Resource Management – Fish Wildlife and Habitat Management	No response.
Ministry of Forests Lands and Natural Resource Management – Compliance Enforcement Branch	No response.
CSRD Operations Management	Team Leader Utilities – No concerns. Regional Fire Chief – no concerns. Team Leader Environmental Health – No concerns. Community Parks and Recreation Operator – Parks supports the consistency of measuring floodplains for high water mark of 348.3 m GSC datum for all zoning bylaws affecting Shuswap Lake. Consistent floodplain definitions will assist developers in determining appropriate land offered for parkland provision in the future.
Adams Lake Indian Band	Manager Operations Management – No concern.
Little Shuswap Indian Band	No response.
Neskonlith Indian Band	No response.
Akisqnuq First Nation	No response.

Ktunaxa Nation Council	No response.
Lower Kootenay Band	No response.
Okanagan Indian Band	No response.
Okanagan Nation Alliance	No response.
Penticton Indian Band	No response.
Shuswap Indian Band	No response.
Simpcw Indian Band	No response.
Splats'in First Nation	No response.
St. Mary Indian Band	No response.
Tobacco Plains Indian Band	No response.
Coldwater Indian Band	No response.
Cooks Ferry Indian Band	No response.
Esh-kn-am Cultural Resources Management Services	No response.
Lower Similkameen Indian Band	No response.
Nlaka'pamux Nation Tribal Council	No response.
Siska Indian Band	No response.

COLUMBIA SHUSWAP REGIONAL DISTRICT

ANGLEMONT ZONING AMENDMENT (CSRD) BYLAW NO. 650-11

A bylaw to amend the "Anglemont Zoning Bylaw No. 650"

WHEREAS the Board of the Columbia Shuswap Regional District adopted Bylaw No. 650;

AND WHEREAS the Board deems it appropriate to amend Bylaw No. 650;

NOW THEREFORE the Board of the Columbia Shuswap Regional District, in open meeting assembled, HEREBY ENACTS as follows:

1. "Anglemont Zoning Bylaw No. 650" is hereby amended as follows:

A. TEXT AMENDMENT

1. Schedule A, Zoning Bylaw Text, which forms part of the "Anglemont Zoning Bylaw No. 650" is hereby amended as follows:

i. Part 1, Definitions is amended by adding the following new definitions:

"FLOOD PROOFING PROTECTION means the installation of improvements, provided they are upland of the current *natural boundary*, that are specifically designed to prevent damage to existing natural earthen banks caused by the erosive effects of water and wave action by armouring the soil surface through the use of geotextile materials and some combination of rip-rap or other protective surfacing materials. *Retaining Structures* and *Landscape Retaining Structures* are not included under this definition;"

After the definition of "FAMILY";

"HABITATION means the support of life processes within a *building*, including, but not limited to, sleeping, eating, food preparation, waste elimination, personal cleaning, and rest and relaxation areas."

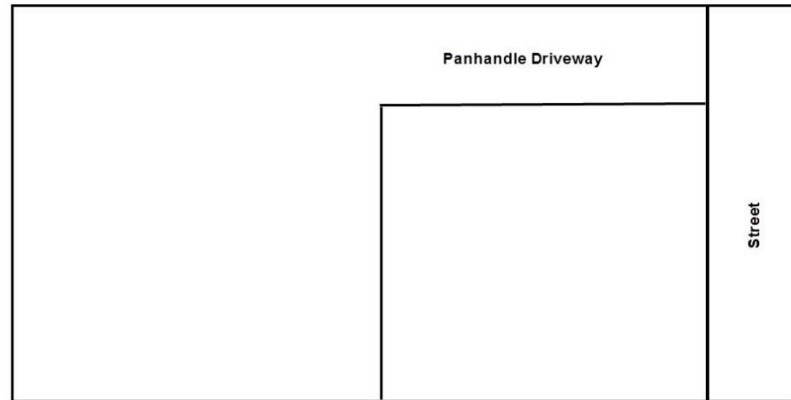
After the definition of "GUEST COTTAGE";

"LANDSCAPE RETAINING STRUCTURE means a specific type of *retaining structure*, the use or intended use of which is to hold back and resist, stabilize or support less than 1.2 meters of retained material, such as an earthen bank;"

After the definition of "KENNEL";

"LOT, PANHANDLE means a lot that has its primary *highway* frontage through a narrow strip of land which projects to the highway from the

main portion of the lot. This narrow strip is an integral part of the lot and is referred to as the *panhandle driveway*, as illustrated in the following drawing:



”

Before the definition of “MARINA”;

"MEAN ANNUAL HIGH WATER MARK means an elevation of 348.3 metres Geodetic Survey of Canada Datum”;

After the definition of “MARINA”;

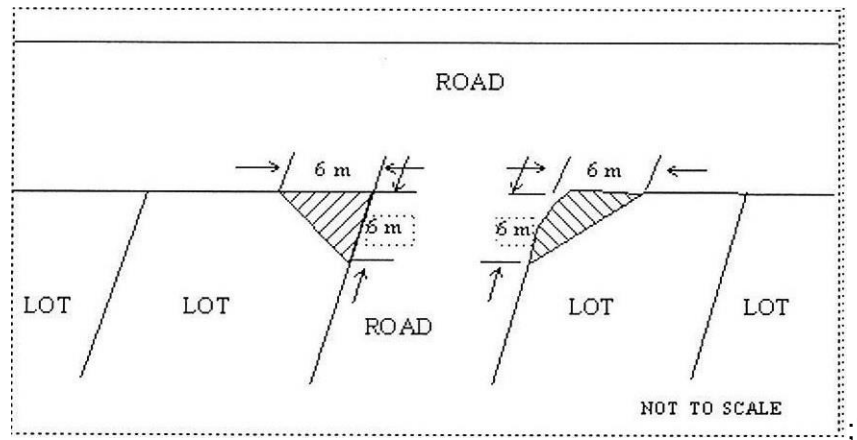
“PANHANDLE DRIVEWAY means that portion of a *panhandle lot* that is the narrow strip fronting a *highway*.”

After the definition of “OFFSTREET PARKING AREA”;

"RETAINING STRUCTURE means a specific type of structure that is subject to lateral earth pressure, is laterally unsupported at the top and retains more than 1.2 meters of soil material at any point along its length, measured as the difference between the *finished ground elevation* at the top and bottom of the structure, and specifically excludes *Landscape Retaining Structures* and *Retaining Structures* which are part of and connected structurally to a Building”;

After the definition of “RETAIL STORE”;

"SIGHT TRIANGLE means the area formed by a triangle in the angle formed by the right of way boundaries or boundaries produced and 2 points on those boundaries 6 m from the point of intersection, as shown crosshatched in the diagram below.



After the definition of “SETBACK”;

“SURVEYOR CERTIFICATE means a sketch plan provided by either a BC Land Surveyor or a Survey Technician which locates all *buildings* structures and improvements on a parcel.”

After the definition of “SINGLE FAMILY DWELLING”; and,

“FINISHED GROUND ELEVATION means either a natural or altered ground level but shall not include areas artificially raised through the use of *retaining structures* unless the *retaining structure* provides a level ground area that is a minimum of 1.2 m wide measured from the face of the *building*; or earth piled against the *building* with a slope of greater than 2:1 (horizontal to vertical).”

After the definition of “FAMILY”.

ii. Part 1, Definitions is further amended by:

a) Replacing the existing definition of “WATERCOURSE” with the following:

“WATERCOURSE is a natural depression with banks and a bed of 0.6 m (1.97 ft.) or more below the surrounding land and 1 of the following, a) serving to give direction to a current of water for at least 6 months of the year, b) having a drainage area of 2 km² (494 ac.) or more, c) an area designated as a *watercourse* by the Province, and includes lake, pond, river, stream, creek, spring, ravine, swamp, and wetland;”.

b) replacing the existing definition of “PARCEL BOUNDARY, FRONT”, with the following:

“PARCEL BOUNDARY, FRONT means the *parcel* boundary that is the shortest *parcel* boundary common to the lot and an abutting *highway* or access route in a bare land strata plan, and where in the case of a *panhandle lot* means the line separating the *panhandle driveway* from the main part of the lot.”

- iii. Part 3, General Regulations is amended by:
 - a) deleting Section 3.2.2(a), and replacing it with the following:
 - “(a) a fence not exceeding 2.4 m (7.87 ft.) in height, in compliance with the regulations set out in Section 3, General Regulations, subsection 3.19 Sight Triangles;
 - b) adding Section 3.2.2(g) as follows:
 - “(g) *landscape retaining structures*, provided that such structures must be separated from each other by a minimum 1.5 m distance measured horizontally from the face (or from the toe of the upper wall to the top face of the lower wall, if the *landscape retaining structures* are not vertical) of each *landscape retaining structure* and specifically excludes *landscape retaining structures* proposed to be constructed adjacent to a Section 42 road, as defined in the Transportation Act, or in the sight triangle. Landscape retaining structures proposed to be located adjacent to a Highway must comply with Ministry of Transportation and Infrastructure regulations and may require the approval of that Ministry; and,”
 - c) Adding Section 3.2.2(h) as follows:
 - “(h) exterior stairway not forming part of a building.”
 - d) deleting Section 3.5.3, and replacing it with the following:
 - “.3 The floodplain setback is:
 - (a) 15.0 m from the *mean annual high water mark* of Shuswap Lake, defined as 348.3 metres Geodetic Survey of Canada Datum;
 - (b) 15.0 m (49.2 ft.) from the *natural boundary* of any other watercourse.
 - e) deleting Section 3.6., and replacing it with the following:
 - “.1 A *building*, including a manufactured home or structure must not be constructed, reconstructed, moved or extended within a floodplain setback.
 - .2 The underside of a floor system or top of concrete slab that is used for *habitation*, business, or the storage of goods that are susceptible to damage by floodwater, must be above the flood construction level.
 - .3 Where landfill or structural support or both are used to comply with subsection 2., they must be protected against scour and

- erosion from flood flows, wave action, ice and other debris and not extend within the flood plain setback.
- .4 Furnaces and other fixed electrical or mechanical equipment susceptible to damage by floodwater must be above the flood construction level.
 - .5 The Manager of Development Services or their delegate requires that a *Surveyor Certificate* be submitted to them by the land and property owners to verify compliance with the flood construction level and flood plain setback specified in subsections 3.6.1, .2, .3, and .4.
 - .6 The following are exempted from the regulations of subsection .2 as they apply to the flood construction level:
 - (a) a renovation of an existing *building*, including a manufactured home or structure that does not involve an addition to the exterior of the *building*, manufactured home or structure;
 - (b) an addition to a *building*, manufactured home or structure of less than 25 percent of the *floor area* existing the date of coming into force of this bylaw. The addition must be no lower in elevation than the floor existing the date of coming into force of this *bylaw*. The distance from the *building*, manufactured home or structure to a *water body* or *watercourse* must not be decreased with respect to the floodplain setback;
 - (c) carport or domestic garage.
 - .7 The following are exempted from the requirements of Sections 3.6.1, .2, and .3 as they apply to the flood construction level and floodplain setback:
 - (a) a floating *building* or structure;
 - (b) a dock or wharf;
 - (c) a boat fueling use;
 - (d) a fence constructed of wood or wire through which water can flow freely;
 - (e) *flood proofing protection* works constructed to stabilize the shoreline of a water body or the banks of a watercourse;
 - (f) a roof overhang or cantilevered deck with no footings within the setback area;
 - (g) on-loading and off-loading facilities associated with water oriented industry and portable sawmills; and
 - (h) ground level patios
 - (i) detached accessory building that do not include *habitation*;
 - (j) exterior stairway not forming part of a *building* or attached in any way to another structure, provided it does not extend below the *parcel* boundary, or the *natural boundary*;
 - (k) electrical or mechanical equipment not susceptible to damage by floodwater; and,
 - (l) storage of goods not damageable by flood waters.”

- f) adding a new section 3.15 titled Sight Triangle, as follows:

"SIGHT TRIANGLE

3.15 An owner, occupier or lessee of land at the intersection of any *highway* must not grow or place, or cause or allow to be grown or placed, within the sight triangle on that land, any signs or structures or trees or other plants, with horizontal dimension exceeding 0.6m, unless:

- a) the person has the consent of the Minister of Transportation and Infrastructure to do so; or
- b) an eye 0.9 m above the surface elevation of one *highway* can, by looking directly over the sign or structure or tree or other plant, see an object 0.9 m above the surface elevation of the other highway."

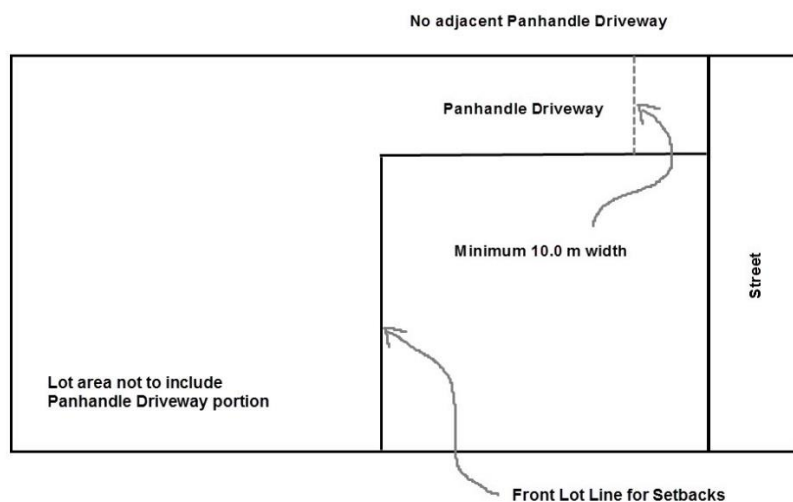
- g) Adding new section 3.16 titled Subdivision Regulations for Panhandle Lots, as follows:

"SUBDIVISION REGULATIONS FOR PANHANDLE LOTS

3.16 Where a subdivision application proposes to create a *panhandle lot* the *panhandle lot* must meet the following requirements:

- a) The minimum width of the *panhandle driveway* is 10.0 m;
- b) The *panhandle driveway* portion of the lot is not included in lot area calculation for minimum *parcel* size; and,
- c) No more than 2 *panhandle lots* to be adjacent to each other.

As illustrated in the following drawing:



2. This bylaw may be cited as "Anglemont Zoning Amendment (CSRD) Bylaw No. 650-11."

READ a first time this 17 day of March, 2016.

READ a second time, as amended, this _____ day of _____, 2017.

PUBLIC HEARING held this _____ day of _____, 2017.

READ a third time this _____ day of _____, 2017.

ADOPTED this _____ day of _____, 2017.

Corporate Officer

Chair

Certified true copy of Bylaw No. 650-11
as read a third time.

Certified true copy of Bylaw No. 650-11
as adopted.

Corporate Officer

Corporate Officer

COLUMBIA SHUSWAP REGIONAL DISTRICTMAGNA BAY ZONING AMENDMENT (CSRD) BYLAW NO. 800-26A bylaw to amend the "Magna Bay Zoning Bylaw No. 800"

WHEREAS the Board of the Columbia Shuswap Regional District adopted Bylaw No. 800;

AND WHEREAS the Board deems it appropriate to amend Bylaw No. 800;

NOW THEREFORE the Board of the Columbia Shuswap Regional District, in open meeting assembled, HEREBY ENACTS as follows:

1. "Magna Bay Zoning Bylaw No. 800" is hereby amended as follows:

A. TEXT AMENDMENT

1. Schedule A, Zoning Bylaw Text, which forms part of the "Magna Bay Zoning Bylaw No. 800" is hereby amended as follows:

i. Part 1, Definitions is amended by adding the following new definitions:

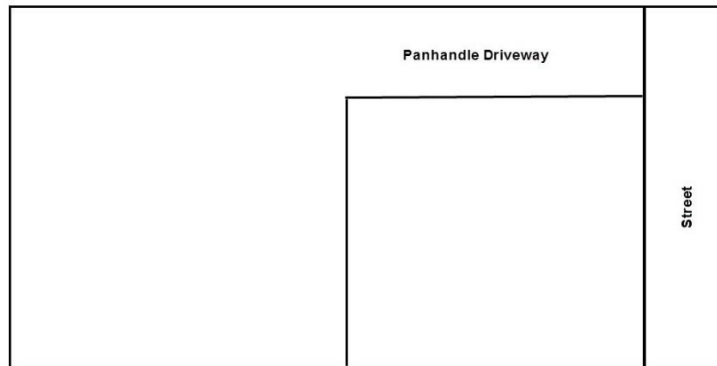
"FLOOD PROOFING PROTECTION means the installation of improvements, provided they are upland of the current *natural boundary*, that are specifically designed to prevent damage to existing natural earthen banks caused by the erosive effects of water and wave action by armouring the soil surface through the use of geotextile materials and some combination of rip-rap or other protective surfacing materials. *Retaining Structures* and *Landscape Retaining Structures* are not included under this definition;"

After the definition of "FAMILY";

"LANDSCAPE RETAINING STRUCTURE means a specific type of *retaining structure*, the use or intended use of which is to hold back and resist, stabilize or support less than 1.2 meters of retained material, such as an earthen bank;"

After the definition of "KENNEL";

"LOT, PANHANDLE means a lot that has its primary *highway* frontage through a narrow strip of land which projects to the highway from the main portion of the lot. This narrow strip is an integral part of the lot and is referred to as the *panhandle driveway*, as illustrated in the following drawing:



”

Before the definition of “MARINA”;

"MEAN ANNUAL HIGH WATER MARK means an elevation of 348.3 metres Geodetic Survey of Canada Datum;"

After the definition of “MARINA”;

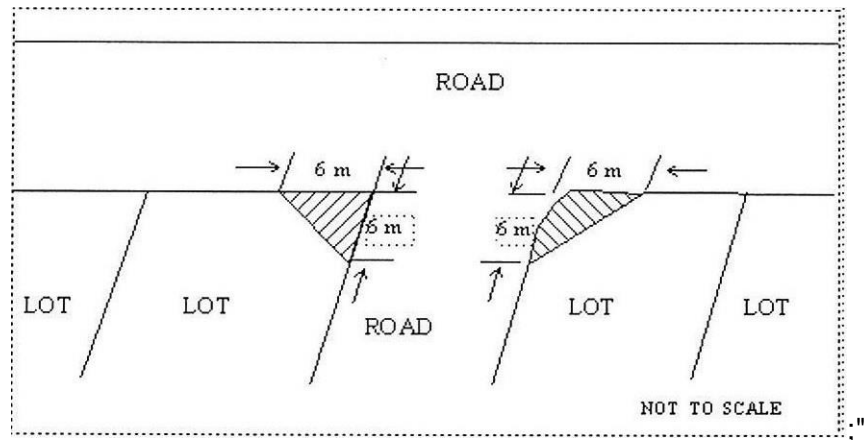
“PANHANDLE DRIVEWAY means that portion of a *panhandle lot* that is the narrow strip fronting a *highway*.”

After the definition of “PAD”;

"RETAINING STRUCTURE means a specific type of structure that is subject to lateral earth pressure, is laterally unsupported at the top and retains more than 1.2 meters of soil material at any point along its length, measured as the difference between the *finished ground elevation* at the top and bottom of the structure, and specifically excludes *Landscape Retaining Structures* and *Retaining Structures* which are part of and connected structurally to a Building;"

After the definition of “RETAIL STORE”;

"SIGHT TRIANGLE means the area formed by a triangle in the angle formed by the right of way boundaries or boundaries produced and 2 points on those boundaries 6 m from the point of intersection, as shown crosshatched in the diagram below



After the definition of “SETBACK”;

“FINISHED GROUND ELEVATION means either a natural or altered ground level but shall not include areas artificially raised through the use of *retaining structures* unless the *retaining structure* provides a level ground area that is a minimum of 1.2 m wide measured from the face of the *building*; or earth piled against the *building* with a slope of greater than 2:1 (horizontal to vertical).”

Before the definition of “FLOOR AREA”; and,

“SURVEYOR CERTIFICATE means a sketch plan provided by either a BC Land Surveyor or a Survey Technician which locates all *buildings* structures and improvements on a parcel.”

After the definition of “STANDALONE RESIDENTIAL CAMPSITE”.

ii. Part 1, Definitions is further amended by:

a) Replacing the existing definition of “WATERCOURSE” with the following:

“WATERCOURSE is a natural depression with banks and a bed of 0.6 m (1.97 ft.) or more below the surrounding land and 1 of the following, a) serving to give direction to a current of water for at least 6 months of the year, b) having a drainage area of 2 km² (494 ac.) or more, c) an area designated as a *watercourse* by the Province, and includes lake, pond, river, stream, creek, spring, ravine, swamp, and wetland;”.

b) replacing the existing definition of “PARCEL BOUNDARY, FRONT”, with the following:

“PARCEL BOUNDARY, FRONT means the *parcel* boundary that is the shortest *parcel* boundary common to the lot and an abutting *highway* or access route in a bare land strata plan, and where in the case of a *panhandle lot* means the line separating the *panhandle driveway* from the main part of the lot.”

c) Replacing the existing definition of “HABITATION”

“HABITATION means the support of life processes within a *building*, including, but not limited to, sleeping, eating, food preparation, waste elimination, personal cleaning, and rest and relaxation areas.”

iii. Part 3, General Regulations is amended by:

a) deleting Section 3.2(a), and replacing it with the following:

“(a) a fence not exceeding 2.4 m (7.87 ft.) in height, in compliance with the regulations set out in Section 3, General Regulations, subsection 3.19 Sight Triangles;

b) deleting Section 3.2 (e), and replacing it with the following:

“(e) a structure below finished grade;”

c) adding Section 3.2.(g) as follows:

“(g) *landscape retaining structures*, provided that such structures must be separated from each other by a minimum 1.5 m distance measured horizontally from the face (or from the toe of the upper wall to the top face of the lower wall, if the *landscape retaining structures* are not vertical) of each *landscape retaining structure* and specifically excludes *landscape retaining structures* proposed to be constructed adjacent to a Section 42 road, as defined in the Transportation Act, or in the sight triangle. Landscape retaining structures proposed to be located adjacent to a *Highway* must comply with Ministry of Transportation and Infrastructure regulations and may require the approval of that Ministry; and,”

d) adding Section 3.2.(h), as follows:

“(h) exterior stairway not forming part of a building.”

e) deleting Section 3.4(3), and replacing it with the following:

“(3) The floodplain setback is:

- (a) 15.0 m from the *mean annual high water mark* of Shuswap Lake, defined as 348.3 metres Geodetic Survey of Canada Datum;
 - (b) 30.0 m (98.4 ft.) from the *natural boundary* of Ross Creek;
 - (c) 20.0 m (65.62 ft.) from the *natural boundary* of Onyx Creek;
 - (d) 15.0 m (49.2 ft.) from the *natural boundary* of a water body or watercourse other than Onyx Creek and Ross Creek; and
 - (e) where more than one floodplain setback is applicable, the larger distance is the floodplain setback.”
- f) deleting Section 3.6(5), and replacing it with the following:
- “(5) The Manager of Development Services or their delegate requires that a *Surveyor Certificate* be submitted to them by the land and property owners to verify compliance with the flood construction level and flood plain setback specified in subsections 3.6(1), (2), (3) and (4).”
- g) deleting subsection 3.6(7)(e) and replacing it with the following:
- “(e) *flood proofing protection* works constructed to stabilize the shoreline or banks of a *watercourse*,”
- h) adding the following subsections to Section 3.6(7):
- “(f) a roof overhang or cantilevered deck with no footings within the setback area;
 - (g) on-loading and off-loading facilities associated with water oriented industry and portable sawmills;
 - (h) ground level patios.
 - (i) detached accessory building that do not include *habitation*;
 - (j) exterior stairway not forming part of a *building* or attached in any way to another structure, provided it does not extend below the *parcel* boundary, or the *natural boundary*;
 - (j) electrical or mechanical equipment; not susceptible to damage by floodwater; and,
 - (k) storage of goods not damageable by flood waters.”
- i) adding a new section 3.19 titled Sight Triangle, as follows:

"SIGHT TRIANGLE

3.19 An owner, occupier or lessee of land at the intersection of any *highway* must not grow or place, or cause or allow to be grown or placed, within the sight triangle on that land, any signs or structures or trees or other plants, with horizontal dimension exceeding 0.6 m, unless:

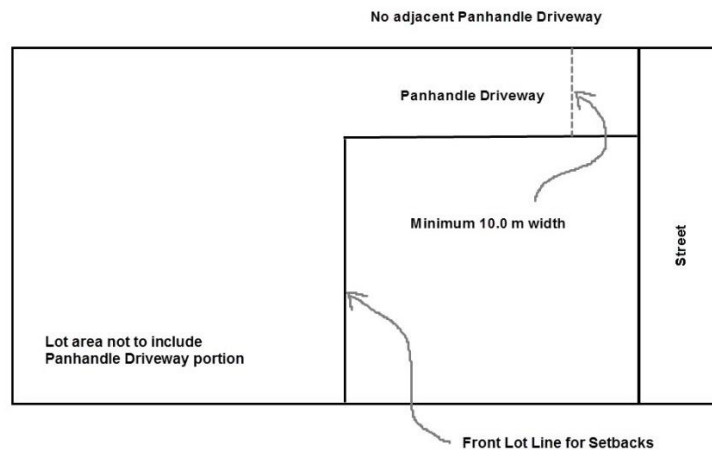
- a) the person has the consent of the Ministry of Transportation and Infrastructure to do so; or
 - b) an eye 0.9 m above the surface elevation of one *highway* can, by looking directly over the sign or structure or tree or other plant, see an object 0.9 m above the surface elevation of the other *highway*.”
- j) Adding a new section 3.20 titled Subdivision Regulations for Panhandle Lots, as follows:

“SUBDIVISION REGULATIONS FOR PANHANDLE LOTS

3.20 Where a subdivision application proposes to create a *panhandle lot* the *panhandle lot* must meet the following requirements:

- a) The minimum width of the *panhandle driveway* is 10.0 m;
- b) The *panhandle driveway* portion of the lot is not included in lot area calculation for minimum *parcel* size; and,
- c) No more than 2 *panhandle lots* to be adjacent to each other.”

As illustrated in the following drawing:



”

2. This bylaw may be cited as "Magna Bay Zoning Amendment (CSRD) Bylaw No. 800-26."

READ a first time this 17 day of March, 2016.

READ a second time, as amended, this _____ day of _____, 2017.

PUBLIC HEARING held this _____ day of _____, 2017.

READ a third time this _____ day of _____, 2017.

ADOPTED this _____ day of _____, 2017.

Corporate Officer

Chair

Certified true copy of Bylaw No. 800-26
as read a third time.

Certified true copy of Bylaw No. 800-26
as adopted.

Corporate Officer

Corporate Officer

COLUMBIA SHUSWAP REGIONAL DISTRICT

SCOTCH CREEK/LEE CREEK ZONING AMENDMENT (CSRD) BYLAW NO. 825-34

A bylaw to amend the "Scotch Creek/Lee Creek Zoning Bylaw No. 825"

WHEREAS the Board of the Columbia Shuswap Regional District adopted Bylaw No. 825;

AND WHEREAS the Board deems it appropriate to amend Bylaw No. 825;

NOW THEREFORE the Board of the Columbia Shuswap Regional District, in open meeting assembled, HEREBY ENACTS as follows:

1. "Scotch Creek/Lee Creek Zoning Bylaw No. 825" is hereby amended as follows:

A. TEXT AMENDMENT

1. Schedule A, Zoning Bylaw Text, which forms part of the "Scotch Creek/Lee Creek Zoning Bylaw No. 825" is hereby amended as follows:

i. Part 1, Definitions is amended by adding the following definitions:

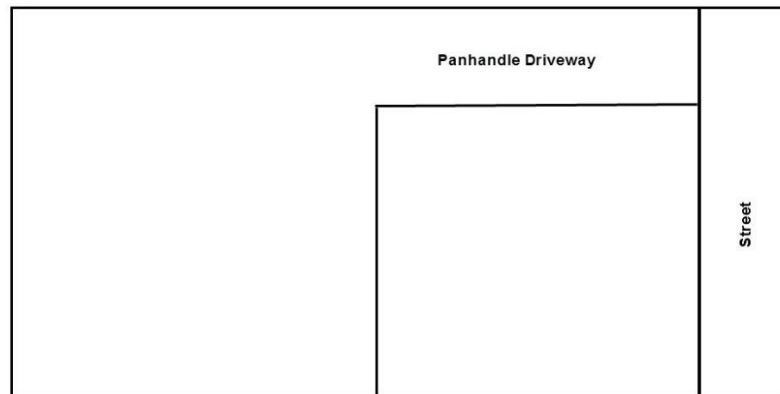
"FLOOD PROOFING PROTECTION means the installation of improvements, provided they are upland of the current *natural boundary*, that are specifically designed to prevent damage to existing natural earthen banks caused by the erosive effects of water and wave action by armouring the soil surface through the use of geotextile materials and some combination of rip-rap or other protective surfacing materials. *Retaining Structures* and *Landscape Retaining Structures* are not included under this definition;"

After the definition of "FAMILY";

"LANDSCAPE RETAINING STRUCTURE means a specific type of *retaining structure*, the use or intended use of which is to hold back and resist, stabilize or support less than 1.2 meters of retained material, such as an earthen bank;"

After the definition of "KENNEL";

"LOT, PANHANDLE means a lot that has its primary *highway* frontage through a narrow strip of land which projects to the *highway* from the main portion of the lot. This narrow strip is an integral part of the lot and is referred to as the *panhandle driveway* as illustrated in the following drawing:



”

After the definition of “LOADING AREA”;

“PANHANDLE DRIVEWAY means that portion of a *panhandle lot* that is the narrow strip fronting a *highway*.”

After the definition of “PAD”;

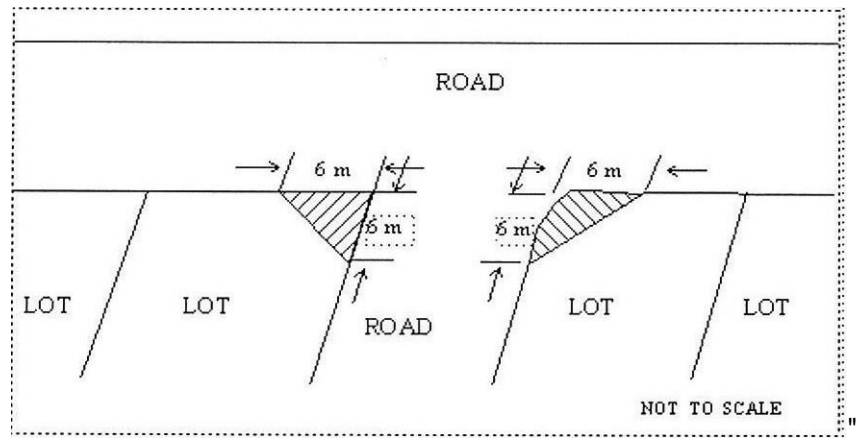
"MEAN ANNUAL HIGH WATER MARK means an elevation of 348.3 metres Geodetic Survey of Canada Datum;"

After the definition of “MARINA”;

"RETAINING STRUCTURE means a specific type of structure that is subject to lateral earth pressure, is laterally unsupported at the top and retains more than 1.2 meters of soil material at any point along its length, measured as the difference between the *finished ground elevation* at the top and bottom of the structure, and specifically excludes *Landscape Retaining Structures* and *Retaining Structures* which are part of and connected structurally to a *Building*;"

After the definition of “RESTAURANT”;

"SIGHT TRIANGLE means the area formed by a triangle in the angle formed by the right of way boundaries or boundaries produced and 2 points on those boundaries 6 m from the point of intersection, as shown crosshatched in the diagram below:



After the definition of “SIDE PARCEL BOUNDARY”.

“FINISHED GROUND ELEVATION means either a natural or altered ground level but shall not include areas artificially raised through the use of *retaining structures* unless the *retaining structure* provides a level ground area that is a minimum of 1.2 m wide measured from the face of the *building*; or earth piled against the building with a slope of greater than 2:1 (horizontal to vertical).”

Before the definition of “FLOOR AREA”; and,

“SURVEYOR CERTIFICATE means a sketch plan provided by either a BC Land Surveyor or a Survey Technician which locates all *buildings* structures and improvements on a *parcel*.”

After the definition of “STRUCTURAL ALTERATION”.

ii. Part 1, Definitions is amended by:

- a) replacing the existing definition of “WATERCOURSE” with the following:

“WATERCOURSE is a natural depression with banks and a bed of 0.6 m (1.97 ft.) or more below the surrounding land and 1 of the following, a) serving to give direction to a current of water for at least 6 months of the year, b) having a drainage area of 2 km² (494 ac.) or more, c) an area designated as a *watercourse* by the Province, and includes lake, pond, river, stream, creek, spring, ravine, swamp, and wetland.”

- b) replacing the existing definition of “FRONT PARCEL BOUNDARY”, with the following:

“FRONT PARCEL BOUNDARY means the *parcel* boundary that is the shortest *parcel* boundary common to the lot and an abutting *highway* or access route in a bare land strata plan, and

where in the case of a *panhandle lot* means the line separating the *panhandle driveway* from the main part of the lot.”

- c) Replacing the existing definition of “HABITATION” with the following:

“HABITATION means the support of life processes within a *building*, including, but not limited to, sleeping, eating, food preparation, waste elimination, personal cleaning, and rest and relaxation areas.”

- iii. Part 3, General Regulations is amended by:

- a) deleting Section 3.2(1)(b), and replacing it with the following:

"(b) a fence not exceeding 2.4 m (7.87 ft.) in height, in compliance with the regulations set out in Section 3, General Regulations, subsection 3.17 Sight Triangles;

- b) adding Section 3.2(1)(g) as follows:

"(g) *landscape retaining structures*, provided that such structures must be separated from each other by a minimum 1.5 m distance measured horizontally from the face (or from the toe of the upper wall to the top face of the lower wall, if the *landscape retaining structures* are not vertical) of each *landscape retaining structure* and specifically excludes *landscape retaining structures* proposed to be constructed adjacent to a Section 42 road, as defined in the Transportation Act, or in the sight triangle. Landscape retaining structures proposed to be located adjacent to a *Highway* must comply with Ministry of Transportation and Infrastructure regulations and may require the approval of that Ministry."

- c) deleting Section 3.4(3), and replacing it with the following:

"(3) The floodplain setback is:

- (a) 15.0 m from the mean annual high water mark of Shuswap Lake, defined as 348.3 metres Geodetic Survey of Canada Datum;
- (b) 30.0 m (98.4 ft.) from the *natural boundary* of Corning (Lee) Creek;
- (c) 30.0 m (98.4 ft.) from the *natural boundary* of Adams River;
- (d) 15.0 m (49.2 ft.) from the *natural boundary* of any other *watercourse*; and
- (e) where more than one floodplain setback is applicable, the larger distance is the floodplain setback.

- d) deleting Section 3.6(5), and replacing it with the following:

“(5) The Manager of Development Services or their delegate requires that a *Surveyor Certificate* be submitted to them by the land and property owners to verify compliance with the flood construction level and flood plain setback specified in subsections 3.6(1), (2), (3) and (4).”

e) adding the following subsections to Section 3.6(7):

- “(f) a roof overhang or cantilevered deck with no footings within the setback area;
- (g) on-loading and off-loading facilities associated with water oriented industry and portable sawmills;
- (h) ground level patios;
- (i) detached *accessory building* that do not include habitation;
- (j) exterior stairway not forming part of a *building* or attached in any way to another structure, provided it does not extend below the *parcel* boundary, or the *natural boundary*;
- (k) electrical or mechanical equipment not susceptible to damage by floodwater; and,
- (l) storage of goods not damageable by flood waters.”

f) deleting subsection 3.6(7)(e) and replacing it with the following:

“(e) *flood proofing protection* works constructed to stabilize the shoreline
or banks of a *watercourse*”

g) adding new section 3.17 titled Sight Triangle, as follows:

"SIGHT TRIANGLE

3.17 An owner, occupier or lessee of land at the intersection of any *highway* must not grow or place, or cause or allow to be grown or placed, within the sight triangle on that land, any signs or structures or trees or other plants, with horizontal dimension exceeding 0.6m, unless:

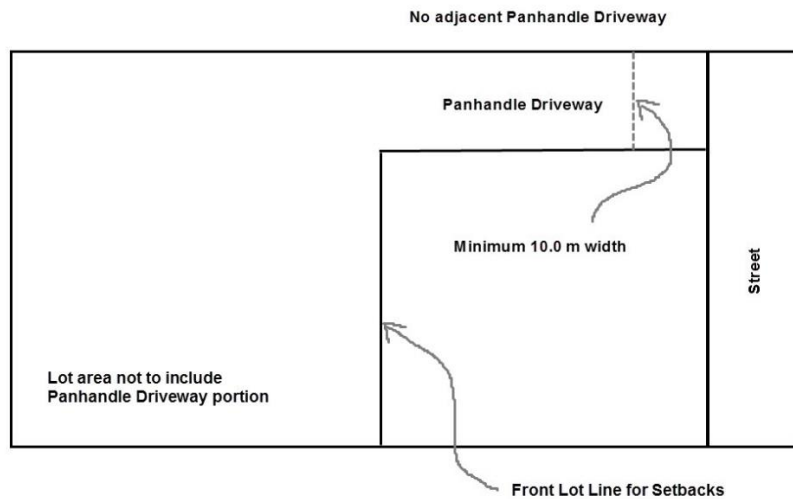
- a) the person has the consent of the Ministry of Transportation and Infrastructure to do so; or
 - b) an eye 0.9 m above the surface elevation of one *highway* can, by looking directly over the sign or structure or tree or other plant, see an object 0.9 m above the surface elevation of the other *highway*."
- h) Adding new section 3.18 titled Subdivision Regulations for Panhandle Lots, as follows:

"SUBDIVISION REGULATIONS FOR PANHANDLE LOTS

3.18 Where a subdivision application proposes to create a *panhandle lot* the panhandle lot must meet the following requirements:

- a) The minimum width of the *panhandle driveway* is 10.0 m;
- b) The *panhandle driveway* portion of the lot is not included in lot area calculation for minimum *parcel* size; and,
- c) No more than 2 *panhandle lots* to be adjacent to each other.

As illustrated in the following drawing:



”

2. This bylaw may be cited as "Scotch Creek/Lee Creek Zoning Amendment (CSRD) Bylaw No. 825-34."

READ a first time this 17 day of March, 2016.

READ a second time, as amended, this _____ day of _____, 2017.

PUBLIC HEARING held this _____ day of _____, 2017.

READ a third time this _____ day of _____, 2017.

ADOPTED this _____ day of _____, 2017.

Corporate Officer

Chair

Certified true copy of Bylaw No. 825-34
as read a third time.

Certified true copy of Bylaw No. 825-34
as adopted.

Corporate Officer

Corporate Officer

COLUMBIA SHUSWAP REGIONAL DISTRICT

RURAL SICAMOUS LAND USE AMENDMENT (CSRD) BYLAW NO. 2064

A bylaw to amend the "Rural Sicamous Land Use Bylaw No. 2000"

WHEREAS the Board of the Columbia Shuswap Regional District adopted Bylaw No. 2000;

AND WHEREAS the Board deems it appropriate to amend Bylaw No. 2000;

NOW THEREFORE the Board of the Columbia Shuswap Regional District, in open meeting assembled, HEREBY ENACTS as follows:

1. "Rural Sicamous Land Use Bylaw No. 2000", as amended is hereby further amended as follows:

A. TEXT AMENDMENT

1. PART 2 – LAND USE REGULATIONS is amended as follows:

- i. Section 2.1, DEFINITIONS is amended by adding the following new definitions:

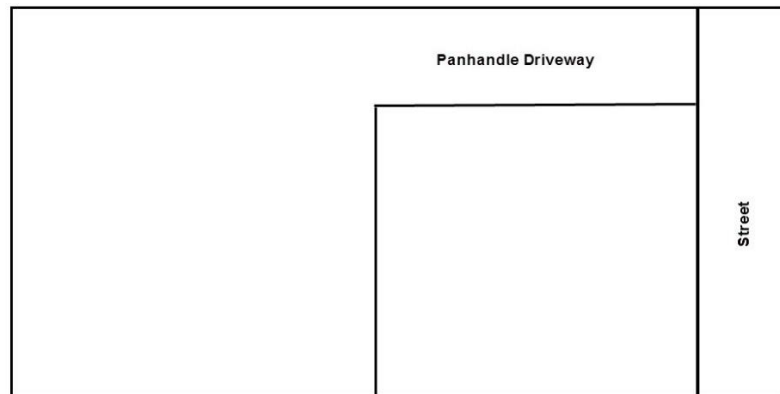
"FLOOD PROOFING PROTECTION means the installation of improvements, provided they are upland of the current *natural boundary* that are specifically designed to prevent damage to existing natural earthen banks caused by the erosive effects of water and wave action by armouring the soil surface through the use of geotextile materials and some combination of rip-rap or other protective surfacing materials. *Retaining Structures* and *Landscape Retaining Structures* are not included under this definition;"

After the definition of "FARM AND GARDEN CENTRE";

"LANDSCAPE RETAINING STRUCTURE means a specific type of *retaining structure*, the use or intended use of which is to hold back and resist, stabilize or support less than 1.2 meters of retained material, such as an earthen bank;"

After the definition of "KENNEL";

"LOT, PANHANDLE means a lot that has its primary *highway* frontage through a narrow strip of land which projects to the *highway* from the main portion of the lot. This narrow strip is an integral part of the lot and is referred to as the *panhandle driveway*, as illustrated in the following drawing:



.”

Before the definition of “MARINA”;

"MEAN ANNUAL HIGH WATER MARK means an elevation of 348.3 metres Geodetic Survey of Canada Datum for Shuswap Lake and 348.4 for Mara Lake;"

After the definition of “MARINA”;

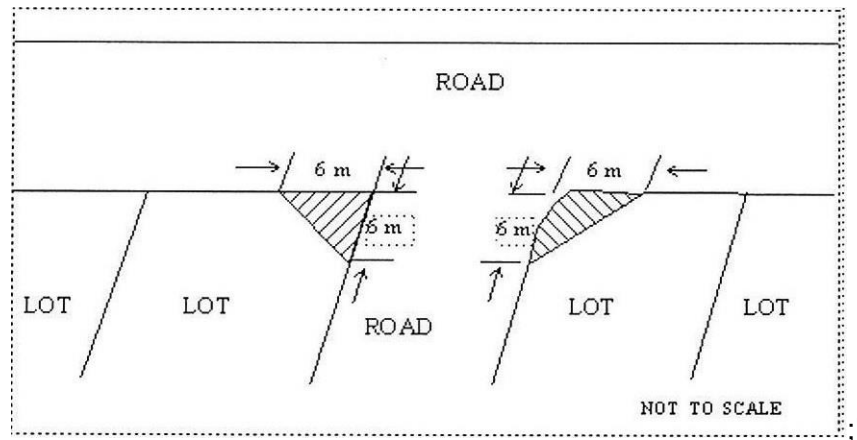
“PANHANDLE DRIVEWAY means that portion of a *panhandle lot* that is the narrow strip fronting a *highway*.”

After the definition of “PAD”;

"RETAINING STRUCTURE means a specific type of structure that is subject to lateral earth pressure, is laterally unsupported at the top and retains more than 1.2 meters of soil material at any point along its length, measured as the difference between the *finished ground elevation* at the top and bottom of the structure, and specifically excludes *Landscape Retaining Structures* and *Retaining Structures* which are part of and connected structurally to a Building;"

After the definition of “RETAIL STORE”;

"SIGHT TRIANGLE means the area formed by a triangle in the angle formed by the right of way boundaries or boundaries produced and 2 points on those boundaries 6 m from the point of intersection, as shown crosshatched in the diagram below



After the definition of "SETBACK";

"FINISHED GROUND ELEVATION means either a natural or altered ground level but shall not include areas artificially raised through the use of *retaining structures* unless the *retaining structure* provides a level ground area that is a minimum of 1.2 m wide measured from the face of the *building*; or earth piled against the *building* with a slope of greater than 2:1 (horizontal to vertical)."

Before the definition of "FLOOR AREA"; and,

"SURVEYOR CERTIFICATE means a sketch plan provided by either a BC Land Surveyor or a Survey Technician which locates all buildings structures and improvements on a parcel."

After the definition of "STRUCTURE".

ii. Section 2.1, DEFINITIONS is further amended by:

a) Replacing the existing definition of "WATERCOURSE" with the following:

"WATERCOURSE is a natural depression with banks and a bed of 0.6 m (1.97 ft.) or more below the surrounding land and 1 of the following, a) serving to give direction to a current of water for at least 6 months of the year, b) having a drainage area of 2 km² (494 ac.) or more, c) an area designated as a *watercourse* by the Province, and includes lake, pond, river, stream, creek, spring, ravine, swamp, and wetland;"

b) replacing the existing definition of "PARCEL BOUNDARY, FRONT", with the following:

"PARCEL BOUNDARY, FRONT means the parcel boundary that is the shortest parcel boundary common to the lot and an abutting *highway* or access route in a bare land strata plan, and where and in the case of a *panhandle lot* means the line separating the *panhandle driveway* from the main part of the lot;"

- c) replacing the existing definition of “HABITATION” with the following:

“HABITATION means the support of life processes within a *building*, including, but not limited to, sleeping, eating, food preparation, waste elimination, personal cleaning, and rest and relaxation areas.”

- iii. Section 2.3.4, ESTABLISHMENT OF FLOOD PLAINS is amended by:

- (a) deleting sub-section (3), and replacing it with the following:

"(3) The floodplain setback is:

- (a) 15.0 m from the *mean annual high water mark* of Shuswap Lake, defined as 348.3 metres Geodetic Survey of Canada Datum;
- (b) 15.0 m from the *mean annual high water mark* of Mara Lake, defined as 348.4 metres Geodetic Survey of Canada Datum;
- (c) 30 m (98.43 ft.) from the *natural boundary* of the Eagle River, Sicamous Creek and the portion of Hummingbird Creek that is downstream from highway 97A;
- (d) 15 m (49.2 ft.) from the *natural boundary* of any other *watercourse*; and,
- (e) where more than 1 flood plain setback is applicable, the larger distance is the flood plain setback.”

- iv. Section 2.3.5, MEASUREMENT OF FLOOD CONSTRUCTION LEVEL AND FLOOD PLAIN SETBACK is amended by:

- a) deleting subsections (1) and (2) and adding the following:

- “
- (1) The flood construction level is determined by measuring at a 90° angle to the *mean annual high water mark* for Shuswap and Mara Lakes, or the *natural boundary* for all other *watercourses* to a point where the elevation is the required elevation above said *mean annual high water mark* or *natural boundary*.
- (2) The flood plain setback is determined by measuring at a 90° angle to the *mean annual high water mark* for Shuswap and Mara Lakes or the *natural boundary* for all other *watercourses*, the distances stated in Section 2.3.4(3). “

- v. Section 2.3.6, APPLICATION OF FLOOD PLAINS is amended by:

- (a) deleting subsection (5) and replacing with the following:

“(5) The Manager of Development Services or their delegate requires that a *Surveyor Certificate* be submitted to them by the land and

property owners to verify compliance with the flood construction level and flood plain setback specified in subsections 2.3.4 (2) and (3)."

(b) deleting subsection (7) and replacing it with the following:

"(7) The following are exempted from the requirements of subsection (1) and (2) as they apply to the flood construction level and floodplain setback:

- a) a floating *building* or structure;
- b) a dock or wharf;
- c) a boat fueling use;
- d) a fence constructed of wood or wire through which water can flow freely;
- e) *flood proofing protection* works constructed to stabilize the shoreline of a *water body* or the banks of a *watercourse*;
- f) a roof overhang or cantilevered deck with no footings within the setback area;
- g) on-loading and off-loading facilities associated with water-oriented industry and portable sawmills;
- h) ground level patios;
- i) detached *accessory building* that do not include *habitation*;
- j) exterior stairway not forming part of a building or attached in any way to another structure, provided it does not extend below the parcel boundary, or the *natural boundary*;
- k) electrical or mechanical equipment not susceptible to damage by floodwater; and,
- l) storage of goods not damageable by flood waters."

vi. Section 2.3.10 SETBACK EXCEPTIONS is amended by:

(a) deleting Section 2.3.10(a), and replacing it with the following:

"(a) a fence not exceeding 2.4 m (7.87 ft.) in height, in compliance with the regulations set out in section 2.3.22 Sight Triangles; and

(b) deleting Section 3.2 (e), and replacing it with the following:

"(e)a structure below finished grade;"

(c) adding Section 2.3.10(g) as follows:

"(g) *landscape retaining structures*, provided that such structures must be separated from each other by a minimum 1.5 m distance measured horizontally from the face (or from the toe of the upper wall to the top face of the lower wall, if the *landscape retaining structures* are not vertical) of each *landscape retaining structure* and specifically excludes *landscape retaining structures* proposed to be constructed adjacent to a Section 42 road, as defined in the Transportation Act, or in the sight triangle. *Landscape retaining structures*

proposed to be located adjacent to a *Highway* must comply with Ministry of Transportation and Infrastructure regulations and may require the approval of that Ministry; and,"

(d) adding Section 3.2.(h), as follows:

"(h) exterior stairway not forming part of a building."

vii. Add a new Section 2.3.22 titled SIGHT TRIANGLE, as follows:

"SIGHT TRIANGLE

2.3.22 An owner, occupier or lessee of land at the intersection of any *highway* must not grow or place, or cause or allow to be grown or placed, within the sight triangle on that land, any signs or structures or trees or other plants, with horizontal dimension exceeding 0.6m, unless:

- a) the person has the consent of the Minister of Transportation and Infrastructure to do so; or
- b) an eye 0.9 m above the surface elevation of one *highway* can, by looking directly over the sign or structure or tree or other plant, see an object 0.9 m above the surface elevation of the other highway."

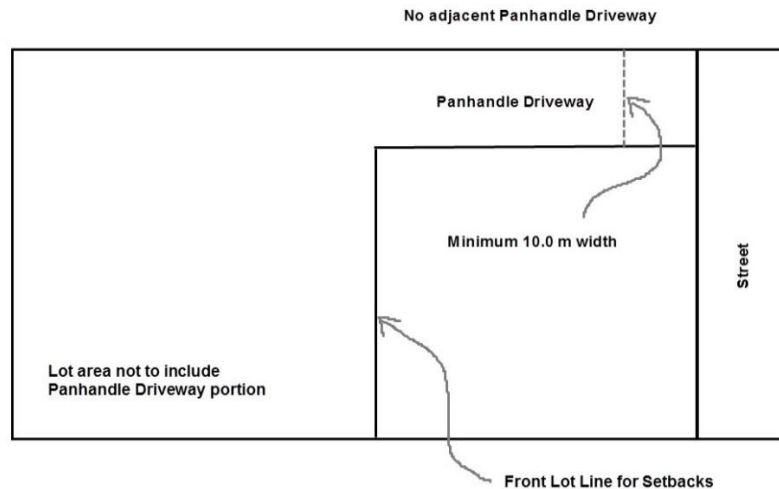
viii. Adding new section 2.3.23 titled Subdivision Regulations for Panhandle Lots, as follows:

"SUBDIVISION REGULATIONS FOR PANHANDLE LOTS

2.3.23 Where a subdivision application proposes to create a *panhandle lot* the *panhandle lot* must meet the following requirements:

- a) The minimum width of the *panhandle driveway* is 10.0 m;
- b) The *panhandle driveway* portion of the lot is not included in lot area calculation for minimum parcel size; and,
- c) No more than 2 *panhandle lots* to be adjacent to each other.

As illustrated in the following drawing:



2. This bylaw may be cited as "Rural Sicamous Land Use Amendment (CSRD) Bylaw No. 2064."

READ a first time this 17 day of March, 2016.

READ a second time, as amended, this day of , 2017.

PUBLIC HEARING held this day of , 2017.

READ a third time this day of , 2017.

ADOPTED this day of , 2017.

Corporate Officer

Chair

Certified true copy of Bylaw No. 2064
as read a third time.

Certified true copy of Bylaw No. 2064
as adopted.

Corporate Officer

Corporate Officer

COLUMBIA SHUSWAP REGIONAL DISTRICT

SOUTH SHUSWAP ZONING AMENDMENT (CSRD) BYLAW NO. 701-83

A bylaw to amend the "South Shuswap Zoning Bylaw No. 701"

WHEREAS the Board of the Columbia Shuswap Regional District adopted Bylaw No. 701;

AND WHEREAS the Board deems it appropriate to amend Bylaw No. 701;

NOW THEREFORE the Board of the Columbia Shuswap Regional District, in open meeting assembled, HEREBY ENACTS as follows:

1. "South Shuswap Zoning Bylaw No. 701" is hereby amended as follows:

A. TEXT AMENDMENT

1. Schedule A, Zoning Bylaw Text, which forms part of the "South Shuswap Zoning Bylaw No. 701" is hereby amended as follows:

i. Section 1, Definitions is amended by:

Adding the following new definitions:

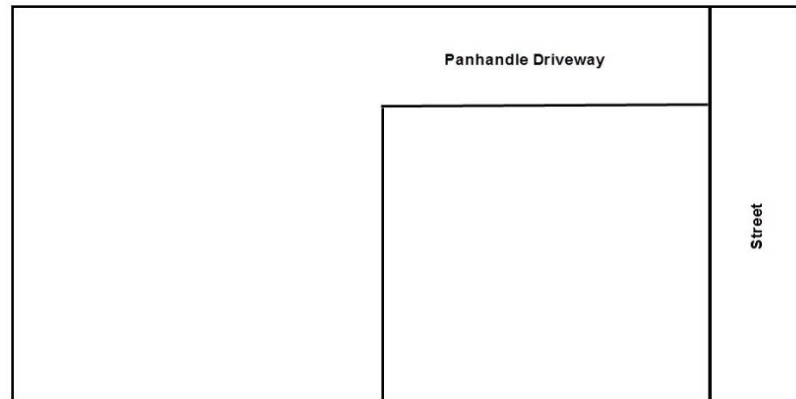
"FLOOD PROOFING PROTECTION means the installation of improvements, provided they are upland of the current *natural boundary*, that are specifically designed to prevent damage to existing natural earthen banks caused by the erosive effects of water and wave action by armouring the soil surface through the use of geotextile materials and some combination of rip-rap or other protective surfacing materials. *Retaining Structures* and *Landscape Retaining Structures* are not included under this definition";

after the definition of "FINISHED GROUND ELEVATION";

"HABITATION means the support of life processes within a *building*, including, but not limited to, sleeping, eating, food preparation, waste elimination, personal cleaning, and rest and relaxation areas."

After the definition of "FLOOR AREA";

"LOT, PANHANDLE means a lot that has its primary *highway* frontage through a narrow strip of land which projects to the *highway* from the main portion of the lot. This narrow strip is an integral part of the lot and is referred to as the *panhandle driveway*, as illustrated in the following drawing:



”

After the definition of “LANE”;

“PANHANDLE DRIVEWAY means that portion of a *panhandle lot* that is the narrow strip fronting a *highway*.”

After the definition of “PAD”; and,

“SURVEYOR CERTIFICATE means a sketch plan provided by either a BC Land Surveyor or a Survey Technician which locates all *buildings structures* and improvements on a parcel.”

After the definition of “STRUCTURE”.

ii. Section 1, Definitions is further amended by:

a) replacing the existing definition of “WATERCOURSE” with the following:

“WATERCOURSE is a natural depression with banks and a bed of 0.6 m (1.97 ft.) or more below the surrounding land and 1 of the following, a) serving to give direction to a current of water for at least 6 months of the year, b) having a drainage area of 2 km² (494 ac.) or more, c) an area designated as a *watercourse* by the Province, and includes lake, pond, river, stream, creek, spring, ravine, swamp, and wetland;”.

b) replacing the existing definition of “PARCEL LINE, FRONT”, with the following:

“PARCEL LINE, FRONT means the parcel line that is the shortest parcel boundary common to the lot and an abutting *highway* or access route in a bare land strata plan, and where and in the case of a *panhandle lot* means the line separating the *panhandle driveway* from the main part of the lot.”

- iii. Section 3.18, Application of Floodplain Specifications is amended by:
 - a) deleting Section 3.18, and replacing it with the following:
 - “.1 A *building*, including a manufactured home or structure must not be constructed, reconstructed, moved or extended within a floodplain setback.
 - .2 The underside of any floor system or top of concrete slab supporting any space or room that is used for *habitation*, business, or the storage of goods that are susceptible to damage by floodwater, must be above the flood construction level.
 - .3 Where landfill or structural support or both are used to comply with subsection (2), they must be protected against scour and erosion from flood flows, wave action, ice and other debris and shall not extend within the flood plain setback.
 - .4 Furnaces and other fixed equipment susceptible to damage by floodwater must be above the flood construction level.
 - .5 The Manager of Development Services or their delegate requires that a *Surveyor Certificate* be submitted to them by the land and property owners to verify compliance with the flood construction level and flood plain setback specified in subsections 3.18.1, .2, .3, and .4.
 - .6 The following are exempted from the regulations of subsection .2 as they apply to the flood construction level:
 - .1 a renovation of an existing *building*, including a manufactured home or *structure* that does not involve an addition to the exterior of the *building*, manufactured home or *structure*;
 - .2 an addition to a *building*, manufactured home or *structure* of less than 25 percent of the *floor area* existing the date of adoption of this bylaw, provided that the degree of non-conformity is not increased;
 - .3 carport or domestic garage;
 - .4 a *building* used for *agriculture* excluding a closed-sided livestock housing and a *dwelling unit*; and
 - .5 a farm *dwelling unit* that is located both on a *parcel* 8.1 ha (20.01 ac.) or larger and within the Agricultural Land Reserve and provided:
 - (i) the underside of a wooden floor system;
 - (ii) the top of a concrete slab;
 - (iii) in the case of a manufactured home, the top of the pad; or;
 - (iv) the ground surface under an area used for *habitation*, is no lower than 1 m(3.28 ft.) above the natural ground elevation measured from the highest point on the

perimeter of the farm *dwelling unit* or no lower than the flood construction level, whichever is the lesser.

.7 The following are exempted from the requirements of sub-sections (1) and (2) as they apply to the flood construction level and floodplain setback:

- (a) a floating *building* or *structure*;
- (b) a dock or wharf;
- (c) a boat fueling use;
- (d) a fence constructed of wood or wire through which water can flow freely;
- (e) *flood proofing protection* works constructed to stabilize the shoreline of a *water body* or the banks of a *watercourse*;
- (f) a roof overhang or cantilevered deck with no footings within the setback area;
- (g) on-loading and off-loading facilities associated with water-oriented industry and portable sawmills;
- (h) ground level patios;
- (i) detached *accessory building* that do not include *habitation*;
- (j) exterior stairway not forming part of a building or attached in any way to another structure, provided it does not extend below the parcel boundary, or the natural boundary;
- (j) electrical or mechanical equipment not susceptible to damage by floodwater; and,
- (k) storage of goods not damageable by flood waters.”

.8 Buildings or structures constructed within District Lot 6483, K.D.Y.D. and as permitted in Modification Agreement No. 0251702 to Lease 344987 are exempted from the requirements of 3.17 as it pertains to the Flood Construction Levels and Floodplain Setbacks

.9 Buildings or structures constructed within District Lot 6021, K.D.Y.D., as permitted by Provincial Lease 333195 are exempted from the requirements of 3.17 as it pertains to the Food Construction Levels and Floodplain Setbacks.”

iv. Section 3.5, Setback Exceptions is amended by:

a) Replacing Section 3.5.9 with the following:

“.9 *landscape retaining structures*, provided that such structures must be separated from each other by a minimum 1.5 m distance measured horizontally from the face (or from the toe of the upper wall to the top face of the lower wall, if the *landscape retaining structures* are not vertical) of each *landscape retaining structure* and specifically excludes *landscape retaining structures* proposed to be constructed adjacent to a Section 42 road, as defined in the Transportation Act, or in the sight triangle. Landscape retaining structures proposed to be located adjacent to a Highway must

comply with Ministry of Transportation and Infrastructure regulations and may require the approval of that Ministry.”

v. Section 3 General Regulations is amended by:

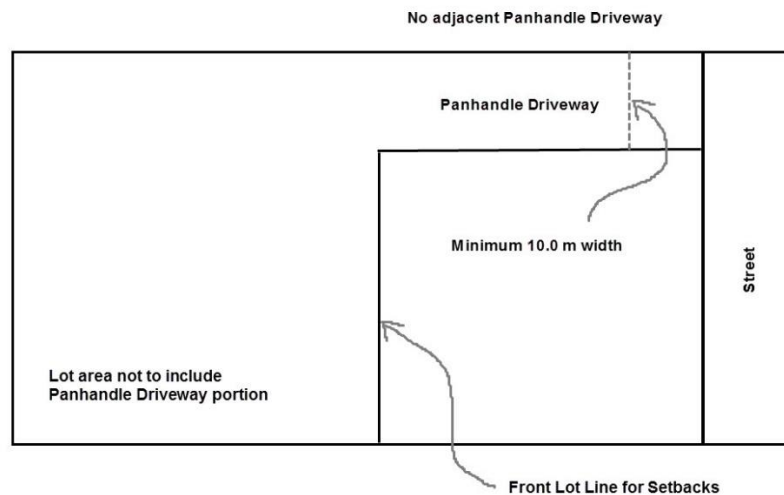
a) Adding a new section 3.20 titled Subdivision Regulations for Panhandle Lots, as follows:

“SUBDIVISION REGULATIONS FOR PANHANDLE LOTS

3.120 Where a subdivision application proposes to create a *panhandle lot* the *panhandle lot* must meet the following requirements:

- a) The minimum width of the *panhandle driveway* is 10.0 m;
- b) The *panhandle driveway* portion of the lot is not included in lot area calculation for minimum parcel size; and,
- c) No more than 2 *panhandle lots* to be adjacent to each other.

As illustrated in the following drawing:



2. This bylaw may be cited as "South Shuswap Zoning Amendment (CSRD) Bylaw No. 701-83."

READ a first time this 17 day of March, 2016.

READ a second time, as amended, this ____ day of _____, 2017.

PUBLIC HEARING held this _____ day of _____, 2017.

READ a third time this _____ day of _____, 2017.

ADOPTED this _____ day of _____, 2017.

Corporate Officer

Chair

Certified true copy of Bylaw No. 701-83
as read a third time.

Certified true copy of Bylaw No. 701-83
as adopted.

Corporate Officer

Corporate Officer

