Planning & Development Services Committee Meeting Amended Agenda

August 1, 2019
4:00 pm

Members: *Director Reinhardt (Chair), Director McCormick (Vice Chair), Director Gay, Director Doehle, Director Sosnowski, Director Walter, Director Clovechok, Director Wilkie, Director Pratt, Director Graham, Director Qualizza, Director Miller, Director Sterzer, Director Wilks*

Voting Rules
Unless otherwise indicated on this agenda, all Directors except the Director representing the District of Elkford have one vote and a simple majority is required for a motion to pass.

Who Votes **Count**

1. Call to Order

2. Addition of Late Items

3. Adoption of the Agenda

4. Adoption of the Minutes

4.1 July 4, 2019 Meeting

5. Delegations

5.1 Richard Haworth re: Doehle ALR Exclusion Application – *item 9.2.1*

5.2 Hans Plechinger re: 310613 BC Ltd. (Three Bars Ranch) ALR Non-Adhering Residential Use Application – *item 9.2.2*

5.3 Barry Stuart re: DVP No. 26-19 – *item 9.3.2*

5.4 Richard Haworth re: DVP No. 28-19– *item 9.3.4*

5.5 Wendy Booth re: DVP No. 29-19 – *item 9.3.5*

5.6 Doug Feely re: Liquor Licencing Application – Island Lake Lodge – *item 9.6.2*

6. Correspondence

6.1 ALC Decisions

6.1.1 ALC Application #57297 – Block Inclusion Application Referral

6.1.2 Lizard Creek Road / Ministry of Transportation ALR Non-Farm Use

6.1.3 North of Sparwood / Foothills Silva Culture Inc. ALR Non-Farm Use

6.2 Mine Referral

6.2.1 Placer Lease – Merklin Resources Inc. / Wildhorse River, northeast of Fort Steele

6.3 Miscellaneous

6.3.1 Planning & Development Services August 2019 Board Report

6.3.2 Information Report – Kootenay & Boundary Regional Adaptation Strategies

7. Advisory Commissions

7.1 APC Minutes

7.1.1 Area A – July 16, 2019

7.1.2 Area B – July 17, 2019

7.1.3 Area C – July 11, 2019

7.1.4 Areas F & G – July 16, 2019

8. Unfinished Business

8.1.1 Area A – Ministry of Forests, Lands, Natural Resource Operations and Rural Development: Recreation Sites & Titles Branch Crown Land Application for a Designated Use Area

9. New Business

9.1 Bylaw Amendments

9.2 ALR Applications

9.2.1 Baynes Lake / Doehle ALR Exclusion Application

9.2.2 Wycliffe / 310613 BC Ltd. (Three Bars Ranch) ALR Non-Adhering Residential Use Application

9.3 Development Variance Permit Applications

9.3.1 DVP No. 25-19 Jim Smith Lake / Passey

9.3.2 DVP No. 26-19 Fernie Alpine Resort / Barry Stuart Realty Inc.

9.3.3 DVP No. 27-19 Monroe Lake Road / Pickering

9.3.4 DVP No. 28-19 Fernie Alpine Resort / Polar Peak Properties Inc.

Revised 9.3.5 DVP No. 29-19 Fairmont Hot Springs / Hemsing

9.4 Temporary Use Permit Applications

9.5 Ministry of Forests, Lands, Natural Resource Operations and Rural Development Referrals

9.5.1 Area B – Koocanusa Recreation Steering Committee Crown Land Application to Establish & Maintain a Recreation Area in the Dorr / Grasmere Area

9.5.2 Area C – Bombardier Crown Land Application for Specific Permission for an Existing Private Residential Dock on Moyie Lake

9.6 Miscellaneous Items

9.6.1 Request for Exemption from Providing a Professional Report – Friedley

9.6.2 Liquor Licencing Application – Island Lake Lodge

10. Late Agenda Items

11. Adjournment

MINUTES OF THE REGIONAL DISTRICT OF EAST KOOTENAY **PLANNING & DEVELOPMENT SERVICES COMMITTEE** MEETING HELD AT THE REGIONAL DISTRICT OFFICE IN CRANBROOK BC ON **JULY 4, 2019**

PRESENT

Committee Chair Clara Reinhardt	Village of Radium Hot Springs
Director Mike Sosnowski	Electoral Area A
Director Stan Doehle	Electoral Area B
Board Chair Rob Gay	Electoral Area C
Director Jane Walter	Electoral Area E
Director Susan Clovechok	Electoral Area F
Director Gerry Wilkie	Electoral Area G
Director Lee Pratt	City of Cranbrook
Director Wesly Graham	City of Cranbrook
Director Don McCormick	City of Kimberley
Director Ange Qualizza	City of Fernie
Director David Wilks	District of Sparwood
Director Karl Sterzer	Village of Canal Flats
Director Allen Miller	District of Invermere

OTHERS PRESENT

Shawn Tomlin	Chief Administrative Officer
Andrew McLeod	Planning & Development Services Manager
Shannon Moskal	Corporate Officer
Rhiannon Chippett	Planning Assistant (Recording Secretary)

Committee Chair Clara Reinhardt called the meeting to order at 3:02 pm.

ADOPTION OF THE AGENDA

MOVED by Director Wilkie
Agenda SECONDED by Director Gay

THAT the agenda for the Planning & Development Services Committee meeting be adopted.

CARRIED

ADOPTION OF THE MINUTES

MOVED by Director Miller
Minutes SECONDED by Director Sterzer

THAT the Minutes of the Planning & Development Services Committee meeting held on June 6, 2019 be adopted as circulated.

CARRIED

DELEGATIONS

Shannon Kramer, spoke to her application requesting an amendment to the Elk Valley Zoning Bylaw to permit two dwellings on her property located at 797 Hartley Creek Road, north of Fernie. Mrs. Kramer explained that she would be willing to register a covenant stating that the secondary dwelling is for immediate family only and that it would be a manufactured home for her daughter and partner to live in.

Jean Terpsma, agent for Charlotte Marshall and Cameron Beaudry, made a presentation and requested an amendment to the Panorama Mountain Village OCP to support auxiliary dwelling units within the original Panorama Village single-family subdivision. Mrs. Terpsma explained the need for affordable housing and housing for employees in Panorama, and clarified that her request would not be for blanket permission but on a case by case basis and only provided dwellings have suitable parking and connectivity to water and sewer to support the secondary suite.

DELEGATIONS (continued)

Jeremy Traverse, spoke to his application to amend the Upper Columbia Valley Zoning Bylaw to construct a new full-service automotive repair facility at 4847 Selkirk Avenue in Edgewater. Mr. Traverse explained the existing buildings will be removed and a new 40' x 60' building will be constructed and insulated for noise reduction and that outdoor lighting will be downcast for minimal light pollution.

Dan Ayars, spoke to his ALR application for a five lot subdivision at 1643 Dicken Road, north of Fernie. Mr. Ayars explained that two of the proposed parcels are currently used in farm operations which would continue, and that the other three parcels which lack agricultural capability would be sold.

Richard Haworth, agent for Bad Toro Properties Inc., made a presentation and requested a development variance permit to waive provision of water and sewer services for three proposed lots resulting from a boundary adjustment subdivision. Mr. Haworth explained that no new lots are being created at this time, and a restrictive covenant will be registered and ensure proof of servicing prior to development of any building or structures.

Dahlen Sabey, spoke on behalf of the Goulding, Evans, Leaney and Sabey Licence of Occupation application to amend an existing private moorage tenure for a recreational dock on the northeast shore of Tie Lake. Mr. Sabey explained that the existing dock currently accommodates two boats, but as there are four lots associated with the private group moorage tenure, they would like to expand the dock to accommodate four boats, one per lot.

NEW BUSINESS

48600 MOVED by Director Sosnowski
Bylaw No. 2932 SECONDED by Director Qualizza
Introduced

THAT Bylaw No. 2932 cited as "Regional District of East Kootenay – Elk Valley Zoning Bylaw No. 829, 1990 – Amendment Bylaw No. 93, 2019 (Dicken Road / Kramer)" be introduced;

and further, that a development agreement containing the item identified in the staff report be registered on title prior to bylaw adoption.

CARRIED

48601 MOVED by Director Clovechok
Bylaw No. 2933 SECONDED by Director Gay
Introduced

THAT Bylaw No. 2933 cited as "Regional District of East Kootenay – Panorama Mountain Village Official Community Plan Bylaw No. 1441, 1999 – Amendment Bylaw No. 16, 2019 (Panorama / Marshall & Beaudry)" be introduced;

and further, that the Board is satisfied that the OCP consultation identified in the staff report is appropriate.

CARRIED

48602 MOVED by Director Miller
Bylaw No. 2934 SECONDED by Director Gay
Introduced

THAT Bylaw No. 2934 cited as "Regional District of East Kootenay – Upper Columbia Valley Zoning Bylaw No. 900, 1992 – Amendment Bylaw No. 349, 2019 (Panorama / Marshall & Beaudry)" be introduced.

CARRIED

48603 MOVED by Director Wilkie
Bylaw No. 2936 SECONDED by Director Miller
Introduced

THAT Bylaw No. 2936 cited as "Regional District of East Kootenay – Upper Columbia Valley Zoning Bylaw No. 900, 1992 – Amendment Bylaw No. 350, 2019 (Edgewater / Full Circle Automotive Inc)" be introduced.

CARRIED

MOVED by Director Sosnowski
Ayars SECONDED by Director Gay
ALR Subdivision

THAT the Ayars ALR subdivision application for property located at 1643 Dicken Road, north of Fernie be refused.

DEFEATED

IN FAVOUR: Director Gay
Director Wilkie
Director Walter

48604 MOVED by Director Wilks
Ayars SECONDED by Director Doehle
ALR Subdivision

THAT the Agricultural Land Commission be advised the RDEK supports the Ayars ALR subdivision application for property located at 1643 Dicken Road, north of Fernie.

CARRIED

OPPOSED: Director Gay
Director Wilkie
Director Walter

48605 MOVED by Director Miller
DVP 22-19 SECONDED by Director Clovechok
Granted

THAT Development Variance Permit No. 22-19 be granted subject to registration of a restrictive covenant prohibiting serviceable buildings until proof of servicing is provided in accordance with the Subdivision Servicing Bylaw.

CARRIED

48606 MOVED by Director Doehle
Goulding, Evans, Leaney & SECONDED by Director Walter
Sabey Group Moorage

THAT the Ministry of Forests, Lands, Natural Resource Operations and Rural Development be advised the RDEK does not support the Goulding, Evans, Leaney and Sabey Crown land application for an amendment to a group moorage on Tie Lake.

CARRIED

OPPOSED: Director Pratt

Director Mike Sosnowski left the meeting at 3:58 pm.

48607 MOVED by Director Walter
Hunt SECONDED by Director Wilks
ALR Residential Use

THAT the Agricultural Land Commission be advised the RDEK supports the Hunt ALR non-adhering residential use application for property located at 8064 and 8068 Hunt Road in the Meadowbrook area near Kimberley.

CARRIED

Director Mike Sosnowski returned to the meeting at 4:00 pm.

48608 MOVED by Director Sosnowski
DVP 21-19 SECONDED by Director Wilks
Granted

THAT Development Variance Permit No. 21-19 be granted.

CARRIED

48609 MOVED by Director Sterzer
DVP 23-19 SECONDED by Director Doehle
Granted

THAT Development Variance Permit No. 23-19 be granted.

CARRIED

NEW BUSINESS (continued)

48610 MOVED by Director Sterzer
DVP 24-19 SECONDED by Director Clovechok
Granted

THAT Development Variance Permit No. 24-19 be granted.

CARRIED

48611 MOVED by Director Gay
Designated Use Area SECONDED by Director Sterzer
Postponed

THAT consideration of the Ministry of Forests, Lands, Natural Resource Operations and Rural Development Crown land application for a Designated Use Area under Section 17 of the *Land Act*, to preserve an existing historical recreation trail between Sparwood and Elkford, be postponed one month and the Ministry be requested to provide information on the impact the new designation will have on motorized access to the existing trapline tenure.

CARRIED

48612 MOVED by Director Gay
Wildhorse Cycling Club SECONDED by Director Sterzer
BC Recreation Trail

THAT the Ministry of Forests, Lands, Natural Resource Operations and Rural Development, be advised the RDEK supports the Wildhorse Cycling Club Crown land application to establish and maintain a BC Recreation Trail network in the vicinity of Cranbrook.

CARRIED

OPPOSED: Director Wilks
Director Pratt
Director Sosnowski

48613 MOVED by Director Gay
Freedom Mobile Inc. SECONDED by Director Pratt
Communication Tower

THAT the Ministry of Forests, Lands, Natural Resource Operations and Rural Development, be advised the RDEK supports the Freedom Mobile Inc. application for a communication tower in the Cranbrook North area.

CARRIED

48614 MOVED by Director Walter
Hi Ho Silver Resources Inc. SECONDED by Director Wilks
Crown Land Application

THAT the Ministry of Forests, Lands, Natural Resource Operations and Rural Development, be advised the RDEK supports the Hi Ho Silver Resources Inc. Crown land application to establish a clay quarry on unsurveyed Crown land within DL 4592, northwest of Skookumchuk.

CARRIED

48615 MOVED by Director Walter
Kimberley Trails Society SECONDED by Director McCormick
Crown Land Application

THAT the Ministry of Forests, Lands, Natural Resource Operations and Rural Development, be advised the RDEK supports the Kimberley Trails Society Crown land application to establish and maintain a 4 km section of trail as a recreation trail / site in the Matthew Creek FSR area west of Kimberley.

CARRIED

The meeting adjourned at 4:14 pm.

CERTIFIED CORRECT

Committee Chair Clara Reinhardt **Shannon Moskal, Corporate Officer**

Rhiannon Chippett

Subject: FW: Delegation Request -August 1 Planning Committee - Doehle ALR Exclusion
Attachments: 19-08-01 Doehle ALR Exclusion.pptx

Rhiannon,

We are submitting this request to appear as a delegation at the August 1st Planning Committee meeting regarding our request for Exclusion from the ALR for property in Baynes Lake.

The subject property is located at 561 Chief David Road within the rural Baynes Lake area of the Regional District of East Kootenay. The property totals 5.9 acres (2.38 ha)

The ALC conducted a boundary review for RDEK Area "B" in 2015 which included the Baynes Lake area and the subject property. The subject property was included in within the Baynes Lake Area (Block Seven) in the 2015 review and was supported for exclusion from the ALC at that time.

Despite the recommendations of the ALC to remove property from the ALR, many property owners chose to retain ALR status. The owner of the subject property chose to remain in the ALR to support neighbouring property owners that were also remaining in the ALR.

It is the landowners' desire to exclude the property from the ALR. This exclusion is sought so the owner can construct a secondary dwelling on the property for the use of his adult daughter who is suffering from medical issues and requires assistance with daily living that will be provided by the property owners. Construction of a secondary dwelling on the property is not possible within the ALR.

The property is flat with a slough that occupies the rear half of the parcel. Agricultural use of the property is severely limited due to the small area of potentially arable land within the parcel (approximately 1.16 ha (2.8 acres) of the total parcel area of 2.38 ha (5.9 acres)), adjoining small acreage residential uses, the overall historical residential development pattern in the area, placement of the home and detached garage at the front of the lot, and the poor agricultural soil capability.

ALC mapping indicates that the agricultural capability classification for the area encompassing the property is 5:3MT - 4:4TM - 1:6T. The classification area is quite large (see Appendix C – Agricultural Capability) and it appears that the higher quality soils are located elsewhere within the area with this property being lower quality soils and slough.

A site specific agrological assessment has not been undertaken for the property based on the ALC's recommendation to remove the property from the ALR in 2017.

Our powerpoint presentation is attached.

If you require anything further, please contact me at your convenience.

Thanks,
Richard Haworth

HAWORTH Development Consulting

PO Box 223, Suite 203, 926 – 7th Avenue,

Rhiannon Chippett

Subject: FW: Three Bars Ranch building application
Attachments: Presentation RDEK July 11 2019.docx; ATT00001.txt; Screen Shot 2017-11-28 at 2.01.16 PM.png; ATT00002.txt

> Hello Rhiannon,
>
> I would like to attend the meeting as a delegation on behalf of Three
> Bars Ranch building permit application. Please find attached
> presentation. Looking forward to your Thank you and best regards Hans
>
>

In 1986, the Plechinger and Beckley families formed Three Bars Ranch

In following years, the main lodge, 10 guest cabins, housing up to 48 guests at a time, a pool building with hot tub, a bunk house for staff (all massive log buildings) and a tennis court were built. The guest ranch opened in 1992. In subsequent years, additional buildings have been added to accommodate the Beckley family, staff housing as well as ranch equipment and ranch facilities. My family occupied the original ranch cabin from 1936.

Three Bars employs around 25 people each season between May and October and seven person's year around.
In 2016/17, Three Bars Ranch acquired two more properties of 128 additional hectares agricultural land adjacent to its property for a total of 345 hectares. In 2018, we added 3 more guest cabins housing 12 additional guests for a total of 60 guests per week. We host about 900 international/domestic guests annually.
Three Bars Ranch runs a cow herd of 120 mother cows and over 100 horses for the dude string and has about 100 ha of irrigated hay land.

Three Bars is operated by the Beckley and Plechinger families with the next generation involved in management
As you all know, the ranch part of the operation is not sustainable by itself, it requires stringent cost control and is strictly depending on the success of the Guest Ranch, subsidizing the non-profitable agricultural operation. Therefore, the specific experience and daily, 24/7 presence of all family members on site is of great importance to keep cost under control in order to have the both parts of the operation going forward.

Our top priority is to ensure and sustain the future of the agricultural part of the ranch by means of supporting it financially from profits of the Guest Ranch business. Therefore, it is vital to have management living on site
My wife and I can no longer live in the cabin due to its aging condition and have to travel daily to Cranbrook and back, thus cutting time on site significantly which is so important for operations. Our 24/7 presence is

required to conduct daily business operations smoothly. The ranch can't afford these additional expenses and loss of valuable management time.

Therefore, it is planned to build a family home of approximately 180 square meters living space in a small triangle of 0.25ha of land, on DL 14299, PID 007-422-059, size 91.2 ha. This very corner part of undulating land of this DL is only useable as horse pasture. This parcel does not have any value to the agricultural operation as it is low quality pasture which can't be irrigated due to its triangle shape in this specific corner of the lot, hence little growth and productivity. On one side of the proposed building site, there is a steep drop to Wycliffe/Perry Creek road, breaking up the DL. This planned location is within the approved zoning amendment as defined by the RDEK in 2015. We planned to build living quarters for us in 2016.

However, an opportunity arose to acquire an adjacent property of 115 ha, which had three gust cabins on site. We have moved these cabins to the existing ones. This project delayed the building of our living quarters as our resources had to be redirected to this project. We intended to start building this spring but where caught by surprise, not knowing about the new ALR/ALC regulations when we applied for a building permit.

At the end I would like to underline, that the success and profitability of the Guest Ranch operation is the sole guarantor for the future of the agricultural operation of the company. But it requires all efforts and a 24/7 presence at the ranch of all managing family members.

I would like to thank the RDEK and its staff for their support of our operation in the past years and look forward to our future cooperation.

Thank you very much.

Rhiannon Chippett

Subject: FW: Delegation Request - DVP Application - Barry Stuart Realty Inc.
Attachments: DevelopmentVariancePermit (2) (2) (3).pdf

Further to our telephone discussion, please see my responses below Rhiannon.

Please advise if what I have provided here is acceptable.

Thanks, Barry

The topic on which the delegation wishes to speak; DP Variance Application

1. An executive summary or outline of the presentation to made; simply providing the reason for request for increase in permitted height
2. The name of the designated speaker(s); Barry Stuart
3. The specific action which is being requested of the Board or Committee; Approval of my application
4. Whether or not you will require use of audio/visual equipment. No

Rhiannon Chippett

Subject: FW: Delegation Request -August 1 Planning Committee - Polar Peaks Properties
Attachments: 19-08-01 Polar Peaks.pptx

Rhiannon,

We are submitting this request to appear as a delegation at the August 1st Planning Committee meeting regarding our request for a DVP for the Polar Peaks property at Fernie Alpine Resort.

The subject property is located on Timberline Crescent at Fernie Alpine Resort and comprises approximately 1.62 acres (0.66 ha). The property is the undeveloped portion of a phased strata that will become part of NES199 (Polar Peaks).

We are seeking to obtain a building permit for the property to allow development of the next phase of the Polar Peaks strata development. However, due to split zoning of the property, issuance of a building permit cannot occur until this split zoning is resolved or a DVP is permitted to allow issuance of a BP in a split zoned area. The zoning bylaw requires setbacks within split zoned areas as if the edge of the zoning was a property boundary. We are seeking a DVP to reduce the setback on the split zoned portion of the property to 0.0m.

To expedite the approval process, we are seeking a DVP to allow issuance of the building permit. We have also submitted an application for zoning amendment to rectify the split zoning on the property.

Our powerpoint presentation is attached.

If you require anything further, please contact me at your convenience.

Thanks,
Richard Haworth

HAWORTH Development Consulting

PO Box 223, Suite 203, 926 – 7th Avenue,
Invermere, BC V0A 1K0

T: 250-342-1227

Rhiannon Chippett

Subject: FW: Delegation Request RE: August planning committee meeting

Hi Rhiannon and Shannon

Please see the answers to appear as a delegation at the August Planning Committee meeting. My comments are in red.

1. The topic on which the delegation wishes to speak; Hemsing DVp
2. An executive summary or outline of the presentation to be made; I will make myself available to answer any questions that the Directors may have.
3. The name of the designated speaker(s); Wendy Booth
4. The specific action which is being requested of the Board or Committee; and I will be asking the Planning Committee to support the Hemsing DVP.
5. Whether or not you will require use of audio/visual equipment. No.

Depending on the APC and staff recommendation, I may withdrawal this request.

Thanks

Wendy

Wendy Booth
cell 250 342 5381
home office 250-345-6155
www.wendybooth.ca

Rhiannon Chippett

From: Doug Feely <doug@islandlakeresorts.com>
Sent: July 17, 2019 8:30 AM
To: Rhiannon Chippett
Subject: RDEK Aug 1 Planning Meeting
Attachments: P 719 116 Island Lake Lodge Letter (2).pdf

Follow Up Flag: Follow up
Flag Status: Flagged

I am requesting to appear at the Aug 1 Planning Meeting to present our Liquor License Application for Change to Operating Hours. I presented to the APC last evening in Fernie.
Please confirm receipt of this email.

Thanks so much.

Doug Feely
CEO, Island Lake Lodge

Karen MacLeod

From: ALC Kootenay Land Use ALC:EX <ALC.Kootenay@gov.bc.ca>
Sent: July-05-19 6:18 PM
To: Karen MacLeod
Subject: ALC Application #57297 (RDEK) - Referral to Executive Committee

Hi Karen,

A quick update for you. The block inclusion application will be reviewed at an upcoming meeting of the ALC Executive Committee. I will be in touch in the next few weeks once all the application material is compiled and the application is ready for review by the Commission.

Dear Karen MacLeod:

This email is to advise you that your ALC application #57297 (RDEK) has been referred to the Executive Committee of the Agricultural Land Commission as the proposal has been determined to be of provincial importance under s. 11.2(1)(a) of the *Agricultural Land Commission Act* (ALCA).

The ALC endeavors to communicate the decisions of applications directed under s. 11.2(1)(a) ALCA within 180 business days of receipt of a complete application.

Sincerely,

Mike Bandy | Land Use Planner | Agricultural Land Commission
201 - 4940 Canada Way, Burnaby, BC, V5G 4K6 | 604.660.7047
ALC.Kootenay@gov.bc.ca | www.alc.gov.bc.ca

Agricultural Land Commission
201 – 4940 Canada Way
Burnaby, British Columbia V5G 4K6
Tel: 604 660-7000
Fax: 604 660-7033
www.alc.gov.bc.ca

July 15, 2019

ALC File: 57322
Your File: 24062

Tim Dyer
DELIVERED ELECTRONICALLY

Dear Tim Dyer:

Re: Application 57322 to conduct a non-farm use in the Agricultural Land Reserve

Please find attached the Reasons for Decision for the above noted application (Resolution #240/2019). As agent, it is your responsibility to notify the applicants accordingly.

Request for Reconsideration of a Decision

Under section 33(1) of the ALCA, a person affected by a decision (e.g. the applicant) may submit a request for reconsideration. The request must be received within one (1) year from the date of this decision's release. For more information, refer to *ALC Policy P-08: Request for Reconsideration* available on the Commission website.

Please direct further correspondence with respect to this application to Jennifer Carson at ALC.Kootenay@gov.bc.ca

Yours truly,

Jennifer Carson, Land Use Planner

Enclosures: Reasons for Decision (Resolution #240/2019)
Schedule A: Decision Map

cc: East Kootenay Regional District

AGRICULTURAL LAND COMMISSION FILE 57322

REASONS FOR DECISION OF THE CHIEF EXECUTIVE OFFICER

Transportation Application Submitted Under s. 6 of the *Agricultural Land Reserve General Regulation*

Applicant:	**Ministry of Transportation**
Agent:	**Tim Dyer**
Properties:	**Legal Description: Part of District Lot 4130, Kootenay District, Except (1) Reference Plan 66648-I, (2) The Right of Way of the Crows Nest Southern Railway as shown on Plan B15 and (3) Part included in Plans 1921 and 1339, Part of District Lot 8900, Kootenay District Except (1) Parcel A (See 142795-I) and (2) Parts included in Plans R368 and 17500 and Crown Land Being the Bed of Lizard Creek within District Lots 4130 and 8900, Kootenay District** **Area: 0.8 ha**
Chief Executive Officer:	**Kim Grout** **(the "CEO)**

OVERVIEW

[1] The Right of Way is located partially within the Agricultural Land Reserve (ALR) as defined in s. 1 of the *Agricultural Land Commission Act* (ALCA).

[2] Pursuant to s. 6 of the Agricultural Land Reserve General Regulation (the "Regulation), the Applicant is applying to the Agricultural Land Commission (the "Commission") to dedicate a Right of Way for Highway 3 and to replace an existing bridge on a piled foundation with concrete abutments, a large mammal crossing underneath the bridge, and a 3m wide multi-use pathway (for pedestrians and cyclists). These structures would require the placement of 2,335 m^3 of fill with a total footprint of approximately 0.8 ha (the "Proposal").

[3] The Proposal along with related documentation from the Applicant, Agent, Commission, and third parties is collectively referred to as the "Application". All documentation in the Application was disclosed to the Applicant in advance of this decision.

[4] On October 19th, 2017 the Commission delegated decision-making to the CEO by Resolution #046N/2017. In accordance with section 27 of the ALCA the Commission specified applications may be decided by the CEO. One of these criteria is:

> 4. Non-farm use applications made pursuant to section 6 of BC Regulation #171/2002 (ALR Use, Subdivision and Procedure Regulation), except for those relating to recreational trails. *Clarification: Applications made under Section 6 of BC Regulation #171/2002 (ALR Use, Subdivision and Procedure Regulation) and Section 20(2) of the ALCA are considered to be non-farm use applications. As such, Section 27 (1)(a) of the ALCA which delegates authority to the CEO to consider non-farm use applications is interpreted to encompass applications made under s. 6 of the Regulation.*

BACKGROUND

[5] On February 22, 2019, section 6 (c) of the Agricultural Land General Regulation was amended to no longer require an application for the dedication of a right of way itself,

however, an application is required for construction. In this case, the proposed bridge replacement, mammal crossing and pedestrian walkway does require an application.

[6] The Ministry of Transportation provided further information that a total of approximately 0.83 ha of ALR will be impacted: 0.35 ha used for grading, 0.11 ha used for the pathway, 0.03 ha used for the bridge including the ungulate pathway and 0.35 ha of total existing components.

[7] The Agent submits that the pedestrian walkway could potentially be part of a larger trail network in the future. It is understood that there are no concrete plans for this trail but that the Fernie Trail Alliance understands that it must submit an application and gain approval from the Commission before the trail can be constructed.

DECISION

[8] After reviewing the Application, I am satisfied that the Proposal is consistent with Criterion #4 of Resolution #046N/2017 and approve the Proposal.

[9] The Proposal is approved subject to the following conditions:

a. Siting of the non-farm use for the road and bridge replacement in accordance with Schedule A will not exceed 0.8 ha;
b. The volume of fill brought onto the property for the project will not exceed 2,335m^3; and
c. A weed control plan for both the construction and operation phases of the project must be developed and submitted to the Commission prior to starting construction of the project.

[10] This decision does not relieve the owner or occupier of the responsibility to comply with applicable Acts, regulations, bylaws of the local government, and decisions and orders of any person or body having jurisdiction over the land under an enactment.

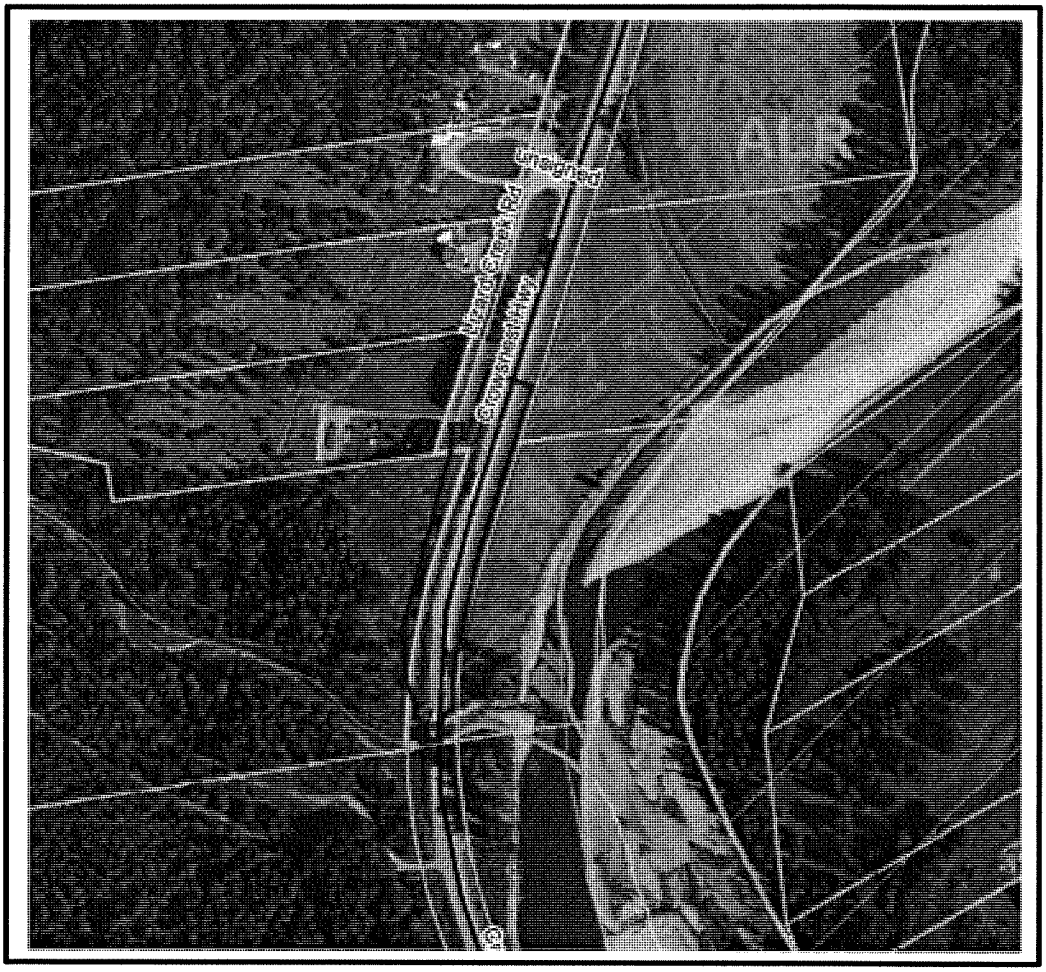
[11] A decision of the CEO is a decision of the Commission pursuant to s. 27(5) of the *ALCA*.

[12] Resolution #240/2019

Released on July 15, 2019

Kim Grout, Chief Executive Officer

Schedule A: Agricultural Land Commission Decision Sketch Plan
ALC File 57322 (Nelson)
Conditionally Approved Bridge Replacement
ALC Resolution #240/2019



Conditionally Approved Bridge Replacement (0.8 ha)

Agricultural Land Commission
201 – 4940 Canada Way
Burnaby, British Columbia V5G 4K6
Tel: 604 660-7000
Fax: 604 660-7033
www.alc.gov.bc.ca

July 22, 2019

ALC File: 57981

Richard Haworth
Haworth Development Consulting Ltd.
DELIVERED ELECTRONICALLY

Dear Richard Haworth:

Re: Application 57981 to conduct a non-farm use in the Agricultural Land Reserve

Please find attached the Reasons for Decision of the Kootenay Panel for the above noted application (Resolution #249/2019). As agent, it is your responsibility to notify the applicant accordingly.

Review of Decisions by the Chair

Under section 33.1 of the *Agricultural Land Commission Act* (ALCA), the Chair of the Agricultural Land Commission (the "Commission") has 60 days to review this decision and determine if it should be reconsidered by the Executive Committee in accordance with the ALCA. You will be notified in writing if the Chair directs the reconsideration of this decision. The Commission therefore advises that you consider this 60 day review period prior to acting upon this decision.

Request for Reconsideration of a Decision

Under section 33(1) of the ALCA, a person affected by a decision (e.g. the applicant) may submit a request for reconsideration. The request must be received within one (1) year from the date of this decision's release. For more information, refer to *ALC Policy P-08: Request for Reconsideration* available on the Commission website.

Please direct further correspondence with respect to this application to ALC.Kootenay@gov.bc.ca.

Yours truly,

Mike Bandy, Land Use Planner

Enclosures: Reasons for Decision (Resolution #249/2019)
Schedule A: Decision Map

cc: Regional District of East Kootenay (File: P 718 124)

AGRICULTURAL LAND COMMISSION FILE 57981

REASONS FOR DECISION OF THE KOOTENAY PANEL

Non-Farm Use Application Submitted Under s. 20(2) of the *Agricultural Land Commission Act*

Applicant:	**Foothills Silva Culture Inc.**
Agent:	**Richard Haworth, Haworth Development Consulting Ltd.**
Property:	**Parcel Identifier: 016-439-961** **Legal Description: District Lot 11710, Kootenay District** **Civic: 5305 Highway 43, north of Sparwood, BC** **Area: 62.7 ha**
Panel:	**David Zehnder, Kootenay Panel Chair** **Ian Knudsen** **Jerry Thibeault**

OVERVIEW

[1] The Property is located within the Agricultural Land Reserve (ALR) as defined in s. 1 of the *Agricultural Land Commission Act* (ALCA).

[2] Pursuant to s. 20(2) of the ALCA, the Applicant is applying to the Agricultural Land Commission (the "Commission") to use a 0.8 ha portion of the 62.7 ha Property as a temporary lay-down yard during construction of powerline improvements on adjacent land between Sparwood and Elkford (the "Proposal").

[3] The area proposed for the lay-down yard (the "Proposal Area") would be used for storage of hydro poles, powerline, and other materials, for a period of approximately one year.

[4] The issue the Panel considered is whether the Proposal impacts the agricultural utility of the Property.

[5] The Proposal was considered in the context of the purposes of the Commission set out in s. 6 of the ALCA. These purposes are:

(a) to preserve the agricultural land reserve;
(b) to encourage farming of land within the agricultural land reserve in collaboration with other communities of interest; and,
(c) to encourage local governments, first nations, the government and its agents to enable and accommodate farm use of land within the agricultural land reserve and uses compatible with agriculture in their plans, bylaws and policies.

EVIDENTIARY RECORD

[6] The Proposal along with related documentation from the Applicant, Agent, local government, and Commission is collectively referred to as the "Application". All documentation in the Application was disclosed to the Agent in advance of this decision.

EVIDENCE AND FINDINGS

[7] This Application was submitted on August 6, 2018 and was forwarded to the Commission by the Regional District of East Kootenay on November 2, 2018. Subsequently, on February 22, 2019, the ALCA was amended and changes were made to its regulations. The Applicant was given an opportunity to make written submissions relating to the amendment of the ALCA and changes to its regulations. While the Application was submitted under the former s. 20(3) of the ALCA, the Panel has considered it under s. 20(2) of the ALCA as amended.

Issue 1: Whether the Proposal would impact the agricultural utility of the Property.

[8] To assess agricultural capability on the Property, the Panel referred in part to agricultural capability ratings. The ratings are identified using the Canada Land Inventory (CLI), 'Soil Capability Classification for Agriculture' system. The improved agricultural capability ratings applicable to the Property is Class 4, more specifically, the majority of the Property is (4T), while approximately a third of the southeast portion of the Property, including the Proposal Area, is (4X).

Class 4 - land is capable of a restricted range of crops. Soil and climate conditions require special management considerations.

The limiting subclasses associated with this parcel of land are T (topographic limitations), and X (a combination of soil factors).

[9] In addition, the Panel received a Professional Agrologist's report, prepared by David Struthers, dated July 15, 2011 (the "Struthers Report"). The Struthers Report was prepared for a previous application on the Property and does not address the Proposal directly, but contains agricultural capability information about the Property. The Struthers Report submits that the unimproved agricultural capability rating for the Property is 5MTP, with limiting subclasses of M (moisture deficiency), P (stoniness), and T (topographic limitations). Improvements are considered to be unfeasible due to the combined influence of the limiting factors, and soil-bound agricultural use is likely limited to seasonal grazing of perennial

forage. The author notes that remnants of past gravel extraction activities were observed on the field inspection.

[10] Based on the agricultural capability ratings and the Struthers Report, the Panel finds that the Property has secondary agricultural capability. The Panel recognizes that soil conditions on the Property may limit some forms of soil-based agriculture.

[11] The Application submits that the Property is not currently utilized for agricultural purposes, with the exception of a small horse paddock on the northern portion of the Property. The Proposal would utilize an area of the Property that the Application suggests is not currently capable of agricultural uses due to past gravel extraction activity. The Application submits that the Proposal Area would be cleared and levelled, and any topsoil would be stripped and stockpiled for remediation of the site. In addition, the Proposal would utilize existing access roads to access the Proposal Area, and no new road construction would be required.

[12] Given the temporary nature of the Proposal, and the proposed utilization of a previously disturbed site and existing access roads, the Panel finds that impacts to the Property's agricultural utility could be reasonably mitigated if access is limited to existing road infrastructure, and appropriate measures for invasive species control and remediation of the Proposal Area are taken under the guidance of a qualified registered professional.

DECISION

[13] For the reasons given above, the Panel approves the Proposal to use a 0.8 ha portion of the 62.7 ha Property as a temporary lay-down yard during construction of powerline improvements on adjacent land between Sparwood and Elkford subject to the following conditions:

Qualified Registered Professional:

a) the reclamation of the Proposal Area must be overseen by a qualified registered professional with specific knowledge of invasive plant species management and land reclamation:

i. prior to commencement of the project, the Commission must review and approve the qualified registered professional who will be responsible for oversight of the reclamation;
ii. if the approved qualified registered professional associated with the Application is to be replaced by any other qualified registered professional, the Commission must be immediately notified and have the opportunity to review and approve the change;

Prior to Commencement of the Non-Farm Use:

b) within 60 calendar days prior to the non-farm use commencing, the approved qualified registered professional must submit for the Commission's review and approval:
    i. a reclamation plan for the Proposal Area that includes a pre-work site assessment of the agricultural capability of the Proposal Area;
    ii. an invasive plant species management plan that includes a pre-work survey of invasive plant species in the Proposal Area, outlines control of existing invasive plant species prior to the Proposal, and mitigation of invasive plant species during the Proposal and for a period of two (2) calendar years following completion of the Proposal;

Irrevocable Letter of Credit (ILOC)

c) to ensure the successful reclamation of the project area and appropriate oversight should you cease to consult with a qualified registered professional, a financial security in the form of an Irrevocable Letter of Credit (the "ILOC") in the amount of $15,000 must be made payable to the Minister of Finance c/o the Agricultural Land Commission. The ILOC is to ensure the Proposal is conducted in accordance with the information submitted with the Application and the conditions of this decision;
    i. the ILOC must be submitted to the Commission within 60 calendar days prior to the commencement of the non-farm use;
    ii. release of the ILOC will be dependent on receipt of evidence that the project is completed to a standard deemed satisfactory by the Commission. In this regard, the Commission will consider the final report that must be prepared

by a qualified registered professional and submitted to the Commission in fulfillment of condition "h" below. For greater clarity, some or all of the ILOC will be accessible to and used by the Commission upon the failure of the operator to comply with any or all aspects of the conditions of approval contained herein;

During the Non-Farm Use:

d) If any topsoil is to be stripped as part of the Proposal, it must be salvaged for use during the reclamation of the Proposal Area where appropriate, under the direction of the qualified registered professional:
   i. stockpiled soils should be windrowed and located in an area where they will not be disturbed and will not impede site drainage;
   ii. stockpiles should be seeded and established with an appropriate plant cover, or other suitable soil erosion control measure must be applied to protect the stockpiles from wind, runoff and other removal process;
   iii. stockpiled soil must not be removed from the Property without written permission from the Commission;

e) appropriate invasive plant species control measures must be practiced on all areas disturbed by the Proposal as per the invasive plant species management plan submitted in accordance with condition "b(ii)";

After the Non-Farm Use:

f) appropriate invasive plant species control must be practiced on all areas disturbed by the Proposal for at least two (2) calendar years following completion of the non-farm use, as per the invasive plant species management plan submitted in accordance with condition "b(ii)";

g) within one (1) year following completion of the non-farm use, the Proposal Area must be reclaimed to an agricultural capability equal or better to existing conditions as per the pre-work site assessment submitted in accordance with condition "b(i)";

h) a post-reclamation assessment must be conducted by the qualified registered professional two (2) years following the completion of the non-farm use to assess the post-reclamation agricultural capability of the Proposal Area. The post-reclamation assessment must include sign-off from the qualified registered professional indicating that the Proposal Area has been reclaimed to conditions equal to or better than pre-disturbance conditions; the post-reclamation assessment must be submitted for review by the Commission.

General:

i) The non-farm use is restricted to a 0.8 ha area, and must be sited in accordance with Schedule A of this decision;

j) Access and egress of all vehicle traffic associated with the non-farm use must be restricted to the existing road infrastructure labelled as 'existing access roads' on Schedule A of this decision;

k) Approval for the non-farm use is granted for the sole benefit of the Applicant and is non-transferable without the written approval of the Commission; and

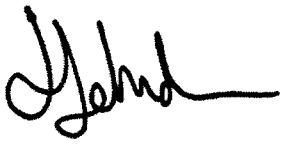
l) Approval is valid for three (3) years from the date of release of this decision. If the Proposal is not completed within this timeframe, a new application may be required.

[14] This decision does not relieve the owner or occupier of the responsibility to comply with applicable Acts, regulations, bylaws of the local government, and decisions and orders of any person or body having jurisdiction over the land under an enactment.

[15] These are the unanimous reasons of the Panel.

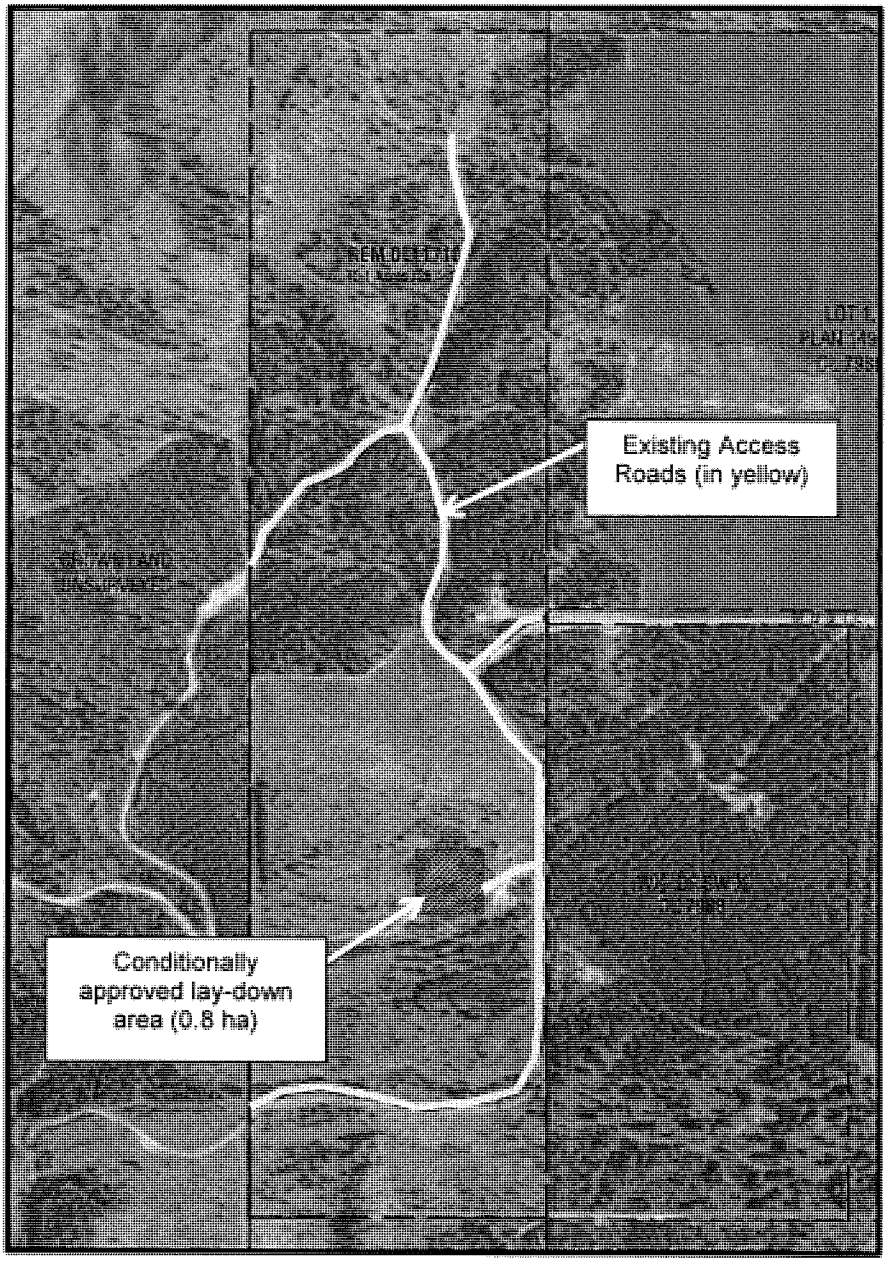
[16] A decision of the Panel is a decision of the Commission pursuant to s. 11.1(5) of the ALCA.

[17] Resolution #249/2019
Released on July 22, 2019



David Zehnder, Panel Chair
On behalf of the Kootenay Panel

Schedule A: Agricultural Land Commission Decision Map
ALC File 57981 (Foothills Silva Culture)
Conditionally Approved Non-Farm Use
ALC Resolution #249/2019



The Property

Regional District of East Kootenay

Planning & Development Services

File: P 146 020

To: Andrew McLeod, Manager

From: Krista Gilbert, Planning Technician

Date: July 22, 2019

Subject: Placer Lease – Merklin Resources Inc. / Wildhorse River, Northeast of Fort Steele

BACKGROUND

Basic Overview: The proposal is to extend an existing placer lease. The applicants propose to conduct a program of percussion drilling to define the shape of the bedrock surface and to sample gold concentrations above it so that they can design the most efficient production pit and associated infrastructure. The previous operation ran a shaker and sluice wash plant 10 hours per day, 5 days a week with a maximum production of 2,800 m^3 per week. The applicants have indicated that they plan for a similar rate of production for this operation. Mining will proceed from southwest to northeast across the lease and will not disturb more than 5 ha at a time, with an estimated maximum disturbance area of 13 ha. As a new block is mined, waste material will go either from the wash plant or directly from current mining to fill the previously mined block. This will be topped by previously stock-piled soil and organic material and then will be seeded.

INFORMATION

Access Road: Highway 93/95 to Fort Steele-Wildhorse Road to Maus Creek Road to Boulder Creek Road.

Zoning Designation: RR-60, Rural Resource Zone. Grading, washing, screening, crushing and transporting of sand and gravel resources extracted from the parcel is a permitted use.

ALR Designation: The subject land is not within the ALR.

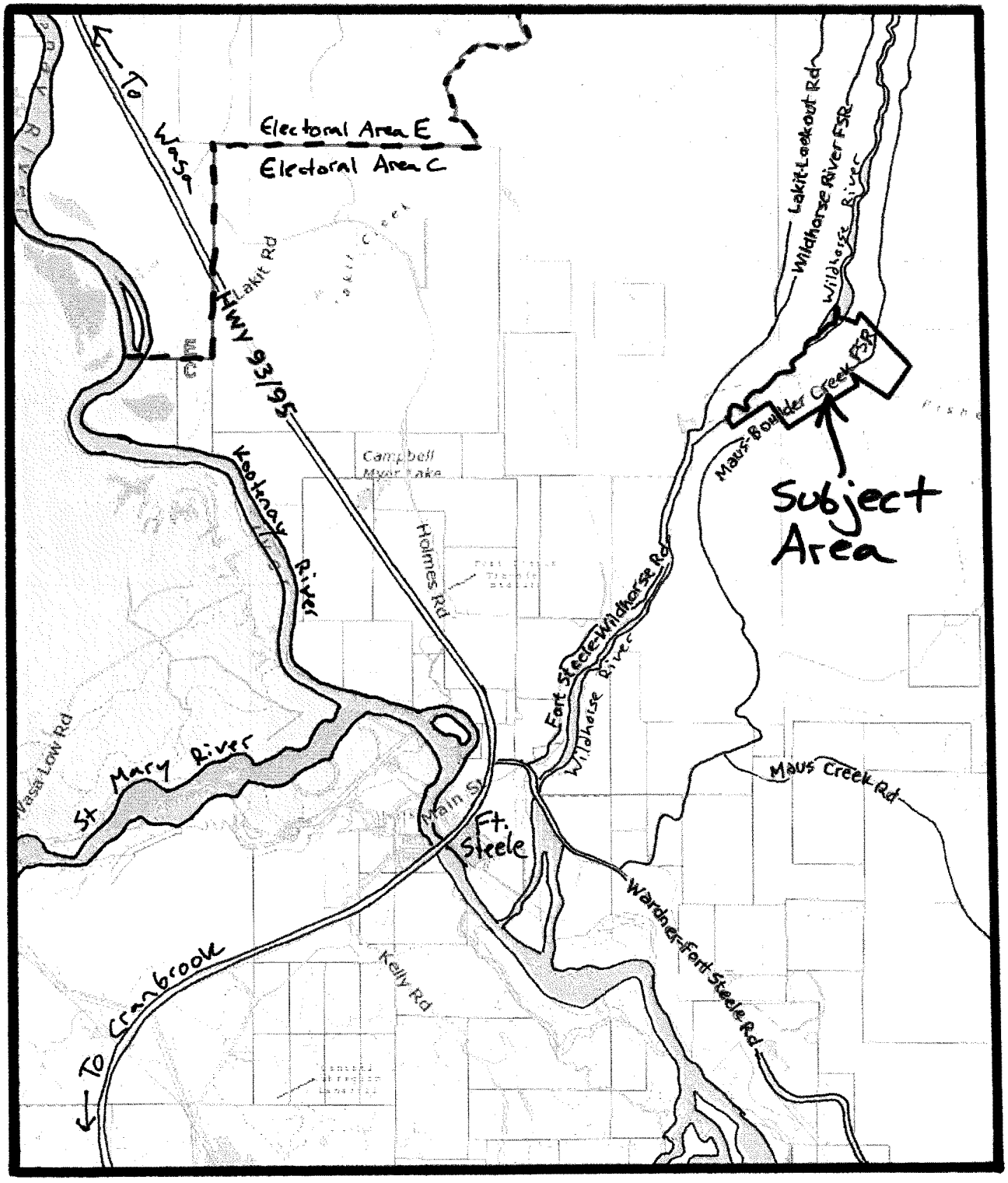
Nearest private land within the RDEK: The closest private property is a residential lot located approximately 1 km away on Fort Steele-Wildhorse Road.

Nearest community: Fort Steele

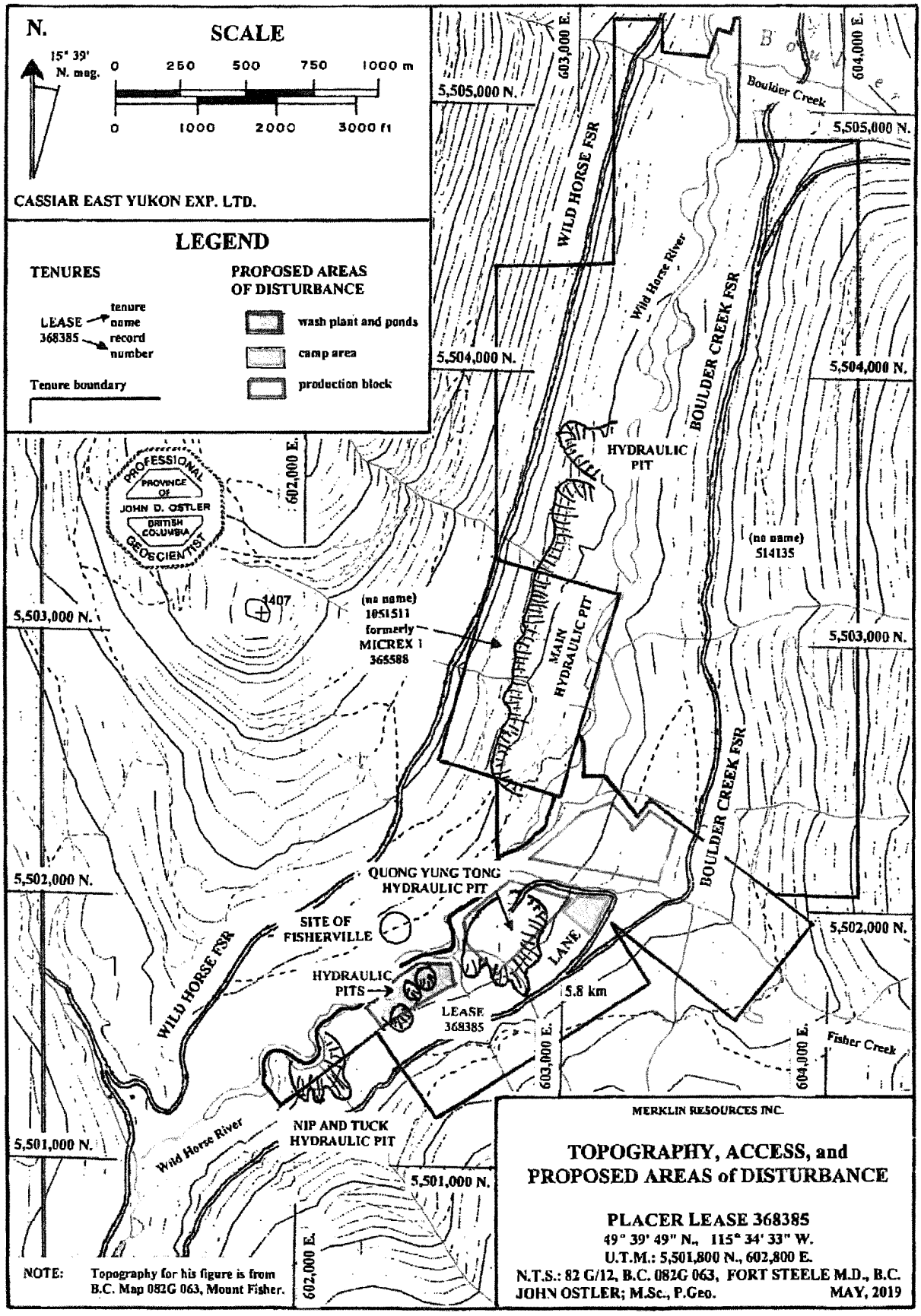
Attachments:

- Location Map
- Referral Package

Location Map



Proposal


N.
SCALE
15° 39' N. mag.
0 250 500 750 1000 m
0 1000 2000 3000 ft
CASSIAR EAST YUKON EXP. LTD.
LEGEND
TENURES
LEASE 368385 tenure name record number
Tenure boundary
PROPOSED AREAS OF DISTURBANCE
wash plant and ponds
camp area
production block
PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA JOHN D. OSTLER GEOSCIENTIST
5,505,000 N.
5,504,000 N.
5,503,000 N.
5,502,000 N.
5,501,000 N.
603,000 E.
604,000 E.
602,000 E.
WILD HORSE FSR
BOULDER CREEK FSR
Wild Horse River
Boulder Creek
Fisher Creek
HYDRAULIC PIT
MAIN HYDRAULIC PIT
(no name) 514135
(no name) 1051511 formerly MICREX 1 365588
1407
QUONG YUNG TONG HYDRAULIC PIT
SITE OF FISHERVILLE
HYDRAULIC PITS
LANE
5.8 km
LEASE 368385
NIP AND TUCK HYDRAULIC PIT
NOTE: Topography for his figure is from B.C. Map 082G 063, Mount Fisher.
MERKLIN RESOURCES INC.
TOPOGRAPHY, ACCESS, and PROPOSED AREAS of DISTURBANCE
PLACER LEASE 368385
49° 39' 49" N., 115° 34' 33" W.
U.T.M.: 5,501,800 N., 602,800 E.
N.T.S.: 82 G/12, B.C. 082G 063, FORT STEELE M.D., B.C.
JOHN OSTLER; M.Sc., P.Geo. MAY, 2019

December 30, 2014

Mining and Placer Leases Explained

What is a Mining Lease? What is a Placer Lease?

A mining lease is a form of mineral title that effectively removes the limit on production of ore from a mineral claim. A mineral claim allows the recorded holder to explore for and develop minerals up to a production limit of 1,000 tonnes of ore in a year from each unit of a claim. A bulk sample of up to 10,000 tonnes of ore may be extracted from a mineral claim not more than once every five years. Production of ore, as one would encounter in a fully operational mine, beyond these limits requires a mining lease. Each adjoining mineral claim from which minerals will be extracted at mine production levels must be converted to a single mining lease. To apply for a mining lease, a recorded holder applies to have their mineral claim replaced with a mining lease under Section 42 of the *Mineral Tenure Act*.

The decision to issue a mining lease is a statutory decision made by the Chief Gold Commissioner under Section 42(5) of the *Mineral Tenure Act*. Mining leases are issued according to a survey plan and for a pre-defined term of no more than 30 years, and on conditions the Chief Gold Commissioner considers necessary. A mining lease is maintained by payment of annual rent of $20 per hectare. There are no exploration work requirements to maintain a lease in good standing as exist for a mineral claim. The presumption is that the lessee will be engaged in mine production and/or mine reclamation subsequent to production. Royalties under the Mineral Tax Act are paid on the volume of ore and/or minerals produced from a lease.

A placer lease serves essentially the same purpose as a mining lease but it differs in several ways:

- A placer claim may be converted to a placer lease and a mineral claim may be converted to a mining lease.
- Placer claims and leases confer a right to placer minerals, whereas mining claims and leases confer rights to hard rock minerals.
- Production on a placer claim or lease is expressed in cubic meters of "pay dirt". The annual production limit on a placer claim is 20,000 cubic meters. If more than 20,000 m3/year of pay dirt will be processed, the recorded holder must apply to convert the claim to a lease.
- Placer leases are issued pursuant to section 45 of the *Mineral Tenure Act.* Placer leases are issued for a term of no more than 10 years, and the term may be extended for additional terms up to 10 years each.
- As part of the application for a placer lease, the applicant may submit either a survey plan or a technical survey plan as described in Section 18 of the Mineral Tenure Act Regulation.

When a mining or placer lease expires, the area subject to the lease may become available to a recorded holder of a cell claim if some portion of the lease area overlaps some portion of an existing cell claim. Once a lease expires, it is not eligible for renewal unless an application has been made to extend the term. If no such application is made, the area may become available for subsequent staking of a claim.

A lease does not authorise any mining activity but does ensure the recorded holder has the exclusive right to all minerals on the lease area. A claim is a chattel interest; whereas a lease is considered an

Ministry of Energy and Mines | Mineral Titles Branch | Location & Mailing Address: 300-865 Hornby Street Vancouver, BC V6Z 2G3 | Phone: 1 (866) 616-4999 Fax: (604) 660-2653 Em: mineral.titles@gov.bc.ca http://www.mineraltitles.gov.bc.ca

interest in land as per Section 48 of the *Mineral Tenure Act*. Section 48 also notes that if a lease is issued over a mineral claim or group of mineral claims, the title of those claims is extinguished.

Leases can be bought and sold. Any sale transaction must be registered in the Mineral Titles Online registry.

Application for a Lease

The recorded holder or authorized agent of a claim may register an application for a lease online using the Mineral Titles Online registry. There is a registration fee of $100 per application.

One or more adjoining claims may be replaced with a lease, and the claims may be legacy claims, cell claims or a combination of the two types, provided all claims are adjoining. A definition of adjoining is provided in Section 1 of the *Mineral Tenure Act.*

Upon registration of a lease application, Mineral Titles contacts the applicant respecting the type of survey that must be completed. Upon approval of the survey, the lease application must be advertised according to the requirements in section 42(2) of the *Mineral Tenure Act* for a mining lease, or section 18 of the Mineral Tenure Act Regulation for a placer lease. As the issuance of both mineral and placer leases are statutory decisions, the province is required to consult with and if necessary accommodate First Nations. Lease applications are also referred to other provincial ministries and agencies as well as to municipal and local government agencies. More detailed information may be obtained from Mineral Titles staff.

Payment of Annual Rent on a Lease

A lease is maintained by payment of the annual rent of $20 per hectare for a mining lease or $20 per hectare for a placer lease. The recorded holder or authorized agent registers the payment in Mineral Titles Online. Payment is due at the start of the anniversary year of the lease. If payment is not made on or before the anniversary date, Mineral Titles staff will send a notice requiring payment within 30 days. If no payment is made after notification that payment is due, the Chief Gold Commissioner may order the forfeiture of the lease.

A term extension application may be registered at any time prior to the date of expiry of the lease. Leases may also include a condition that the lessee applies for a renewal of the term of the lease at least one year prior to the expiry date of the lease.

Registering a Term Extension Application for a Lease

A mining lease is issued for a specific term up to maximum of 30 years while placer leases are issued for maximum 10 year terms. The recorded holder of a lease may register a term extension at any time prior to the expiry of the lease, but typically the application for an extension is made during the last year of the existing term. If this is not done, the lease automatically terminates on the anniversary date ending the last year of the current term.

Ministry of Energy and Mines | Mineral Titles Branch | Location & Mailing Address: 300-865 Hornby Street Vancouver, BC V6Z 2G3 | Phone: 1 (866) 616-4999 Fax: (604) 660-2653 Em: mineral.titles@gov.bc.ca http://www.mineraltitles.gov.bc.ca

When applying for an extension of the term of a lease the Chief Gold Commissioner must be satisfied that the lease is required for a mining activity. It is recommended that application for a term renewal be registered early in the last anniversary year. Mineral Titles Branch will contact the recorded holder following registration of the application for a term extension in order to obtain the necessary information to evaluate the application.

Any questions regarding the content of this document, may be directed to the Mineral Titles Branch at 1-866-616-4999 or at mineral.titles@gov.bc.ca

In the event of a discrepancy between the information in this document and the *Mineral Tenure Act* and regulations under the Act, the provisions in the statute and regulations apply.

Ministry of Energy and Mines

Mineral Titles Branch

Location & Mailing Address:
300-865 Hornby Street
Vancouver, BC V6Z 2G3

Phone: 1 (866) 616-4999
Fax: (604) 660-2653
Em: mineral.titles@gov.bc.ca
http://www.mineraltitles.gov.bc.ca

Planning & Development Services
August 2019 Board Report

P 006 001

STATISTICS
(June 16, 2019 – July 15, 2019)

	2019	2018
INQUIRIES	**349**	335
BUILDING CHECKS	**34**	34

	---------- ELECTORAL AREAS ----------						YEAR	
	A	**B**	**C**	**E**	**F**	**G**	**2019**	2018
Agricultural Land Reserve	**1**	**1**	**2**			**2**	**6**	0
Bylaw Amendments *(Zoning / Land Use / OCP)*	**1**			**4**	**1**	**1**	**7**	3
DP			**1**	**2**	**1**		**4**	6
DVP / Bd. of Variance				**1**	**1**		**2**	5
Subdivision		**1**	**1**	**1**	**2**		**5**	4
MFLNRO Referrals			**2**				**2**	0
Other Agency Referrals *(MoTI / Liquor Control etc.)*							**0**	1
Other Permits & Agreements *(Housing Agreements / Temp. Use / Floodplain Exemptions / Campground)*							**0**	0
TOTALS 2019	**2**	**2**	**6**	**8**	**5**	**3**	**26**	
TOTALS 2018	0	1	6	1	6	5		19

Area G OCP Review

Three introductory meeting have been held in communities across the plan area to provide a brief presentation on the Steamboat-Jubilee Mountain OCP and the planning process. Those in attendance had an opportunity to share their knowledge of the plan area and identify concerns and values related to a variety of topics. This information will help shape the remainder of the OCP review.

Panorama OCP

A public meeting was hosted on July 9th with about 30 people in attendance. Round two of the online engagement is open until Sept 2nd.

Lake Windermere OCP

The public comment period for the draft plan closed on July 10. Over 150 responses were received. Wildsight promoted a write-in campaign for its members to express concern over certain policies in the OCP. As a result, an additional 139 form letters were also received. Unfortunately, much of the information Wildsight was sharing on its website was both incomplete and inaccurate. The most significant issue of public concern in all the submissions is the proposed development of the Grizzly Ridge lands west of Invermere, and the associated OCP policies related to that location. It is anticipated that the draft OCP will be amended, reviewed again by the OCP advisory committee, and then re-posted to the website with a summary of the public feedback received and the resulting changes.

Regional District of East Kootenay

Information Report

P101 006

Date	July 25, 2019
Author	Kris Belanger, Planner
Subject	Kootenay & Boundary Regional Adaptation Strategies

BACKGROUND

The Board of Directors passed the following resolution at the September 7, 2018 meeting:

THAT the Regional District of East Kootenay will participate in the Regional Agricultural Adaptation Strategies Project.

INFORMATION

On July 4, 2019 the Kootenay and Boundary Regional Adaptation Strategies report was released to the public. Lead by the Climate Action Initiative, the planning process was developed through collaboration with agricultural producers, the RDEK, RDKB, RDCK, provincial and federal agencies and identifies important actions for the Kootenay and Boundary region agricultural sector to adapt to climate change.

Wildfire risk, lack of water, changing insect and pest pressure, increasing seasonal flood risk and increasingly unpredictable variable weather conditions were identified as the key challenges and climate impacts facing the local agriculture sector.

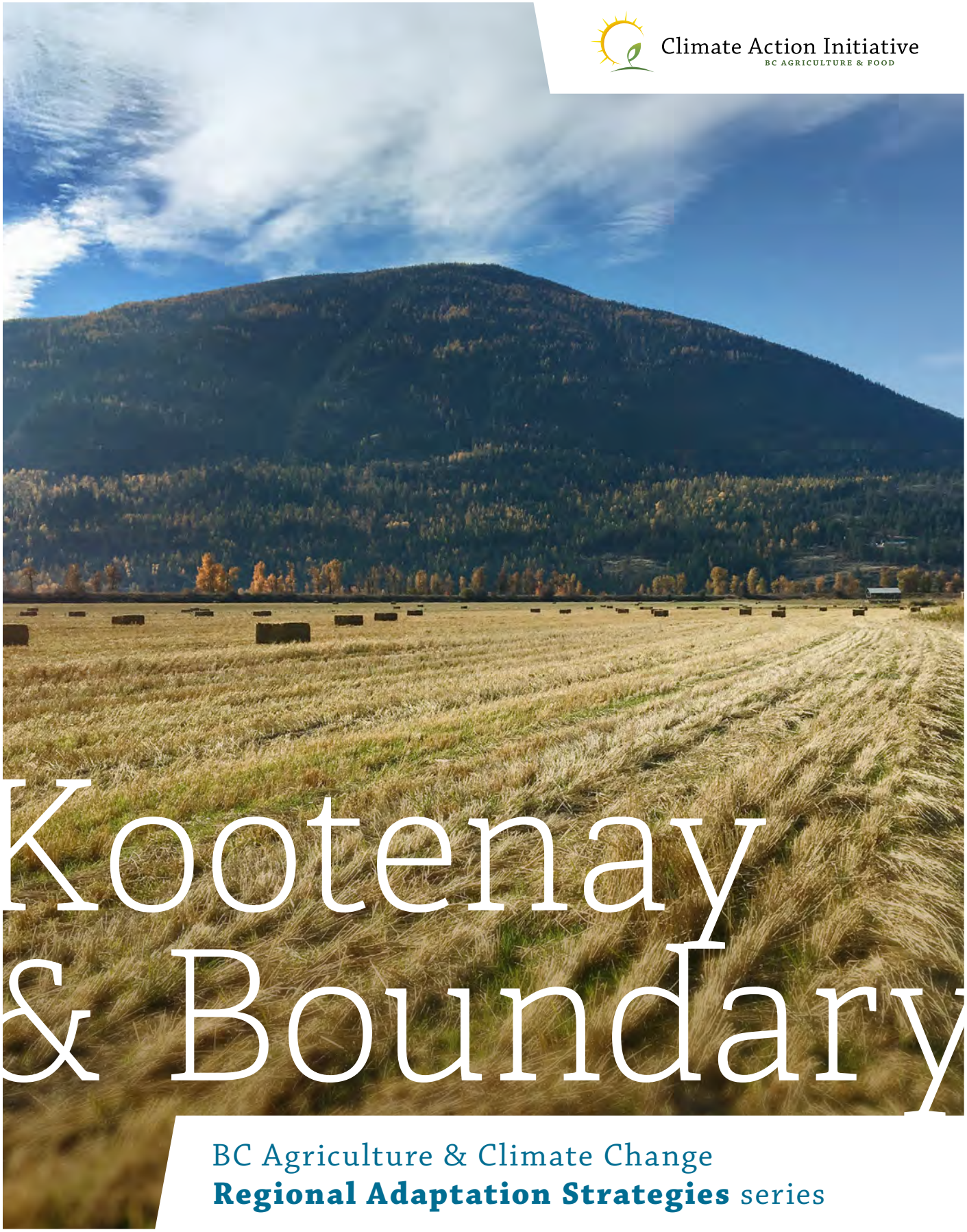
The plan prioritizes implementation strategies and actions that will strengthen resilience in response to the identified climate impacts. Priority projects are identified in the Implementation and Monitoring section of the plan.

NEXT STEPS

To facilitate the implementation of projects identified as priority actions, the provincial and federal governments are providing $300,000 in funding through the Canadian Agricultural Partnership. A working group with representatives from the agricultural sector, regional and provincial governments will oversee development of these projects, with the Climate Action Initiative managing project implementation. An estimated 4-6 projects will be completed in the region by 2022.

Attachment: Kootenay & Boundary Regional Adaptation Strategies

Climate Action Initiative
BC AGRICULTURE & FOOD



Kootenay & Boundary

BC Agriculture & Climate Change
Regional Adaptation Strategies series

Regional Adaptation Strategies: Kootenay & Boundary

This project is part of the ***Regional Adaptation Program***,
a program delivered by the ***BC Agriculture & Food Climate Action Initiative***.

Published by BC Agriculture & Food Climate Action Initiative, 2019.

Learn more at
www.bcagclimateaction.ca/regional/kootenay-boundary

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REFERENCE LIST:
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Disclaimer

Funding for this project has been provided in part by the governments of Canada *and* British Columbia *under the* Canadian Agricultural Partnership, *a federal-provincial-territorial initiative.*

Additional support has been provided by the Regional District of Kootenay Boundary, *the* Regional District of Central Kootenay *and the* Regional District of East Kootenay.

Funding is administered by the BC Agricultural Research & Development Corporation.

The BC Agriculture & Food Climate Action Initiative (CAI) develops tools and resources that increase the capacity of agriculture to adapt to climate change. Guided by industry, CAI brings together producers, government and researchers to develop a strategic, proactive and pan-agricultural approach to climate adaptation. The Regional Adaptation Program is part of the BC Ministry of Agriculture's ongoing commitment to climate change adaptation in the agriculture sector while enhancing sustainability, growth and competitiveness.

PROJECT DELIVERY TEAM
Harmony Bjarnason,
Samantha Charlton *&* ***Emily MacNair***

PROJECT & WORKSHOP SUPPORT
Meeri Durand,
Regional District of Central Kootenay,
Paris Marshall-Smith,
Regional District of Central Kootenay
& ***Shauna MacKinnon,***
BC Agriculture & Food Climate Action Initiative

CLIMATE DATA
Trevor Murdock,
Pacific Climate Impacts Consortium

GRAPHIC DESIGN
Rocketday Arts
with photos by ***Harmony Bjarnason***

PROJECT CONTACT
Emily MacNair
Emily@BCAgClimateAction.ca

www.BCAgClimateAction.ca

Climate Action Initiative
BC AGRICULTURE & FOOD

Regional District of Kootenay Boundary

Regional District of Central Kootenay

Regional District of East Kootenay

CANADIAN AGRICULTURAL PARTNERSHIP

BC Agricultural Research & Development Corporation ardcorp

Investment Agriculture Foundation of British Columbia

British Columbia

Canada

Acknowledgements

The *Kootenay & Boundary Adaptation Strategies* plan was initiated by the BC Agriculture & Food Climate Action Initiative to address priorities identified through both the 2012 *Climate Change Risk & Opportunity Assessment* and the 2010 *BC Agriculture Climate Change Action Plan* (both available at *www.bcagclimateaction.ca*).

Thank you to the Regional District of Kootenay Boundary, the Regional District of Central Kootenay, the Regional District of East Kootenay and the agricultural organizations that supported, and contributed to, the success of this project.

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Contents

Introduction

In the coming years, climate change will impact the agriculture sector in British Columbia in a range of different ways.

Although agricultural producers are accustomed to adjusting their practices to manage through difficult conditions, the scope and scale of climate change is anticipated to exceed anything previously experienced. Strategies and actions that will enhance agriculture's ability to adapt to climate change are the focus of this plan.

In 2011–2012, a province-wide assessment of climate change-related risks and opportunities evaluated the potential impacts of climate change on agricultural production and the sector's capacity to adapt.[1] The assessment made evident that due to British Columbia's diversity (with respect to agriculture, ecology and climate), a regional approach to climate change adaptation is required. In addition, while some adaptation will occur at the farm level, the context beyond the farm and collaborative approaches, are critical for supporting agricultural adaptation.

Building on these findings, in 2012–2013 a pilot project was initiated with agricultural producers, agricultural organizations and local governments in Delta and the Peace River and Cowichan Valley regions. Each planning process resulted in a distinctive set of local sector impacts and priorities, as well as a series of strategies and actions for adapting and strengthening resilience. The plans are intended to offer clear actions suited to the specifics of the local context, both with respect to anticipated changes and local capacity and assets.

In 2013–2014, following completion of the pilot, the ***Regional Adaptation Program*** was launched. The Program is delivered by the BC Agriculture & Food Climate Action Initiative (CAI). Since the Program's inception, additional adaptation plans have been completed for the Cariboo region (2014), the Fraser Valley region (2015), the Okanagan region (2016), the Bulkley-Nechako & Fraser-Fort George region (2019) and Kootenay & Boundary region (2019). Between 2017 and 2018, five of the plans (Peace, Delta, Cariboo, Fraser Valley and Okanagan) were updated to reflect implementation progress and near-term priorities.

From 2018 through to 2023, the Regional Adaptation Program is funded by the governments of Canada and British Columbia through the Canadian Agricultural Partnership (CAP). Once regional adaptation plans are completed, CAP "seed" funding is available to regional partners (working with the CAI) to develop and implement collaborative priority projects.

Completed plans and details regarding projects (completed and underway) are available at *www.bcagclimateaction.ca*.

Project Delivery

A local Advisory Committee for the Kootenay & Boundary region was formed to provide input throughout the project. This Committee included participants from the three regional districts, the BC Ministry of Agriculture, the Kootenay and Boundary Farm Advisors and five local/regional agricultural organizations.

The agricultural producer participants volunteered their time throughout the project, representing five distinct local production systems. The regional district partners provided staff time and expertise and covered costs associated with the workshops. With funding from the Canadian Agricultural Partnership, the BC Agriculture & Food Climate Action Initiative provided core management and human resources for project delivery. Please see Acknowledgements for more details.

photo by Harmony Bjarnason

Project Methodology

The development of the ***Kootenay & Boundary Adaptation Strategies*** involved three key stages:

Stage 1 – Project Development

A project plan was drafted and background research was conducted through a review of relevant documents and related activities. Eleven preliminary meetings were held with agricultural organization representatives and local and provincial government staff to discuss local issues and priorities. An initial meeting was held with the Advisory Committee to receive input on the project outline and the proposed approach for the first workshop.

Stage 2 – Workshops

Two sets of workshops were held (each set held in both Creston and Greenwood) for a total of four workshops. Due to the size and the diverse geography of the Kootenay & Boundary region, two supplementary focus groups were also held (in Winlaw and in Cranbrook).

The first set of workshops focused on reviewing climate change projections, discussing the associated agricultural impacts and identifying priority areas of risk. Developing strategies and actions for adapting to these priority areas then became the focus of the second set of workshops.

Prior to the second set of workshops, a series of overarching goals, strategies and sample actions was developed and reviewed by the Advisory Committee. These materials provided support for the workshop action planning process (which also incorporated consideration of local priorities, context and resources). One hundred and fifteen individual participants attended one or more of the project workshops, focus groups and/or the final implementation meeting.

Stage 3 – Implementation Meeting

An implementation meeting was held in Creston with participants representing many of the local partner organizations. The meeting involved prioritization of draft actions based on which were most important, which were easiest to implement and which would support enhancement of capacity for additional adaptation. The meeting also included discussion of steps to implement prioritized actions.

Regional Context

Geography, Climate & Production Capacity

The geographic scope of the ***Kootenay & Boundary Adaptation Strategies*** covers 57,721 square kilometres[2] and includes the Regional District of Kootenay Boundary (RDKB), the Regional District of Central Kootenay (RDCK) and the Regional District of East Kootenay (RDEK). The region includes a substantial portion of the Canadian Columbia basin drainage and is located in the southeastern corner of British Columbia, bordered by Alberta to the east and the United States to the south.

Within these three regional districts there are 25 municipalities and 22 electoral areas.[3] The area is home to the Shuswap First Nation and the Ktunaxa Nation and its communities of ʔAkisq̓nuk (Upper Kootenay Tribe), St. Mary's (ʔAq̓am), Tobacco Plains (ʔAkink̓um‡asnuq‡iʔit) and Lower Kootenay (Yaqan Nuykiy).[4]

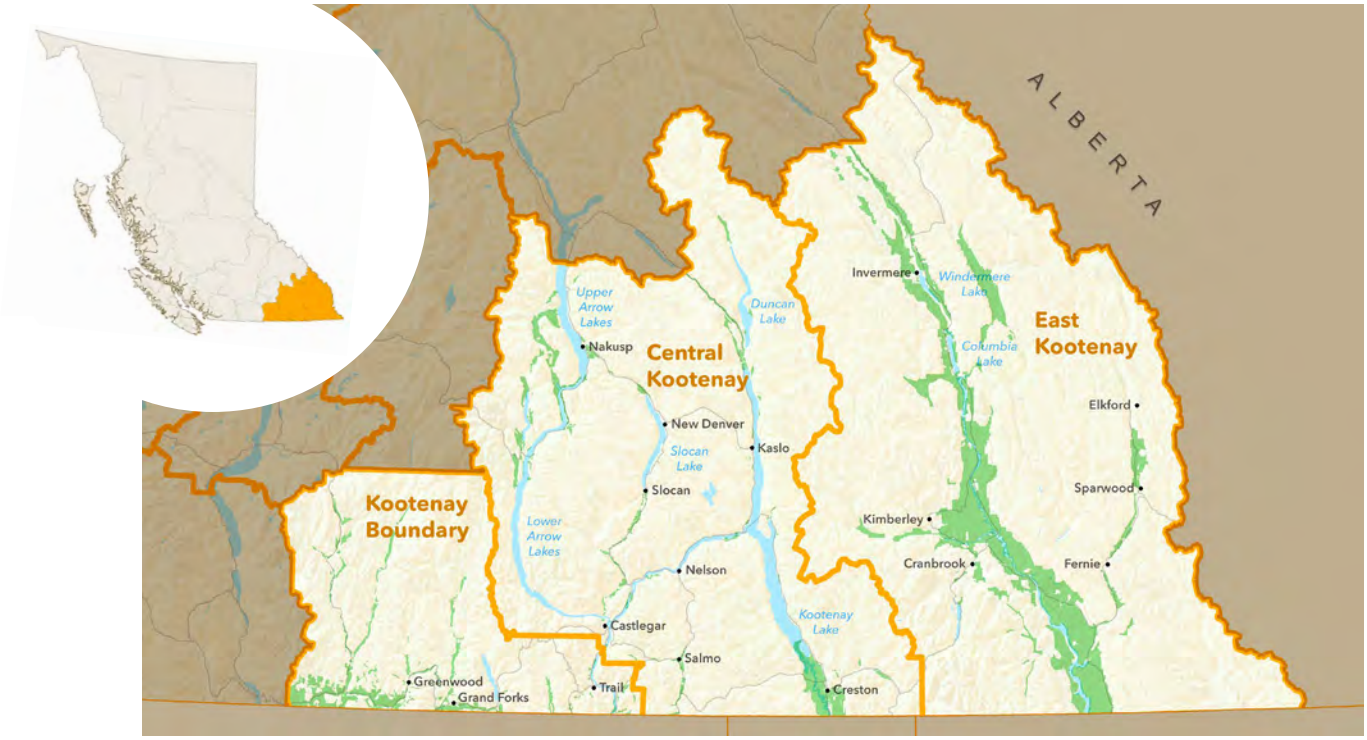


FIGURE 1 Map of the three Kootenay & Boundary region's Regional Districts (with ALR shown in green)

A series of valleys are distributed throughout the Kootenay & Boundary region, nestled between four mountain ranges — the Rocky Mountains, the Purcell Mountains, the Selkirk Mountains and the Monashee Mountains. There are also numerous watersheds in the region, including the Elk River, Kootenay River, Columbia River, Kootenay Lake, Slocan River and Kettle River.[5] Crown land — largely forested and mountainous areas — comprises approximately 91% of the land base in the region.[6] Much of the land in the valleys — where the majority of the agricultural production occurs — is privately owned.

The topography across the region is mountainous and diverse and temperature and precipitation can vary greatly across small distances.[7] The region receives an average of 998 mm of precipitation annually,[8] but this region-wide average does not accurately reflect precipitation along the valley floors, where annual precipitation tends to be much lower (649 mm in Creston, 496 mm in Cranbrook, 531 mm in Grand Forks). Precipitation falls relatively evenly throughout the year, with a slight increase in precipitation in May and June in the eastern and northern portion of the region, and slightly more precipitation during the winter in the central and western portion of the region.[9] The exception is in the north-central Kootenays, through the Slocan Valley, which receives average annual precipitation of 1,298 mm[10] with a higher concentration of precipitation (frequently falling as snow) during December, January and February.[11]

Summers in the Kootenay & Boundary region are generally hot and dry, while winters vary from mild to severe.[12] Winter temperatures are slightly milder in the Boundary area.[13] The average frost-free period is approximately 5 months long, with a slightly longer growing season in the western portion of the region.[14] The Creston area of the Central Kootenays also has warmer average and minimum winter temperatures than the rest of the region.[15] Summer maximum temperatures hover in the mid-to-high 20s along the valley floors.[16]

There are limitations to agricultural production in the region, due primarily to the mountainous topography (a climatic limitation) and to soil type and quality (e.g., moisture deficiency, stoniness, etc.). In the East Kootenays, 24% of Agricultural Land Reserve (ALR) land is Class 2 through 4, with stone free, fine-textured soils found mostly on the terraces of the Rocky Mountain trench and the Elk River Valley.[17] The remaining (76%) of East Kootenay ALR land is rated Class 5 or lower.[18] In the Central Kootenays, cultivated soil types are primarily sand and silt loam, as well as silty clay loam[19] and over 80% of ALR land is Class 4 or higher.[20] The soils in the agricultural valleys of the Boundary area are — in their unimproved state — predominantly marginal (Class 4, 5 or 6), but are often improvable to prime (Class 2 or 3).[21]

Economic & Institutional Context

The Kootenay & Boundary region's economy is reliant on the natural resource sector which includes forestry, mining and hydroelectric power generation.[22] While the forestry sector employs less than 2% of the population,[23] the industry's impact on the agricultural sector is relatively large since forest management practices affect the ecology, land-cover and hydrology of the region. Tourism is also a large economic driver for the region.[24]

The region is experiencing a positive population trend. Between 2011 and 2016, the population of the region increased 3.5%, from 146,264 to 151,403, although this growth is lower than the BC average of 5%.[25] The combined population of the three regional districts is 151,403 (representing 3.3% of British Columbia's population).[26]

Farmland in the Kootenays (at $45,000/acre) is more affordable than in the Okanagan and on the South Coast, but significantly more expensive than in other regions of the province (such Thompson-Nicola and Central/Northern BC).[27] During the past few years, agriculture has trended toward smaller acreages. However, in 2018, the region as a whole saw a very limited number of farmland sales, especially for orchard properties.[28]

There are a number of local initiatives supporting and promoting local food production and/or consumption[29] and the region is home to over 20 farmers' market locations, with some markets operating year-round.[30] Almost 40% of farms report participating in some form of direct marketing.[31]

The Columbia Basin Trust[32] supports the agriculture sector through several high-profile initiatives (e.g., Basin Business Advisors, Grassland and Rangeland Enhancement Program) and through capacity building and research (e.g., the Agricultural Forum on Market Development, Basin Food and Buyers Expo).[33] The Trust also collaborates with the three Regional Districts to fund extension services for producers through the Kootenay and Boundary Farm Advisors (KBFA) program.[34,35]

The Regional District of Kootenay Boundary (2018), Regional District of Central Kootenay (2011), and Regional District of East Kootenay (2014) have all completed Agriculture Area Plans.[36,37,38] RDCK previously had an Agricultural Advisory Commission (AAC) for Electoral Areas A, B and C (Creston Valley) to provide advice to local government on agricultural issues, although they are currently on hiatus. RDEK has an AAC built into their Advisory Planning Commissions and RDKB established the Boundary Area Food and Agriculture Advisory Council to support the development of the Area Agricultural Plan and to advance food security in the region. An Agricultural Land Use Inventory (ALUI) has been completed for the Regional District of Central Kootenay, and for sub-areas of the Regional District of East Kootenay (including the Elk Valley, Columbia Valley and Central Region).[39] Agriculture Water Demand modeling — which models current and future water demand for agriculture — has been completed for the RDCK and the Kettle Watershed (a sub-region of Regional District of Kootenay Boundary).[40]

photo by Harmony Bjarnason, Rock Creek

While the Kootenay & Boundary region is home to two local colleges (Selkirk College, College of the Rockies), there are no formal agriculture education or research programs. The Columbia Basin Rural Development Institute (through Selkirk College) does facilitate agricultural research, including research focused on expanding the regional food system and improving food security.[41]

The region is home to many agriculture organizations including several local chapters of the BC Cattlemen's Association (e.g., the Kootenay Livestock Association, Creston Valley Beef Growers Association, Southern Interior Stockmen's Association), several organic grower groups, the Kootenay Milk Producers Association, the Windermere District Farmers' Institute and the Rock Creek Farmers' Institute. Some cherry growers in the Central Kootenays belong to the BC Cherry Association and, until 2019, BC Tree Fruits maintained field staff in the area, but has recently discontinued this service.

Agricultural Production

Of the Kootenay & Boundary region's nearly 6 million hectares of land, 381,551 hectares (6.6%) are included in the ALR.[42] The total number of farms in the region has steadily declined over the past decade, from 1,349 farms in 2006 to 1,157 farms in 2016 (a 14% decrease).[43] During this same period, average farm size decreased by approximately 13% in all three regional districts.[44] East Kootenay farms are the largest (at an average of 205 hectares), almost twice the size of the average farm in Kootenay Boundary (at 125 hectares) and over five times the size of the average farm in Central Kootenay (at 40 hectares).[45] Differences in farm sizes

can largely be attributed to differences in production types (due to soil and climatic factors). Ranching is the predominant industry on larger acreages in East Kootenay and Kootenay Boundary, and smaller acreage tree fruit orchards, market gardens and dairies are more prominent in Central Kootenay.

In contrast to the decline in farm number and size, gross farm receipts have been increasing across the region since 2006. Agricultural production generated $90 million in gross farm receipts in 2016, contributing 2.4% to the provincial total.[46] Central Kootenay generated the highest gross farm receipts in 2016 ($46 million)[47] driven by strong dairy and tree fruit sectors. Boundary generated $25 million in farm receipts in 2016[48] and East Kootenay generated $21 million.[49] Between 2011 and 2016, gross farm receipts increased by 28% for the region (the increase was greatest in the Central Kootenay with its concentration of high value production systems such as dairy and cherries). The overall increase represents a significant bump from the 3% increase in the previous 5-year period (2006–2011).[50]

Agriculture in the Kootenay & Boundary region is centred around the ranching industry (predominantly cattle and calf) with 377 ranches and 30,820 head.[51] Ranchers were heavily impacted by the 2003 Bovine spongiform encephalopathy (BSE) crisis and between 2001 and 2016 the number of cattle ranching operations in all three regional districts declined (by over 50% in some areas).[52,53,54] While the industry has recovered somewhat, production has not reached pre-BSE levels.

Forage and pasture accounts for more than 95% of all cultivated land in East Kootenay[55] and are also the predominant crops in Central Kootenay (comprising 76% of all cultivated land)[56] as well as in Boundary.[57] There is some production of barley and oats and limited production of canola across the three regions.[58]

There are almost 200 hectares under vegetable production in Kootenay & Boundary (3% of BC total), as well as small floriculture and greenhouse operations across the region.[59] Forty-seven (4%) of the region's farms are certified organic, and the area is home to 10% of BC's organic farms.[60] Many farms report having a small number of poultry (30% of farms), although the region's overall poultry production is very limited.[61] The region also produces sheep, goats, llamas, turkeys and rabbits and has a large number of bee colonies.[62] East Kootenay also has a sizable Christmas tree industry, accounting for 38% of the BC Christmas tree acreage.[63]

The tree fruit industry in Kootenay & Boundary is primarily located east of Creston and represents 2% of cultivated tree fruit acreage for BC, but is steadily expanding, with acreage being converted from apples to cherries.[64] Favourable climatic conditions — such as warmer winter temperatures and a high number of growing degree days — have led to the establishment of several wineries in the Creston area. Central Kootenay also has a profitable dairy industry that holds 1.4% of the Continuous Dairy Quota for BC (shared by six dairy operations).[65]

photo by Don Low

Regional Climate Science

Accessing the best possible information about climate change is the first step in determining the options for adaptation.

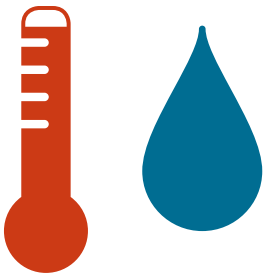
For many years, climate scientists have been improving and refining climate models to produce more accurate future projections.[66] These models have been validated in several ways, including against observed climate records.[67] The resolution of the data and models continues to increase, enabling the kinds of regional projections that follow.

The Pacific Climate Impacts Consortium (PCIC) is a regional climate service centre at the University of Victoria that provides practical information on the physical impacts of climate variability and change, in support of long-term planning.[68] As with the previous (CAI) *Regional Adaptation Strategies*, PCIC has assisted in the production of the agriculturally-relevant regional climate projections for the 2020s to 2080s that are presented in this document.

Additional information about regional climate projections, maps, and related definitions may be found in Appendix B and Appendix C, and in PCIC's *Updated Kootenay and Boundary Climate Summary*.[69]

Climate Projections

Key climate projections for the Kootenay & Boundary region from the 2020s to 2080s are summarized on the following pages.



Projections are derived from PCIC's *Statistically Downscaled Climate Scenarios*[70] at a gridded resolution of 300 arc-seconds (roughly 10 km) for the simulated period of 1950–2100.[71] Numbers provided are the median of all model runs under the Representative Concentration Pathways 8.5 (RCP 8.5) high GHG emissions model (red and blue solid lines in the graphs that follow). The shaded areas on the graphs show the range of projected possible future conditions.[72] RCP 8.5 assumes minor reductions in emissions leading to a + 3.5° Celsius increase in global temperatures. It is standard practice, when planning for future conditions at the local level, to focus planning around the worst case-scenario occurring at the middle of the century (2050s). The climate projections in this report follow this convention.[73]

Temperature

Projections for key temperature variables (see sidebar) show a strong increasing trend with all models projecting warming in all seasons. This trend is significant compared to historical variability, represented by the black line in Figure 2. Average summer temperatures are projected to increase slightly more than average temperatures in other seasons, while average daytime high and nighttime low temperatures are also expected to increase across all seasons.

As shown in Figure 3 (on the following page), the Kootenay & Boundary region's complex topography creates considerable climate variability over short distances with baseline temperatures varying with elevation (warmer in the valleys and cooler in the mountains). Projected warming trends (i.e., the percentage change from the baseline) are consistent across the region's valleys and mountains, even when the baselines vary due to topography (see Appendix B for sub-regional baselines and future projections).

Temperature Projections

- Annual average [74]
  - **+1.6°C** *by 2020s*
  - **+3.2°C** *by 2050s*
  - **+5.3°C** *by 2080s*

  BASELINE of 2.5°C [75]
- Annual frost-free days [76]
  - **+24 days** *by 2020s*
  - **+49 days** *by 2050s*
  - **+82 days** *by 2080s*

  BASELINE of 155
- Growing degree-days [77]
  - **+266 days** *by 2020s*
  - **+580 days** *by 2050s*
  - **+1,019 days** *by 2080s*

  BASELINE of 969

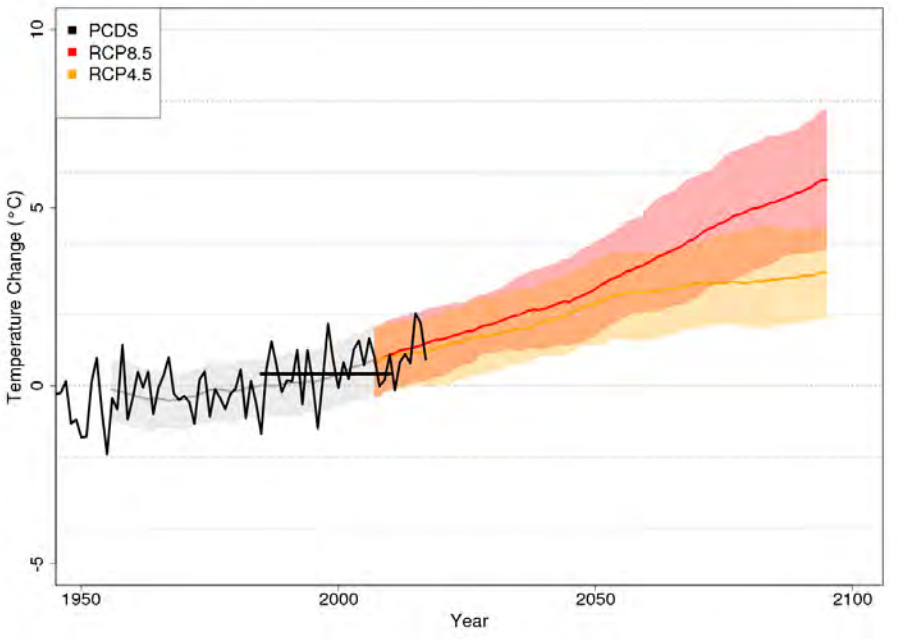


FIGURE 2 Average Annual Temperature change, 1960s to 2080s

RCP (Representative Concentration Pathways) 8.5 is a high GHG emissions scenario. RCP 4.5 is a medium GHG emissions scenario. The bold coloured lines indicate the mid-point of the ensembles of 12 different climate models while shading indicates the projected model range. The black line represents PCDS (Provincial Climate Data Set) and is historic climate data collected from BC.

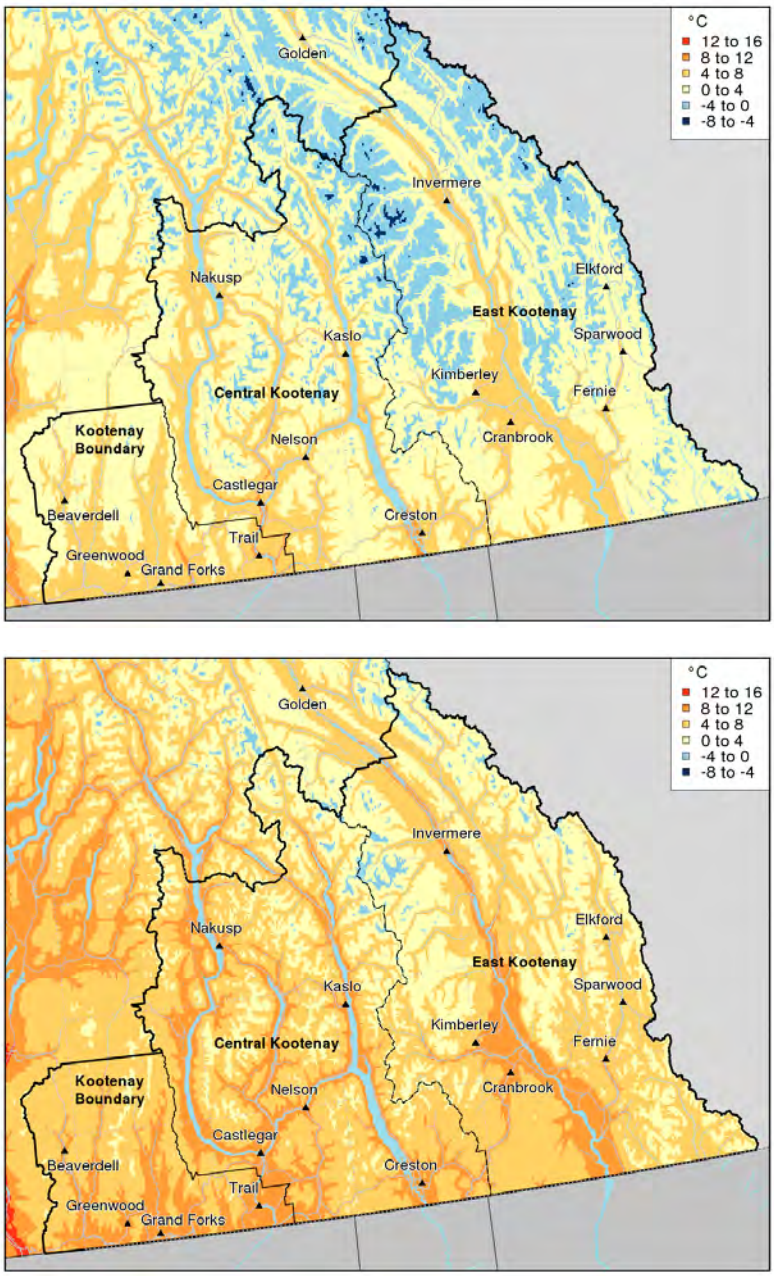


FIGURE 3 Kootenay & Boundary region Average Annual Temperature
TOP: Historic baseline, 1971–2000
BOTTOM: Projected, 2041–2070

These maps illustrate the spatial distribution of median values for annual temperature.

The baseline map (top) provides a visualization of historic annual temperature, while the 2041–2070 map (bottom) illustrates the projected change in average temperature over a 30-year future period. The global model data has been down-scaled to reflect regional temperature variation, driven largely by topography.

Precipitation

There is considerable variation in average annual precipitation across the region (measured in mm) with the majority of precipitation falling in the Selkirk, Purcell and Monashee mountain ranges. Grand Forks (to the west) receives an average of 531 mm of annual precipitation, Creston (central) receives 649 mm, Cranbrook (east) receives 496 mm. The Slocan Valley, nestled in the Selkirk mountain range, receives 1298 mm of annual precipitation. While models show a range of future average annual precipitation scenarios — including both increasing and decreasing trends — the median trend is an increase of 1% above the regional baseline (998 mm) by the 2020s, and an increase of 4% by the 2050s.

Projections show a decrease in summer precipitation in contrast to the projected increase in precipitation during spring, fall and winter (see sidebar). Projected changes in summer and spring precipitation (see Figure 4) are more pronounced than in winter and fall, which are relatively modest compared to historic variability. While local topography continues to create significant variation in sub-regional precipitation, seasonal relative precipitation projections (i.e., percentage change from the baseline) for the sub-regions closely follow the regional trends.

Precipitation Projections

- Summer
  - **– 8%** *by 2020s*
  - **– 12%** *by 2050s*
  - **– 20%** *by 2080s*
  - *baseline of 213 mm*
- Fall
  - **+ 2%** *by 2020s*
  - **+ 7%** *by 2050s*
  - **+ 14%** *by 2080s*
  - *baseline of 268 mm*
- Winter
  - **+4%** *by 2020s*
  - **+7%** *by 2050s*
  - **+14%** *by 2080s*
  - *baseline of 286 mm*
- Spring
  - **+ 5%** *by 2020s*
  - **+ 12%** *by 2050s*
  - **+ 18%** *by 2080s*
  - *baseline of 231 mm*

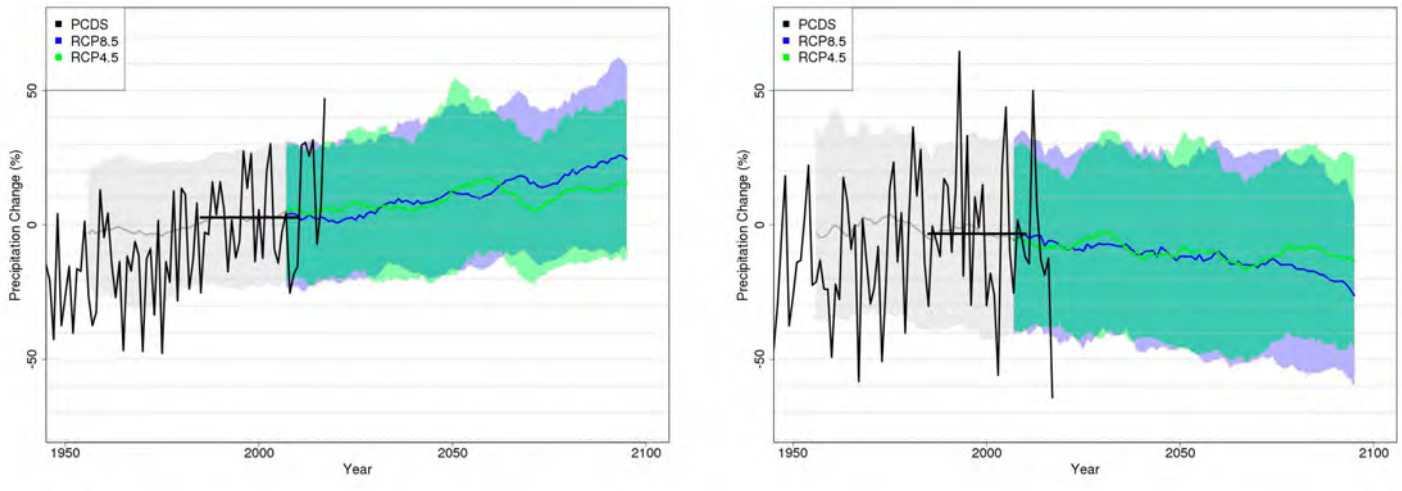


FIGURE 4 Average (Seasonal) Precipitation Change, 1960s to 2080s
LEFT: Spring
RIGHT: Summer

Related Effects

The magnitude and frequency of extreme events, related to both temperature and rainfall, are forecast to increase with climate change. Unusually warm temperatures are very likely to occur more often, and unusually cold temperatures less frequently. Projections are for twice the number of days per year over 25°C and three times the number of days per year over 30°C by the 2050s. Extremely hot days (defined as the hottest day in the past 20 years) previously reached 31°C. By the 2050s these extreme highs are expected to reach 36°C, and 39°C by the 2080s. The frequency and magnitude of extreme rainfall events are also projected to increase. Detailed projections for the 2050s extremes are provided in the sidebar.[78]

Winter and spring warming will reduce snowpack throughout much of the region, particularly at low elevations,[79] although most basins will continue to be snow dominated watersheds.[80]

Future projections indicate that both the Columbia River and Kootenay River will have increased streamflow during the winter and spring. Summer and autumn stream flows in the Kootenay River are projected to decrease, while the summer flows in the Columbia River are expected to remain relatively consistent with past trends.[81] Summer flows on the Kettle River in Boundary have been steadily decreasing over the last 50 years,[82] and are expected to continue to decrease in the summer as temperatures warm and precipitation decreases.

Winter and spring flows on smaller tributaries will also be affected by more rapid snowmelt in the spring and increased spring precipitation, while summer flows will be affected by warming summer temperatures and decreased summer precipitation.

The projected changes outlined in this section will affect the Kootenay & Boundary region's agricultural sector. The ecological effects and resulting agricultural impacts of these changes are summarized in the next section.

Extremes

- Days per year over 25°C are expected to occur more than twice as often by 2050.
  BASELINE of 19 days per year
- 17% increase in "1-in-20 hottest day" temperature by 2050.[83]
  BASELINE of 31°C
- Days with heavy rain[84] are expected to occur up to 25% more often.
- 30% more of the rain falling will fall in heavy rain events.

Agricultural Impacts

The changes in climate projected for the Kootenay & Boundary region will have a range of impacts on the agriculture sector. These impacts are summarized in the table immediately below.

TABLE 1 Potential impacts of climate change on agricultural production in the Kootenay & Boundary region

Projected Climate Changes	Projected Effects	Potential Agricultural Impacts
▪ Increase in average temperatures ▪ Increase in summer average and maximum temperatures ▪ Increase in number of days above 25°C and 30°C ▪ Decrease in summer precipitation	***Warmer & drier summers*** *(changing hydrological regime):* ▪ Lower summer stream flows ▪ More frequent and extended dry periods in summer	▪ Increase in agricultural water demand ▪ Reduction in water supply availability ▪ Increase in need for new/improved water storage and irrigation infrastructure ▪ Reduction in water flows and water pressure in purveyed water systems (due to increased water demand) ▪ Negative impacts to crop yields and quality (particularly non-irrigated crops) ▪ Changes to timing and use of rangelands for grazing cattle ▪ Forage crop losses and increase in livestock feed costs during dry years ▪ Increase in pest pressure
▪ Increase in summer temperatures, reduction in summer rainfall and periods of extreme heat (longer, warmer and drier summers) ▪ Increase in winter and spring temperatures (more rapid snowmelt, drier conditions)	***Increasing wildfire risk:*** ▪ More frequent and intensive wildfire events	▪ Damage and losses to agricultural assets and infrastructure ▪ Increase in costs associated with preparing for, managing and responding to wildfire ▪ Stress and psychological challenges for producers ▪ Lost production during active wildfire and recovery period ▪ Negative impacts to animal and crop health and productivity/ yield from smoke ▪ Reduced human capacity and worker productivity (respiratory and cardiac illnesses) from smoke ▪ Changes to pollinator behaviour ▪ Long-term impacts to soil, hydrology and forest ecosystems ▪ Increase in invasive species pressure in burned areas

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Projected Climate Changes	Projected Effects	Potential Agricultural Impacts
▪ Increase in variability of conditions (including temperatures, precipitation and extremes)	***Increasing variability:*** ▪ Fluctuating and unpredictable seasonal conditions (temperature/ moisture) ▪ Increased uncertainty over frost timing (spring/fall)	▪ Damage to crops from extreme temperature fluctuations in late winter and early spring ▪ Reduction in crop productivity and quality ▪ Increased costs to adopt new farm practices/install infrastructure to mitigate risk ▪ Shifting/unpredictable schedule for farm activities ▪ Changes to pollinator behaviour
▪ Warmer winter and spring temperatures ▪ Increase in winter and spring precipitation ▪ Increase in extreme precipitation events	***Potential for increased flooding*** *(changing hydrological regime):* ▪ Increasing river flows in winter and spring ▪ Earlier peak stream flows/freshet	▪ Risk of catastrophic flooding and damage to farm buildings and equipment ▪ Impact to farm profitability due to crop or livestock losses ▪ Increase in need for farm and community flood-readiness (and associated costs) ▪ Disrupted access to local services/supply chains/transportation networks ▪ Increase in pressure on flood-protection infrastructure
▪ Increase in average precipitation in winter ▪ Increase in intensity/ frequency of extreme rainfall events	***Extreme precipitation*** *(changing hydrological regime):* ▪ Potential for more rain-driven flood events ▪ Increase in excess moisture ▪ Increase in run-off	▪ Increase in site-specific flooding (and associated crop/ infrastructure losses) ▪ Damage to riparian areas (erosion, washouts, silting) ▪ Reduced access to fields and risk of soil compaction ▪ Increase in pressure on farm drainage systems ▪ Increase in risk of soil erosion and landslides ▪ Reduced windows for crop development and seasonal tasks (pollination, planting, harvesting) ▪ Increased disease pressure (from excess moisture)
▪ Increase in average and maximum summer temperatures	***Increase in extreme heat events:*** ▪ Increasing number of days per year over 25°C and 30°C	▪ Increase in evapotranspiration and crop water demand ▪ Risk of crop damage and loss (especially for crops without irrigation) ▪ Negative impacts to livestock health and productivity ▪ Increase in need for livestock and poultry cooling infrastructure
▪ Increase in average temperatures ▪ Increase in growing degree days ▪ Increase in frost free days ▪ Increase in winter minimum temperatures ▪ Shift in precipitation patterns	***Changing crop suitability ranges:*** ▪ Changing seasonal conditions ▪ Changing production windows	▪ Increase in management complexity and cost (e.g., with season extension) ▪ Inconsistent yield and quality of previously suitable crops ▪ Difficulty in identifying suitable crops for changing conditions ***Potential Opportunities:*** ▪ Increase in suitability for new varieties and new crops ▪ Less winter kill of perennial crops (e.g., peach trees) ▪ Opportunity for season extension and additional harvest of certain crops

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Projected Climate Changes	Projected Effects	Potential Agricultural Impacts
▪ Increase in annual temperatures ▪ Increase in winter minimum temperatures ▪ Increase in spring precipitation and extreme rain events ▪ Drier summer conditions	***Changes in pests, diseases, invasive plants:*** ▪ Increasing winter survival rates ▪ Increasing number of cycles in a year ▪ Introduction of new pests and diseases ▪ Changing range/ distribution of pests, diseases and invasive species	▪ Reduction in efficacy of previous pest management schedules and practices ▪ Increase in management costs and complexity ▪ More frequent and increased damage to crops ▪ Impacts to livestock health (poisonous weeds/ poor pasture) ▪ Reduction in forage and pasture quality/yield

photo by Harmony Bjarnason

This set of "impact areas" (groupings of projected climate changes and their associated effects and agricultural impacts) formed the basis for discussions at the first set of workshops and the first focus group.

These impact areas were explored in detail with participants and ranked in order of importance for both the individual farm and at the regional level. Based on this input, the highest priorities were identified and some impact areas in the table above were excluded from consideration at the second workshops. Those impacts that were excluded may prove to be problematic or advantageous in the Kootenay & Boundary region in the future, and should continue to be monitored. Adaptation strategies will still be needed for agriculture to address all impact areas.

Priority Impact Areas, Strategies & Actions

The following four impact areas were identified as the highest priorities with respect to agricultural adaptation in the Kootenay & Boundary region:

- **Impact Area 1**
  Warmer & drier summer conditions
- **Impact Area 2**
  Increasing wildfire risk
- **Impact Area 3**
  Increasing variability
- **Impact Area 4**
  Increasing risk of spring flooding

In the sections that follow, a background description and adaptation goals are provided for each of the Impact Areas. Following the impact description, a series of strategies and actions to support the Kootenay & Boundary region agriculture sector with adapting to climate change are outlined.

The selected strategies and actions presented are intended to:

- Address the highest priority impact areas
- Reduce vulnerability to these impacts, and/or build capacity to adapt and respond to these impacts; and
- Define practical steps forward that address gaps and build on existing assets in the Kootenay & Boundary region context.

Following the strategies and actions, the final section highlights those actions identified for near-term implementation. Implementation details, key participants, timeframes and cost ranges are provided for these near-term priority actions.

Impact Area 1: *Warmer & drier summer conditions*

The Kootenay & Boundary region's (historical average) summer conditions are typically dry and irrigation is required to maintain healthy agricultural production. The amount of land under agricultural production that relies on irrigation varies, from approximately 50% of actively farmed land in the East Kootenays, to 35% in the Central Kootenays to 10% in Kootenay Boundary.[85] Some areas, such as the Creston Flats, are naturally sub-irrigated by high water tables from adjacent waterways (e.g., Kootenay and Goat Rivers). There is extensive dryland farming in the region primarily encompassing forage, pasture, cereals and oilseeds; while tree fruits, vegetables, and nursery production are typically irrigated. Demand for irrigation is expected to increase with drier conditions.

With climate change, increasing winter temperatures are expected to result in a decrease in snowpack and earlier peak stream flows. More frequent and extended hot and dry periods are also anticipated during the growing season, along with changes in hydrology that will reduce surface water flows in some major rivers and tributaries in summer. This combination of changes will result in reduced water supply during the periods of greatest water demand.[86] Over time, the impact of glacial retreat on the region's water resources and supply will be significant.[87]

Across the region there are a number of water systems that are already insufficient to meet peak demand.[88] In August 2015 the Central and East Kootenay regions both reached a Level 3 drought,[89] and in September of 2017 the Boundary region reached a Level 4 drought.[90] The BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD) Water Stewardship division monitors 15 creeks and rivers in the Kootenay & Boundary region during drought conditions[91] and the Regional Districts have flagged additional creeks with supply concerns.

The combined effect of warmer and drier summer conditions, and higher rates of evapotranspiration, will increase agricultural water demand. The *Agriculture Water Demand Model: Kettle Valley Report* projects a 25% increase in future annual water demand (over demand during baseline hot, dry years). Agriculture Water Demand modelling has also been completed for the RDCK and an Agricultural Water Demand Review is underway for Erickson (within RDCK). Water demand in the Creston area could be further impacted by changes in production type (e.g., anticipated increase of cherry acreage of up to 50% over the next five years).[92]

In addition to changes in water supply and demand, the regulatory context for agricultural water is also shifting. The Water Sustainability Act includes a number of regulations of concern for agriculture (including those related to groundwater protection, dam safety and livestock watering).[93,94] Producers require a clearer understanding of how the new and upcoming regulations will affect them, as well as information about how water supply and demand will change over time.

The strategies and actions in this section address the following ***adaptation goals***:

- ***Increasing adoption of water conservation best practices***
- ***Ensuring availability of a sustainable water supply for agricultural production***

Relevant Climate Change Effects

- Increasing average summer temperature
- Increasing number of days per year above 25°C and days per year above 30°C
- Increasing winter minimum temperatures
- Decreasing precipitation in the summer

Improve tools and resources for irrigation efficiency and water management best practices

As noted previously, many producers in the Kootenay & Boundary region utilize irrigation to maintain crop productivity. Use of best practices to optimize water use (suited to farm conditions and production type) will contribute towards ensuring producers have the water they need throughout the growing season.

Resources for irrigation efficiency and water management already exist in BC (e.g., Irrigation Management Guides, Irrigation Scheduling Calculators) and there is an opportunity to improve water use efficiency through irrigation management.[95] Developing new resources — or adapting and improving existing resources – with locally relevant and/or commodity-specific water management options and opportunities would also be beneficial.

Measuring water use is an important component of water management, in order to track use and know where improvements can be made. At present many producers can estimate their water usage based on irrigation sets (i.e., a function of type of irrigation equipment utilized, length of time spent irrigating, flow rate, etc.), but a more precise (metered or non-metered) tracking tool may be helpful. A tracking tool piloted with grape growers in the Okanagan could inform development of a similar tool for the Kootenay & Boundary region.[96] The RDCK is drafting a metering implementation plan for the Erickson area and subsequently for all RDCK water systems.[97] Lessons learned from these initiatives could inform water measurement elsewhere in the Kootenay & Boundary region.

There may be opportunities to increase uptake of cost-shared irrigation management plans and water saving technologies (such as weather stations, soil moisture sensors and moisture meters) through the Environmental Farm Plan and Beneficial Management Practices programs.[98]

There is substantial interest from producers in obtaining new information regarding practices for improving soil moisture-holding capacity which are of benefit to both irrigated and dryland farms. For many producers optimizing soil moisture-holding capacity and preventing evaporation are the only options for dealing with warmer and drier conditions because water storage and irrigation are not feasible. Improving resources on this topic is a high priority — including better data regarding microclimates and soils, along with local demonstration. The Kootenay and Boundary Farm Advisors program provides a strong foundation for these types of knowledge transfer activities.

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ACTION 1.1A **Develop resources to improve water use efficiency and communicate benefits of water conservation**	ACTION 1.1B **Develop tools(s) to measure, track and optimize water use**	ACTION 1.1C **Provide knowledge transfer for practices to maintain/ enhance soil moisture**
▪ Conduct a baseline assessment (by commodity) to document current irrigation practices/technologies and identify opportunities for improvement ▪ Document the benefits of water conservation and costs/ impacts of overwatering (e.g., nutrient leaching and increased susceptibility to disease) ▪ Identify opportunities for cost-shares/incentives to support adoption of improved technologies and practices ▪ Summarize findings in a resource (organized by commodity type or by farm practice/irrigation type) ▪ Conduct knowledge transfer through field-days, fact-sheets, webinars, etc.	▪ Develop tool(s) to track (or accurately estimate) farm water consumption ▪ Use data from water tracking tool to generate a baseline 'report card' for producers to evaluate and compare their year-to-year water use ▪ Promote uptake of water measurement tools through local extension (e.g., Ministry of Agriculture staff, Environmental Farm Plan Advisors, Kootenay and Boundary Farm Advisors).	▪ Synthesize and adapt existing informational resources ▪ As required, develop new resources specific to Kootenay & Boundary region ▪ Determine the preferred mechanisms to share resources (e.g., field days, workshops, demonstration sites, fact-sheets) ▪ Conduct knowledge transfer through preferred channels

Support the enhancement of existing, and development of new, water storage capacity

Producers in the Kootenay & Boundary region rely on many different water sources (e.g., dams, dugouts, points of diversion) for irrigation and livestock water. With water supply being adversely affected by climate change and peak agricultural water demand coinciding with periods of reduced water supply — enhancement of water storage and delivery infrastructure will be increasingly necessary to ensure adequate water availability. Climate change may make the cost/benefit of water storage investments more favourable, both at the farm-level and more broadly.

A high-level assessment to identify agricultural sub-regions that are (or may become) vulnerable to water shortages could be followed by a more in-depth assessment of optimal sites for shared water storage. The process would identify delivery infrastructure requirements and estimated installation costs, along with (agricultural and environmental/social) benefits, and would set the stage for collaboration on supplemental water storage development. Collaborative development and distribution of a shared water source may help to keep costs down for small farms, and thus be the best mechanism to increase water storage capacity.

Producers wishing to enhance or expand farm-level water storage face many barriers including the need for costly technical assistance and navigation of a complex regulatory context. These barriers, along with the financial cost (from lost production) of giving up sizable areas of land for water storage infrastructure, can prove particularly daunting to small-scale farms. Providing improved information (on technical considerations and requirements) that is tailored to farm and production type, could help to overcome some barriers. For example, market gardeners may be able to install small-scale water storage infrastructure for drip systems on private land.

Knowledge transfer activities could include developing and sharing new resources for farm-level water storage, establishing demonstration sites and/or piloting a 'water management advisor' to visit farms/ranches to provide guidance on suitable storage options and assistance with permit and cost-share applications. Collaborating with existing organizations and programs (e.g., RDKB's Kettle River Watershed Management Plan implementation team, the Grassland and Rangeland Enhancement Program and the Kootenay Boundary Farm Advisors, as well as with the Ministry of FLNRORD) would reduce costs and improve success of this Strategy.

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ACTION 1.2A **Identify and evaluate options for shared (sub-regional) water storage**	ACTION 1.2B **Strengthen availability of technical, regulatory and economic information on development/ enhancement of on-farm/ranch water storage**
▪ Building on local knowledge and existing research, identify sub-regions experiencing (or likely to experience) water supply shortages but with opportunities for diversion/storage ▪ Undertake in depth analysis in selected (pilot project) area/s including: - Assessment of water delivery infrastructure and opportunities for improvement - Storage options and criteria for suitability - Cost-benefit analysis (development costs, agricultural benefits) - Potential co-benefits (flood mitigation, fire protection, wildlife enhancement) - Impacts of climate change on water availability/flows - Possible partners ▪ Convene stakeholders to discuss and prioritize options	▪ Inventory existing informational and technical resources and develop new resources that fill information gaps for various farm types/scales regarding: - Regulatory considerations - Suitability of different infrastructure - Cost-benefit analysis and pay-back period - Cost-share supports/co-funding - Climate change considerations - Technical or "how-to" information ▪ Establish demonstration sites to showcase a variety of storage types and sizes; provide knowledge transfer via (for example) case studies, field days, fact-sheets and videos ▪ Pilot a 'water management advisor' program to provide farm/ranch specific guidance on suitable water storage options and to assist with permit and cost-share applications. (Note: This step may come first, as one or more years of this position could inform all previous steps identified)

Enhance representation of agricultural interests in landscape level water management and planning

Increasing temperatures, rapid spring snow melt and changing precipitation patterns are altering forest ecosystems in the Kootenay & Boundary region and affecting aquifer recharge rates and dynamics. Producers are concerned that forest management practices are also having an impact on aquifer health and increasing pressure on water resources.

Identifying informational gaps related to water management and aquifer health (of greatest importance to agriculture) would support suitably focused research and monitoring. There is an opportunity for the agriculture sector to work collaboratively on priority issues, and potential for the sector to become involved with improving baseline information/filling data gaps through on the ground activities such as well monitoring and citizen science.[99]

A number of specific topics of interest have been identified, ranging from improving knowledge about how climate change affects aquifer recharge, to sharing information with producers about how forest management practices affect the availability and quality of water resources. Aquifer and water mapping/monitoring is taking place in parts of the region and consolidating and sharing this information — as well as the results of the Ministry of FLNRORD's cumulative effects[100] assessment — would be a positive step in strengthening producer knowledge of aquifer health.

At present the Regional Districts have varying levels of activity associated with watershed planning (e.g., RDKB Watershed Coordinator position and the RDCK Watershed Governance Initiative project). Identifying opportunities for on-going, efficient and integrated engagement of the agriculture sector in watershed management, planning and initiatives would help to ensure that agricultural interests are represented and enable the sector to start addressing key areas of concern. There are a number of active water advocacy/water management groups in the Kootenay & Boundary region (e.g., the Columbia Basin Watershed Network, Kettle River Watershed Management Plan implementation team) that the agriculture sector could collaborate with.

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ACTION 1.3A **Identify and fill information and data gaps relating to water resources in the region**	ACTION 1.3B **Strengthen regional capacity for a coordinated, cross-sector approach to water management and planning**
▪ Inventory current research/knowledge/data and identify gaps of greatest importance to the agriculture sector ▪ Support the initiation of new research/data gathering of greatest importance to the agriculture sector (as identified above) ▪ Improve monitoring on small streams and wells and develop a resource/tool to provide real-time information about aquifer recharge/levels (use data collected on streams and wells to estimate aquifer recharge/health) ▪ Develop resources to improve baseline knowledge relating to aquifer dynamics/water resource management	▪ Document active water stewardship groups in the region and assess their mandates, activities and current links with the agriculture sector ▪ Assess options for: - Strengthening integration of agricultural representation/concerns with existing water stewardship groups - Creating an agricultural water advisory committee to interface with all/select groups - Creating a regional water board (similar to Okanagan Basin Water Board) ▪ Engage with agricultural stakeholders (e.g., through a forum) to: - Discuss options and identify the preferred engagement mechanism - Identify key priorities (water management topics of most importance to agriculture) - Develop a feedback mechanism to share water management updates/progress on key priorities with producers

Impact Area 2: *Increasing wildfire risk*

Earlier snowmelt due to warmer winter and spring temperatures, combined with prolonged hot and dry summers, is increasing the likelihood of more severe and frequent wildfires in the Kootenay & Boundary region. Forest die-off due to mountain pine beetle, a long history of fire suppression activities and logging practices that leave fuel behind, are also increasing wildfire risk.

Although the Kootenays have not experienced the extensive destructive wildfires that have impacted other agricultural regions of the province (i.e. the Cariboo in 2017 and Bulkley-Nechako in 2018),[101] wildfire activity has been increasing in the region over the past decade.[102] Boundary, which is more arid than Central and East Kootenay, experienced a significant wildfire season in 2015 with severe agricultural impacts. This fire burned 4400 hectares of land between Westridge and Rock Creek, destroyed structures on more than 50 properties (including 30 homes and 20 outbuildings), burned kilometres of livestock fencing and hundreds of hectares of ranchland.[103]

Wildfires jeopardize crop production and quality, livestock health, farm workers' health and agricultural infrastructure. Producers are keenly aware of the increasing risk of wildfire and require support in mitigating risks to their operations and in planning for wildfire emergencies. Strategies to support and promote individual producer preparedness are required, as well as actions that will strengthen implementation of fuel management at the farm level and on the agriculture/wildland interface.

As in other areas of BC, producers in the region have concerns about effective communication with key agencies during wildfire response. A consistent and collaborative approach to communication and information sharing, before the wildfire season and during wildfire emergencies, is needed. A pilot project in the Regional District of Okanagan Similkameen to develop and test a "communication protocol"[104] may provide a model for a similar project in the Kootenay & Boundary region.

Relevant Climate Change Effects

- Increasing average and maximum summer temperature
- Increasing average winter and spring temperature
- Increasing number of days above 25°C and 30°C
- Decreasing precipitation in the summer

Wildfire smoke impacts extend well beyond the areas in immediate jeopardy. The 2017 and 2018 growing seasons were notable for extensive and prolonged smoky conditions. In 2018, most of the region experienced more than 20 days of Air Quality Health Index[105] above 7 (high health risk) due to significant smoke cover. These conditions negatively impacted crops and animal health across the region, and relevant adaptation actions are included in Impact 3, Strategy 3.2.

The strategies and actions in this section address the following ***adaptation goal:***

- ***Supporting comprehensive wildfire preparedness planning to minimize impacts from wildfire***

Promote wildfire preparedness planning at the farm and regional levels

As is the case across much of British Columbia, climate change is increasing the risk of wildfires on the agricultural interface in the Kootenay & Boundary region. Mitigating damage associated with wildfire requires preparedness planning at both the farm and community levels.

In 2018, the BC Agriculture & Food Climate Action Initiative released a farm-level *Agriculture Wildfire Preparedness and Mitigation Workbook & Guide*[106] to assist producers with planning for a wildfire emergency and reducing impacts to their operations. The wildfire preparedness materials were promoted through workshops held across the province in 2018 and 2019.[107]

Demand remains high within the producer community for continued support with preparing for, and mitigating, risks associated with wildfire. There is particular interest in on-farm assessments to assist with preparedness/mitigation planning, but also in additional workshops and/or instructional videos. The Kootenay Livestock Association has been collecting relevant information from producers (e.g., equipment available for mobilization during an emergency) to coordinate producer preparedness/response, and this type of leadership from the agricultural sector will enhance the actions below.

When wildfire risk is present (i.e., when wildfire is in the area and during alerts/orders) producers require timely information to help them react quickly and effectively and to inform farm-level decisions (e.g., livestock relocation, harvest timing). Effective information exchange and communication – before and during wildfire events – is an important contributor to wildfire impact reduction.[108] Producers rely on outside agencies for information during the wildfire season, and ensuring that communication mechanisms, key contacts and roles and responsibilities are shared and understood is critical.

As noted previously, a pilot project is underway in the Okanagan-Similkameen region to establish a protocol to guide communication between the Regional District of Okanagan Similkameen, response agencies and agricultural residents. The pilot approach could be adapted/replicated in the Kootenay & Boundary region.

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ACTION 2.1A **Encourage adoption of farm-level wildfire planning preparedness tools and resources**	ACTION 2.1B **Develop a wildfire communication protocol to guide communication between response agencies and producers**
▪ Identify and implement preferred mechanism(s) for completion of farm-level preparedness and mitigation planning (e.g., *Agriculture Wildfire Preparedness and Mitigation Guide/Workbook*). This may include: - Development of how-to-videos and/or webinars - Farm assessments - Workshops (and follow-up sessions) - Distribution of resources through partner agencies ▪ Provide additional planning support (e.g., through targeted workshops) to livestock sector to develop and coordinate livestock relocation plans ▪ Ensure relevant information from individual plans (e.g., contact information, maps, equipment lists) is being effectively shared with response agencies	▪ Bring producers and response agencies together to develop a communication protocol (utilizing/adapting Regional District of Okanagan Similkameen Wildfire Communication Protocol materials). This protocol may include: - Roles and responsibilities during a wildfire - Local contact information - Permitting and re-entry guidelines - How and what to communicate at what times - Where to post/find information - Incorporating an "agricultural liaison" into Emergency Operations Centres ▪ Pilot implementation of Wildfire Communication Protocol ▪ Evaluate outcomes and revising protocol as needed

Pilot and demonstrate fuel management practices for private and Crown range land

Fuel management is a critical element of wildfire mitigation and refers primarily to reducing the fuel load (vegetation and woody debris). Producers with large acreages and private woodlot licensees[109] — who hold exclusive rights to manage and harvest Crown timber within the woodlot licence area — have access to very few resources to assist them with reducing fire risk on their property or tenure.

FireSmart principles can be effectively utilized to reduce the risk of fire damage to agricultural buildings and structures, but fuel management on larger acreages necessitates the development and execution of larger-scale — and more costly and complex — fuel management plans. Developing new resources to support small-scale fuel management activities is an important component of farm-level wildfire preparedness. Producers are also interested in fuel management options that allow them to better manage (for profit) their private timber supply (private land/woodlot).

An initial assessment/consultation to define local priorities would be the first step, followed by a pilot to test and demonstrate practices. Producers would also benefit from identification and/or development of cost-share supports and incentives to support private fuel management practices. For example, the newly created provincial Community Resiliency Investment (CRI) program (replacing the Strategic Wildfire Prevention Initiative) has expanded its mandate to include funding for FireSmart activities on private land.[110]

High fuel loads on Crown land pose significant wildfire risk to adjacent private lands and farmers and ranchers cannot mitigate impacts to their operations (through actions identified in Strategy 2.1, and treatments on private land) without collaboration and partnerships with Crown land managers. Ember showers from Crown land can ignite fuels from up to two km away.[111] Agricultural producers have very few opportunities for fuel management on Crown land, and even where opportunities exist, these activities tend to be complex, time consuming and expensive to carry out.

To fill gaps in current fuel management activities, there is a need to support collaborative fuel management at the agricultural/wildland interface by piloting different approaches for removal and disposal of fuel and exploring alternative options — such as range management practices — for fuel reduction.

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ACTION 2.2A **Identify and address barriers to fuel management on private land**	ACTION 2.2B **Develop and pilot collaborative fuel management approaches to reduce fuel on high-risk Crown land***
▪ Building on work completed in the Cariboo (Opportunities and Barriers to Wildfire Risk Mitigation), conduct an analysis to identify local priorities for fuel management on private land (e.g. addressing access to equipment and expertise, costs of treatment, disposal challenges) ▪ Develop pilot project(s)/program to reduce identified barriers (e.g., providing technical expertise to private landowners to develop prescriptions for reducing fuel load, identifying how land-owners can manage land to reduce wildfire risk and maximize profit from harvesting timber) ▪ Develop resource materials and sharing results with producers ▪ Identify and/or develop cost-share supports and incentives to support farm-level fuel management practices	▪ Compile research on options for management of forest fuels near agricultural operations such as: - creating fire breaks - fuel thinning/fuel chipping - prescribed burning - silvopasture/agroforestry to remove understory ▪ Document range management practices that can be used to reduce fuel loads and assess suitability for region ▪ Convene partners to prioritize locally suitable fuel management practices for pilot/demonstration and identify pilot area(s) and collaborators ▪ Establish one or more pilot sites to demonstrate practices identified above ▪ Assess opportunities to increase the duration of range tenure as an incentive to employ management practices to reduce the fuel load in long-term

* **Developing and testing collaborative fuel management approaches has been prioritized in other regions of the province and opportunities to build on existing/ongoing research and demonstration should be explored before undertaking a project.**

Impact Area 3: *Increasing variability*

The combination of changes in climate (including shifting and unpredictable temperature and precipitation patterns, increasing growing degree days and increasing frequency and intensity of extreme events) is resulting in more variable seasonal conditions and changing pest cycles — both of which increase the complexity of farm management decisions and associated costs. Adapting to variable conditions requires that producers increase their overall resilience and their ability to respond to a broad range of projected changes.

Critical windows in the production season (such as planting and harvesting) are becoming less predictable. Variable temperatures and abrupt temperature swings can result in increased risk of frost or heat damage to crops, and winter storm events are of particular concern for livestock and forage producers (e.g., impact of freeze-thaw cycles on crops, livestock mortality due to extreme cold). Parameters for crop suitability may shift in some areas, reducing the viability of current crops/varieties and increasing the potential of others. However, harnessing the potential of new crops and varieties requires trials, market research and transition support.

Limited access to reliable local weather information is a gap for most producers which impacts their ability to manage (proactively or in response to) variable conditions. Increasing the availability of weather data and forecasts would support producers with decisions regarding soil management, irrigation scheduling and pest treatments, and would support more accurate assessments around the suitability of new crops.

A critical strategy for adaptation is conducting local research to trial new crops or varieties and to evaluate how differing practices and technologies may strengthen resilience. Some producers are already undertaking applied research, but would benefit from additional research support and expertise, as well as improved communication channels for sharing results and/or exchanging information with other producers.

Relevant Climate Change Impacts

- Shifting precipitation patterns
- Increasing number of growing degree days
- Increasing frequency and intensity of extreme events

Variability is also anticipated to increase pest pressure in the region. As average annual temperatures increase, the ranges and prevalence of insect pests, diseases and invasive species are anticipated to shift. Climate change may result in an increase in the number and distribution of existing problem species, and may also result in new species becoming established in the region.[112] Improving locally relevant pest identification and management resources is a priority for producers in the region.

The strategies and actions in this section address the following ***adaptation goals:***

- ***Enhancing availability of data-driven resources to support adaptation***
- ***Supporting collaborative research on crop selection and farm practices***
- ***Strengthening knowledge transfer to limit the impacts of pests and invasive species***

Enhance weather data collection/analysis and availability of decision support tools

Access to real-time weather data (such as growing degree day accumulation) would enable farm planning and decision-making that are more responsive to local microclimates and actual conditions (rather than timing activities based on historical averages). Access to more precise weather data would also allow producers to better track how variable conditions are affecting their operations year over year (e.g., frequency of late spring frosts and hot summer temperatures).

At present the Farmwest website (www.farmwest.com) provides access to 5-day forecasts for 17 weather stations across the Kootenay & Boundary region. Not all of these stations measure variables of value to the agriculture sector (e.g., humidity, precipitation). In addition, there remain significant geographic gaps in coverage which are exacerbated by the microclimatic variability across the region. For example, there are four microclimate zones for tree fruits in Creston alone, and there is only one weather station in Creston.[113]

Improving the weather monitoring network also creates the potential to develop locally relevant decision support tools[114] which link to real-time weather station data. Some decision support tools can be found on the Farmwest website, but producers are interested in a greater diversity of these resources. Other relevant decision support tools already exist in BC and beyond but may require adaptation for the local context (e.g., the Okanagan BC Tree Fruit Decision Aid System, AgWeather Quebec).[115,116] There may also be opportunities to test/demonstrate tools that link to private (on-farm) weather stations (i.e., that would not require the establishment of a network of weather stations).

The BC Ministry of Agriculture, in partnership with the British Columbia Agricultural Climate Adaptation Research Network (ACARN), has completed a *Gap Analysis and Overview of Weather Station Data in British Columbia Agricultural Regions*, which includes an analysis of the Kootenay & Boundary region.[117] This research could inform a more in-depth assessment of the weather network coverage in the Kootenay & Boundary region. The BC Ministry of Agriculture has allocated funding to establish new weather stations across the province of BC and has approved a new station in Grand Forks that will link to Farmwest. Additional stations may be installed in the Kootenay & Boundary region through this initiative, although funding is limited.

Establishing and maintaining a weather station network is a significant undertaking that would require long-term collaboration, investment and effort, and partnering with existing initiatives will be vital to success. It will also be important to provide training and knowledge transfer about how to use the data and associated tools. Supporting education and training for existing extension agents, as well as sharing information through sector groups, would enable efficient transmission of information about new tools and resources.

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ACTION 3.1A **Expand weather station coverage and improve producer access to station data**	ACTION 3.1B **Develop decision support tools and resources linked to weather data**
▪ Complete an analysis of weather station coverage (identify existing station locations and utility to the agriculture sector) and identify monitoring gaps ▪ Evaluate options for linking with existing networks and/or establishing and maintaining a new network (e.g., administration, funding and maintenance) ▪ Share findings with agricultural organizations and regional partners and develop implementation plan ▪ Install new stations to fill critical gaps and make data available to producers	▪ Determine options for developing decision support tools that are relevant to agricultural needs (linked to expanded weather data network in ACTION 3.1A) and document costs of tool development and projected producer benefits. Tools may include: - Expanding the BC Tree Fruits Decision Aid System (BC DAS) Tool - Adapting/developing new tools for forage, hay and range management - Providing improved (localized) weather forecasting information ▪ Evaluate options (costs/benefits) for network/shared tools versus tools linked to private (on-farm) weather stations ▪ Develop prioritized tool(s) and resources and share them with producers

Support local research and demonstration for crop trials and farm management practices

Producers are adept at managing through challenging conditions and are constantly experimenting with new crops and farm practices. Local research is a valuable contributor to testing and evaluating practices, technologies and/or crops for the local context. There has been no formal long-term agricultural research in the region since AAFC closed their regional station 30 years ago. Results from farm-level research may prove valuable in assisting other producers in the region to adapt to increasing variability.

Many producers are eager to undertake research but require assistance and support to design and conduct trials and analyze results. The recently developed *Guide to On-Farm Demonstration Research* provides a structured approach for producers to develop a research question, gather data and analyze results.[118] Taking this work a step further, a project is underway (from 2019 to 2022) in the Kootenay & Boundary region to develop research templates (with accompanying Case Studies) for a range of commodities/research questions.[119]

The Kootenay & Boundary region is very diverse with respect to growing conditions and production types and research and demonstration interests/needs vary by location. Some examples of research interests include trialing new drought tolerant varieties, conducting season extension trials with high tunnels,[120] management intensive grazing and keyline design.

Sharing the results from producer-led (and other locally relevant) research could be facilitated through the development of a digital knowledge hub which could be hosted on an existing website. The hub could offer a forum for questions/answers to be shared, and for local research priorities to be established. Creating a digital knowledge hub could be relatively low-cost, but long-term success requires ongoing funding and administrative support, as well as collaboration and engagement from producer partners.

The Kootenay and Boundary Farm Advisors would be a strong local partner for all of the actions within this strategy. Other partners could include university researchers and students (e.g., University of British Columbia, Thompson Rivers University, Kwantlen Polytechnic University). College of the Rockies and Selkirk College also have some interest in agricultural research.

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ACTION 3.2A **Create a producer-led research network**	ACTION 3.2B **Develop an online producer knowledge hub**	ACTION 3.2C **Identify and undertake applied research to support innovative farm practices to mitigate risk from climate change impacts**
▪ Create an inventory of producer-led research currently underway ▪ Survey producers to identify research priorities ▪ Secure partnerships and develop a program or support system to assist producers with their farm research. Support may include: - providing in-person technical input in advance of and during trials - assisting with trouble shooting, data collection and analysis - hosting a 'farm-research bootcamp' - sharing the *Guide to On-Farm Demonstration Research* ▪ Coordinate knowledge transfer activities for producers to share their research/results	▪ Outline objectives and functional requirements of an online producer knowledge hub and identify possible partners. Objectives may include: - Sharing of research results - Linking producers wanting to do research with land - Seed sharing - Producer-to-producer knowledge exchange ▪ Establish, pilot and evaluate the knowledge hub ▪ Collaborate with partners and funders to develop a long-term administration and management plan	▪ Consult with the agriculture sector to prioritize research topics and/or create a regional producer research advisory body (link to producer-led research network in ACTION 3.2A if action completed) ▪ Conduct a scan of innovative management practices to assist producers in reducing impact of variable/extreme conditions such as: - Extended periods of wildfire smoke (e.g., impacts to light levels, air quality and temperature) - Protection from late spring/early fall frost - Worker and animal health during extreme heat ▪ Share scan results and assess local applicability including piloting and demonstrating practices (as needed) ▪ Conduct knowledge transfer (e.g., field days, fact sheets etc.)

Improve education and awareness for effective management of pests

(pests include insects, diseases, weeds and invasive species)

Climate change will shift the distribution and life cycles of insects, diseases, weeds and invasive species already present in the region (such as spotted wing drosophila and aster yellows) and may create conditions favourable for the establishment of new pests (such as brown marmorated stink bug which is currently found in the Okanagan).

Identifying the pests of greatest concern to agriculture and developing and/or disseminating resources for identification and effective management would minimize negative impacts to the sector and assist producers with making timely management decisions. Early detection of, and rapid response to, emerging pests can help to prevent establishment. A project completed in the Cariboo provides a methodology that could be applied to identification of priority pests, critical information gaps, and resource requirements for producers in the Kootenay & Boundary region.[121]

Knowledge transfer activities might include the development and delivery of fact-sheets, presentations, workshops and field days. There are also opportunities to develop new outreach mechanisms — such as a "pest-of-the-week" newsletter, enhanced pest-alerts[122] and/or expanding the coverage of weed/pest reporting apps[123] to cover the region.

There is demand from producers for Integrated Pest Management (IPM)[124] and improved information regarding biological and mechanical controls for pests and invasive species. Currently IPM adoption is most common among organic growers, growers selling for export (e.g., cherry producers) and producers selling into the retail market.[125] Generally, IPM information is difficult to access, or does not exist for the local context. Specific IPM topics of interest include:

- → providing/creating habitat for beneficial insects being introduced to farm;
- → managing soil health to reduce pest and invasive species pressure; and
- → understanding how the prevalence of certain weeds relates to soil health.

Invasive species are monitored and managed by each Regional District's invasive species organization. The Boundary Invasive Species Society, Central Kootenay Invasive Species Society and East Kootenay Invasive Species Council have robust education, training and outreach programs, although to date the agriculturally focused resources have been primarily for the forage sector.

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ACTION 3.3A **Determine economically significant pests/ emerging pests of concern to the agricultural sector**	ACTION 3.3B **Enhance producer knowledge of, and access to, pest and invasive species management information**	ACTION 3.3C **Provide knowledge transfer about biological/mechanical treatments for pests and invasive species**
▪ Utilize the methodology from *Priority Pests of the Cariboo-Chilcotin*; consult with agricultural organizations, regional invasive species groups and government agencies to: - Identify pests and invasive species of greatest concern to the agricultural sector - Assess existing programs and resources to determine transferability and identify gaps ▪ Adapt existing resources and (if needed) develop new resources to address knowledge gaps (as identified above)	▪ Share information about programs and cost-share supports (e.g., RDEK has a cost-share support program for invasive species management) ▪ Utilize resources (from ACTION 3.3A) to deliver knowledge transfer activities which may include: - Distributing fact sheets and other informational resources - Hosting presentations/ workshops/field days on pest and invasive species identification and management - Developing targeted promotional campaigns/ outreach (such as Pest Alerts, or Insect Week – where one pest is highlighted each week) - Working though existing channels (such as local agricultural newsletters and local agricultural meetings) to distribute information and resources	▪ Consult with producers to determine which pests and invasive species to focus on (build on results of ACTION 3.3A if completed) ▪ Identify biological and mechanical controls for priority pests and develop and share supporting resources with producers (may build on existing resources) ▪ Develop resources to enhance producer knowledge of the relationship between soil health (e.g., soil pH, nutrient deficiency) and pests

Impact Area 4: *Increasing risk of spring flooding*

Warming winter and spring temperatures are changing precipitation patterns (with less precipitation falling as snow and more falling as rain) and are causing earlier and more rapid snowmelt.[126] These factors, combined with projected increases in spring precipitation, are heightening the risk of flooding on land adjacent to large and small watercourses.

Flood risk in the Kootenay & Boundary region is most pronounced in the spring (although flooding can occur any time of year) and is most frequently caused by rapid melting of a thick snow pack, heavy rainfall and/or ice or debris jams.[127]

Areas that are deemed highly susceptible to flooding are designated as floodplains, and the region has the largest number of individual floodplains in British Columbia.[128] Much of the agricultural land in the region follows the valley floors and rivers, and is therefore vulnerable to flood events.

Producers need to be prepared for a range of flood scenarios from large-scale floods (as experienced on the Kettle and Granby Rivers in 2018), to site-specific floods along smaller watercourses. Addressing flood risk on agricultural land requires both farm-level and landscape-level planning and mitigation approaches. The Regional Districts have been proactive in undertaking research to better understand regional flood risk and risk mitigation (such as LIDAR floodplain mapping, debris flow management planning, evacuation route mapping) and in developing programs to support flood recovery (such as Boundary Flood Recovery).

Landscape-level flood mitigation is increasingly examining how to restore and enhance the role of natural green infrastructure (such as forests, riparian areas, floodplains and wetlands) to reduce/manage flood risk. Following the 2018 flood season, the City of Grand Forks (as part of their 2018 flood recovery efforts) has been particularly proactive in identifying areas that would benefit from natural green infrastructure installation or enhancement, including the restoration of floodplains and riparian areas.[129] There are opportunities to connect agricultural areas prone to flooding with existing regional initiatives, to implement green infrastructure projects and/or demonstration sites.

Relevant Climate Change Impacts

- Increasing winter and spring precipitation
- Increasing average temperatures (particularly in spring)
- Increasing frequency and intensity of precipitation events

At the farm level, riparian rehabilitation and the creation of riparian buffers can reduce the potential for inundation, washouts and erosion, as well as minimize the loss of productive land to flooding.[130] There are both local and provincial level resources and expertise available to provide support to producers with planning and undertaking riparian projects on private land.[131] However, even with these supports, agricultural landowners still face significant obstacles when planning and undertaking riparian projects including difficulty navigating the regulatory and permitting process and the financial burden of establishing and maintaining these areas.

The highly productive Creston Flats agricultural area is a former floodplain that is now protected by dikes on the Kootenay and Goat rivers.[132] However, this area is still at risk of flooding if dikes are overtopped or breached. The dikes are managed by several independent diking districts, and the agricultural sector would benefit from improved communication regarding planned maintenance and upgrades.

The strategies and actions in this section address the following ***adaptation goals:***

- ***Enhancing natural flood management infrastructure to mitigate flood risk***
- ***Reducing the impacts of flooding on agricultural lands and operations***

Slow and capture runoff through enhancement of small-scale green infrastructure

Green infrastructure refers to ecological systems, both natural and engineered, that act as living infrastructure. Natural green infrastructure (including forests, grasslands, wetlands, creeks and other waterways) supply valuable environmental services such as providing habitat for fish and wildlife, filtering of air and water pollutants and reducing run-off and associated flooding.[133]

As in many areas, the function and health of natural green infrastructure in the Kootenay & Boundary region has been compromised by human activities – particularly forestry – over the last century.[134] Restoration and rehabilitation of existing green infrastructure and installation of new green infrastructure (such as the establishment of small woody dams, rehabilitation and/or improvements to riparian zones and rehabilitation of floodplains) can slow and spread run-off while reducing flood risk.

Various research projects (led by the Regional Districts) are currently underway to help to improve baseline understanding of regional flood risk. RDCK is undertaking a regional flood risk assessment, including a gap analysis and a prioritized inventory of hazards across the region.[135] RDKB and the City of Grand Forks have completed flood risk assessments and flood recovery planning and identified sites in need of natural (and constructed) flood infrastructure improvements.[136] Opportunities exist to partner with these (and other) initiatives to incorporate an agricultural lens into current research and projects.

A scan of best practices for small-scale green infrastructure enhancements and an assessment of which options are best suited to the region (e.g., small woody dams, floodplain restoration, riparian zone rehabilitation) would be an important first step. Building on this work, identification of suitable small-scale pilot/demonstration locations could be followed by an assessment of feasibility, costs and potential for water storage (a valuable co-benefit for agriculture). Moving from the assessment phase into demonstration would require partnerships and strong local champions. It would also be important to collect baseline information at any new demonstration sites to enable evaluation of cost of installation/maintenance versus the extent of various anticipated benefits.

ACTION 4.1A **Identify suitable green infrastructure options and priority pilot areas**	ACTION 4.1B **Establish pilot site(s) and evaluate benefits**
▪ Complete a scan of best practices for small-scale green infrastructure enhancements and assess which options are best suited to region ▪ Conduct a vulnerability assessment to identify suitable pilot area(s) (with agricultural relevance) with potential for green infrastructure improvements/installations ▪ Quantify costs of infrastructure and benefits of proposed project(s) ▪ Convene relevant government agencies and agricultural partners to discuss pilot project options and to seek co-funding	▪ Building on ACTION 4.1A, work with local partners and government agencies to plan pilot projects, obtain necessary permits and authorizations ▪ Develop a monitoring and evaluation plan and collect baseline data before infrastructure installation ▪ Work with partners to install and maintain green infrastructure ▪ Evaluate project(s) and share the results with stakeholders (e.g., field tours, case studies)

Support knowledge transfer for effective management and enhancement of on-farm riparian areas

Healthy wetlands and riparian areas provide valuable flood-mitigation services to adjacent farmland and lessen the impacts of floods when they do occur. There are many initiatives and groups across the region that provide support to producers with riparian and wetland restoration/enhancement such as the Slocan River Streamkeepers, Salmo Watershed Streamkeepers Society, Granby Wilderness Society and the Farmland-Riparian Interface Stewardship Program (FRISP).

Even with these existing supports, undertaking improvements in riparian zones is labour and cost-intensive and any work completed, requires ongoing maintenance. The benefits to the private land-owner are not always clear. Often the value of riparian health is connected to providing habitat or environmental services, rather than to reducing flood risk to private land. It is important to fill this information gap by documenting/sharing the role of riparian and wetland restoration in flood protection.

Existing resources on riparian restoration could be synthesized and tailored for an agricultural audience and could integrate case studies, outline suitability of enhancements/practices for particular sites and provide practical information on permitting requirements. Utilizing demonstration sites to showcase how riparian projects are designed and installed could also support adoption. There are existing projects on farms in the area that may be candidates for demonstration. Opportunities to develop new demonstration sites (with strong local partnerships) may also exist.

Cost is frequently identified by producers as the biggest barrier to riparian and wetland enhancement and restoration (followed closely by legislative and/or permitting barriers). Addressing this barrier is critical to broader adoption and may include enhancing availability/accessibility of cost-benefit information and improving linkages to financial supports (e.g., Environmental Farm Plan and Beneficial Management Practices Program)[137]. Farmland Advantage (based in East Kootenay) has partnered with the Environmental Farm Plan Program on a five-year pilot project (in three regions including the Kootenays) to establish and monitor riparian demonstration sites to inform the development of a payment for ecosystem services model which could be more broadly implemented in the future.[138]

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ACTION 4.2A **Consolidate, create and share information on riparian management and enhancement**	ACTION 4.2B **Establish demonstration sites to facilitate knowledge transfer**	ACTION 4.2C **Develop/improve financial supports available for riparian enhancement**
▪ Undertake a scan to document existing resources (informational, technical, financial, local experts) and to identify resource gaps ▪ Tailor existing materials and/or develop new materials to communicate: - Climate change impacts to watercourses and potential for riparian areas to reduce flood impacts/mitigate risk - Costs and benefits of riparian enhancement - Different types of riparian projects (suitability, case studies, how-to) - Permitting requirements - Available cost-share supports and expertise - Farm management practices for riparian health ▪ Share resources broadly through local agricultural/community groups (e.g., at monthly meetings and AGMs, through workshops, webinars)	▪ Identify existing sites that could be used for demonstration and develop a shortlist of sites for new demonstration (may tie into ACTION 4.4B) ▪ Develop criteria and select suitable new sites for demonstration (if existing sites are not sufficient) ▪ Establish demonstration sites (documenting process/costs for knowledge transfer materials) and/or provide access to existing sites ▪ Evaluate impact of project(s) and quantify benefits ▪ Host field days and develop knowledge transfer materials (e.g., signage for sites, fact-sheets)	▪ Assess existing financial supports and identify gaps/challenges with obtaining financial support/cost-shares ▪ Identify opportunities to reduce cost-share barriers and enhance cost-share opportunities. Options may include: - Establishing a per-plant/tree cost share program (similar to Municipal Neighbourwoods[139] programs) - Incorporating planning for riparian enhancement/flood mitigation into farm business planning services - Improving access to education programs (e.g., subsidies for courses offered by the Wetlands Institute) ▪ Pilot a program – with local funders – to improve financial support for producers (based on results above)

Improve tools and resources for farm-level flood readiness

Various resources are distributed by the Regional Districts to encourage flood-readiness and emergency preparedness, as well as to provide seasonal updates on snowpack/flood conditions.[140] However, there are few informational materials that are specifically designed for agriculture. New agriculture and flood-focused resources are under development through CAI and will be available in 2020. There are also all hazard emergency planning guides available for some agricultural commodities in BC (e.g., dairy, cattle, pork).[141]

Reviewing and adapting existing farm-level preparedness resources (as needed) to suit the various local contexts within the region (e.g., Creston Flats, Boundary) is a first step. This process may focus primarily on how best to disseminate existing preparedness information, but may also incorporate locally specific considerations and support the development of supplemental (sub-regional) resources.

There are several flood related emergency planning activities taking place at the regional and municipal level and facilitating the agriculture sector's participation in existing initiatives would help to ensure that emergency response needs for the sector are identified and addressed. However, much of the responsibility for emergency preparedness falls to producers and it may be beneficial to support an agriculture-led initiative that encourages preparedness planning and identifies sector specific concerns related to flood-readiness planning, flood response and flood recovery (e.g., carcass disposal, obtaining feed for animals after damage to cropped land, supporting non-commercial / hobby producers with post-disaster assistance).

ACTION 4.3A Develop and/or distribute farm-level flood readiness resources

- Assess applicability of existing resources and adapt and/or develop new resources as needed
- If required, develop new resources to address links between flood risk and land and soils management decisions. Topics may include:
  - How climate change will impact flood risk
  - Examples of the positive benefits of flooding in restoring soil health
  - Riparian enhancement as flood mitigation practice (ties into Strategy 4.2)
- Provide active support for farm-level flood-readiness planning (e.g., workshops, webinars/videos, farm visits)
- Share flood readiness resources with producers (e.g., at agricultural organization AGMs and monthly meetings, workshops)

ACTION 4.3B Enhance integration of agriculture-specific issues into community-level emergency planning

- Identify key challenges/areas of concern for the agriculture sector relating to flood readiness, response and recovery
- Facilitate the agriculture sector's participation in community preparedness initiatives (municipal or regional district level) and/or develop an agriculture-led initiative including identification of agriculture specific concerns

Support a cooperative and consistent approach to dike management in the Creston Valley

Diking infrastructure along the Kootenay and Goat Rivers (comprised of dikes, control structures and pumps) has transformed the landscape of the Creston Flats and made farming possible on the former floodplain. The dikes are managed and maintained by several independently operated diking districts.[142] Producers with operations located on the Creston Flats are interested in ensuring that the dikes are being managed and maintained to withstand additional pressures from climate change, but do not have easy access to information about planned maintenance and improvements.

To support information sharing, a first step could be collecting and collating information on planned maintenance and improvements, and documenting diking district processes and procedures (highlighting similarities, differences and best practices). Recent work completed by the Lower Kootenay Band (Yaqan Nukiy) assessing the state of the dikes[143] could serve as a building block for this activity and reduce the necessary up front research. The results of this research could be shared through a collaborative forum with key stakeholders (producers, diking district representatives, Lower Kootenay Band, government agencies) to discuss research findings and to determine how to strengthen communication between producers and the diking districts. The forum could also serve as a venue to discuss the potential for increasing cooperation between the diking districts.

Improving riparian management practices along dike banks and set-backs could enhance the function of the dikes and reduce flood risk (from overtopping and breach), while the establishment of sediment ponds could help to reduce the need for dredging.[144] There is potential to strengthen riparian management practices along dikes, but this would require partnerships with land-owners and technical guidance regarding practices. Identifying the best riparian practices for dike banks and set-backs and undertaking an analysis to document the costs (e.g., cost of establishment, loss of productive land from larger dike set-back) and benefits (e.g., erosion control, sediment control, flood mitigation, environmental values) of practices would be an important first step in supporting improved practices.

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ACTION 4.4A **Support improved communication among diking districts and between diking districts and the agricultural sector**	ACTION 4.4B **Establish demonstration sites to encourage adoption of riparian management practices that enhance flood mitigation on dike banks and set-backs**
▪ Synthesize and compile existing information on the current condition of dikes and planned dike upgrades and maintenance ▪ Undertake an assessment of processes and procedures for dike management across the diking districts in the Creston region – documenting differences, similarities and best practices ▪ Convene key stakeholders to share results of the assessment and facilitate dialogue about: - Opportunities to improve communication with the agriculture sector - Development of a common approach for dike management - Creation of a joint body (with one representative per diking district) to facilitate collaborative dike management and fundraising	▪ Undertake a scan of riparian practices to improve marginal land along dikes and to prevent dike erosion (e.g., riparian plantings, sediment ponds, larger set-backs) ▪ Conduct an analysis to calculate the costs and benefits of potential riparian management practices ▪ Identify and establish demonstration site(s) and conduct evaluation of project(s) ▪ Provide knowledge transfer to support adoption of improved riparian practices along dikes (e.g., signage, tours, fact-sheets, how-to workshops)

Implementation & Monitoring

While all of the actions contained in this plan are important for the Kootenay & Boundary region agriculture sector to adapt to climate change, the actions on the following pages are identified as "next steps." This is due to their importance and may also reflect their relative ease of implementation or their potential to build capacity for further adaptation actions (see text box on this page). Building momentum and capacity for collective action, and addressing the most important issues, will help to ensure implementation of all of the identified actions.

As the final stage in plan development, an implementation meeting was held with key partners (25 individuals) to prioritize actions and determine how to move them forward. The input received at this meeting informs the content below.

In some cases, multiple actions have been merged into single projects because this is the most effective and efficient way to accomplish them. Implementation considerations, such as potential partners and cost range, are identified for each of the next steps.

In order to move forward with project implementation, members of the Advisory Committee that supported the development of this plan will transition into a local working group to oversee implementation and monitor progress. This group will continue to include agricultural organizations, local government and provincial government representatives. The Climate Action Initiative will function as the overall coordinator for this group and will also lead project development and assist with monitoring progress and reporting.

For each Action in the Next Steps below, potential partners are identified. Potential partners were determined through workshops and subsequent draft development, but no formal commitments have been made regarding roles in various strategies and actions. Development of partnerships will be a preliminary activity in project development.

- ***Important*** actions are those that address the highest priority impacts or critical gaps for building resilience.
- ***Ease of implementation*** refers to actions that can be initiated without delay because there is a window of opportunity, there are clear co-benefits with other actors or programs, or there are minimal barriers to address. These actions can also create momentum to help move more difficult or longer-term actions forward.
- ***Capacity building*** actions support the sector by strengthening the ability of producers and producer organizations to take effective action. This may include filling knowledge gaps or developing resources that strengthen the ability to act collectively or individually.

Next Steps for ACTIONS 1.1A & 1.1C

Actions

→ ***Develop resources to improve water use efficiency and communicate benefits of water conservation***

→ ***Provide knowledge transfer for practices to maintain/enhance soil moisture***

Implementation details

- Initial phase will involve a scan to identify types of irrigation/water management practices being employed and opportunities for improvement
- Resources will need to be tailored for different agricultural production systems and the local context
- Knowledge transfer should include multiple channels (e.g., demonstration, field days, videos, fact-sheets)
- Identify opportunities to support producers (through knowledge transfer/collaboration) with acquisition of necessary equipment/infrastructure and/or inputs (e.g., sharing woodchips and compost)
- Topics of interest include:
  - Organic practices for soil moisture preservation: cover crops, green manures, row mulch and supplements
  - Impact of weeds on water availability for crops
  - Tools to capture, slow and sink water
  - Irrigation design
  - Optimizing water use for crop type
  - Costs of overwatering

Potential partners

- Agricultural organizations
- BC Ministry of Agriculture
- Kootenay and Boundary Farm Advisors
- Post-secondary institutions (e.g., Selkirk College, College of the Rockies, UBC, Kwantlen)
- BC Institute of Agrologists

Timeframe

- First project (scan and initial knowledge transfer resources/ activities) = Short term (LESS THAN 2 YEARS)
- Multiple projects = Medium-term (2–4 YEARS)

Cost

- First project = Medium ($50,000–$100,000)
- Multiple projects = High ($100,000+)

Next Steps for ACTION 1.2B

Actions

→ ***Strengthen availability of technical, regulatory and economic information on development/ enhancement of on-farm/ranch water storage***

Implementation details

- First step is to identify and document water storage needs (e.g., types of storage, vulnerable production systems, areas with greatest need, producer interest, costs and benefits)
- Explore opportunities to partner with existing resource people/ groups to pilot water storage field support (e.g., Kootenay and Boundary Farm Advisors)
- Knowledge gathered by 'water management advisor ' after first year can inform development of resources.
- Can link knowledge transfer with ACTIONS 1.1A and 1.1C

Potential partners

- Agricultural organizations
- BC Ministry of Agriculture
- BC Ministry of Environment
- Regional Districts and local governments
- First Nations
- Kootenay and Boundary Farm Advisors
- Kettle River Watershed Planning team

Timeframe

- Medium-term (2–4 YEARS)

Cost

- Medium ($50,000–$100,000)

Next Steps for ACTIONS 2.1A & 2.1B

Actions

→ ***Encourage adoption of farm-level wildfire planning preparedness tools and resources***

→ ***Develop a wildfire communication protocol to guide communication between response agencies and producers***

Implementation details

- Explore options for linking preparedness support/information into existing events (e.g., Columbia Basin Agricultural Forum, South-East PREOC Emergency Preparedness Workshops)
- Provide additional resources (beyond workshops) for farm-level preparedness planning (e.g., farm visits, videos)
- Ongoing follow-up/support for farm-level planning would result in completion of more plans
- Communication protocol priorities include: Incorporating an agricultural liaison into the Emergency Operation Centres (EOCs), streamlining the permitting and re-entry process for producers and developing a mechanism for producers to share their farm-level preparedness plans back with the Regional Districts

Potential partners

- Agricultural organizations
- BC Ministry of Agriculture
- BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development (Range staff and BC Wildfire Services)
- First Nations
- Partners in Protection Canada (FireSmart Program)
- Kootenay and Boundary Farm Advisors
- Columbia Basin Trust
- Regional Districts and local governments
- Emergency Management BC

Timeframe

- Farm-level preparedness planning = Short-term (LESS THAN 2 YEARS)
- Developing and piloting a communication protocol = Short-term (LESS THAN 2 YEARS)

Cost

- Farm-level preparedness planning = Low (LESS THAN $50,000)
- Developing and piloting a communication protocol = Medium ($50,000–$100,000)

Next Steps for ACTION 3.1A

Action

→ ***Expand weather station coverage and improve producer access to station data***

Implementation details

- Two phases are required – first phase is coverage and gap assessment/feasibility analysis, second phase is securing partnerships and establishing weather network
- Phase 1 (assessment) can build on recent provincial weather network assessment by Agriculture Climate Adaptation Research Network (ACARN) and Environment and Climate Change Canada/Canadian Centre for Climate Services
- This project could link into Farmwest and the BC Ministry of Agriculture's weather network expansion initiative, and could partner with technical colleges to hire students to check and maintain stations.
- Phase 2 (establishing a network) will be dependent on securing strong partnerships and funding. The strength of these partnerships (and geographic concentration of agricultural operations) may necessitate the establishment of sub-regional networks (e.g., Creston area).

Potential partners

- Agricultural organizations
- BC Ministry of Agriculture
- Other government agencies (which maintain weather stations)
- Regional Districts and local governments
- First Nations
- Farmwest
- Growers' Supply
- Post-secondary institutions

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Timeframe

- Assessment = Short-term (LESS THAN 2 YEARS)
- Establishing network = Medium-term (2–4 YEARS)

Cost

- Assessment = Low (LESS THAN $50,000)
- Establishing network = Medium ($50,000–$100,000; will require partner funding)

NEXT STEPS FOR ACTION 3.2C

Action

→ ***Identify and undertake applied research to support innovative farm practices to mitigate risk from climate change impacts***

Implementation details

- Begin with identifying commodities at greatest risk of negative impacts, impacts of greatest concern (e.g., wildfire smoke, pollinator populations, extreme heat, farm activity timing), along with suitable technologies/practices
- Develop case studies and pilots to demonstrate and evaluate technologies and practices (including cost-benefit analysis) directed at highest risk commodities identified above
- Knowledge transfer will be vital to success; work through local channels/champions (producers, Kootenay and Boundary Farm Advisors) to share findings

Potential partners

- Agricultural organizations
- Producers
- BC Ministry of Agriculture
- BC Agricultural Climate Adaptation Research Network
- Kootenay and Boundary Farm Advisors
- Post-secondary institutions
- Kootenay Permaculture Institute
- Agricultural supply/seed companies

Timeframe

- Assessment = Short-term (LESS THAN 2 YEARS)
- Piloting and demonstration = Medium-term (2–4 YEARS)

Cost

- Assessment = Low (LESS THAN $50,000)
- Piloting and demonstration = Medium ($50,000–$100,000)

Next Steps for ACTIONS 4.1A

Action

→ ***Identify suitable green infrastructure options and priority pilot areas***

Implementation details

- It will be important to tie-into existing initiatives (e.g. green infrastructure planning/projects with Regional Districts) to keep costs down and to build partnerships for projects
- Metric of success would be improving consideration for/ understanding of agricultural values when planning green infrastructure projects
- Moving from the assessment phase (identifying suitable green infrastructure options for the region) into establishing green infrastructure projects is dependent on strong local partnerships and co-funding

Potential partners

- Agricultural organizations
- Producers
- BC Ministry of Agriculture
- BC Ministry of Environment
- Regional Districts and local governments
- First Nations
- Selkirk College Rural Development Institute and GIS department
- Local streamkeeper societies
- BC Wildlife Federation
- Ducks Unlimited
- Creston Valley Wildlife Authority
- Creston Wildsight Society

Timeframe

- Assessment = Short-term (LESS THAN 2 YEARS)
- Piloting and demonstration = Medium-term (2–4 YEARS)

Cost

- Assessment = Low (LESS THAN $50,000)
- Piloting = Low (LESS THAN $50,000; will require partner funding)

Next Steps for ACTION 4.2C

Action

→ ***Develop and improve financial cost-share supports for riparian enhancement***

Implementation details

- In-kind support (for project design, implementation) can serve as an important cost-share support and should be included in analysis
- There are many strong local riparian enhancement groups who can provide support and expertise
- Look to reduce permitting burden by building strong relationships with government agencies

Potential partners

- BC Ministry of Agriculture
- BC Ministry of Environment
- Regional Districts and local governments
- First Nations
- Local streamkeeper societies
- BC Wildlife Federation
- Ducks Unlimited
- Credit unions
- Columbia Basin Trust

Timeframe

- Medium-term (2–4 YEARS)

Cost

- Medium ($50,000–$100,000)

Appendix A: Weather, Climate & Variability

Weather is what happens on a particular day at a particular location. Farmers are continually required to adapt to weather conditions to effectively plan and manage their businesses. In contrast, climate refers to long-term trends, patterns and averages over time. These are more difficult to notice through day-to-day or year-to-year experiences, or short-term records of weather. However, over a period of decades, recorded observations can characterize the climate and identify trends.

Anyone who pays close attention to weather forecasts appreciates that predictions of weather are often limited in their accuracy. This is partly because of the many factors that impact weather. Turning to longer, climate-related timescales, in BC we are familiar with the 3–7 year cycles of El Niño and La Niña ("ENSO"), which dramatically impact the climate of individual seasons and years (see Figure 5). Compared to La Niña years, conditions in BC during El Niño years are typically warmer and drier in winter and spring, and less stormy in southern BC.

Adding to the complexity, the Pacific Decadal Oscillation (PDO) is a known pattern that shifts over longer time periods (20 to 30 years) and this is associated with different temperature and precipitation conditions here in BC. It also has a warm and cool phase, and so it can either enhance or dampen the impacts of El Niño and La Niña conditions in a given year.

Figure 5 shows the difference between climate variability, oscillations, and climate change. The many factors that impact the weather create significant variation in what we experience from year to year. However, we are still able to chart averages over long periods of time.

For additional resources see *BC Agriculture Climate Change Adaptation Risk & Opportunity Assessment Series* (*https://bcagclimateaction.ca/regional/overview/risks-opportunities/*) and Pacific Climate Impacts Consortium video *Climate Insights 101: BC Climate Impacts and Adaptation: The Climate of British Columbia* (*https://pics.uvic.ca/insights/bc-regional-climate-impacts-adaptation/M2L1_SEPT23_2014/player.html*).

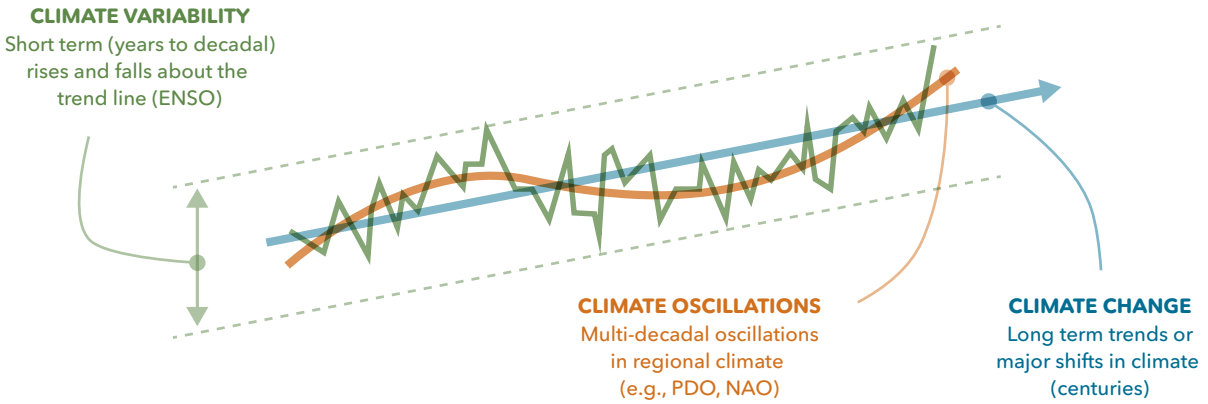

FIGURE 5 Climate Variability, Oscillations & Change

Diagram showing difference between climate variability, oscillations, and climate change. Adapted from original, courtesy of Pacific Climate Impacts Consortium, www.pacificclimate.org

Appendix B: Future Projections: Climate Maps & PCIC Tables

Table 2 Kootenay & Boundary Region Climate Projections — 2020s
(Source: Pacific Climate Impacts Consortium, *www.pacificclimate.org*)

Climate Variable	Time of Year	Projected Change from 1971–2000 Baseline to 2020s			Kootenay and Boundary (Baseline)
		Kootenay and Boundary (Range)	Kootenay and Boundary (Average)	BC (Average)	
Mean Temperature (°C)	Annual	+1.0 °C to +2.1 °C	+1.6 °C	+1.0 °C	2.5 °C
Precipitation (%)	Winter	–3% to +14%	+4.4%	+8%	286 mm
	Spring	–2% to +11%	+4.6%	+6%	231 mm
	Summer	–16% to –1%	-7.6%	+2%	213 mm
	Fall	–6% to +7%	+1.6%	+6%	268 mm
Growing Degree Days (degree days)	Annual	+147 to +365	+266	+153	969
Frost Free Days (days)	Annual	+15 to +34	+24	+10	155
Growing Season Length (days)	Annual	+12 to +26	+19	n/a	148

Table 3 Kootenay & Boundary Region Climate Projections — 2050s
(Source: Pacific Climate Impacts Consortium, *www.pacificclimate.org*)

Climate Variable	Time of Year	Projected Change from 1971–2000 Baseline to 2050s			Kootenay and Boundary (Baseline)
		Kootenay and Boundary (Range)	Kootenay and Boundary (Average)	BC (Average)	
Mean Temperature (°C)	Annual	+1.9 °C to +4.4 °C	+3.2 °C	+1.8 °C	2.5 °C
Precipitation (%)	Winter	–1% to +13%	+7%	+9%	286 mm
	Spring	0 to +19%	+12%	+15%	231 mm
	Summer	–33% to +2%	-12%	–1%	213 mm
	Fall	–1% to +15%	+7%	+17%	268 mm
Growing Degree Days (degree days)	Annual	+323 to +824	+580	+283	969
Frost Free Days (days)	Annual	+39 to +63	+49	+20	155
Growing Season Length (days)	Annual	+24 to +53	+39	n/a	148

TABLE 4 Kootenay & Boundary Region Sub-Regional Baseline
(SOURCE: Pacific Climate Impacts Consortium, *www.pacificclimate.org*)

Climate Variable	Time of Year	Invermere	Cranbrook	Creston	Slocan Valley	Grand Forks
Mean Temperature (°C)	Annual	5.2 °C	5.3 °C	7.3 °C	3.1 °C	7.5 °C
Precipitation (mm)	Winter	79 mm	119 mm	192 mm	394 mm	150 mm
	Spring	83 mm	111 mm	156 mm	302 mm	139 mm
	Summer	144 mm	146 mm	133 mm	234 mm	125 mm
	Fall	89 mm	120 mm	169 mm	368 mm	117 mm
Growing Degree Days (degree days)	Annual	1,547	1,493	1,773	1,015	1,910
Frost Free Days (days)	Annual	182	184	220	169	214
Growing Season Length (days)	Annual	194	191	210	153	212

TABLE 5 Kootenay & Boundary Region Sub-Regional Climate Projections — 2050s
(SOURCE: Pacific Climate Impacts Consortium, *www.pacificclimate.org*)

Climate Variable	Time of Year	Invermere	Cranbrook	Creston	Slocan Valley	Grand Forks
Mean Temperature (°C)	Annual	+3.2 °C	+3 °C	+3.1 °C	+2.9 °C	+3.2 °C
Precipitation (mm)	Winter	+8%	+6%	+6%	+6%	+11%
	Spring	+13%	+12%	+11%	+11%	+16%
	Summer	–9%	–11%	–13%	–14%	–19%
	Fall	+7%	+4%	+6%	+8%	+9%
Growing Degree Days (degree days)	Annual	+688	+694	+753	+595	+756
Frost Free Days (days)	Annual	+47	+51	+61	+49	+56
Growing Season Length (days)	Annual	+32	+36	+40	+37	+34

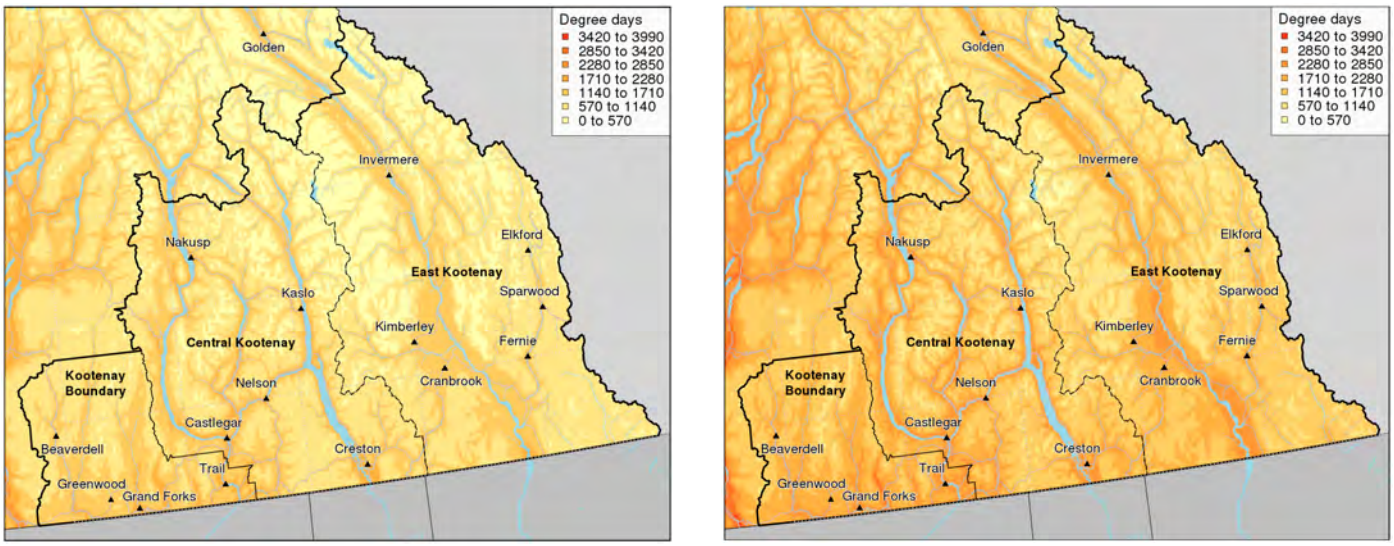

FIGURE 6 Growing Degree Days,
Baseline 1971–2000 (left) and Projections 2041–2070 (right)

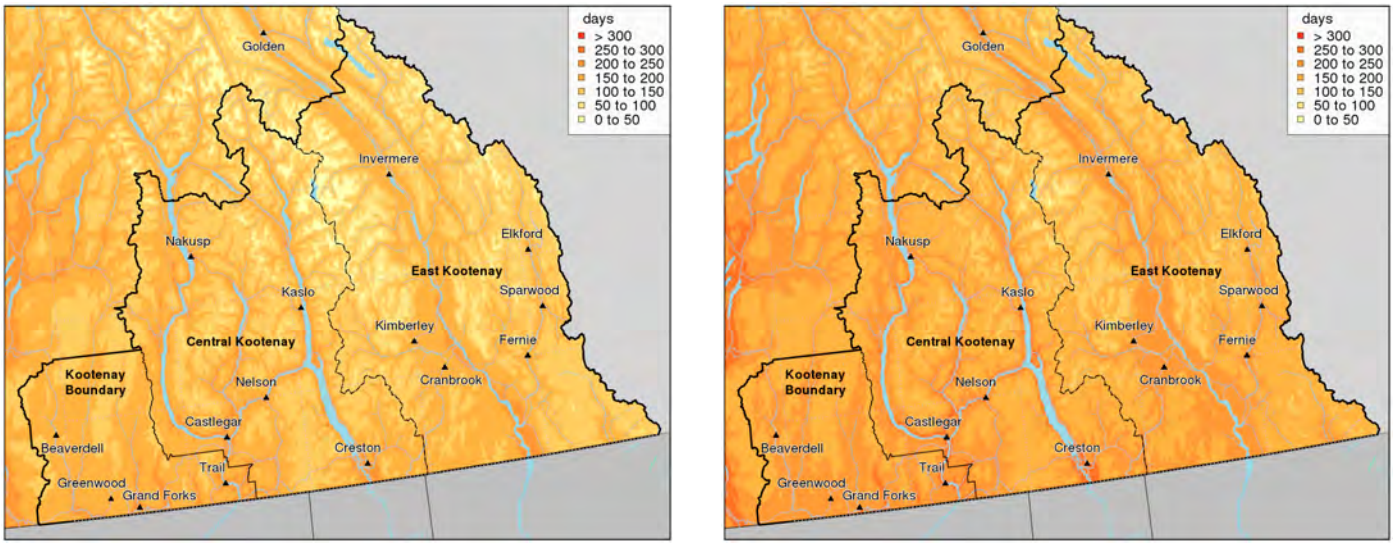

FIGURE 7 Growing Season Length,
Baseline 1971–2000 (left) and Projections 2041–2070 (right)

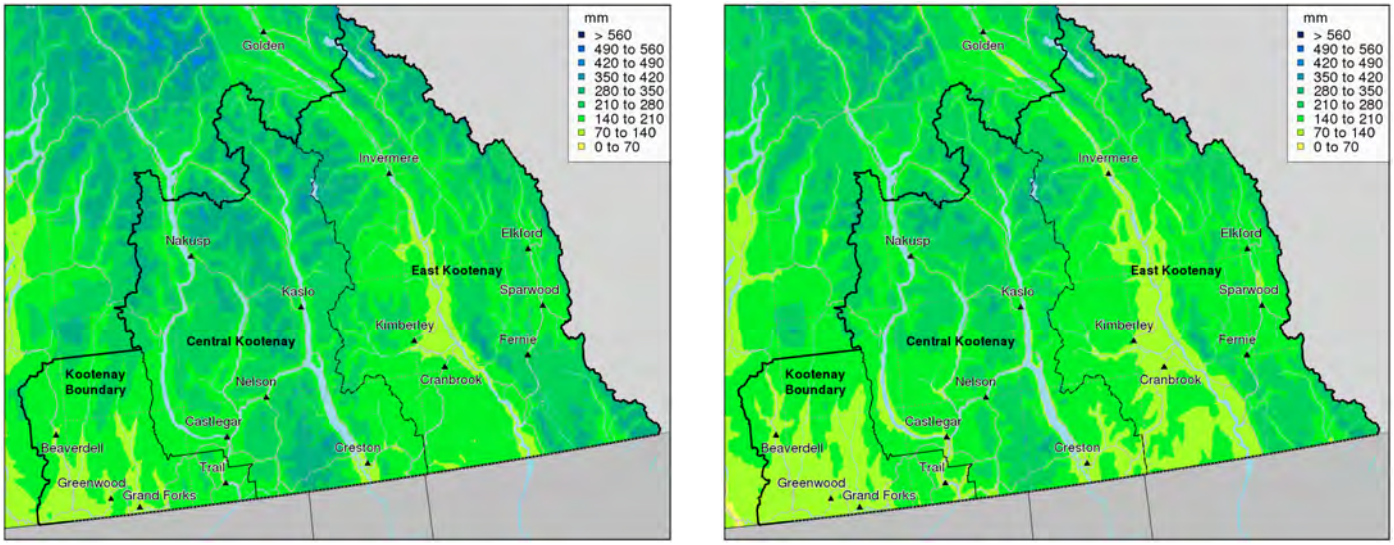

FIGURE 8 Summer Precipitation (mm), Baseline 1971–2000 (left) and Projections 2041–2070 (right)

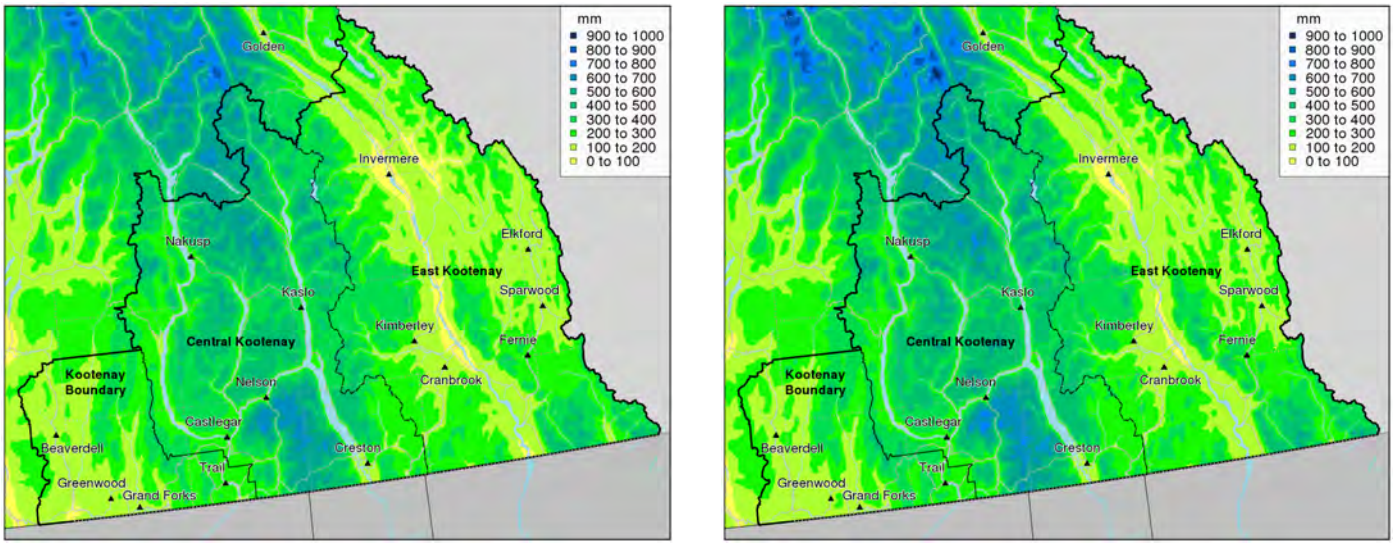

FIGURE 9 Winter Precipitation (mm), Baseline 1971–2000 (left) and Projections 2041–2070 (right)

Note that for legibility, winter and summer use different legends and so cannot be directly compared.

Appendix C: Definitions

- ***Annual Average Temperature***
  refers to the average of the nighttime low (minimum temperature) and the daytime high (maximum temperature) over a calendar year.

- ***Frost-Free Days (FFD)***
  refers to the number of days (in a calendar year) that the minimum daily temperature stayed above 0°C.

- ***Growing Degree Days (GDD)***
  are a measure of heat accumulation and represent the cumulative number of degrees that the average daily temperature is above a base temperature of 5°C, for all days of the year.

- ***Growing Season Length (GSL)***
  represents the number of days between the first span of six consecutive days with a daily mean temperature above 6°C and the last day with a daily mean temperature above 6°C.

- ***Heavy rain days (i.e., the 95th percentile wettest days)***
  represents the total amount of rain that falls on the wettest days of the year, specifically on days when precipitation exceeds a threshold set by the annual 95th percentile of wet days during the baseline period (1971–2000).

- ***Historic Baseline***
  is the average of the variable from 1971 to 2000 (variables are averaged over this 30-year period to smooth out annual variability).

- ***1-in-20 hottest day***
  refers to a day so hot that it has only a one-in-twenty chance of occurring in a given year. That is, there is a 5% chance in any year that temperatures could reach this magnitude.

Appendix D: Adaptive Management of Climate Change Impacts

Climate change adaptation decision-making is an inherently complex task that requires ongoing learning and reflection to adjust to changing information, events and conditions. As learning progresses, new solutions as well as new challenges will be identified. The following questions are provided as tools for navigating this evolving landscape and determining priorities for action.

Additional considerations when determining how to implement priority actions would include:

- Barriers (e.g., legislation, lack of working relationships)
- Assets/Enablers (e.g., leadership, integrating into existing plans/programs)
- Implementation costs
- Operation and maintenance costs
- Financing and resources
- Timeframe

Table 6 Developing & Prioritizing Adaptation Actions

Effectiveness	To what degree does this action reduce risk/vulnerability, and/or enhance resilience?
Adaptability	Can this action (and resources dedicated to it) be changed or redirected as conditions change?
Urgency	When does action need to be taken on this issue, in order to be effective by the time an impact is projected to occur?
Gaps & Assets	How does this action address identified gaps or barriers? How can it build on existing assets and resources?
Co-benefits ("no-regrets")	What other benefits would this action have, even if climate change impacts do not occur as projected?
Consequences	What could be the unintended and/or undesirable effects of taking this action? Can these be avoided or mitigated?
Extent	Do the benefits apply broadly in the region, or to specific individuals?
Relevance	Does this action have the support of the agricultural community?

Endnotes

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48 BC Ministry of Agriculture. (2016). *Agriculture in Brief: Regional District of Kootenay Boundary*. *https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/statistics/census/census-2016/aginbrief_2016_kootenay_boundary.pdf*

49 BC Ministry of Agriculture. (2016). *Agriculture in Brief: Regional District East Kootenay*. *https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/statistics/census/census-2016/aginbrief_2016_east_kootenay.pdf*

50 Calculated from Agriculture in Brief profiles (2006, 2011, 2016) for Kootenay Boundary, Central Kootenay and East Kootenays. These can be accessed on the BC Ministry of Agriculture's website at *https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/statistics/census-of-agriculture*

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73 For a detailed explanation, see the presentation by Trevor Murdoch from the Pacific Climate Impacts Consortium at *https://youtu.be/EqV9-jgFFeg* (21 minute mark).

74 Annual average temperature refers to the average of the nighttime low (minimum temperature) and the daytime high (maximum temperature) over a calendar year.

75 The historic baseline (used for all climate variables) is the average of the variables from 1971 to 2000. Variables are averaged over this 30-year period to smooth out annual variability.

76 Frost-free days is a derived variable referring to the number of days that the minimum daily temperature stayed above 0°C, useful for determining the suitability of growing certain crops in a given area. The method used to compute this on a monthly basis is from (Wang et al, 2006).

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97 Jason McDiarmid, Utility Services Manager, Regional District of Central Kootenay, email communication, April 10, 2019.

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99 Citizen science is defined as scientific work undertaken by members of the general public, often in collaboration with or under the direction of professional scientists and scientific institutions. Examples of Canadian Citizen Science projects can be found at *http://science.gc.ca/eic/site/063.nsf/eng/h_97169.html*

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104 Information on the pilot project Wildfire Pre-Season Communications and Information Exchange Pilot Project can be found at *https://bcagclimateaction.ca/project/ok09/*.

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107 In winter 2019, the BC Agriculture & Food Climate Action Initiative hosted ten provincial workshops focused on farm-level wildfire preparedness and planning (including workshops in Cranbrook, Creston and Greenwood). The BC Cattlemen's Association, in conjunction with AgSafe BC, also hosted a series of farm-level preparedness workshops across BC in winter 2018.

108 Blackwell, B. (2018). *Discussion Document: Planning and Information Exchange for Wildfire Impact Reduction*. BC Agriculture & Food Climate Action Initiative.

109 A list of woodlot licencees for the province of British Columbia can be found at *https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/timber-tenufes/woodlots/issued_woodlot_licences.pdf*. More information about the woodlot licence program is available at *https://www2.gov.bc.ca/gov/content/industry/forestry/forest-tenures/timber-harvesting-rights/woodlot-licence*.

110 The Community Resiliency Investment (CRI) program was introduced by the government of British Columbia in 2018. It is intended to reduce wildfire risks and wildfire impacts in communities by providing funding and support to complete FireSmart initiatives, including priority fuel management activities on provincial Crown land and on private land. Information about the Community Resilience Investment Program can be found at *https://www2.gov.bc.ca/gov/content/safety/wildfire-status/prevention/crip*.

111 Burning embers or other flaming material from a wildfire can be carried by the wind to start new spot fires in areas of unburned fuel. It's quite common for burning embers that are thrown ahead of the leading edge of the fire (the "flame front") to allow wildfires to "jump" fuel-free barriers such as highways or bodies of water. FireSmart BC. *https://firesmartcanada.ca/resources-library/manuals/*

112 Xiang, Tao., and Chaya, Mona. (2019). *Climate change exacerbates the challenge of plant pests*. Foodtank: the Think Tank for Food. *https://foodtank.com/news/2019/03/climate-change-exacerbates-the-challenge-of-plant-pests/*

113 Duane Holder, horticulture consultant, personal communication, April 9, 2019.

114 Decision support tools (DSTs) are information technology resources designed to help farmers tackle complex problems in crop production, inputting the best available data combined with knowledge about best practices.

115 The BC Decision Aid System (BC DAS) is an example of a transferable tool that links data from 27 weather stations in the Okanagan, along with weather forecast data and pest models, to predict pest emergence timing for fruit crops. The tool has a clear, simple interface and links to conventional and organic management recommendations. *https://www.oksir.org/bcdas/*

116 AgWeather Quebec (AQ) provides dozens of bioclimatic models that help producers determine the best time to apply inputs to their fields (pesticides, fungicides, etc.), depending on the specific climate conditions in their area. AQ also provides a management tool for to hay producers to help them determine the best time for the first cut of hay to ensure optimal forage quantity and yield. *http://www.agrometeo.org/indices/category/plantes_fourrageres*

117 Tam, S., Anslow, F. (2018). *Gap Analysis and Overview of Weather Station Data in British Columbia Agricultural Regions*. British Columbia Agricultural Climate Adaptation Research Network. *https://www.bcacarn.com/weather-station-project/*

118 *A Guide to On-Farm Demonstration Research* includes step-by-step instructions on developing research objectives and formulating a research question, deciding what to measure and how to measure it, scouting for relevant research, collecting data and analyzing results. While developed for forage producers, the methodology can be applied to any production system. *https://bcagclimateaction.ca/documents/FI03-On-Farm-Demonstration-Research-Guide.pdf*

119 Information on the project Enabling Climate Change Adaptation through Grab & Go On-Farm Research Templates can be accessed at *https://bcagclimateaction.ca/project/fi19/* .

120 Information on the Farm Adaptation Innovator project Adapting to Low Light Growing Conditions Using High Tunnel Structures can be found at *https://bcagclimateaction.ca/project/fi14/* .

121 This CAI supported project, based in the Cariboo and completed in 2018, combined input from producers on their major pests of concern, statistics on the acreage and value of crops affected by certain pests, information on future biogeoclimatic (BEC) zone modeling to predict shifts to pests, and other criteria to prioritize and rank pests. *https://bcagclimateaction.ca/project/cb13/*

122 Pest alerts are distributed from Canadian Food Inspection Agency (CFIA), but these are reactive once a pest outbreak has occurred. The BC Ministry of Agriculture issues pest alerts and assists with production guides that include information about commodity specific pest management options.

123 In the Cariboo, the Invasive Species Council of BC is consolidating multiple weed reporting apps into one comprehensive app, and other species of pest (in addition to weeds), will be included in the app. If successful, this could be broadened to other regions as a tool.

124 IPM remains the most integrated way to address the increasing severity of pests resulting from climate change. T. Xiang, and M. Chaya. *Climate change exacerbates the challenge of plant pests.* Foodtank: the think tank for food. *https://foodtank.com/news/2019/03/climate-change-exacerbates-the-challenge-of-plant-pests/*

125 Kevin Murphy, Regional Agrologist, BC Ministry of Agriculture, personal communication, April 10, 2019.

126 Pacific Climate Impacts Consortium. (no 70)

127 Regional District Central Kootenays website. *https://rdck.ca/EN/main/services/emergency-management/emergency-preparedness/floods.html*

128 Floodplain maps identify areas that experience periodic flooding from nearby rivers, lakes, streams and the sea and provide information on the spatial distribution of flood construction levels. A comprehensive list of British Columbia floodplains (and associated floodplain maps) can be found at *https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/drought-flooding-dikes-dams/integrated-flood-hazard-management/flood-hazard-land-use-management/floodplain-mapping/floodplain-maps-by-region* . Kootenay floodplain maps can be found under Region 4 – Kootenay, Boundary floodplain maps can be found under Region 3 – Southern Interior.

129 Graham Watt, Recovery Manager, City of Grand Forks and Regional District of Kootenay Boundary, personal communication, May 17, 2019.

130 Cohen, R. (2014). *Fact Sheet #1: Functions of Riparian Areas for Flood Control*. Division of Ecological Restoration, Massachusetts Department of Fish and Game.

131 See Strategy 4.2 for examples of local supports. Financial cost-shared incentives may also be available to eligible producers who develop and have completed a current EFP through the Canadian Agricultural Partnership Beneficial Management Practices (BMP) Program to implement actions identified in their on-farm

environmental actions plan. BMP categories and practices can be found at *http://ardcorp.ca/wp-content/uploads/2018/06/2018-19-BMP-List-Version-3.0-June-21-FINAL.pdf*

132 *Lower Kootenay Band — Creston Floodplain Management Plan: Baseline Study Stage 1*. (2014). (Not public). Provided by Lower Kootenay Indian Band.

133 For more information see resources: Rutherford, S., (2007). *The Green Infrastructure Guide: Issues, implementation strategies and success stories*. West Coast Environmental Law Research Foundation and Fraser Basin Council. (2017). *Rethinking our Waterways: A Guide to Water and Watershed Planning For BC Communities In The Face Of Climate Change And Other Challenges*.

134 Ibid.

135 Information on the RDCK Flood and Geohazard Risk Review can be found on the RDCK website. *https://rdck.ca/EN/meta/news/news-archives/2018-news-archive/regional-flood-and-geohazard-risk-assessment-will-help-reduce-the-impact-of-disasters.html*

136 For more information see Regional District of Kootenay Boundary. (2018). *Community Recovery Options for Areas Damaged by May 2018 Flooding in the Kettle River Watershed. https://bfre.ca/wp-content/uploads/Kettle-River-Flood-Recovery-Report-v-web.pdf*

137 Producers who develop and have completed a current Environmental Farm Plan may be eligible to apply for cost-shared incentives through the Beneficial Management Practices (BMP) Program to implement actions identified in their on-farm environmental actions plan. BMP categories and practices can be found at *http://ardcorp.ca/wp-content/uploads/2018/06/2018-19-BMP-List-Version-3.0-June-21-FINAL.pdf*.

138 For more information on Farmland Advantage's Payment For Ecosystem Services pilot project visit *http://farmlandadvantage.com/about*.

139 The City of Kelowna's NeighbourWoods Program is a residential planting initiative developed to encourage citizens to help grow and preserve Kelowna's healthy neighbourhoods' urban forest. The program provides residents with opportunities to purchase discounted trees (subsidized by the City) on a set date during the year. *https://kelowna.ca/parks-recreation/urban-trees-wildlife/neighbourwoods*

140 An example of a strong resource is the Regional District of East Kootenay Seasonal Flooding Newsletter is available on the Emergency Services page of the RDEK website. *https://rdek.bc.ca/departments/emergencyservices/emergencyinfo/*

141 The BC Ministry of Agriculture has partnered with industry associations to develop all-hazard planning guides for beef, dairy, poultry and pork producers and for mixed farms. Government of British Columbia. (2016). *https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/business-market-development/emergency-preparedness*

142 The six diking districts in the Creston area are the Goat River Residence Association, The Duck Lake Diking District, the Creston Diking District, the Creston Valley Wildlife Management Area, the Reclamation Diking District. Details on each dike can be accessed at *https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/integrated-flood-hazard-mgmt/dikes_listed_by_ownerauthority.pdf*.

143 Lower Kootenay Indian Band. (no 135)

144 Fraser Basin Council. (2010). *Environmental Protection in Flood Hazard Management: A guide for practitioners*. *https://www.fraserbasin.bc.ca/_Library/Water/report_flood_and_environmental_protection_2010.pdf*

Urls in these Endnotes were current as of June 2019.

Advisory Planning Commission
Electoral Area A

Minutes

July 16, 2019
Fernie Chamber Commerce Office

Present:
[Member], Chair
[Member], Vice Chair
Joe Caravetta Secretary
Dale Garrett
David Beranek
Dan Savage
Director Mike Sosnowski

1. Call to Order

Chair Joe called the meeting to order at 730 pm.

2. Delegations

Mike Delich spoke to their application p719 117 and advised that they are seeking a variance on the set back to proceed with building construction. Strata of nearby other buildings are supportive of the application and will be writing letters of support.

Barry Stuart spoke to his application P 719 115 and advised he was seeking a variance or height of building. Provided diagrams of adjacent homes and advised that neighbors were in support of the application.

Doug Feely spoke to his application P719 116 and advised Island Lake lodge is seeking a variance on their liquor license hours to accommodate weddings.

3. Adoption of the Minutes

Moved by David
Seconded by Dan

That the minutes of the Advisory Planning Commission meeting held on June 18, be adopted.
CARRIED

4. Planning & Development Services Monthly Report

Moved by Dale
Seconded by Dan

That the monthly Planning & Development Services Report be received.

5. Agriculture Land Reserve Referrals

6. Bylaw Amendment Application

7. Development Variance Permit Application

P719 115 Barry Stuart /resort Drive Fernie Alpine Resort

Moved by David
Seconded by Dan

That the Advisory Planning Commission recommends the Stuart Development Variance Permit application be Supported
CARRIED

P719 117 Polar peeks Properties/timberline crescent Fernie Alpine

Moved by Dale
Seconded by Dan

That the Advisory Planning Commission recommends the Polar Peeks Development Variance Permit application be Supported
CARRIED

8. Ministry of Forests, Lands, Natural Resource Operations and Rural Development (NRO) Referrals

9. Liquor & Cannabis Licence Applications

P719 116 Island Lake Lodge /Mt Fernie Road Fernie

Moved by Joe
Seconded by Dan

That the Advisory Planning Commission recommends the Island Lake Lodge application be supported
CARRIED

10. Adjournment

The meeting adjourned at 8:20

Advisory Planning Commission
Electoral Area B

Minutes

July 17, 2019
Baynes Lake Fire Hall

Present:
Shayne Webster, Chair
Cory Wentzell, Vice Chair
Lily Durham, Secretary
Josh Pedersen
Wendy Salanski
Andy McDonald
Kent Holmes
Dave Gonnelly
Maureen Coulombe
Marjorie Reay
John Todd

Director Stan Doehle

1. Call to Order

Chair Shayne Webster called the meeting to order at 7:03pm

2. Delegations

Stan Doehle spoke to their application P 719 207- Doehle/Chief David Rd, Baynes Lake (Stan removed himself from the room during discussion due to conflict of interest)

3. Adoption of the Minutes

Moved by Wendy Salanski
Seconded by Dave Gonnelly

That the minutes of the Advisory Planning Commission meeting held on June 6, 2019 be adopted with revision of Delegations name from Sabey to Leaney.
CARRIED

4. Planning & Development Services Monthly Report

Moved by Kent Holmes
Seconded by Dave Gonnelly

That the monthly Planning & Development Services Report be received.

5. Agriculture Land Reserve Referrals

P 719 207 – Doehle/Chief David Rd, Baynes Lake

Moved by Lily Durham
Seconded by Kent Holmes

That the Advisory Planning Commission recommends the Doehle/Chief David rd., Agricultural Land Reserve application be supported.
CARRIED

Comments: Unanimous

5. Bylaw Amendment Application

No Application

6. Development Variance Permit Application

No Application

7. Ministry of Forests, Lands, Natural Resource Operations and Rural Development (NRO) Referrals

P 151 200 – Koocanusa Recreation Steering Committee/Dorr-Grasmere

Moved by Maureen Coulombe
Seconded by Wendy Salanski

That the Advisory Planning Commission recommends the Koocanusa Recreation Steering Committee NRO Referral be refused based on the following conditions:
DEFEATED

Comments: Road access to the river north of the Elk River Bridge be open to the public for motorized access.
What does rough road (restricted) mean?

8. Liquor & Cannabis Licence Applications

No Application

9. Adjournment

The meeting adjourned at 7:56 pm.

MINUTES of the Electoral Area C Advisory Planning Commission meeting held on Thursday, **July 11, 2019** in the Conference Room at the RDEK office in Cranbrook.

PRESENT

Lee-Ann Crane, Chair & Secretary	Bob Bjorn, Vice Chair
Herb Janzen	Ilene Lowing
Richard Wake	Jim Westwood

ABSENT

Chris Caron	Roger Mitchell
Wayne Stone	Rob Gay, Electoral Area C Director

The meeting was called to order at 7:00 pm.

DELEGATIONS

310613 BC Ltd. / Three Bars Guest Ranch – ALR Non-Adhering Residential Use Application

Hans Plechinger from the Three Bars Guest Ranch presented information on their ALR Non-Adhering Residential Use application for placement of a manufactured home as a principal dwelling on their property located at 9430 Wycliffe-Perry Creek Road. Mr. Plechinger provided the history of ownership and operations at the Ranch. He explained the need for the manufactured home and advised that the 'old cabin' is no longer habitable due to age and condition and that this building would be used for storage. Mr. Plechinger further advised that the plan to replace the 'old cabin' as a dwelling unit with a manufactured home had been in place before ALC rules changed to only allow one dwelling per lot.

Brian Passey – 4283 Lakeview Drive – DVP Application

Mr. Passey provided information on his proposal to construct a wheelchair ramp on their property at 4283 Lakeview Drive in the Jim Smith Lake area. It was noted that the ramp would be 4 feet wide (handrails within the 4 feet), constructed on a 1:12 slope, and made of 2x6 boards sitting on edge on concrete blocks. A front-yard setback variance from 6.0m to 1.2m is required to construct the ramp from the house to the parking area.

Darren Pickering – 7834 Monroe Lake Road – DVP Application

Mr. Pickering outlined his proposal to construct an accessory building on his property at 7834 Monroe Lake Road, west of Moyie Lake Road. The building is proposed to be 334 m^2 with the height being 6.1m. He advised that the higher roof is required to accommodate a 12-foot door and 14-foot ceiling in order to park a large recreational vehicle in the building and to avoid having posts within the structure. Mr. Pickering noted that the building would not be used to store items from his commercial operation in Cranbrook, but instead would be used to store personal items and to get them out of his shop in town. He also noted that only one neighbour could actually see or be bothered by the higher building and that neighbour has indicated his support.

Harvey Bombardier – 7547 Green Bay Road – NRO Referral

Mr. Bombardier advised that the purpose of his License of Occupation application is to legalize a wharf that has been in existence for over 20 years. The wharf is located on Crown foreshore immediately across the road from where his cabin is located. He also noted that all his neighbours have wharves and that there is no intent to alter the wharf in any way.

MINUTES

Moved by Bob Bjorn Seconded by Herb Janzen

That the minutes of the June 13, 2019 APC C meeting be adopted as circulated.

CARRIED

ALR APPLICATION

P 719 338 3130613 BC Ltd (Three Bars Guest Ranch) / 9430 Wycliffe-Perry Creek Road, west of Wycliffe

Moved by Jim Westwood Seconded by Herb Janzen

That the 3130613 BC Ltd (Three Bars Guest Ranch) ALR Non-Adhering Residential Use application for placement of a manufactured home as a principal dwelling on property located at 9430 Wycliffe-Perry Creek Road, **be supported**.

CARRIED

DEVELOPMENT VARIANCE PERMIT APPLICATIONS

P 719 335 Passey / 4283 Lakeview Drive, Jim Smith Lake area west of Cranbrook

Moved by Bob Bjorn Seconded by Ilene Lowing

That the Passey DVP application to vary the Cranbrook Rural Zoning Bylaw to reduce the minimum front yard setback requirement from 6.0m to 1.2m for a wheelchair ramp addition on property located at 4283 Lakeview Drive in the Jim Smith Lake area, **be supported**.

CARRIED

P 719 337 Darren Pickering / 7834 Monroe Lake Road, west of Moyie Lake

Moved by Bob Bjorn Seconded by Herb Janzen

That the Pickering DVP application to vary the Moyie & Area Land Use Bylaw maximum permitted height of an accessory building from 5.0m to 6.1m for a 334 m^2 detached garage, **be supported**.

CARRIED

NRO REFERRAL

P 151 300 Bombardier / Crown foreshore across from 7547 Green Bay Road

Moved by Herb Janzen Seconded by Ilene Lowing

That the Bombardier License of Occupation application for specific permission to legalize an existing private recreational dock on Crown foreshore located across from 7547 Green Bay Road in the Moyie Lake area, **be supported**.

CARRIED

The meeting adjourned at 7:42 pm.

APC Minutes. July 16, 2019
Areas F&G

Present:

Area F	Area G
Norbert Schab- Chair	Hermann Mauthner
Colleen Roberts	Norm Funnell
MaryAnne Csokonay.	Stephane Stevens
Chris Zehnder	Owen Mitchell
Director Susan Clovechok	Director Gerry Wilke

Karl Conway - Secretary

Call to Order
Chair Norbert Schab called meeting to order at 7:05 pm

2 Minutes
2.1 APC Meeting July 16, 2019
Moved: Funnell; Second: Schab;
That the minutes of the APC meeting held on July 16, 2019 be adopted as amended to include member Doris Peters as present. Carried

2.2. Planning Commitee Meeting. June 6, 2019.
Minutes received

3.1 Reports
Planning&Develpment Services Report: July 2019
Report Received

4 Draft Lake Windermere OCP
Presentation of Draft RDEK Planner Kris Belanger (teleconference). Excellent summary and explanations from Mr Belanger. Subsequent to discussion the following motions made:
Regarding policy 5.3.1(i) under Commercial & Resort Land Use "An amendment to the Upper Columbia Valley Zoning Bylaw to remove mini-storage, boat and recreational vehicle storage from the list of permitted and accessory uses in the C-2, Service Commercial Zone is supported....."

To address the issue of mini/boat/RV storage in the LWOCP plan area and to provide alignment of policy5.3.1(i) with current zoning, an amendment to the Upper Columbia Zoning Bylaw No. 900 should be made that removes mini storage, boat, and recreational vehicle storage from the list of permitted and accessory uses in the C-2, Service Commercial zone concurrent with approval of the LWOCP or within 3 months of its approval by the RDEK Board of Directors.
Moved: Roberts; Second: Csokonay, Carried

The draft LWOCP be brought back to the APC for review after the public input from the June 9, 2019 open house website, comment forms, emails and letters submitted to the RDEK are considered. It is anticipated that based on this information, there may be changes made to the current document.
Moved: Roberts. Seconded: Zehnder. CARRIED

Development Variance Permit Application

5.1. P 719 529 Hemsing/Falcon Drive, Fairmont Hotsprings Area

Wendy Booth represented applicants to explain nature of request.

Moved: Funnell; Seconded: Stevens. CARRIED

Adjournment

The meeting was adjourned at 7:55 PM

Regional District of East Kootenay

Staff Report ...

Natural Resource Operations Referral

Date: July 24, 2019
File: P 151 100
NRO #409238

Applicant: Ministry of Forests, Lands, Natural Resource Operations and Rural Development: Recreation Sites and Titles Branch
Agent: Lisa Cox
Location: Hornaday Pass area, between Sparwood and Elkford
Legal: Unsurveyed Crown Land in the vicinity of Brule Creek

Proposal: Crown land application for a Designated Use Area under Section 17 of the *Land Act*, to protect and preserve an existing historical recreation trail. The trail is for non-motorized use only.

Options:

1. THAT the Ministry of Forests, Lands, Natural Resource Operations and Rural Development, be advised the RDEK supports the Designated Use Area under Section 17 of the *Land Act*, to preserve an existing historical recreation trail between Sparwood and Elkford.

2. THAT the Ministry of Forests, Lands, Natural Resource Operations and Rural Development be advised the RDEK does not support the Designated Use Area under Section 17 of the *Land Act*, to preserve an existing historical recreation trail between Sparwood and Elkford.

Recommendation: **Option # 1**
Policies from both OCP's support outdoor recreation opportunities that respect and protect resource values.

Property Information:

OCP Designation (Steeples and Elk Valley): RR, Rural Resource; includes agricultural, rural residential and rural resource land uses with parcel sizes 8.0 ha and larger. The RR designation also recognizes the use of these lands for public utility use, resource extraction, green space and recreation.

Elk Valley and Steeples OCP Policies:

- The provision of a broad spectrum of outdoor recreation opportunities, suitable for both residents and tourists, that respect the need to protect resource values, is supported

- The Regional District encourages management of Crown land in an environmentally responsible manner which:
  - Protects surface and groundwater sources;
  - Manages forest ingrowth;
  - Minimize risk of interface fire and wildfire;
  - Enhances wildlife habitat;

Property Information - cont'd:

- Protects viewscapes and scenery;
- Protects watershed ecological values, including waterfowl and fish and their corresponding habitat; and,
- Maintains diverse plant communities by managing invasive plants.

Zoning Designation (Steeples and Elk Valley): RR-60, Rural Resource Zone, minimum parcel size: 60 ha. Recreation reserves are a permitted use in all zones

Parcel Size: Area under application: approx. 2696 ha (6661 ac)

Density: N/A

ALR Status: Not within the ALR.

BC Assessment: N/A

Water / Sewer Services: N/A

Interface Fire Hazard Rating: Low to high, Crown land is not serviced by RDEK fire services

Flood Hazard Rating: There are several creeks that run through the subject area

Crown Land Management Plans: The Southern Rocky Mountain Management Plan designates the area as non-motorized in both snow-free months and snowbound months

Lake Management Plans: N/A

Shoreline Management Guidelines: N/A

Additional Information:

- The Ministry of Forests, Lands, Natural Resource Operations and Rural Development have indicated that access to the trapline has been provided to the trapper through a Section 16 Authorization under the Forest Recreation Regulations in the *Forest and Range Practices Act*.

- The referral states that the Recreation Sites and Trails Branch would like to ensure that any future proposals are compatible with the management intent for this Hornaday Pass reserve area. The overall intent is for a 'semi-primitive non-motorized recreation experience' and to maintain a 'high degree of naturalness'.

- The referral states that it is intended to conserve the forested, riparian, meadow and alpine areas, and retain all natural vegetation.

Additional Information – cont'd:

- The referral states that there will be opportunities for hiking and equestrian uses, but no public motorized use.

Consultation:

APC Area A: Not Support

APC Area C: Support

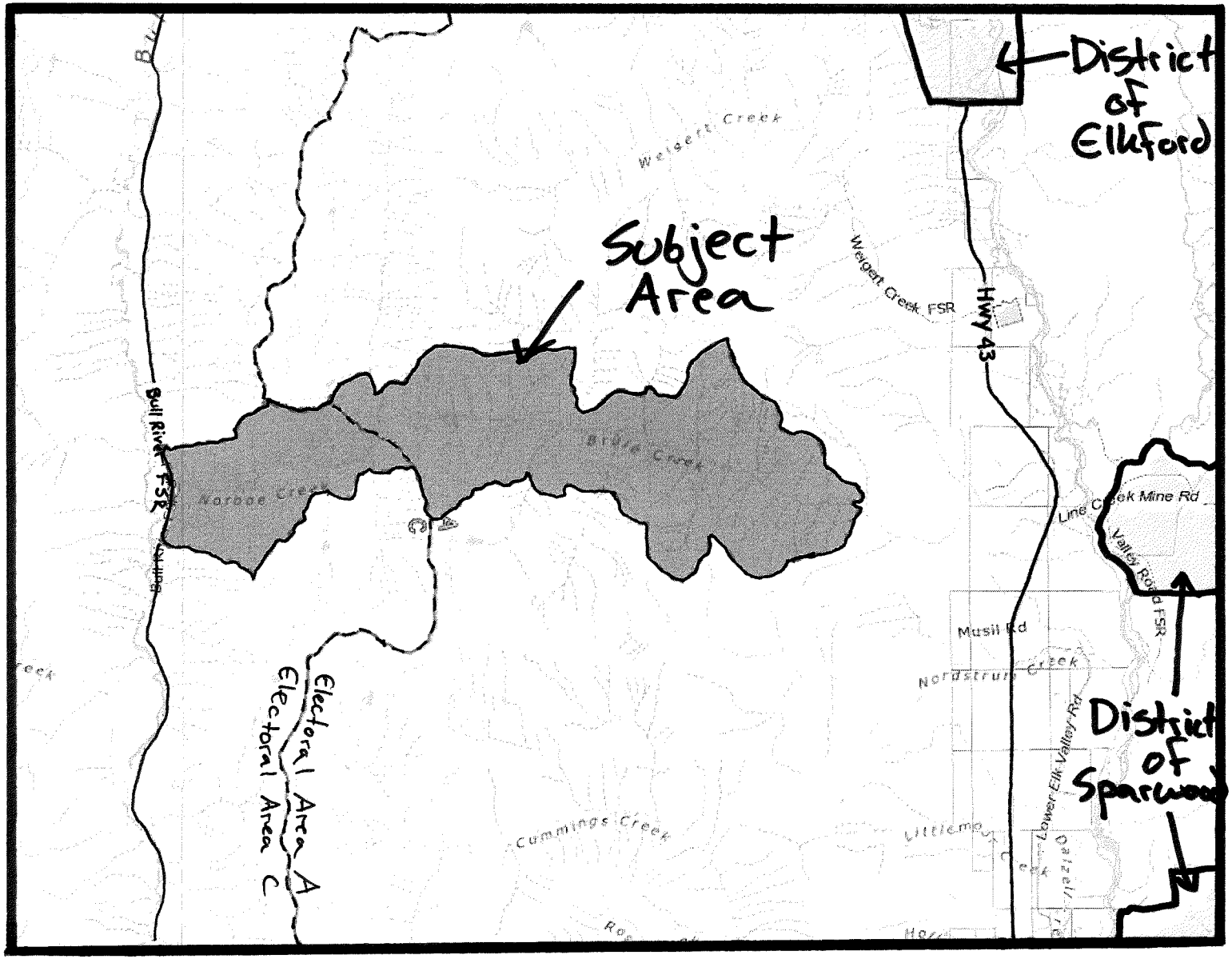
Documents Attached:

- Location Map
- Proposal

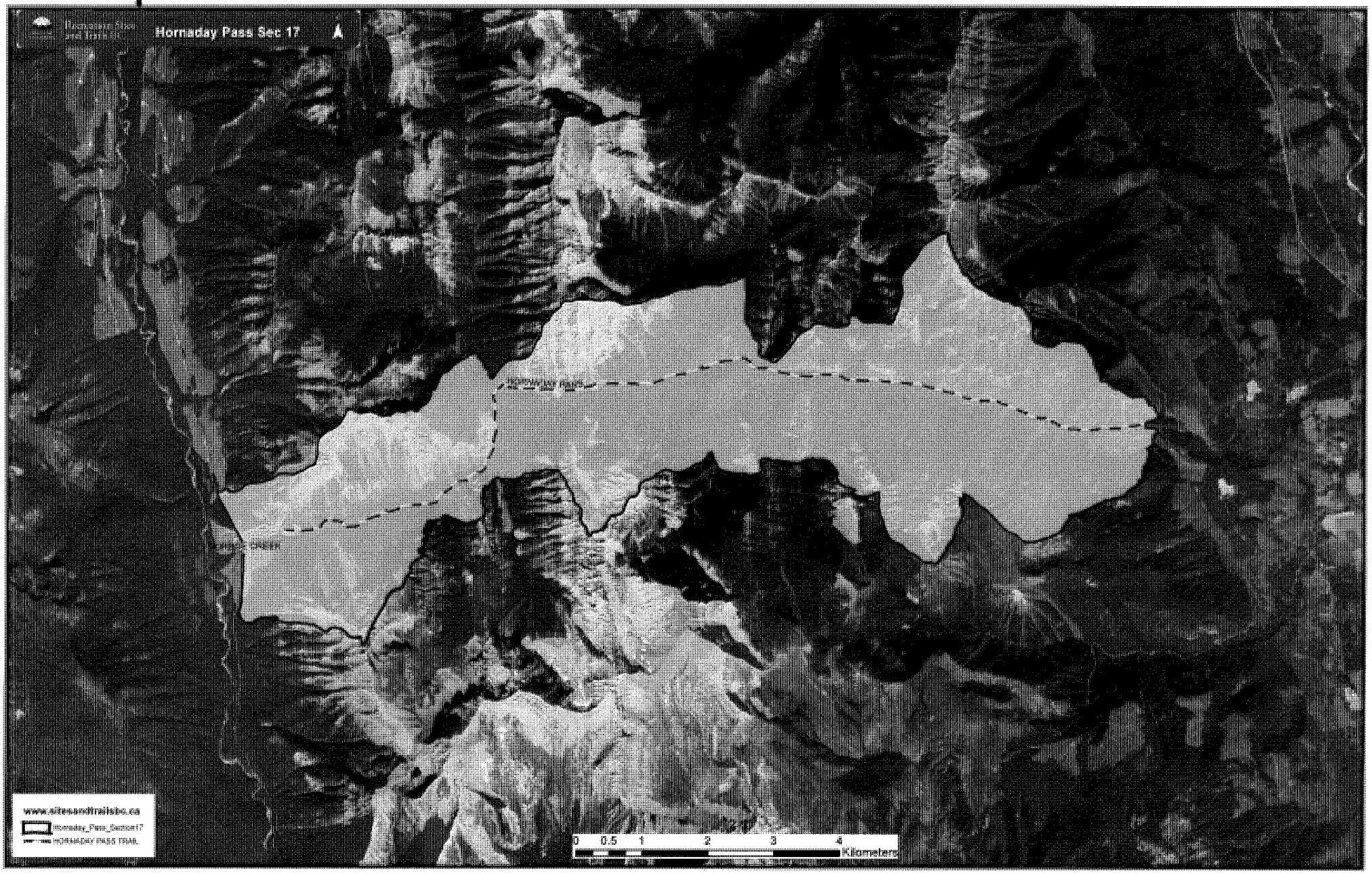
RDEK Contact:

Krista Gilbert, Planning Technician
Phone: 250-489-0314
Email: kgilbert@rdek.bc.ca

Location Map



Proposal



Regional District of East Kootenay

Staff Report ...

ALR Exclusion Application

Date: July 22, 2019
File: P 719 207

Applicants: Stanley and Gloria Doehle
Agent: Richard Haworth
Location: 561 Chief David Road, Baynes Lake
Legal: Lot 3, Block 10, District Lot 132, KD, Plan 1181

Proposal: To exclude their property from the ALR.

Options:

1. THAT the Agricultural Land Commission be advised the RDEK supports the Doehle ALR exclusion application for property at 561 Chief David Road in Baynes Lake.

2. THAT the Doehle ALR exclusion application for property at 561 Chief David Road in Baynes Lake be refused.

Recommendation: **Option # 1**
Schedule C of the OCP identifies the subject property as having potential for ALR exclusion, as does the boundary review completed by the ALC in 2015.

Property Information:

OCP Designation: MH, Medium Holdings

OCP Agricultural Policies:

- Land in the ALR is generally designated and supported for agricultural use.

- To reduce the potential for negative impacts on agriculture and resource based activities, ALR subdivision and exclusion outside of the areas identified on Schedule C are generally not supported.

Zoning Designation: RR-2, Rural Residential (Small Holding) Zone, minimum parcel size: 2 ha.

Parcel Size: 2.4 ha (5.9 ac)

Density: One Single Family Dwelling

ALR Status: Within the ALR

Interface Fire Hazard Rating: Moderate to high, within the Baynes Lake fire service area.

Flood Hazard Rating: The applicant has identified a slough located on the property. Floodplain regulations apply to development.

BC Assessment: Residential – single family dwelling

Agricultural Capability Ratings:

Water / Sewer Services: Onsite

The property is 50% Class 3 with limiting subclasses of topography and moisture deficiency, 40% Class 4 with limiting subclasses of topography and moisture deficiency and 10% Class 6 with a limiting subclass of topography. This rating is not considered improvable.

Agrologist Report: Not required

Additional Information:

- The application states that the property is flat and has a residence and outbuilding near the front of the lot. A slough occupies the rear half of the property.
- The application states that in 2015 the ALC completed a boundary review in the area. The ALC review supported exclusion of the subject property and surrounding area from the ALR. At that time the owners chose to remain within the ALR.
- The application states that the owners want to remove their property from the ALR so that they can construct a secondary dwelling on the property for the use of his adult daughter who is suffering from medical issues and requires assistance with daily living that will be provided by the property owners. Construction of a secondary dwelling on the property is not possible within the ALR.
- A secondary dwelling for a relative requiring care is identified as a permitted use by the RDEK on this property.

Consultation: **APC Area B:** Support

Documents Attached:

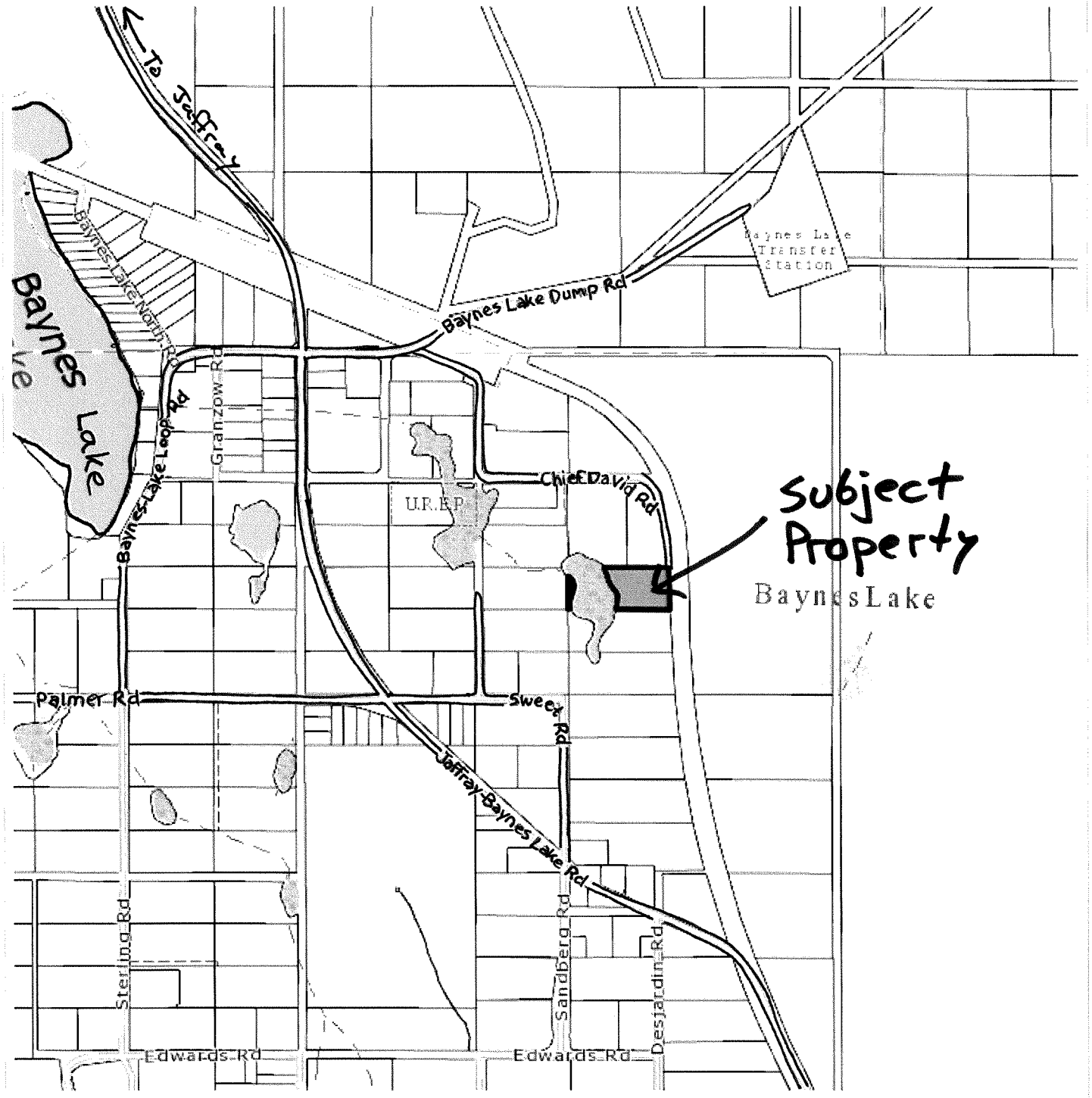
- Location Map
- Land Use Map
- ALR Boundary Map
- Agricultural Capability Map and Legend
- Schedule C of OCP
- Photo provided by applicant

RDEK Contact:

Krista Gilbert, Planning Technician
Phone: 250-489-0314
Email: kgilbert@rdek.bc.ca

Regional District of East Kootenay

Location Map



Notes:

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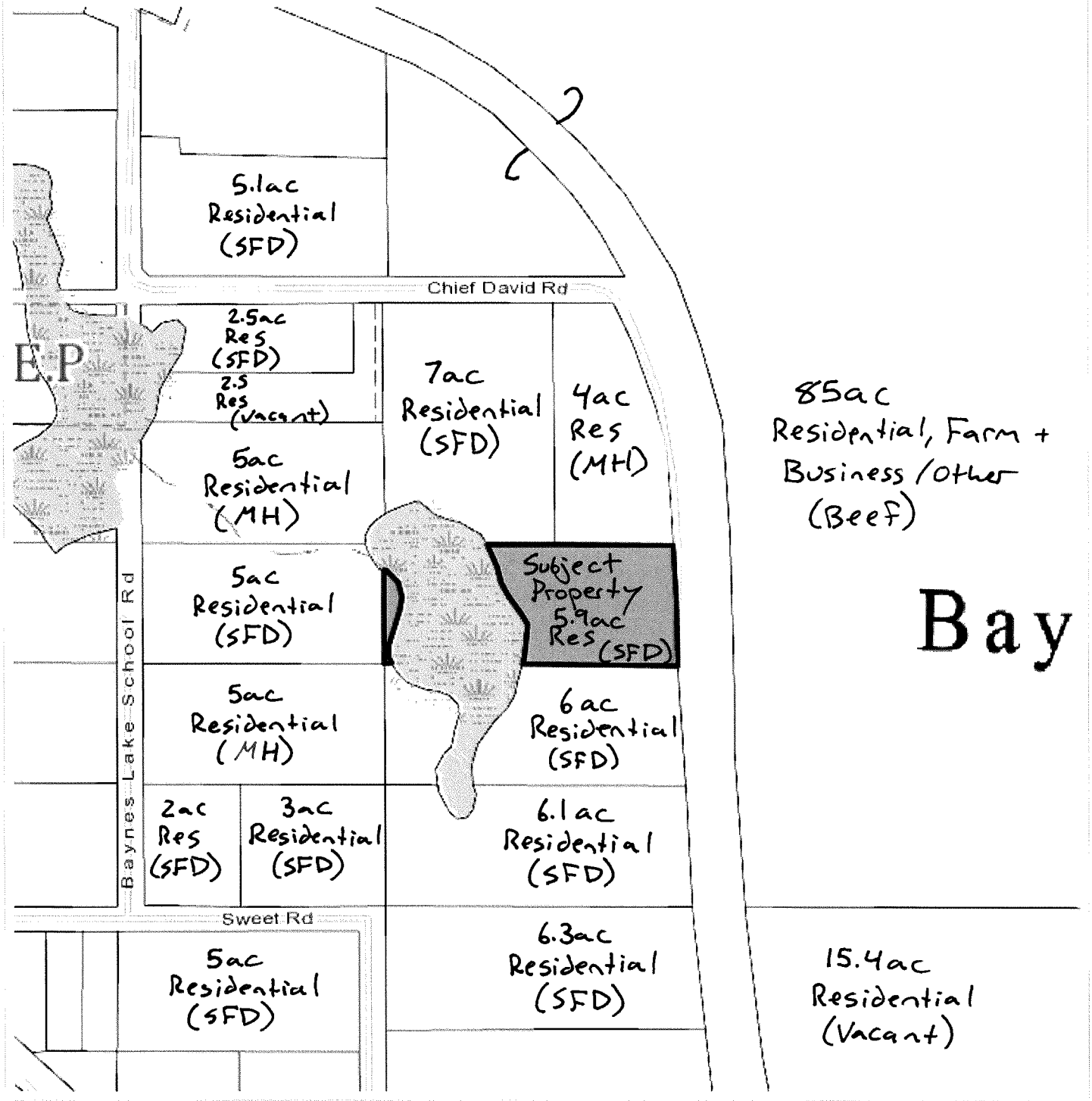
THIS MAP IS NOT TO BE USED FOR NAVIGATION

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.

Regional District of East Kootenay

Land Use Map



Notes:

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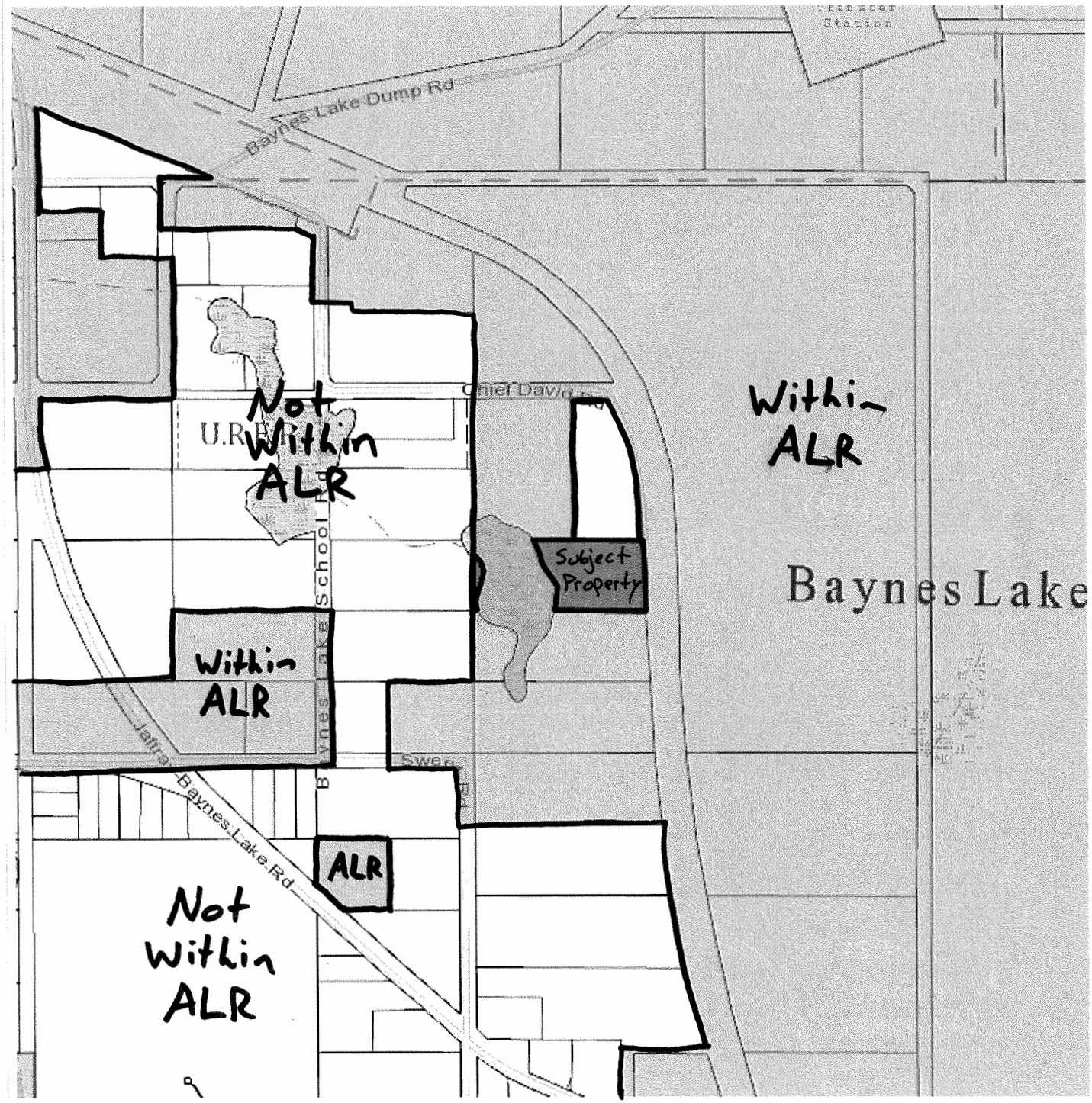
This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

Regional District of East Kootenay

ALR Boundary Map



Notes:

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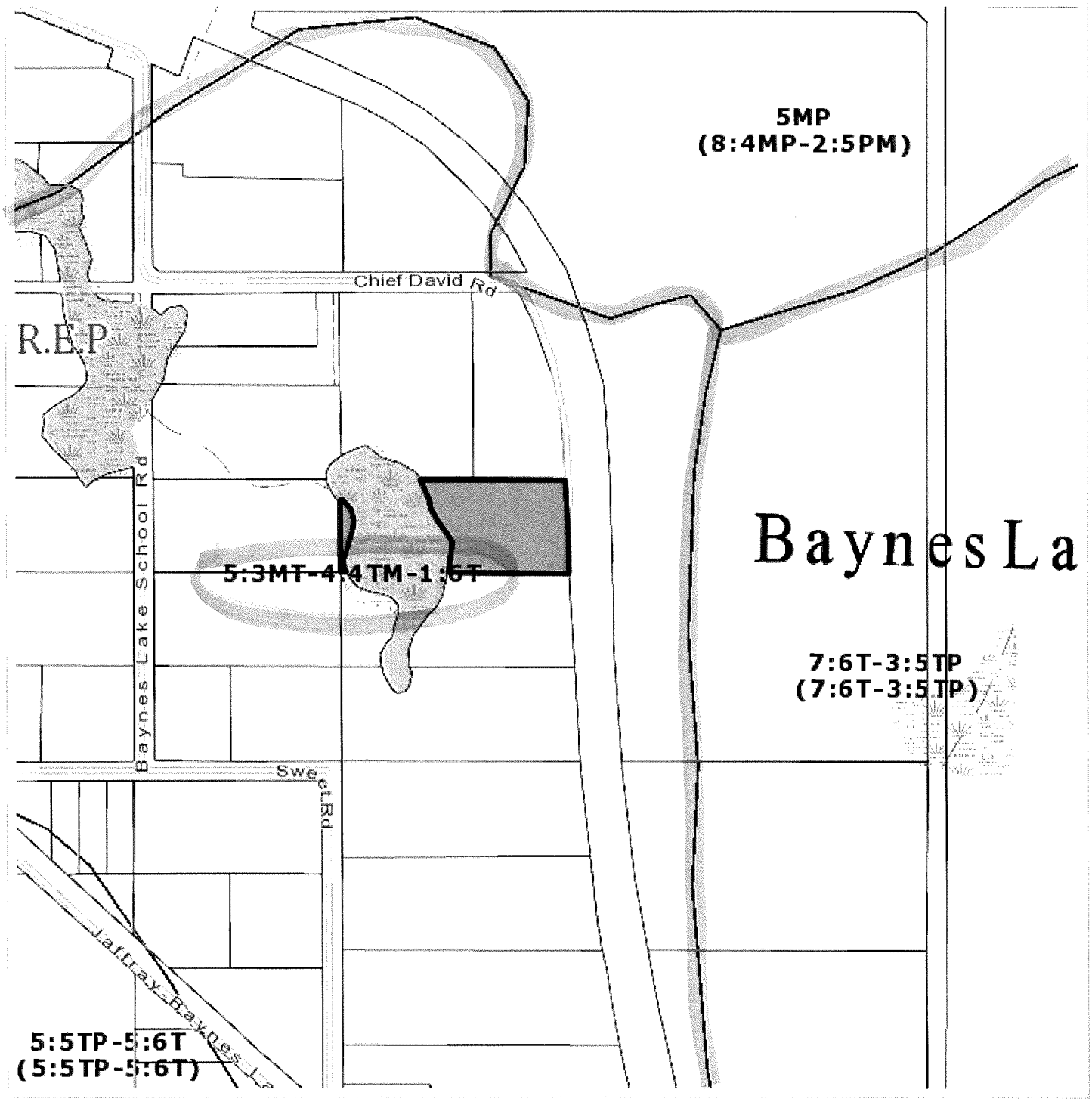
Regional District of East Kootenay

Agricultural Capability Map



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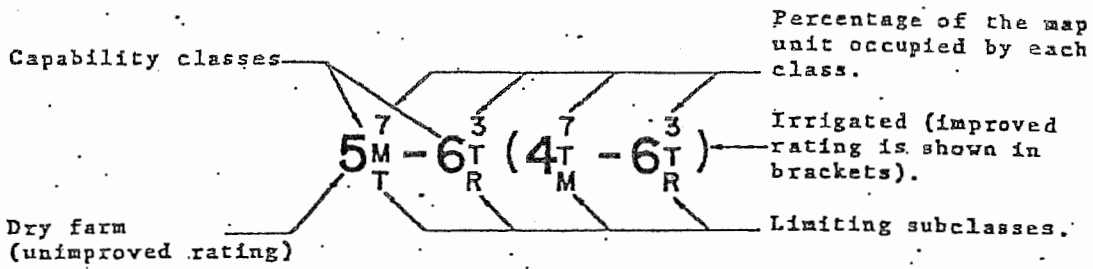
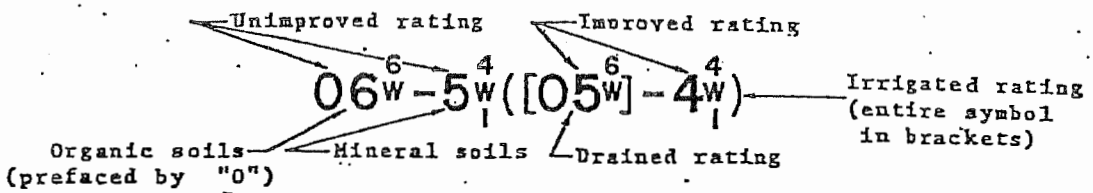
KEY FOR INTERPRETATION OF AGRICULTURE CAPABILITY MANUSCRIPT MAPS (B.C.)

There are 7 capability classes for agriculture with 1 representing the highest class and 7 representing the lowest. In some areas of the province, two ratings are shown: one for dry farming and a second for irrigated or drained (improved) conditions. The irrigated ratings are shown enclosed in round brackets while the drained ratings appear in square brackets. In all cases improved ratings have precedence over dry farm ratings.

Example Classifications





The agriculture capability classes are determined on the relative range of crops the land can produce.

a) Capability Classes

Class 1 – widest range of crops
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Class 5 – only permanent pasture or forage
Class 6 – natural grazing
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b) Limiting Subclasses

C – adverse climate
D – undesirable soil structure
E – erosion
F – low fertility
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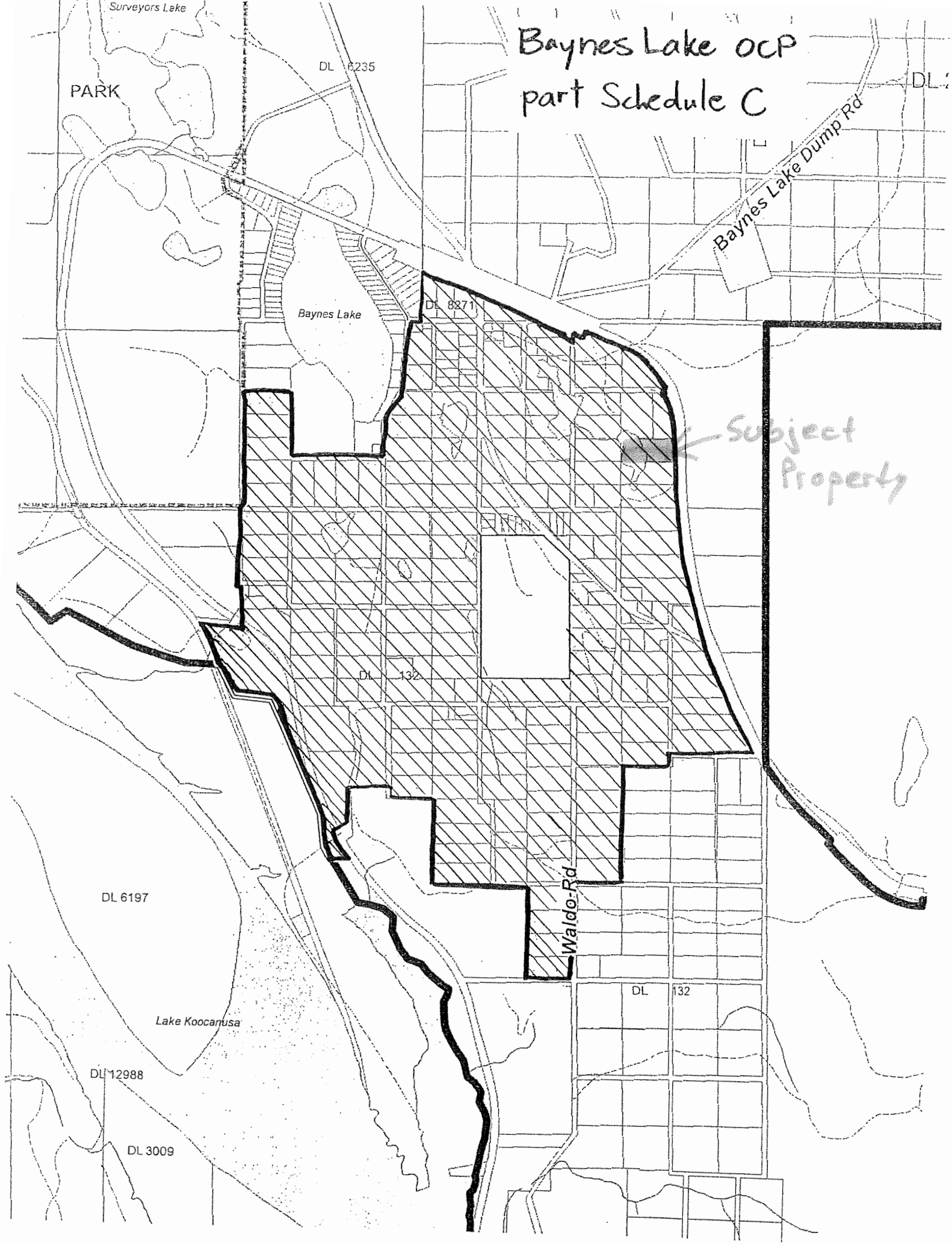
R – bedrock near the surface
T – topography (slope)
W – excess water
X – combination of soil factors
S – cumulative and minor adverse characteristics

Tree fruit and grape growing areas: these crops are tolerant of soil conditions that limit field crops. Steep and stonier soils in suited climates have been upgraded to accommodate the expanded range of crops. e.g. A class 5T soil dry farmed becomes a 3T irrigated in an area climatically suited to tree fruits.

Note: A more detailed 16 page manual entitled Soil Capability Classification for Agriculture is available from the *Lands Directorate, Lands Forests and Wildlife Service, Department of the Environment, Ottawa, Ontario, K1A 0H3.*

B.C. Land Inventory, Victoria

May, 1973


Baynes Lake OCP
part Schedule C
Surveyors Lake
PARK
DL 6235
Baynes Lake Dump Rd
Baynes Lake
DL 8271
Subject Property
DL 132
DL 6197
Waldo Rd
DL 132
Lake Koocanusa
DL 12988
DL 3009

HAWORTH | Development Consulting

Appendix F
Site Photos

Subject property shown bound with heavy red line. Note rear half of property is a slough. Actual usable area of site is approximately 1.16 ha (2.8 acres)

Regional District of East Kootenay

Staff Report ...

ALR Exclusion Application

Date: July 24, 2019
File: P 719 338

Applicant: 310613 BC Ltd. (Three Bars Ranch)
Agent: Eagle Homes
Location 9430 Wycliffe-Perry Creek Road, west of Wycliffe
Legal: District Lot 14299, Kootenay District

Proposal: Application for placement of a new manufactured home as a principal dwelling, replacing an existing principal dwelling which will be converted to a storage building.

Options:

1. THAT the Agricultural Land Commission be advised the RDEK supports the 310613 BC Ltd. ALR non-adhering residential use application for property located at 9430 Wycliffe-Perry Creek Road, west of Wycliffe.

2. THAT the 310613 BC Ltd. ALR non-adhering residential use application for property located at 9430 Wycliffe-Perry Creek Road, west of Wycliffe be refused.

Recommendation: **Option # 1**
A zoning amendment was adopted by the RDEK in 2015 for the proposed residential density. The proposal also supports the property's existing agricultural operation.

Property Information:

OCP Designation: RR, Rural Resource – supports agricultural, rural residential and rural resource land uses with parcel sizes 8.0 ha or larger.

OCP Policies:

- Residential developments are encouraged to be designed to meet the needs of permanent full-time residents.

- Land in the ALR is generally designated and supported for agricultural use.

- The primary commercial uses for land within the ALR should be agriculture production and the processing and marketing of on-farm produce. However, accessory uses that complement agriculture, including, but not limited to agri-tourism and farm gate sales, will generally be supported in the ALR

Zoning Designation: RR-60, Rural Resource Zone, minimum parcel size: 60 ha.

Parcel Size: 92.2 ha (228 ac)

Property Information - cont'd:

Density: A bylaw amendment for the subject property was approved in 2015 to allow for one principal single family dwelling, one dwelling unit for seasonal guest ranch staff, two dwelling units for year-round guest ranch staff and bunkhouse style accommodation for seasonal guest ranch staff up to a maximum floor area of 335 m^2. This proposal does not increase the density granted by the 2015 bylaw amendment.

ALR Status: Within the ALR

Interface Fire Hazard Rating: Moderate to high, not within a fire service area.

Flood Hazard Rating: Perry Creek flows through the south side of the subject property. Development must comply with flood regulations.

BC Assessment: Beef

Water / Sewer Services: Onsite

Agricultural Capability Ratings:

The Canada Land Inventory (CLI) Agricultural Capability Maps indicate that the majority of the property is considered Class 4 with a limiting soil factors of moisture deficiency and is considered improvable to 60% Class 2 with a combination of limiting factors and 40% Class 1. The proposed dwelling is in this portion of the property. The rest of the subject property is mostly considered Class 5 with limiting soil factors of moisture deficiency and stoniness. This is considered improvable to 60% Class 3 with a limiting soil factor of moisture deficiency and 40% Class 4 with limiting soil factors of moisture deficiency and stoniness.

Agrologist Report: Not required for this type of application

Additional Information:

- The application states a new septic system will be installed for the proposed dwelling. The existing well system is capable of providing potable water to the proposed dwelling and a new water line will be extended to the residence, along with a driveway connecting to the main ranch access road.
- The total floor area of the proposed dwelling is 268 m^2, which includes a garage for parking and storage.
- The 2015 bylaw amendment identified a 9 ha portion of the property that all dwelling units must be located within. The proposed dwelling is within the 9 ha area.

Consultation: **APC Area C:** Support

Documents Attached:

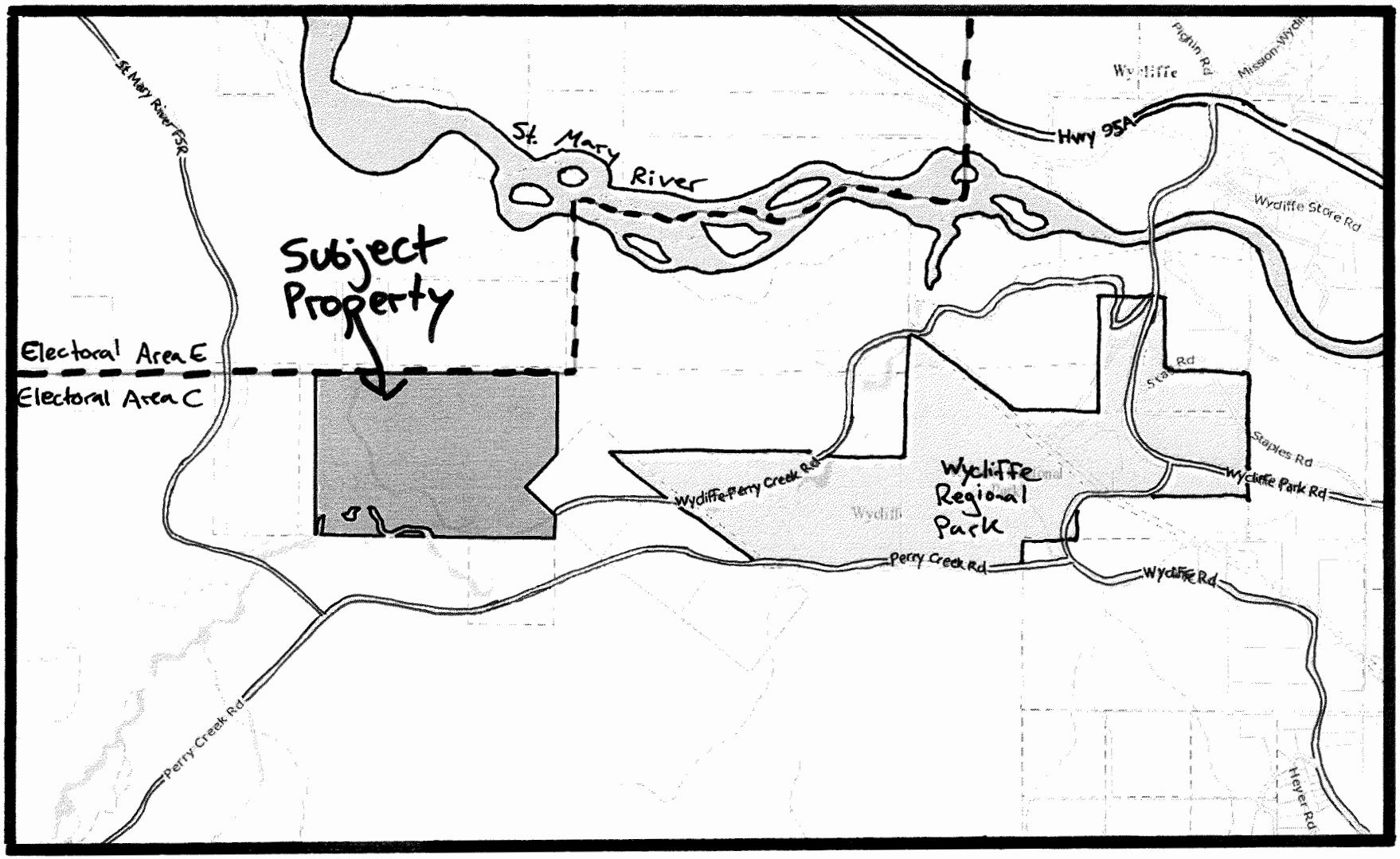
- Location Map
- Land Use Map
- ALR Boundary
- Agricultural Capability Map and Key
- Letter from Applicant
- Proposal

Documents Attached – cont'd:

- Photos provided by applicant

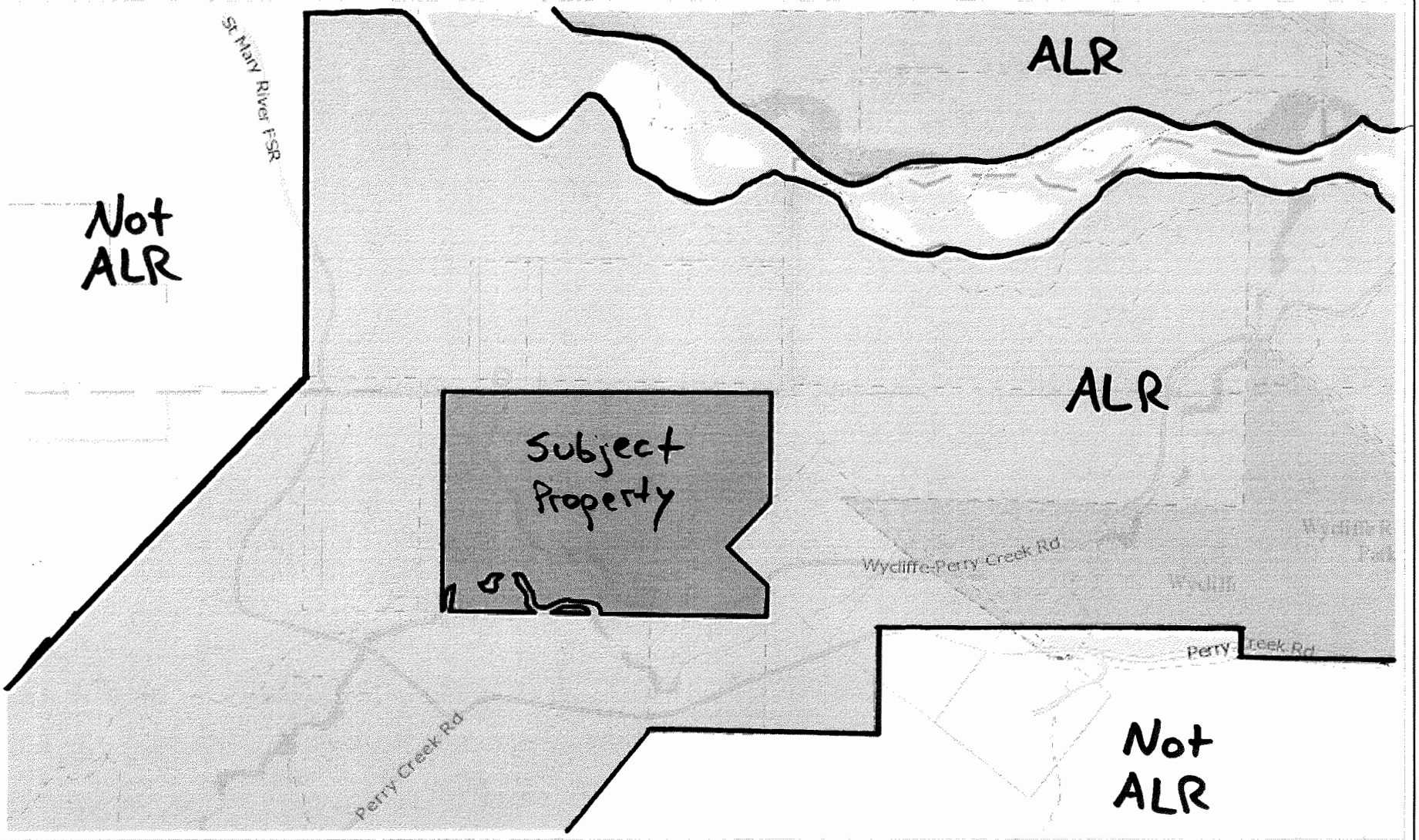
RDEK Contact: Krista Gilbert, Planning Technician
Phone: 250-489-0314
Email: kgilbert@rdek.bc.ca

Location Map



Regional District of East Kootenay

ALR Boundary Map



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Regional District of East Kootenay

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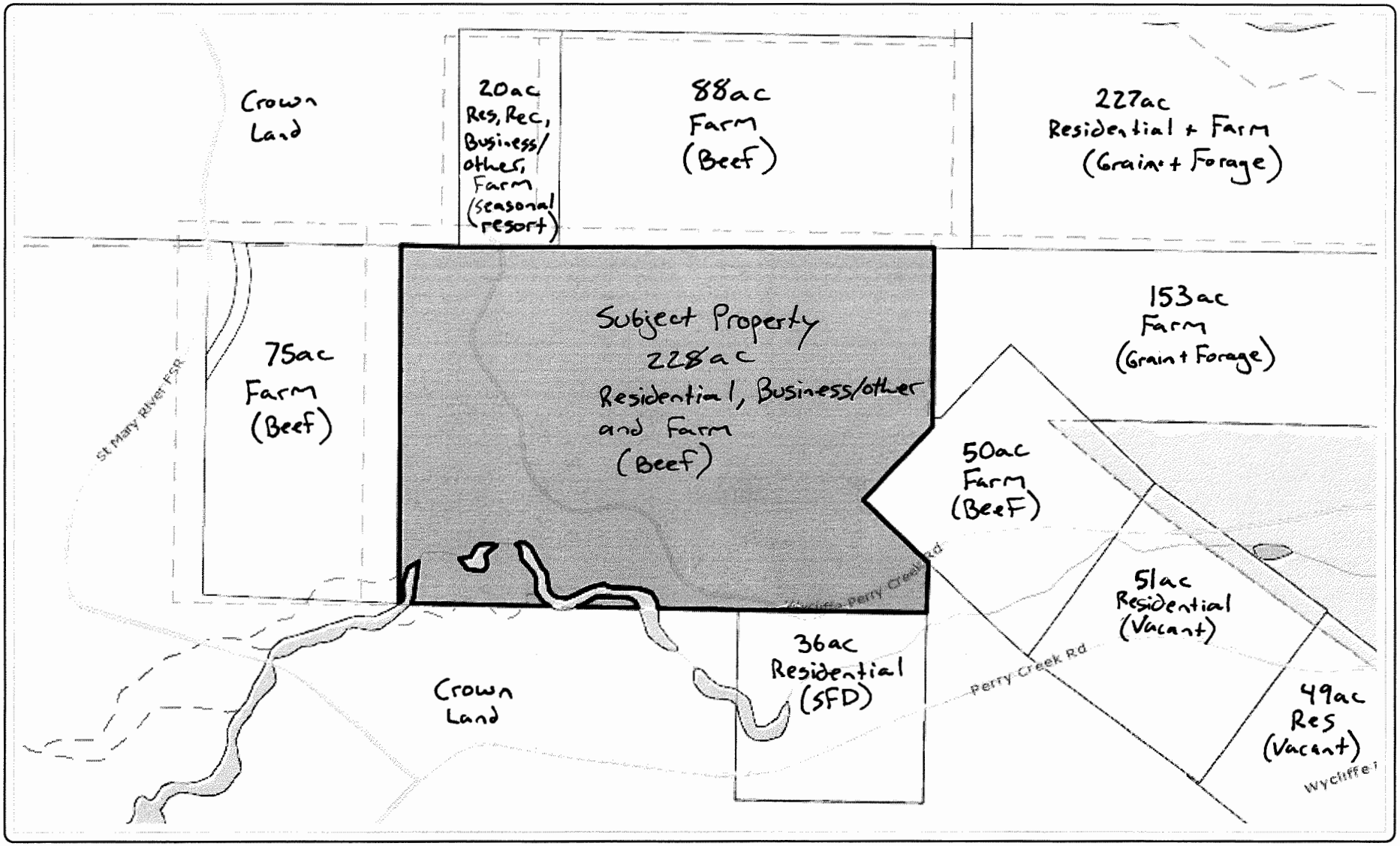

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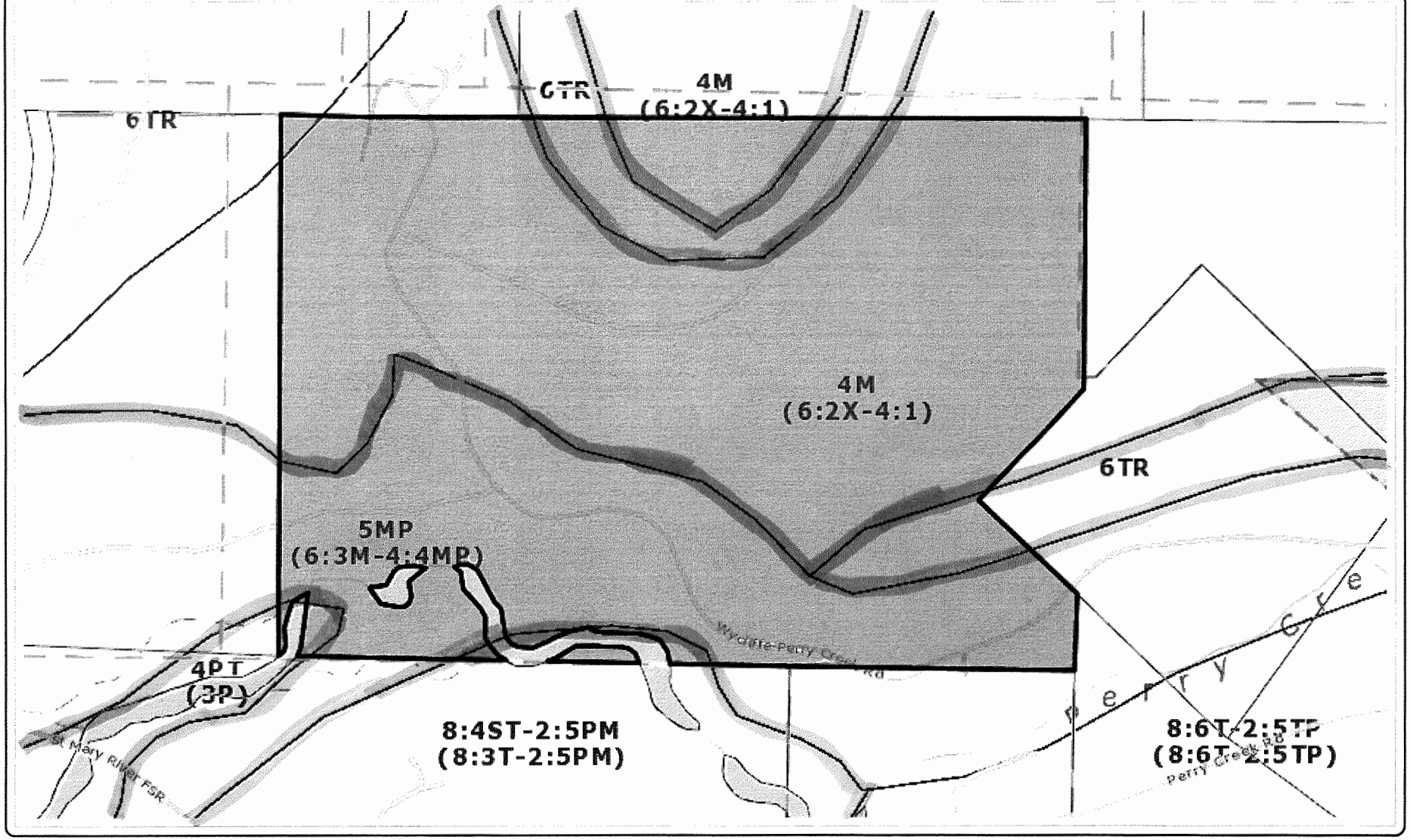
Regional District of East Kootenay

Agricultural Capability Map



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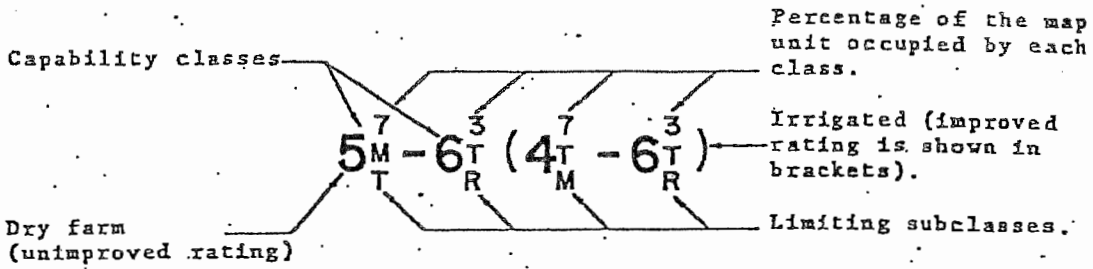

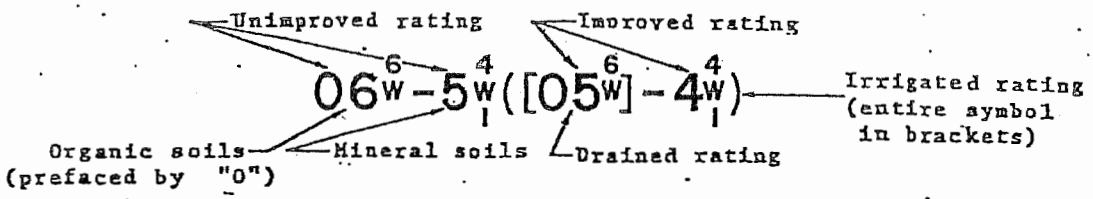

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B.C. Land Inventory, Victoria

May, 1973

Letter From Applicant

Addendum to a building permit application for 310613 BC Ltd., dba Three Bars Guest & Cattle Ranch

Legend:
In 1987, the Plechinger and Beckley families formed 310613 BC Ltd. dba Three Bars Guest & Cattle Ranch and acquired the former Clark ranch at Wycliffe as well as NorWest Guide Outfitting territory in the Purcell Mountains at Dewar Creek Hot springs and West Fork. In following years, the main lodge, 10 guest cabins, housing up to 48 guests at a time, a pool building with hot tub, a bunk house for staff (all massive log buildings) and a tennis court were built. In subsequent years, additional buildings have been added to accommodate the Beckley family, staff housing as well as ranch equipment and ranch facilities. The Plechinger family occupied the original ranch cabin from 1936.
Three Bars Guest & Cattle Ranch introduced a cow herd of 180 head and a horse herd of about 20 horses in 1987. The operation produced losses and proved to be not sustainable as a cattle ranch. Therefore, the shareholders planned and opened the Guest Ranch operation in 1992. Since this time and now 27 years in operation, Three Bars Ranch is established in the industry as one of the leading family style guest ranches in North America with clientele from all over the world.
Three Bars employs around 25 people each season between May and October and seven person's year around. In 2016/17, Three Bars Ranch acquired two more properties of 128 additional hectares agricultural land adjacent to its property for a total of 345 hectares. In 2018, it added 3 more guest cabins housing 12 additional guests.

The Plechinger family is mainly involved in strategic planning and finances of the operation, as well as overseeing and working in the agricultural operations. The Beckley family manages the ranch and Guest Ranch facility. Both families' diversified skills and experiences (Jeff and April Beckley had previous extensive experience in operating Guest Ranches in Idaho and at Top of the World in Cranbrook) lead to the development of this operation into a financially viable and profitable business, the company is a reliable employer and contributing member to the local business and agricultural community since its inception. Three Bars Ranch runs at this time a cow herd of 120 mother cows and 100 horses for the dude string and has about 90 ha of irrigated hay land.

It must be understood, that the agricultural part of the ranch is not sustainable by itself, it required stringent cost control and is strictly depending on the success of the Guest Ranch, which is subsidizing the non-profitable agricultural operation.

Therefore, the specific experience and daily, 24/7 presence of both shareholder family members of Three Bars Ranch on site is of great importance to keep cost under control in order to have the operation going forward successfully.

Business strategy:
Since the start up of the operation, many new and unique strategies in the guest ranch industry have been introduced in order to keep up with the rapidly changing times and guest's expectations. Even though the company is maintaining the "Western Theme", a lot of new activities and services needed to be introduced in the past in order to stay in the top ranking of Guest Ranches in North America.
Our plan is to substantially improve the quality and extent of the services offered to our guests. In 2016, we have introduced a fishing pond, adding an attractive family activity for our guests in the 2017 season; beyond the vast variety of guest activities offered so far. In 2018, we have received approval for the addition of three more guest cabins. We also have acquired 128 additional hectares of agricultural land adjacent to the property. The ranch owns now sufficient land mass to conduct its daily rides on its own property, important during wild fire periods while access to the crown land has been closed for riding. This way we can conduct business as usual and don't have to send customers away and loose substantial revenue streams.

The company's top priority is to ensure and sustain the future of the agricultural part of the ranch by means of supporting it financially from profits of the Guest Ranch business. Therefore, it is vital to have management living on site

Management:

All shareholders are closely involved in directing the company into its future, developing growth strategies, financial and investment control as well as market expansion and ongoing review of its operations.
Jeff and April Beckley contribute with their extensive experience in Guest Ranch operations over three decades on a daily basis and full time involvement. The development of Three Bars Guest & Cattle Ranch since inception speaks for itself and does not require words, the numbers in growth and profits speak for themselves.
Jeff Beckley is managing the agricultural part of the company, introducing new approaches and optimizing this business. April Beckley is leading the Guest Ranch part of the company, covering accounting, financial control, HR and overall control.
Hans and Patricia Plechinger are strongly involved in strategic planning and in financial planning and control of the operation, as well as in the agricultural part of it. It is a necessity for them to live on the ranch and be present on site for the daily business operations. As the cabin is no longer feasible nor save to live in, they need a new on-site accommodation.

Family member **Tyler Beckley**, Jeff and April's oldest son, joined the company in 2001, covering marketing and sales, organising guest activities and guest relations, planning of maintenance and new business development. Tyler's contribution to the business is reflected in the steady growth of the Guest Ranch business during the past years. Tyler is actively engaged in the Dude Ranch Association of North America and serves as on the board of Destination British Columbia, a BC Provincial agency. These positions provide him with the latest information regarding the tourism industry which is continuously applied to the operation. **Jenna Beckley,** Tyler's wife, retired as a school teacher and joined the company in 2015. Jenna is leading the operation of the lodge, cabins, kitchen, bar, procurement of all required supplies, staff planning and staff management. The addition of Jenna and Tyler to the management team is of great importance, as guests expect to stay at a family operated ranch, offering a unique and direct daily contact with the ranch family members. Guest Ranch holidays are typically a family affair. Their involvement with the management team paves the way to a successful transition of management to the next generation into the future, securing the business operation and allowing the continuation of a strong, profitable and sustainable agricultural and tourism business in the East Kootenay's.

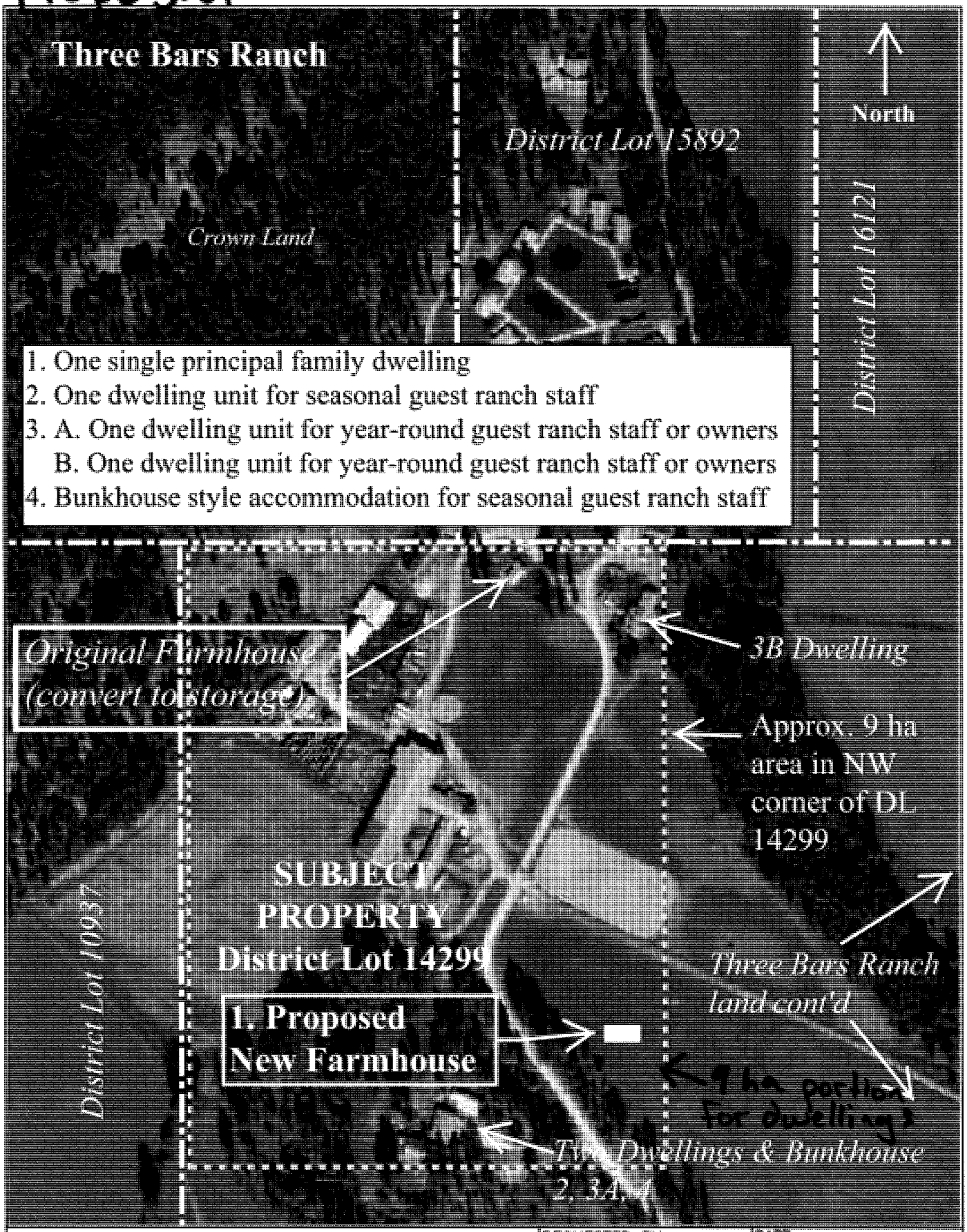
Reason for applying for a building permit:

The Plechinger family is strongly involved in cost control, strategic planning and finances of the operation, as well as agricultural operations. Their living quarter used to be the original ranch cabin built in 1936. This cabin is no longer suitable as living quarters and used for storage only; due to its age and related safety risk.
The plan is to convert this storage cabin into a Ranch Heritage Building, displaying the history of Three Bars Ranch to the guests. This can be achieved with little alterations to the building.

Hans and Patricia Plechinger can no longer live in the cabin and have to travel daily to Cranbrook and back, thus cutting time on site significantly which is so important for ranch operations. Their 24/7presence is required to conduct daily business operations. The ranch can't carry additional expenses and loss of valuable management time.

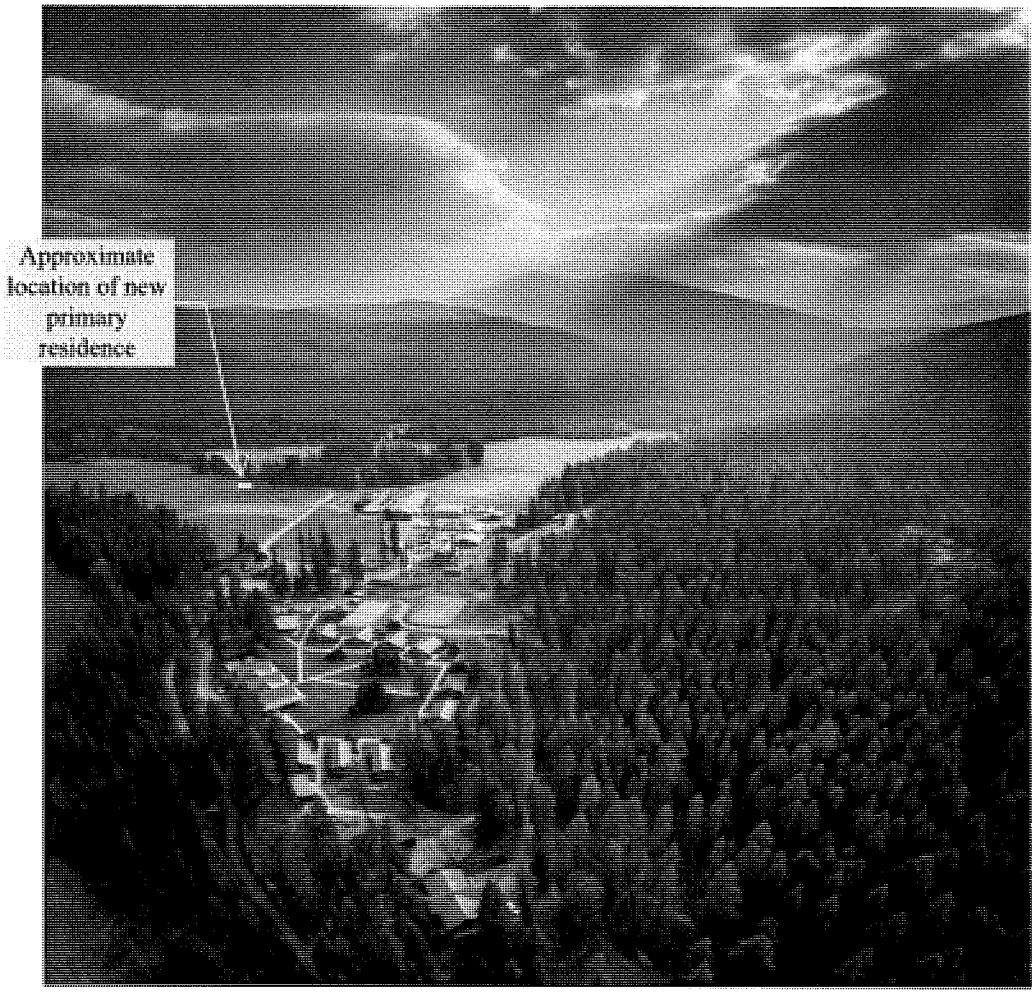
It is planned to build a family home of approximately 180 square meters living space in a small triangle of 0.25ha of land, on DL 14299, PID 007-422-059, size 91.2 ha. This very corner part of undulating land of this DL is only useable as horse pasture. This parcel does not have any value to the agricultural operation as it is low quality pasture which can't be irrigated due to its triangle shape in this specific corner of the DL, hence little growth and productivity. On one side of the proposed building site, there is a steep drop to Wycliffe/Perry Creek road, breaking up the DL.

Proposal



Three Bars Ranch District Lot 14299	REQUESTED BY: BM	DATE: 2019 05 22	
	DRAWN BY: JC	SCALE: NTS	
		SHEET NO.: 1 OF 1	
		BP2019-01-04	


THREE BARS RANCH


Approximate location of new primary residence

Regional District of East Kootenay

Staff Report ...

Development Variance Permit Application

Date: July 22, 2019
File: P 719 335
DVP No. 25-19

Applicant: Brian and Sarah Passey
Location: 4283 Lakeview Drive in the Jim Smith Lake area west of Cranbrook
Legal: Lot 2, Block 3 District Lot 5801, Kootenay District, Plan 4785

Proposal: Application to vary the Electoral Area C South Zoning and Floodplain Management Bylaw to reduce the minimum front yard setback requirement from 6.0 m to 1.2 m for a wheelchair ramp addition.

Options:

1. THAT Development Variance Permit No. 25-19 be granted.

2. THAT Development Variance Permit No. 25-19 be refused.

Recommendation: **Option # 1**
No negative impacts are anticipated.

Property Information:

OCP Designation: R-SF, Residential Low Density

OCP Objectives:

- Residential developments are encouraged to be designed to meet the needs of permanent full-time residents.

Zone Designation: RS-1, Residential (Semi-Rural) Zone; minimum parcel area requirement is 555 m^2.

Parcel Area: 0.11 ha (0.28 acres)

Density: One single family dwelling or duplex is permitted per parcel

ALR Status: Not within the ALR

BC Assessment: Residential with a SFD

Water / Sewer Services: Onsite

Interface Fire Hazard Rating: Low, within the Cranbrook Rural Fire protection area

Flood Hazard Rating: The subject property is adjacent to Jim Smith Lake. Floodplain management provisions apply to development.

Additional Information:

- None

Consultation: **Advisory Commissions:**

APC Area C: Support

Consultation - cont'd:

Response(s) to Notice: 27 notices were mailed on June 11, 2019 to all property owners within 100 m. One notice was returned as undeliverable and no responses have been received.

MOTI Referral: Interests unaffected

Documents Attached:

- Permit
- Location Map
- Land Use Map
- Proposal

RDEK Contact:

Krista Gilbert, Planning Technician
Phone: 250-489-0314
Email: kgilbert@rdek.bc.ca

Regional District of East Kootenay

Development Variance Permit No. 25-19

Permittee: Brian and Sarah Passey

1. This Development Variance Permit is issued subject to compliance with all RDEK bylaws applicable thereto, except as specifically varied or supplemented by this Permit.

2. This Permit applies to and only to those lands described below:

   Lot 2, Block 3 District Lot 5801, Kootenay District, Plan 4785
   (PID: 010-802-282)

3. Regional District of East Kootenay – Electoral Area C South Zoning and Floodplain Management Bylaw No. 2913, 2019, Section 4.03(3)(b) which requires a minimum front yard setback of 6.0 m for a principal building, is varied to reduce the front side yard setback from 6.0 m to 1.2 m for a wheelchair ramp addition.

4. The lands described herein shall be developed strictly in accordance with the terms and conditions of this Permit and in substantial compliance with the drawings submitted in the Development Variance Permit application received April 26, 2019.

5. This Permit shall come into force on the date of an authorizing resolution passed by the RDEK.

6. This Permit is not a building permit.

7. If development authorized by this Permit does not commence within two years of the issue date of this Permit, the Permit shall lapse.

8. A notice pursuant to Section 503(1) of the *Local Government Act* shall be filed in the Land Title Office and the Registrar shall make a note of the filing against the title of the land affected.

9. It is understood and agreed that the RDEK has made no representations, covenants, warranties, guarantees, promises, or agreement (verbal or otherwise) with the developer other than those in this Permit.

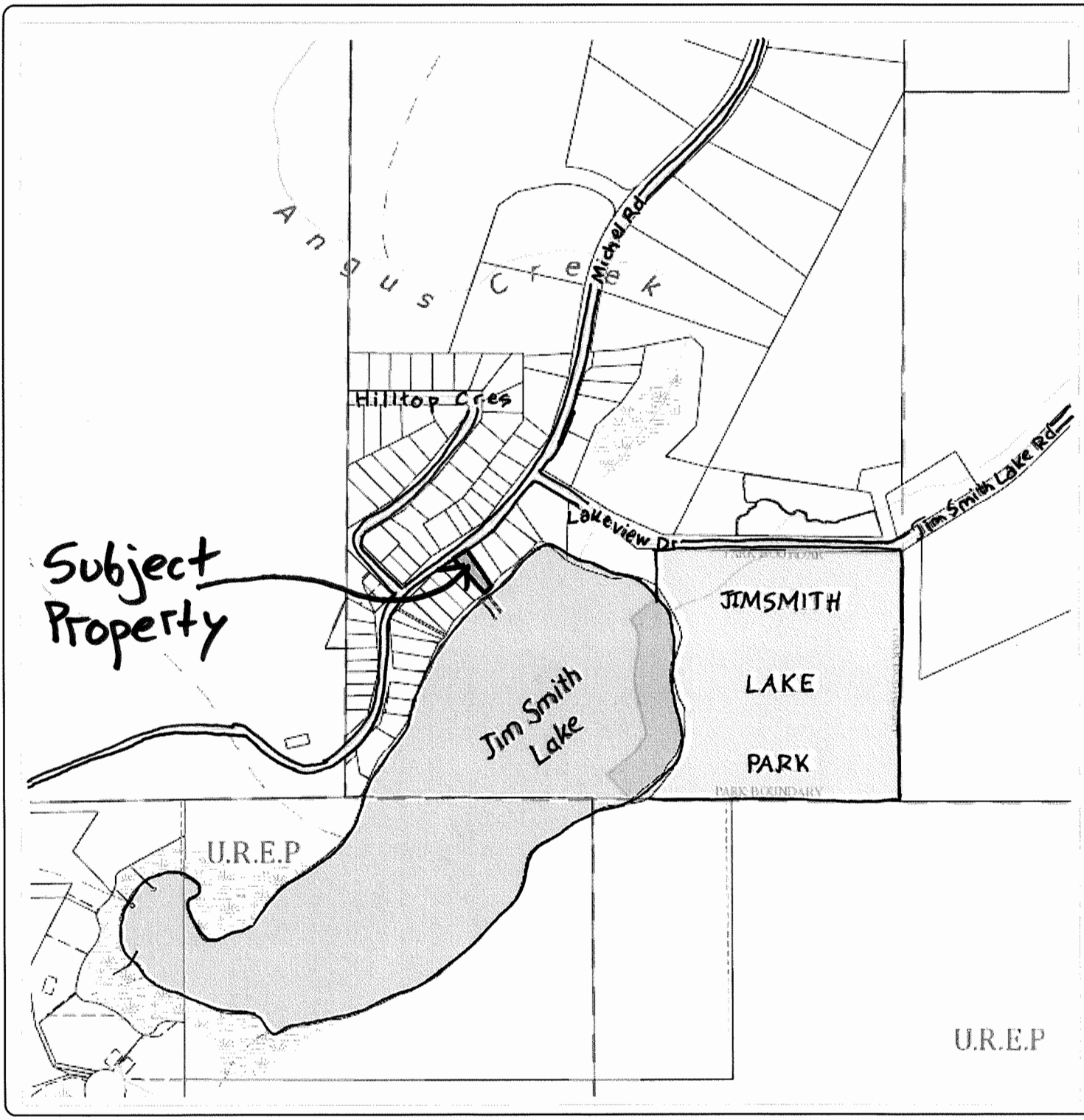
10. This Permit shall inure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, successors, and assigns.

Authorizing Resolution No. adopted by the Board of the Regional District of East Kootenay on the day of , 2019.

Shannon Moskal
Corporate Officer

Regional District of East Kootenay

Location Map



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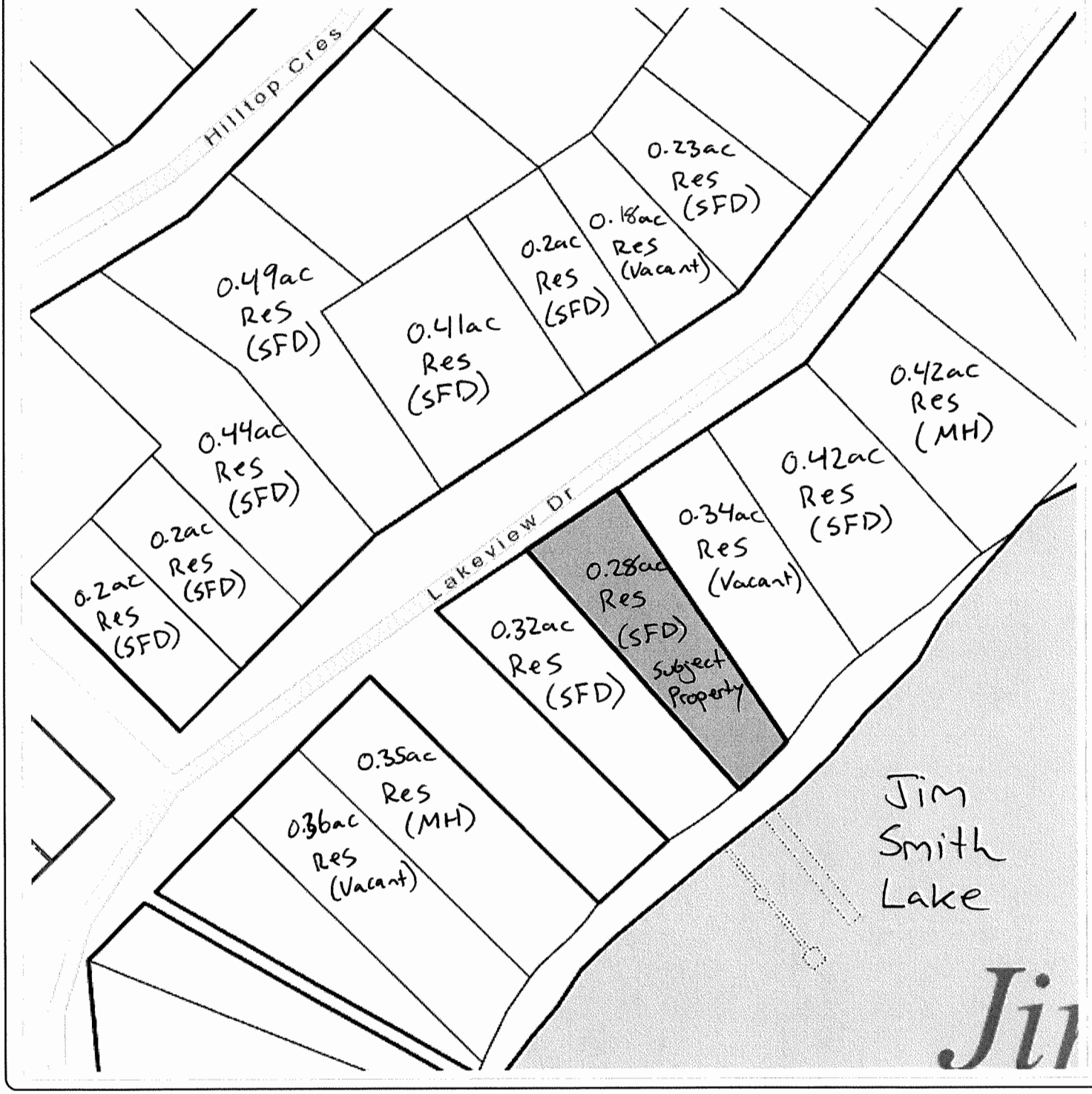
Regional District of East Kootenay

Land Use Map



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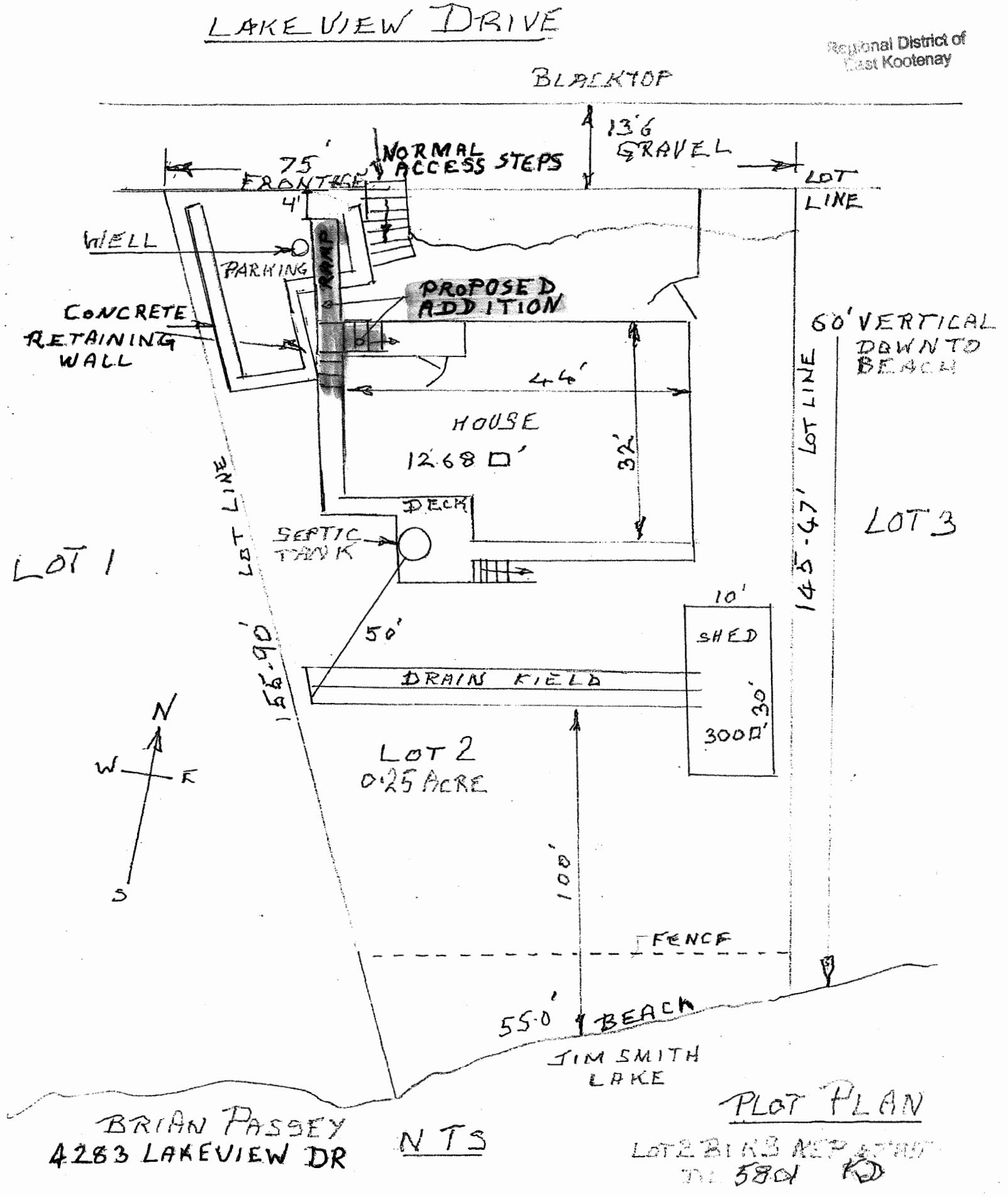
Proposal

RECEIVED
APR 29 2019
Regional District of East Kootenay



Regional District of East Kootenay

Staff Report ...

Development Variance Permit Application

Date: July 25, 2019
File: P 719 115
DVP No. 26-19

Applicant: Barry Stuart Realty Inc.

Location: Resort Drive, Fernie Alpine Resort

Legal: Lot 4, DL 8901, Kootenay District Plan EPP76410 (PID: 030-509-343)

Proposal: Application to vary the Elk Valley Zoning Bylaw maximum permitted height of a single family dwelling from 9.0 m to 11.6 m.

Options:

1. THAT Development Variance Permit No. 26 -19 be granted.

2. THAT Development Variance Permit No. 26 -19 be refused.

Recommendation: **Option # 2**
The dwelling would be significantly higher than surrounding buildings. The dwelling could be designed to meet the bylaw.

Property Information:

OCP Designation: R-SF, Resort Low Density

OCP Policies:

- The Regional District will encourage a range of densities and housing mix within the plan area.
- The Regional District will encourage resort owners to monitor the housing needs of the community, consider a variety of housing types and encourage innovative housing approaches to meet the needs of permanent, semi-permanent and seasonal residents of the resort.

Zoning Designation: RS-2(A), Resort Residential Zone

Parcel Area: 0.08 ha (0.19 ac)

Density: One single family permitted per parcel

ALR Status: Not within the ALR

BC Assessment: Residential (vacant)

Flood Hazard Rating: Not within a flood hazard area.

Water / Sewer Services: Onsite groundwater well and sewage disposal

Interface Fire Hazard Rating: Low to high; within the Fernie Rural fire protection area

Additional information:

- The application states that the variance is being requested as the property is extremely steep, with the difference between the front and back of the property being around 11 m.

Consultation: **APC Area A:** Support.

Response(s) to Notice: 8 notices were mailed on June 12, 2019 to all property owners within 100 m of the subject property. One letter was received objecting to the variance stating concerns due to the large variance requested and the impact it may have to view corridors and property value. They would also like to see a streetscape of the proposal to better understand the plan. The letter is attached.

Documents Attached:

- Permit
- Location Map
- Land Use Map
- Site Plan
- Proposal
- Letter of Opposition

RDEK Contact: Krista Gilbert, Planning Technician
Phone: 250-489-0314
Email: kgilbert@rdek.bc.ca

Regional District of East Kootenay

Development Variance

Permit No. 26-19

Permittee: Barry Stuart Realty Inc.

1. This Development Variance Permit is issued subject to compliance with all RDEK bylaws applicable thereto, except as specifically varied or supplemented by this Permit.

2. This Permit applies to and only to those lands described below:

   Lot 4, District Lot 8901, Kootenay District Plan EPP76410
   [PID: 030-509-343]

3. Regional District of East Kootenay – Elk Valley Zoning Bylaw No. 829, 1990, Section 7.05(A)(6)(a), which permits a maximum height for a principal building or structure of 9.0 m, is varied to permit a height of 11.6 m for a proposed single family dwelling.

4. The lands described herein shall be developed strictly in accordance with the terms and conditions of this Permit and in substantial compliance with the development variance permit application received on May 6, 2019.

5. This Permit shall come into force on the date of an authorizing resolution passed by the RDEK.

6. This Permit is not a building permit.

7. If development authorized by this Permit does not commence within two years of the issue date of this Permit, the Permit shall lapse.

8. A notice pursuant to Section 503(1) of the *Local Government Act* shall be filed in the Land Title Office and the Registrar shall make a note of the filing against the title of the land affected.

9. It is understood and agreed that the RDEK has made no representations, covenants, warranties, guarantees, promises, or agreement (verbal or otherwise) with the developer other than those in this Permit.

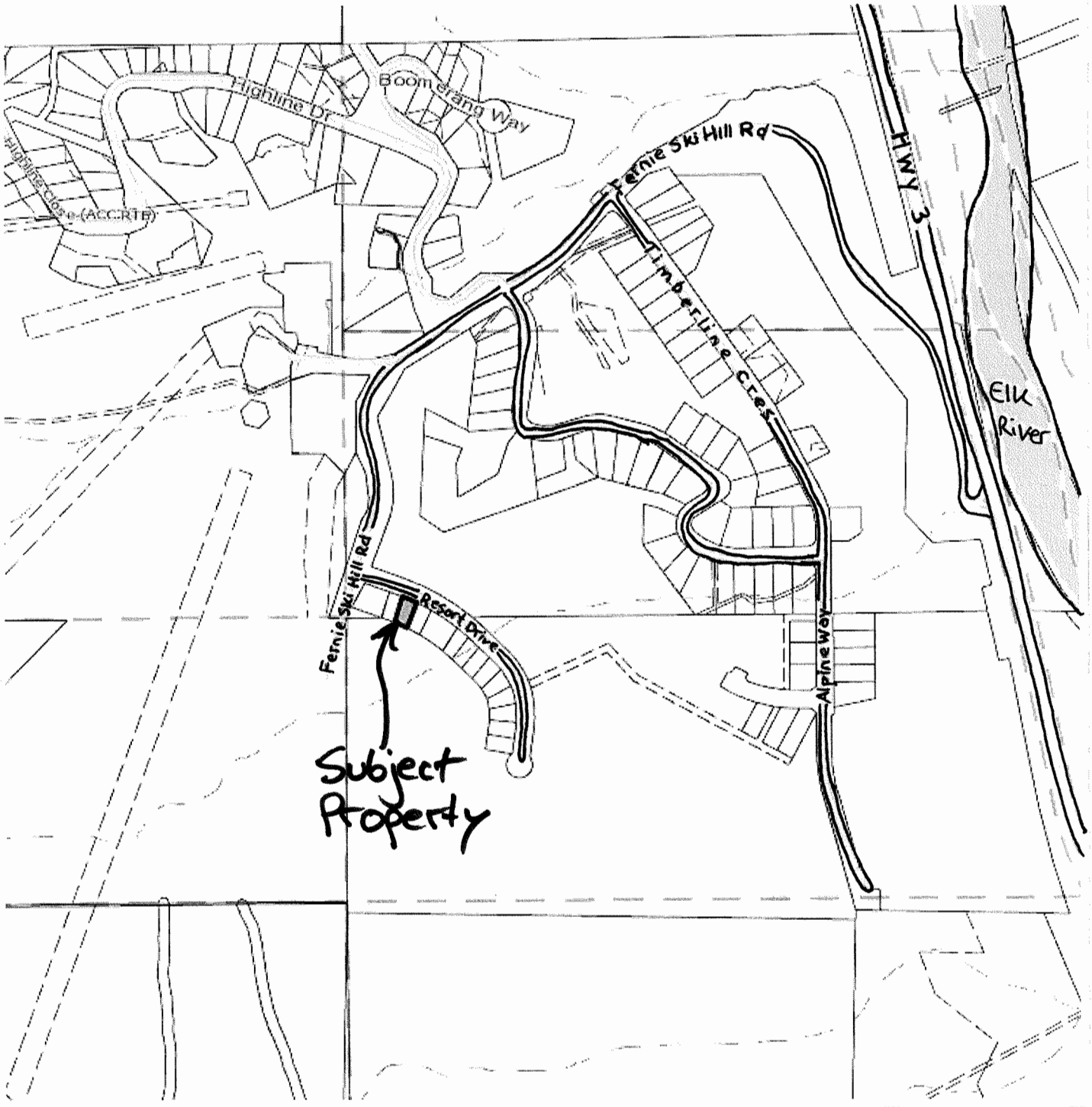
10. This Permit shall inure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, successors, and assigns.

Authorizing Resolution No. adopted by the Board of the Regional District of East Kootenay on the day of , 2019.

Shannon Moskal
Corporate Officer

Regional District of East Kootenay

Location Map



Notes:

300 0 150 300 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere
RDEK GeoViewer - 6-3-2019 2:52 PM

Scale = 1: 12,000

THIS MAP IS NOT TO BE USED FOR NAVIGATION

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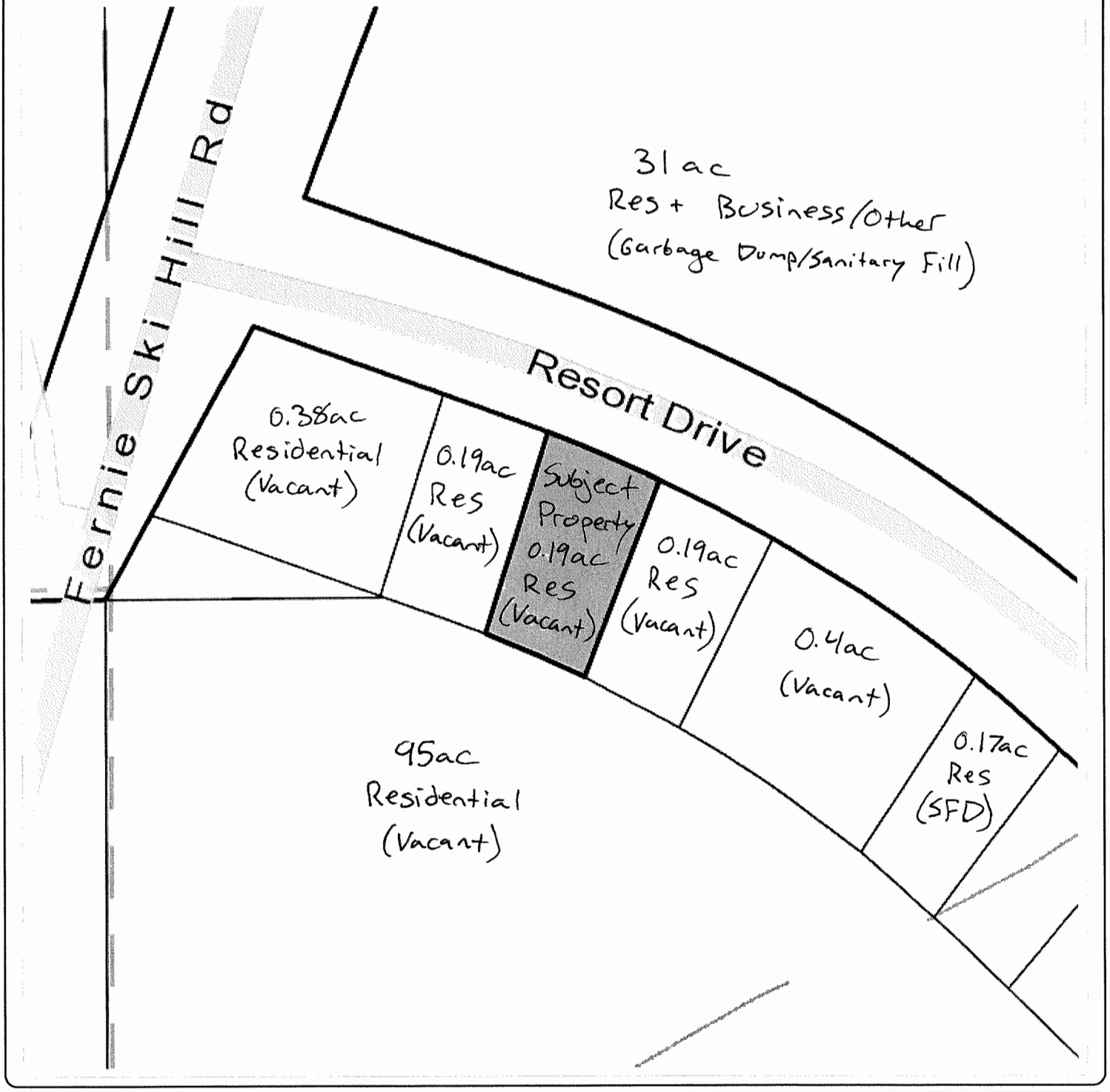
Regional District of East Kootenay

Land Use Map



Notes:

38 0 19 38 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere
RDEK GeoViewer - 6-3-2019 2:53 PM

Scale = 1: 1,500

THIS MAP IS NOT TO BE USED FOR NAVIGATION

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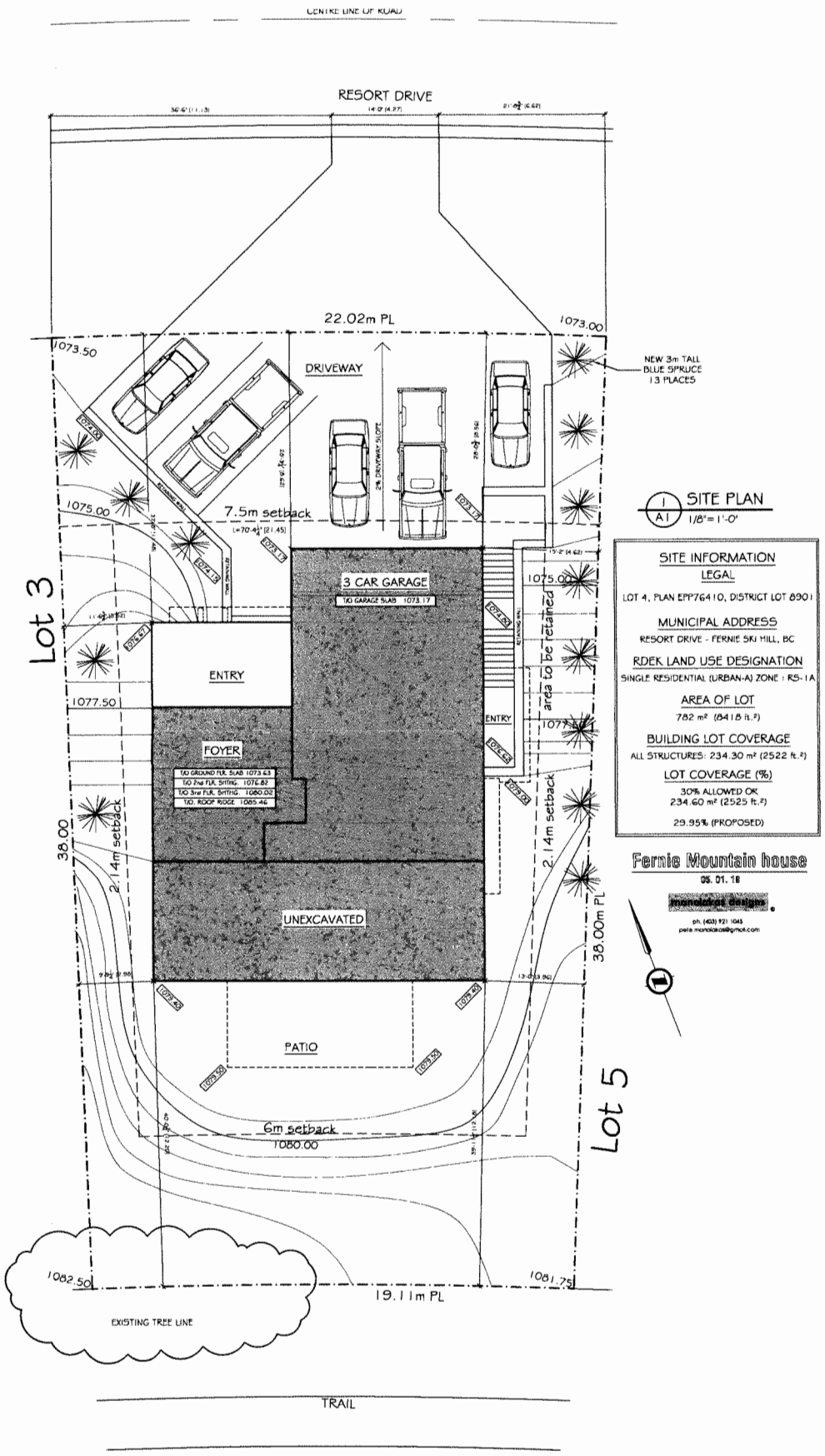
Site Plan



1 / A1 SITE PLAN
1/8" = 1'-0"

SITE INFORMATION

LEGAL
LOT 4, PLAN EPP76410, DISTRICT LOT 8901

MUNICIPAL ADDRESS
RESORT DRIVE - FERNIE SKI HILL, BC

RDEK LAND USE DESIGNATION
SINGLE RESIDENTIAL (URBAN-A) ZONE : R5-1A

AREA OF LOT
782 m² (8418 ft.²)

BUILDING LOT COVERAGE
ALL STRUCTURES: 234.30 m² (2522 ft.²)

LOT COVERAGE (%)
30% ALLOWED OR
234.60 m² (2525 ft.²)

29.95% (PROPOSED)

Fernie Mountain house
05. 01. 18

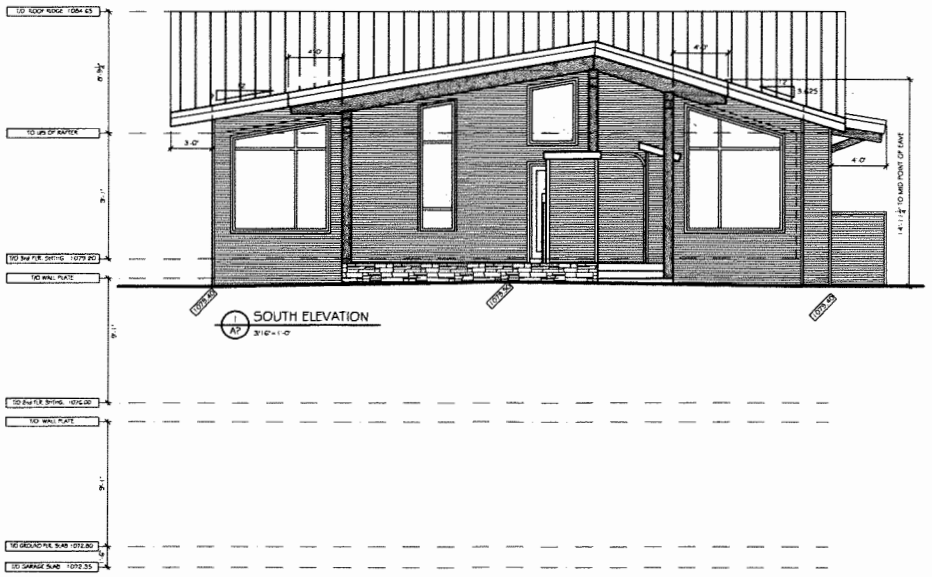
monolotgd designs
ph. (403) 921 1043
pete.monolotgd@gmail.com

Proposal

NORTH ELEVATION
3/16"=1'-0"

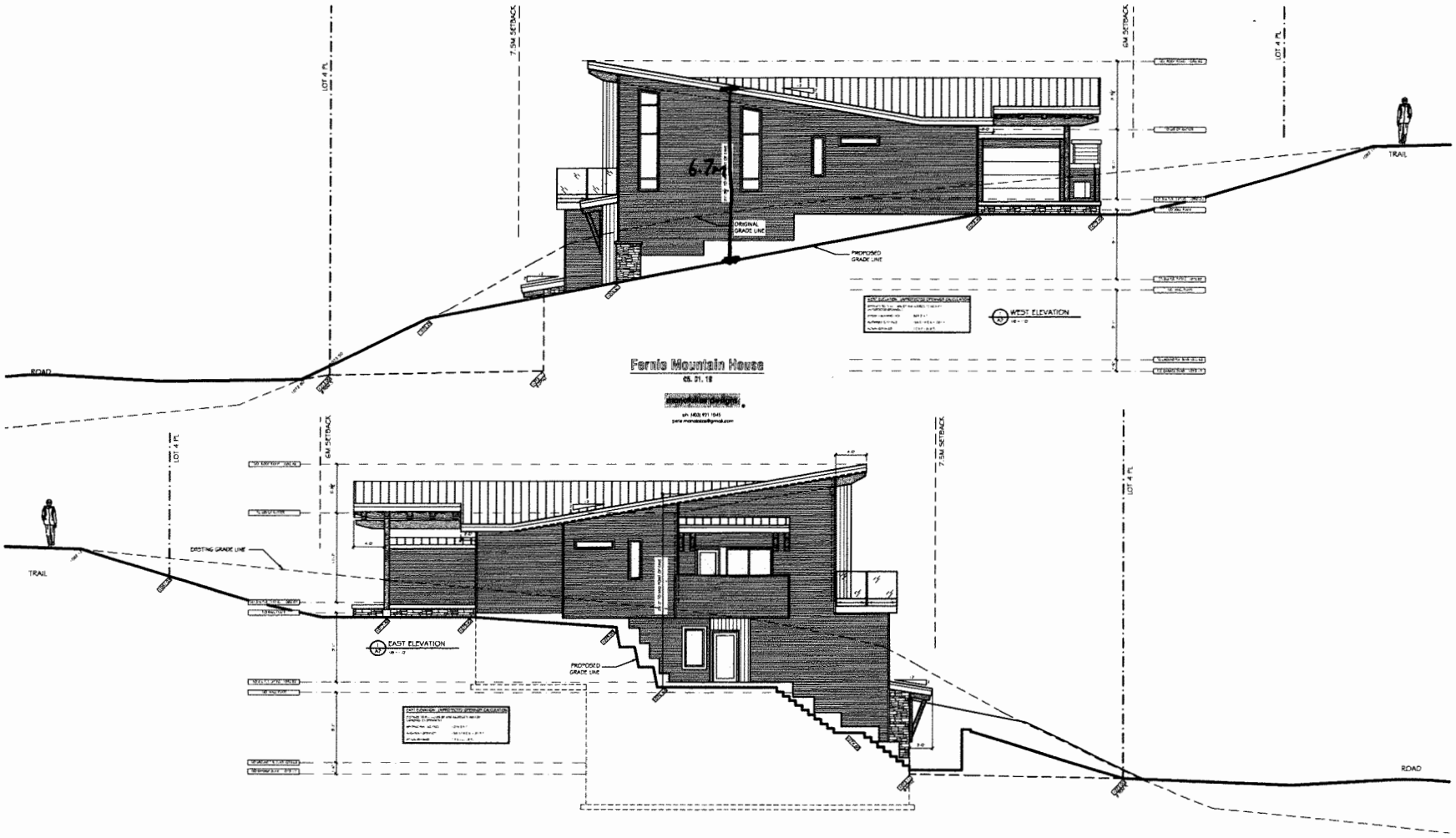
Fernie Mountain House
05. 01. 19

manolakos design ©
ph. (403) 921 1045
pete.manolakos@gmail.com



SOUTH ELEVATION
3/16"=1'-0"

Proposal


LOT 4 PL
7.5M SETBACK
6M SETBACK
LOT 4 PL
6.7m
ORIGINAL GRADE LINE
PROPOSED GRADE LINE
TRAIL
ROAD
WEST ELEVATION
Fernie Mountain House
05. 01. 18
6M SETBACK
7.5M SETBACK
LOT 4 PL
LOT 4 PL
TRAIL
EXISTING GRADE LINE
EAST ELEVATION
PROPOSED GRADE LINE
ROAD

Krista Gilbert

From: Andy Cohen [redacted]
Sent: June 25, 2019 10:12 PM
To: Krista Gilbert
Cc: [redacted]
Subject: Variance Request Lot 4 Timber Landing in Fernie

Hello Krista.
We are commenting on the Variance Request by Barry Stuart on Lot 4 Timber Landing in Fernie.
We own Lot 8, 3 Lots further down the road.
As we understand it, Mr. Stuart has requested an additional 2.6 meters in his building height.
As his lot is at the highest point of the street, we would like to see a street scape so we can understand his plan.
We are concerned that an additional 2.6 meters is a large amount of variance. If the building sits up higher than the others, this will have a negative effect on our view corridors and potentially make the development decrease in value.
So we would object to this variance being given, unless a street scape plan is verified that it will fit together.
Thanks.
Andy and Carol Cohen
Lot 8 Timberlanding
8416 Resort Drive

Regional District of East Kootenay

Staff Report ...

Development Variance Permit Application

Date: July 24, 2019
File: P 719 337
DVP No. 27-19

Applicant: Darren Pickering

Location: 7834 Monroe Lake Rd, west of Moyie Lake

Legal: Lot 14, DL 11313, Kootenay District Plan 1632 (PID: 015-666-832)

Proposal: Application to vary the Electoral Area C South Zoning and Floodplain Management Bylaw maximum permitted height of an accessory building from 5.0 m to 6.1 m for a 334 m^2 detached garage.

Options:

1. THAT Development Variance Permit No. 27 -19 be granted.

2. THAT Development Variance Permit No. 27 -19 be refused.

Recommendation: **Option # 1**
The subject parcel is a larger lot and the proposal complies with parcel coverage requirements. The proposed structure is located away from adjacent property dwellings or the road. No negative impacts are anticipated.

Property Information:

Zoning Designation: RS-1(A), Residential (Semi-Rural Single Family) Zone

Land Use Bylaw Objectives:

- To recognize the current use of residential properties in the bylaw
- To recognize the rural character of the bylaw area by ensuring future residential developments are compatible with adjacent land uses

Parcel Area: 0.6 ha (1.6 ac)

Density: One single family permitted per parcel

ALR Status: Not within the ALR

BC Assessment: Residential (SFD)

Flood Hazard Rating: The subject property is adjacent to Monroe Lake. Floodplain regulations apply to development.

Water / Sewer Services: Onsite

Interface Fire Hazard Rating: Low to high; not within a fire protection area

Additional information: The applicant has stated that the proposed garage is for personal use to store the owner's personal recreation equipment, such as boats and dirt bikes.

Consultation:

Advisory Commissions:

APC Area C: Support

Response(s) to Notice: 14 notices were mailed on June 19, 2019 to all property owners within 100 m of the subject property. No notices were returned as undeliverable and no responses have been received.

Documents Attached:

- Permit
- Location Map
- Land Use Map
- Site Plan
- Proposal

RDEK Contact:

Krista Gilbert, Planning Technician
Phone: 250-489-0314
Email: kgilbert@rdek.bc.ca

Regional District of East Kootenay

Development Variance

Permit No. 27-19

Permittee: Darren Pickering

1. This Development Variance Permit is issued subject to compliance with all RDEK bylaws applicable thereto, except as specifically varied or supplemented by this Permit.

2. This Permit applies to and only to those lands described below:

   Lot 14, District Lot 11313, Kootenay District Plan 1632
   [PID: 015-666-832]

3. Regional District of East Kootenay – Electoral Area C South Zoning & Floodplain Management Bylaw No. 2913, 2019, Section 4.04(3)(c), which permits a maximum height for an accessory building or structure of 5.0 m, is varied to permit a height of 6.1 m for a proposed garage.

4. The lands described herein shall be developed strictly in accordance with the terms and conditions of this Permit and in substantial compliance with the development variance permit application received on May 16, 2019.

5. This Permit shall come into force on the date of an authorizing resolution passed by the RDEK.

6. This Permit is not a building permit.

7. If development authorized by this Permit does not commence within two years of the issue date of this Permit, the Permit shall lapse.

8. A notice pursuant to Section 503(1) of the *Local Government Act* shall be filed in the Land Title Office and the Registrar shall make a note of the filing against the title of the land affected.

9. It is understood and agreed that the RDEK has made no representations, covenants, warranties, guarantees, promises, or agreement (verbal or otherwise) with the developer other than those in this Permit.

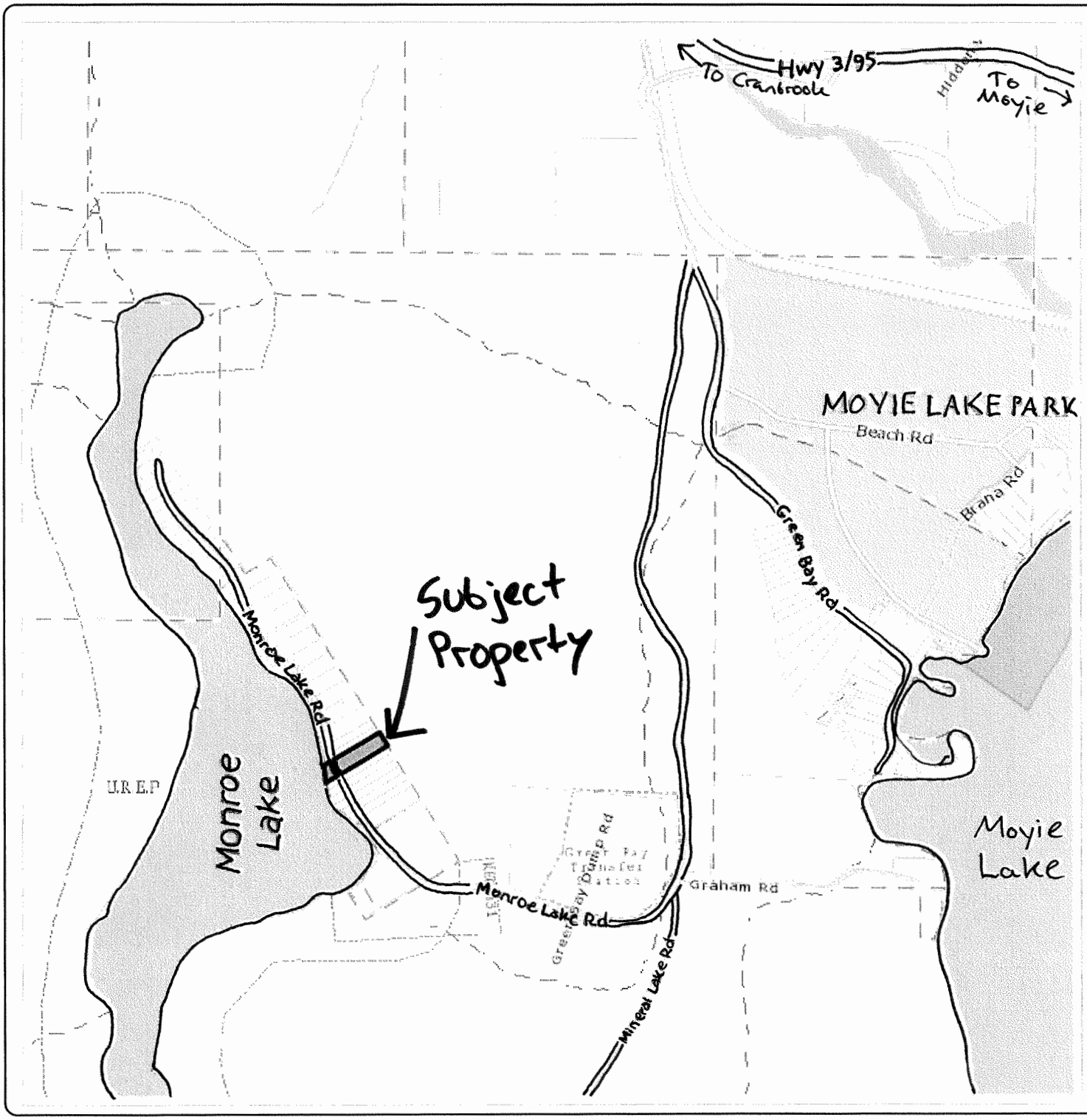
10. This Permit shall inure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, successors, and assigns.

Authorizing Resolution No. adopted by the Board of the Regional District of East Kootenay on the day of , 2019.

Shannon Moskal
Corporate Officer

Regional District of East Kootenay

Location Map



Notes:

525 0 263 525 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere
RDEK GeoViewer - 6-17-2019 11:28 AM

Scale = 1: 21,000

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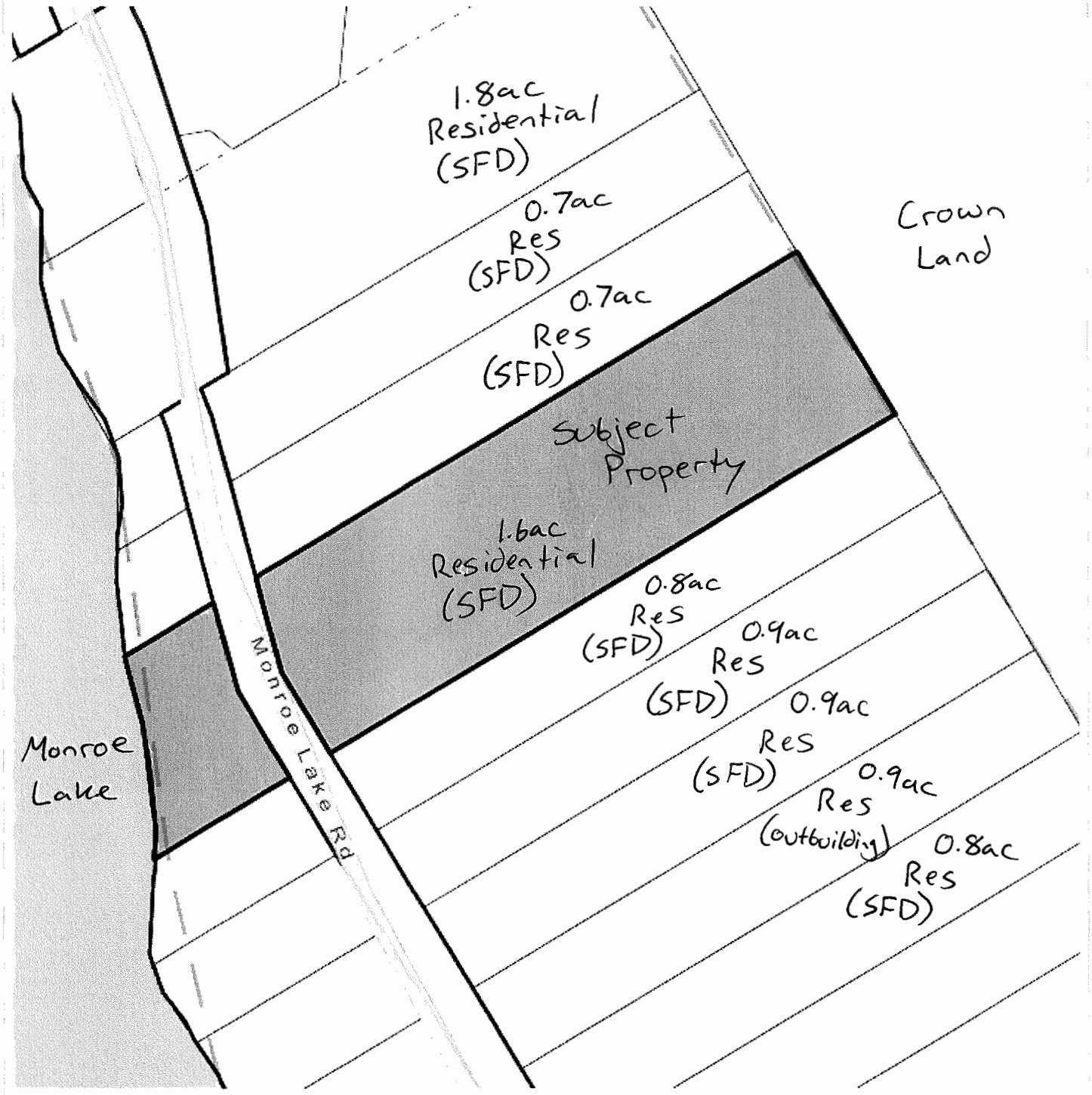
Regional District of East Kootenay

Land Use Map



Notes:

45 0 23 45 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere
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Scale = 1: 1,800

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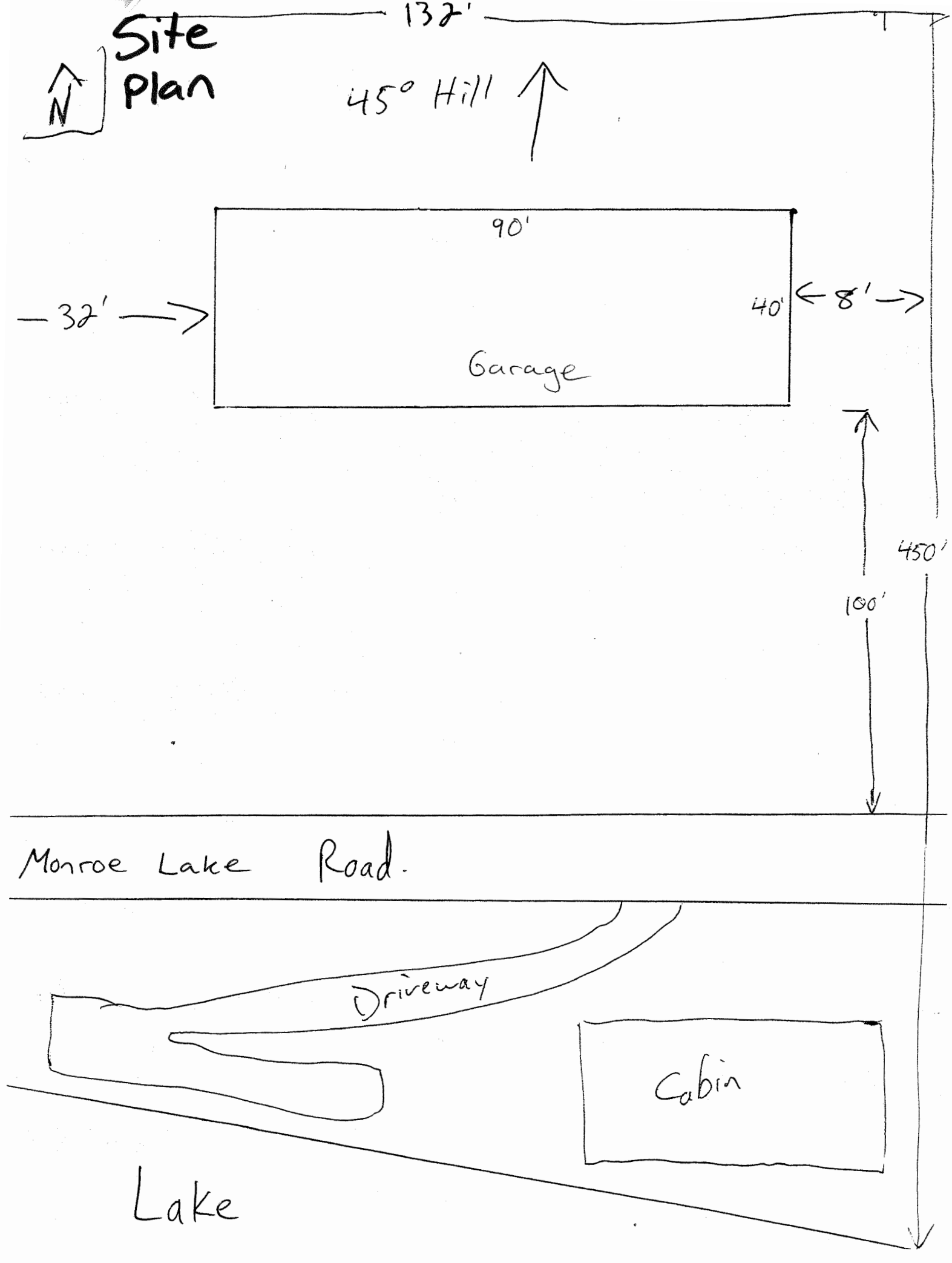
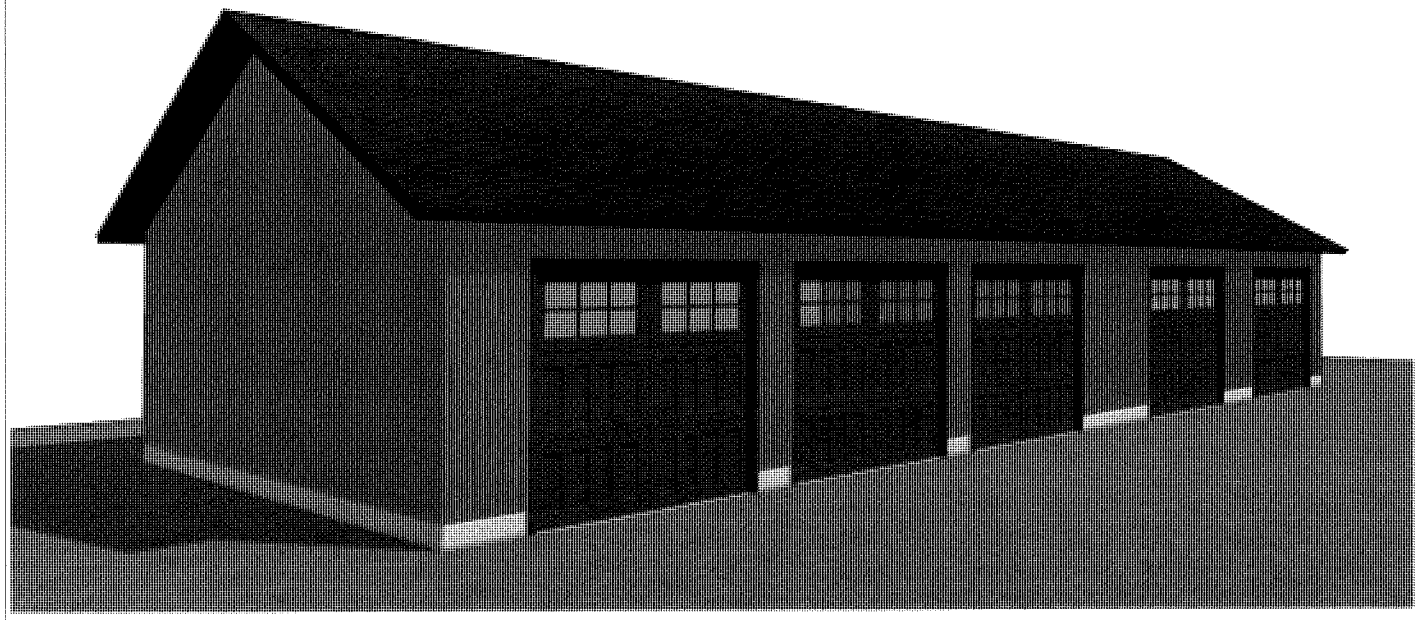

Site Plan
N
132'
45° Hill
90'
32'
40'
8'
Garage
450'
100'
Monroe Lake Road.
Driveway
Cabin
Lake

Proposal



General Notes

- Do not scale drawings

- All Construction shall conform to part 9 of the "BC Building Code" (Current Addition) or Better and any other local or municipal requirements

- Contractor to ensure Footings are Place on a proper base that is free from Frost, excessive moisture. and deleterious materials and to provide adequate cover to footings for frost protection (4' - 0" minimum)

- All dimensions and specifications must be checked and verified by contractor and/or owner before any construction starts. Any corrections and/or omissions must be reported before construction starts.

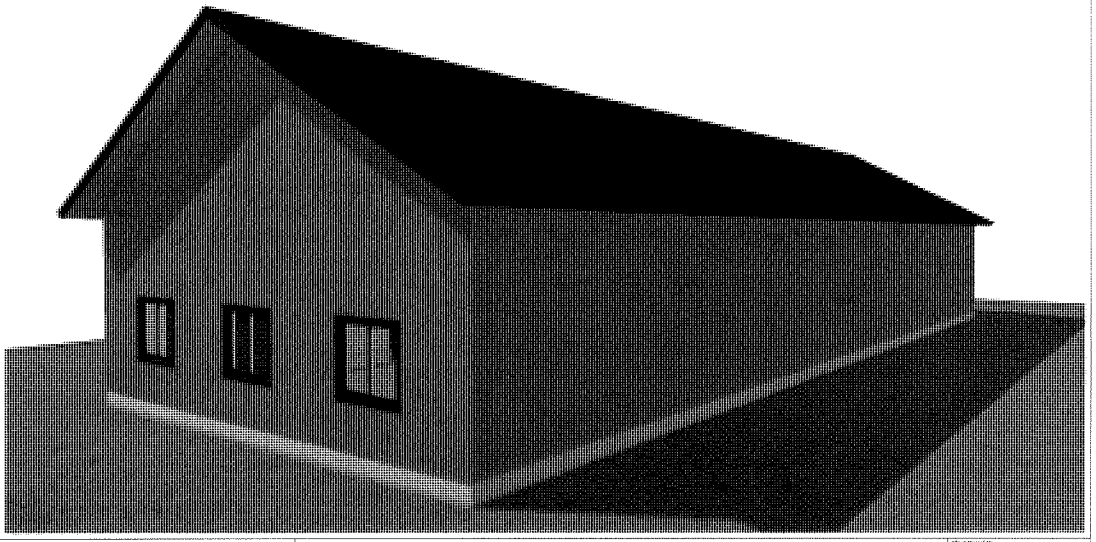
- All pre manufactured floor and roof systems including beams, floor joists, or any other component in the floor must be engineered by supplier

- Any other structural components required must be checked and verified by local building authority and/or structural engineer registered in the province of British Columbia.

- Final grades may alter appearance.

- specs and schedules govern over working drawings and are to be reviewed prior to construction.

- Designers liability limited to correction of plans only



Designed: Checked:
Drawn: S.Hathaway

SUMMIT

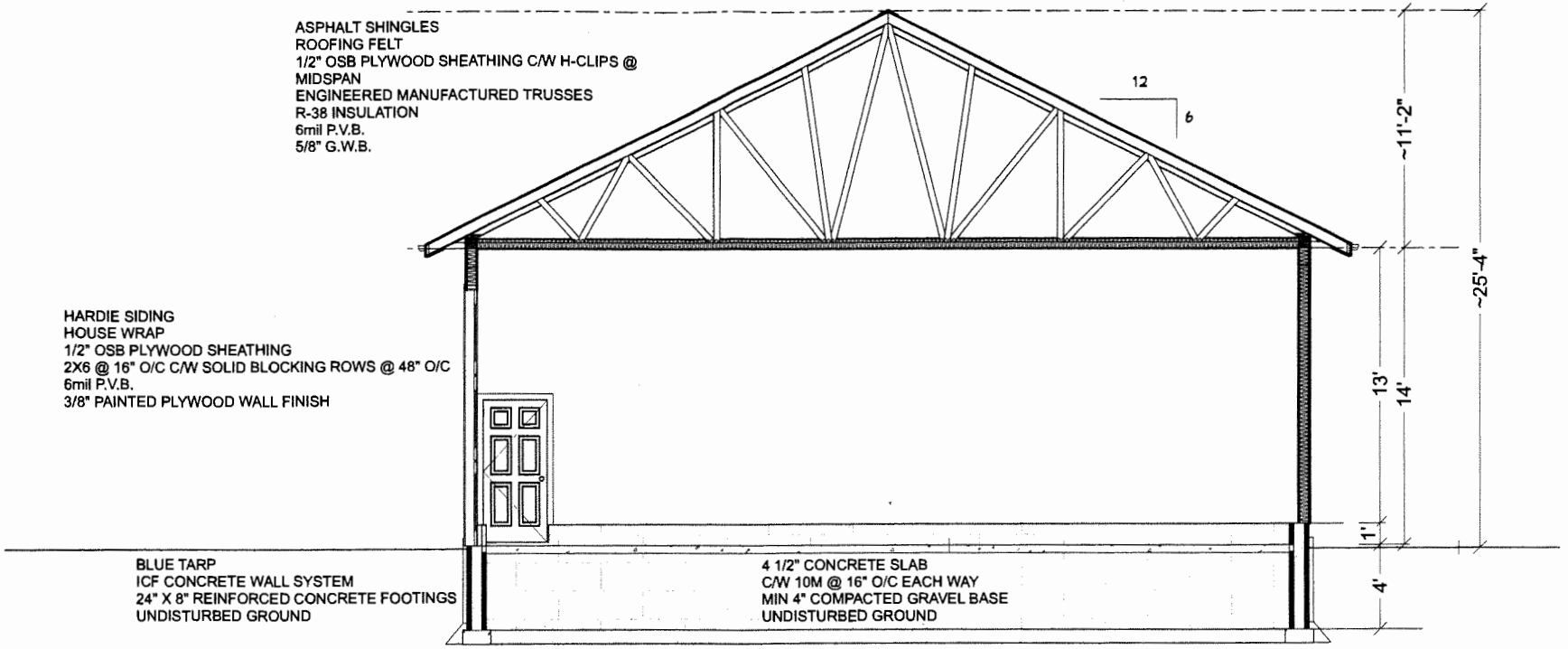
DARREN PICKERING

EXTERIOR PERSPECTIVES & GENERAL NOTES

PROPOSED DETACHED GARAGE

Site # Project No. 0000-00
DATE 6/26/2019
Drawing No. 1

Proposal



SCALE: 1/8" = 1'-

Revision | Dr.

immit CAD info@summitcad.ca

Designed: | Checked:
Drawn: S.Hatheway

SUMMIT

DARREN PICKERING

CROSS SECTION DETAIL A

PROPOSED DETACHED GARAGE

Client Project No. 0000-00

DATE 4/13/2019

Drawing No.

Regional District of East Kootenay

Staff Report ...

Development Variance Permit Application

Date: July 25, 2019
File: P 719 117
DVP No. 28-19

Applicant: Polar Peak Properties Inc.

Agent: Richard Haworth

Location: 4576 Timberline Crescent, Fernie Alpine Resort

Legal: Lot 1, DL 8901, Kootenay District Plan NEP59794 except Strata Plan NES199 (Phases 4, 5, 6 and 7)
(PID: 023-867-884)

Proposal: Application to vary the Elk Valley Zoning Bylaw to allow for construction of a multiple family dwelling along a zone boundary. The application is to waive the requirement that each different zone will be treated as a separate parcel for the purposes of calculating maximum parcel coverage and setbacks, and to reduce the setbacks from a side yard in the RS-2(A) zone and CG-8 zone from 3.0 m and 4.5 m to 0.0 m.

Options:

1. THAT Development Variance Permit No. 28 -19 be granted.

2. THAT Development Variance Permit No. 28 -19 be refused.

Recommendation: **Option # 1**
The proposal complies with the required setbacks from adjacent properties. A rezoning application is in process to address the issue and no issues are anticipated as the parcels are designated for multi-family development in the OCP.

Property Information:

OCP Designation: R-MF, Resort Multi-Family

OCP Policies:

- The Regional District will encourage a range of densities and housing mix within the plan area.

- The Regional District will encourage resort owners to monitor the housing needs of the community, consider a variety of housing types and encourage innovative housing approaches to meet the needs of permanent, semi-permanent and seasonal residents of the resort.

Zoning Designation: Multiple - RS-2(A), Resort Residential Zone and CG-8, Resort Commercial Zone

Parcel Area: 0.65 ha (1.62 ac)

Density: In zones permitting multiple family dwellings, up to 60 dwelling units per gross hectare of minimum usable site area are permitted on a parcel

ALR Status: Not within the ALR

BC Assessment: Residential (multi-family - vacant)

Property Information - cont'd:

Flood Hazard Rating: Not within a flood hazard area.

Water / Sewer Services: Community Water and Community Sewer, provided by Fernie Alpine Resort Utility Company

Interface Fire Hazard Rating: High; within the Fernie Rural fire protection area

Additional information:

- The subject property is the undeveloped portion of a phased strata that will become part of Strata Plan NES199.
- Due to the split zoning of the property, the applicants are unable to obtain a building permit for the proposed structure.
- The application states that to expedite the approval process, the applicants are asking to vary the zoning bylaw to allow construction on a zone boundary, but they have also submitted a bylaw amendment application to rectify the spilt zoning of the property.
- The building under application is building 8 on the site plan. Buildings 9, 10 and 11 have not been constructed at this time.

Consultation:

Advisory Commissions:

APC Area A: Support.

Response(s) to Notice: 293 notices were mailed on July 2, 2019 to all property owners within 100 m of the subject property with six letters returned as undeliverable. Eight letters of opposition have been received expressing a variety of concerns. These include, but aren't limited to, opposition to the increase in density, the impact on wildlife, property values and concerns with the impacts of a 0 m setback. The letters are attached.

Documents Attached:

- Permit
- Location Map
- Land Use Map
- Zone Designation Map
- Site Plan
- Proposal
- Letters of Opposition

RDEK Contact:

Krista Gilbert, Planning Technician
Phone: 250-489-0314
Email: kgilbert@rdek.bc.ca

Regional District of East Kootenay

Development Variance

Permit No. 28-19

Permittees: Polar Peak Properties Inc.

1. This Development Variance Permit is issued subject to compliance with all RDEK bylaws applicable thereto, except as specifically varied or supplemented by this Permit.

2. This Permit applies to and only to those lands described below:

   Lot 1 District Lot 8901, Kootenay District, Plan NEP59794 except Strata Plan NES199 (Phases 4, 5, 6 and 7)
   [PID: 023-867-884]

3. Regional District of East Kootenay – Elk Valley Zoning Bylaw No. 829, 1990, Section 3.3(2)(a) which requires that each different zone will be treated as a separate parcel for the purposes of calculating maximum parcel coverage and setbacks, is waived, Section 7.05(A)(5)(a)(iii), which requires a principal building to be sited at least 3.0 m or at least 10% of the width of the parcel from the side yard, is reduced to 0.0 m; and Section 7.16(5)(a)(iii), which requires a building to be sited at least 4.5 m from the side yard, is reduced to 0.0 m for construction of a multiple family dwelling along a zone boundary.

4. The lands described herein shall be developed strictly in accordance with the terms and conditions of this Permit and in substantial compliance with the development variance permit application received on May 21, 2019.

5. This Permit shall come into force on the date of an authorizing resolution passed by the RDEK.

6. This Permit is not a building permit.

7. If development authorized by this Permit does not commence within two years of the issue date of this Permit, the Permit shall lapse.

8. A notice pursuant to Section 503(1) of the *Local Government Act* shall be filed in the Land Title Office and the Registrar shall make a note of the filing against the title of the land affected.

9. It is understood and agreed that the RDEK has made no representations, covenants, warranties, guarantees, promises, or agreement (verbal or otherwise) with the developer other than those in this Permit.

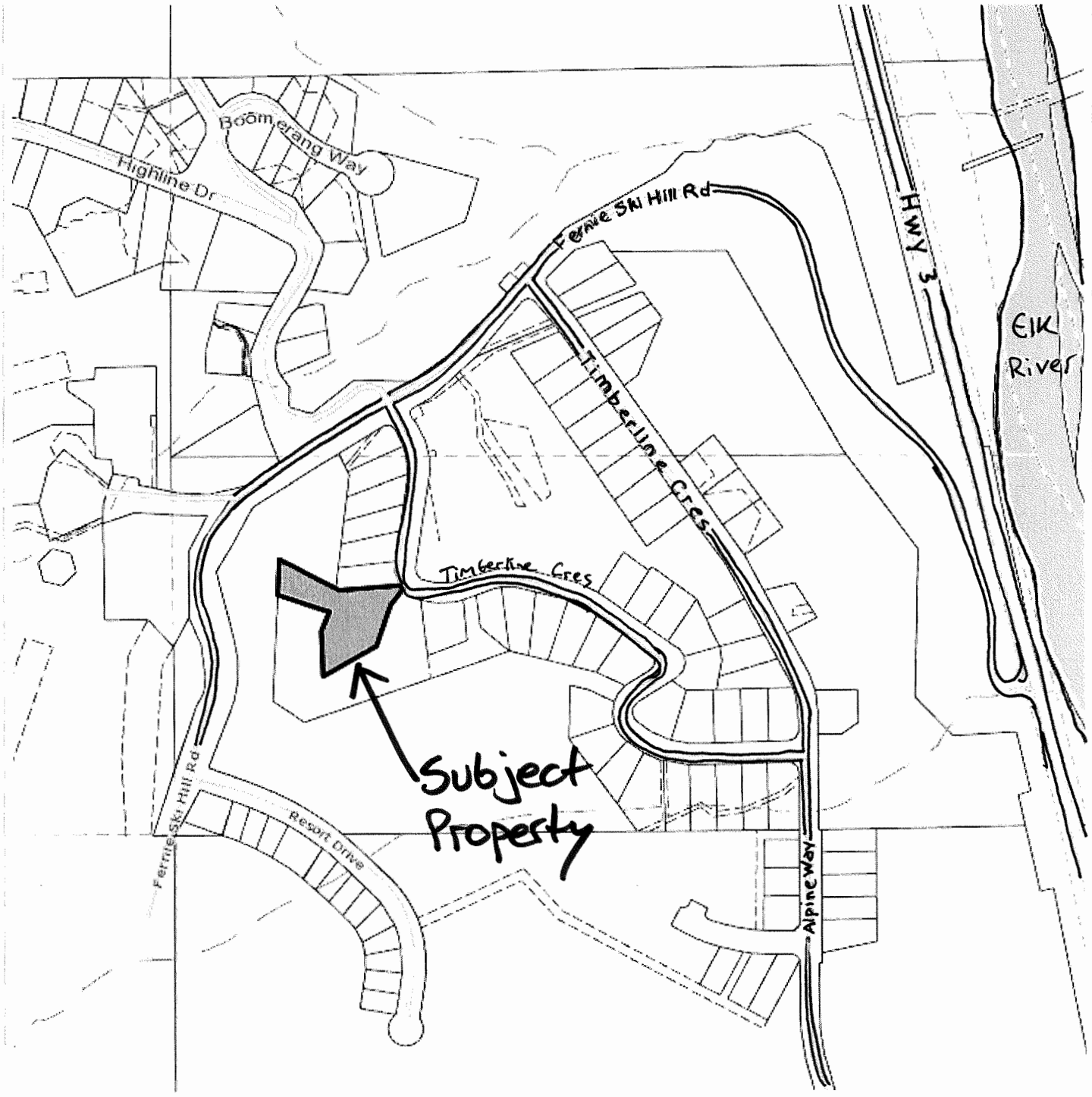
10. This Permit shall inure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, successors, and assigns.

Authorizing Resolution No. adopted by the Board of the Regional District of East Kootenay on the day of , 2019.

Shannon Moskal
Corporate Officer

Regional District of East Kootenay

Location Map



Notes:

226 0 113 226 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere
RDEK GeoViewer - 6-17-2019 11:24 AM

Scale = 1: 9,028

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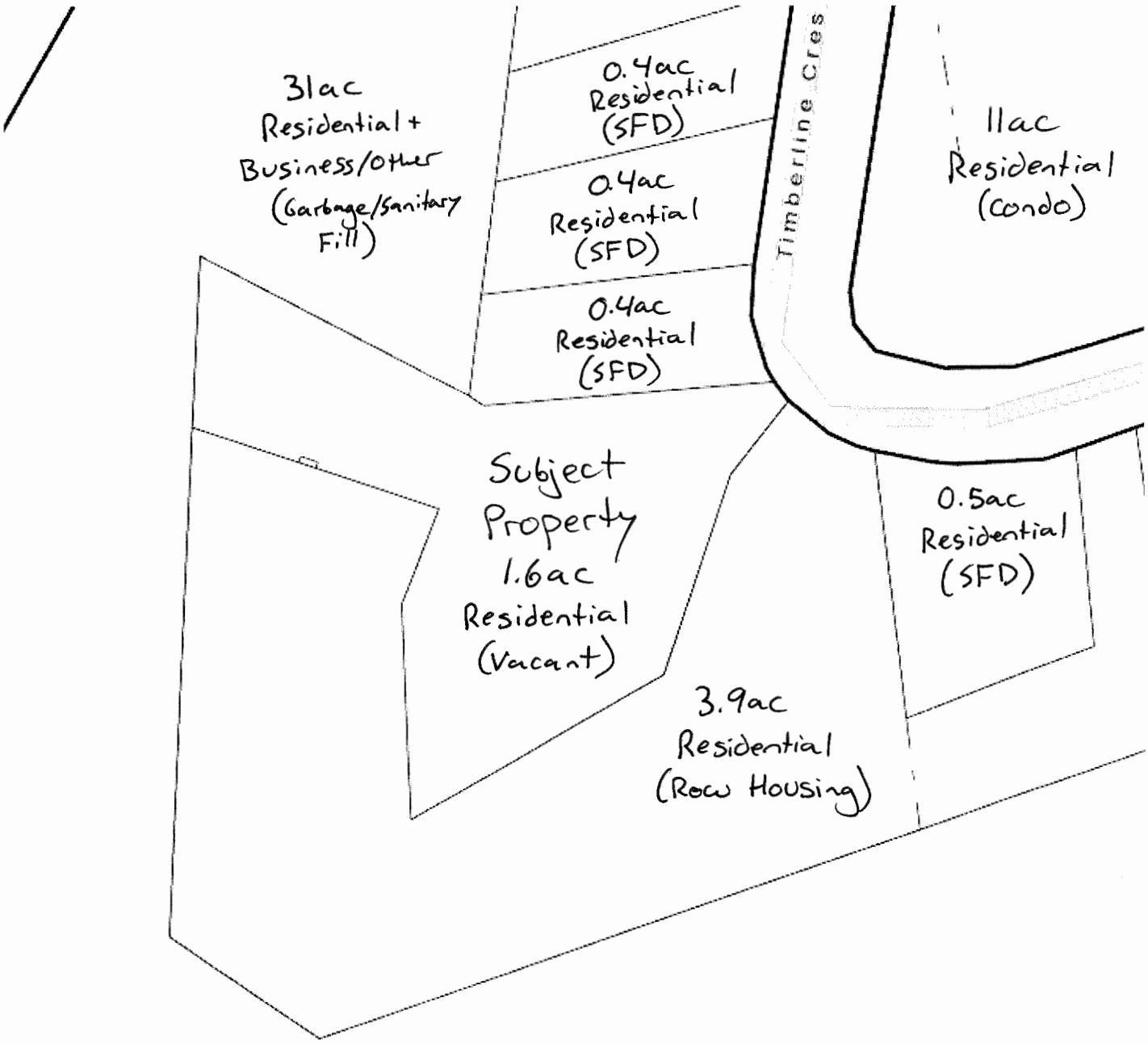
Regional District of East Kootenay

Land Use Map



Notes:

50 0 25 50 Meters

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RDEK GeoViewer - 6-17-2019 12:01 PM

Scale = 1: 2,000

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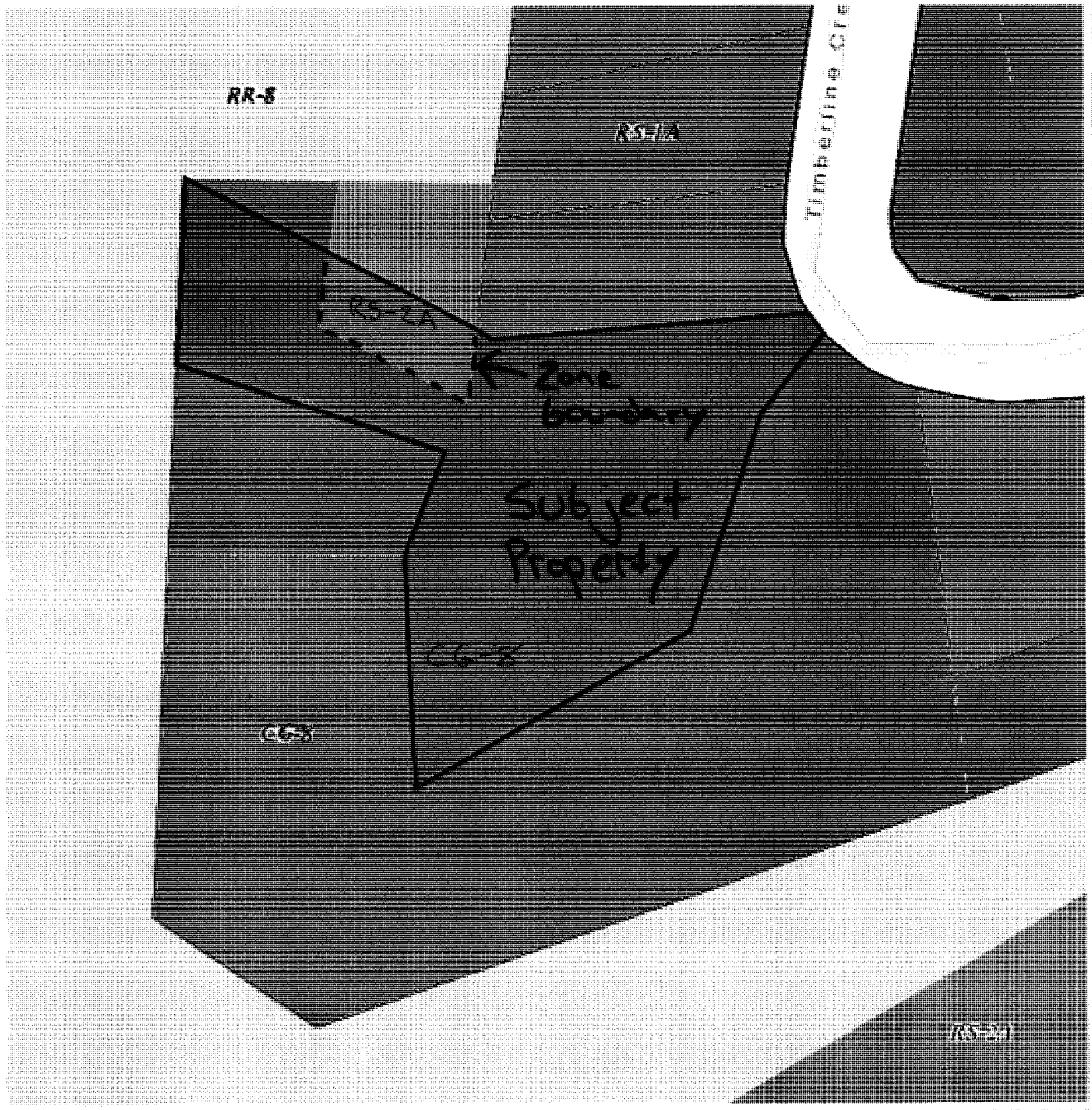
Regional District of East Kootenay

Zone Designation Map



Notes:

44 0 22 44 Meters

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RDEK GeoViewer - 6-18-2019 3:27 PM

Scale = 1: 1,750

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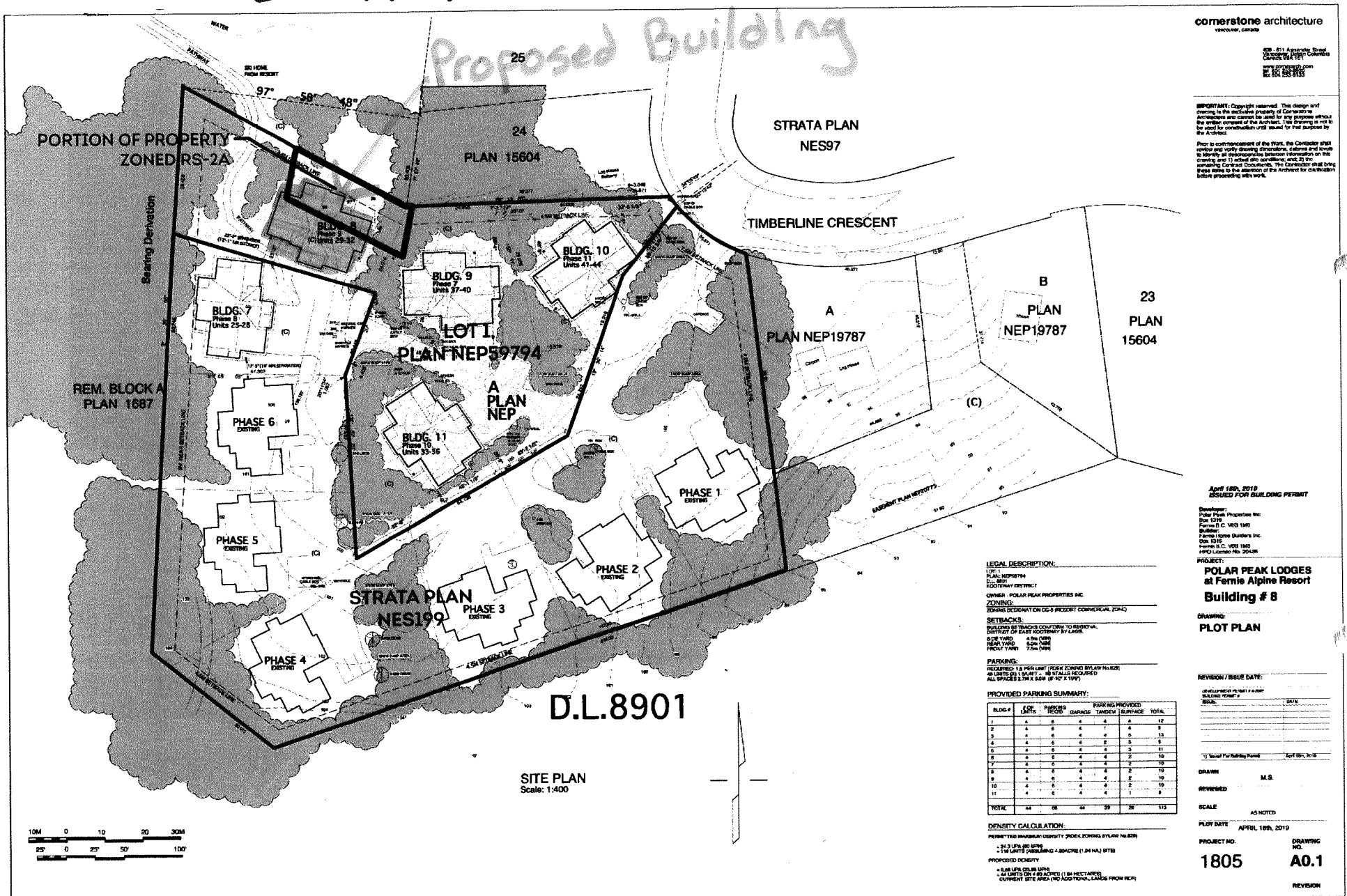
Site Plan



LEGAL DESCRIPTION:
LOT 1
PLAN NEP59794
DL 8901
KOOTENAY DISTRICT

OWNER - POLAR PEAK PROPERTIES INC.

ZONING:
ZONING DESIGNATION CG-5 (RESORT COMMERCIAL ZONE)

SETBACKS:
BUILDING SETBACKS CONFORM TO REGIONAL DISTRICT OF EAST KOOTENAY BY LAWS.

SIDE YARD	4.5m (MIN)
REAR YARD	5.0m (MIN)
FRONT YARD	7.5m (MIN)

PARKING:
REQUIRED: 1.0 PER UNIT (PEAK ZONING BYLAW No.829)
48 UNITS (@) 1 SPLIT = 48 STALLS REQUIRED
ALL SPACES 2.74M X 5.0M (8'-10" X 19'0")

PROVIDED PARKING SUMMARY:

BLDG #	# OF UNITS	PARKING REQ'D	PARKING PROVIDED GARAGE	TANDEM	SURFACE	TOTAL
1	4	6	4	4	4	12
2	4	6	4	1	4	9
3	4	6	4	4	5	13
4	4	6	4	2	3	9
5	4	6	4	4	3	11
6	4	6	4	4	2	10
7	4	6	4	4	2	10
8	4	6	4	4	2	10
9	4	6	4	4	2	10
10	4	6	4	4	2	10
11	4	6	4	4	1	9
TOTAL	44	66	44	39	30	113

DENSITY CALCULATION:
PERMITTED MAXIMUM DENSITY (INDEX ZONING BYLAW No.829)
= 24.3 UPA (60 UPH)
= 116 UNITS (ASSUMING 4.80ACRE (1.94 HA.) SITE)

PROPOSED DENSITY
= 9.48 UPA (23.35 UPH)
= 44 UNITS ON 4.80 ACRES (1.94 HECTARES)
CURRENT SITE AREA (NO ADDITIONAL LANDS FROM ROR)

cornerstone architecture
vancouver, canada

April 18th, 2019
ISSUED FOR BUILDING PERMIT

Developer:
Polar Peak Properties Inc
Box 1319
Fernie B.C. V0B 1M0
Builder:
Fernie Home Builders Inc.
Box 1319
Fernie B.C. V0B 1M0
HPO Licence No. 20425

PROJECT:
POLAR PEAK LODGES at Fernie Alpine Resort
Building # 8

DRAWING:
PLOT PLAN

REVISION / ISSUE DATE:

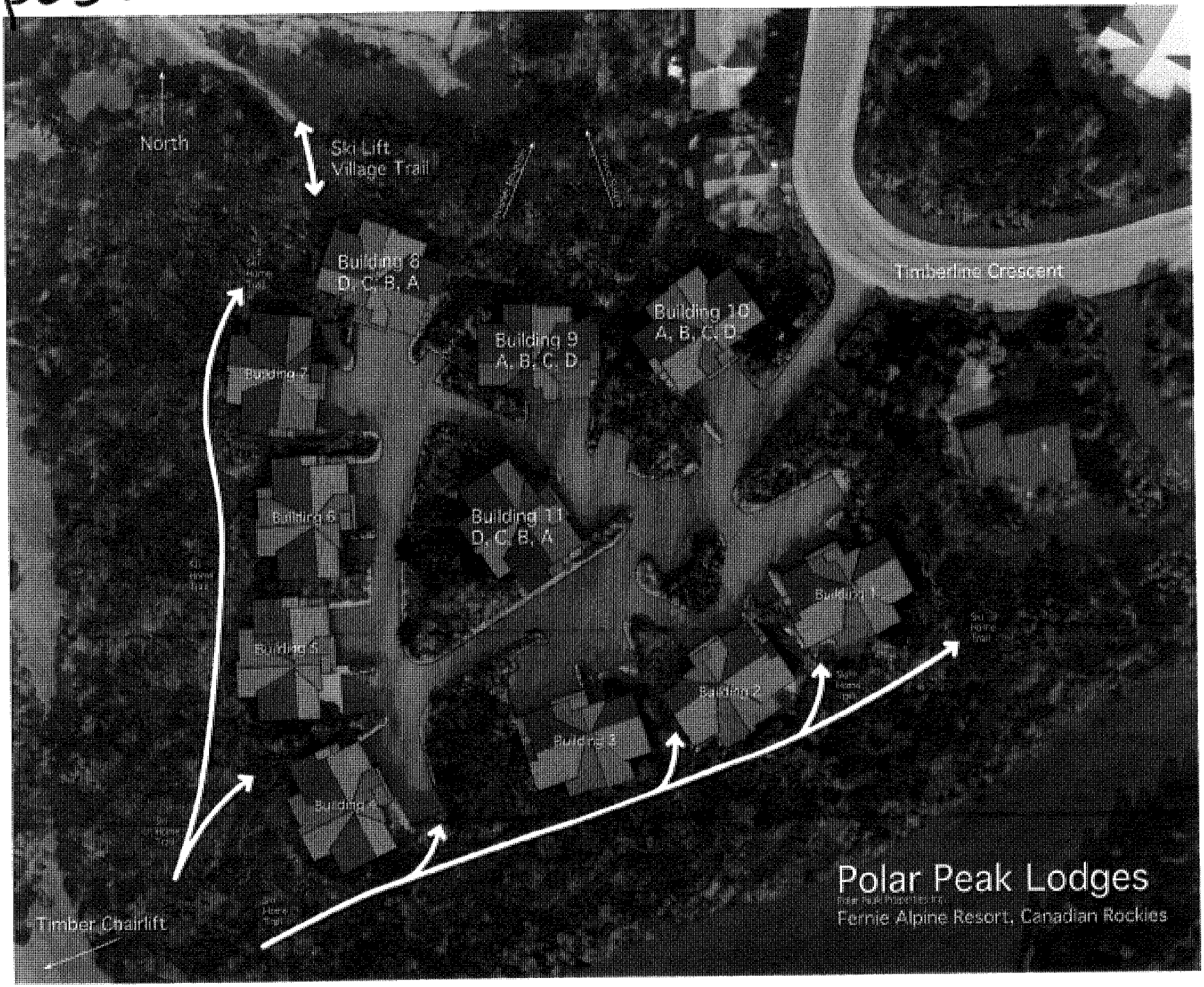
ISSUE	DATE
1) Issued For Building Permit	April 18th, 2019

DRAWN M.S.
REVIEWED
SCALE AS NOTED
PLOT DATE APRIL 18th, 2019

PROJECT NO. 1805
DRAWING NO. A0.1
REVISION

Apple Mac OS X Tiger / Vectorworks 11.5

Proposal


North
Ski Lift
Village Trail
Building 6
D, C, B, A
Building 9
A, B, C, D
Building 10
A, B, C, D
Timberline Crescent
Building 11
D, C, B, A
Timber Chairlift
Polar Peak Lodges
Fernie Alpine Resort, Canadian Rockies


Proposal - Building 8

Application Appeal
Robert and Jill Gibson
4596 Timberline Crescent
Fernie BC [redacted]

July 16, 2019

Andrew McLeod
Planning and Development Services Manager

Krista Gilbert, Planning Technician
19 - 24 Avenue South
Cranbrook BC V1C 3H8

Re: Development Variance Permit No. 28-19
Lot 1 District Lot 8901, Kootenay District Plan NEP59794

Dear Krista Gilbert and Andrew McLeod,

We, as one of the houses located on Snow Lake, will be impacted by this proposal and appeal the granting of the application for the variance setback. The elevation of the proposed build is higher than the surrounding buildings and homes. This will amplify noise both to Polar Peak and the surrounding homes on the Snow Lake. The BC building code requires greater setbacks if the building is larger than first proposed.

Families and children enjoy the teeming wildlife both in and around the lake/pond and will lose an important recreational area at the pond that will change the character of the neighbourhood with the proposed allocation of setbacks.

There is a watershed and wildlife corridor that will be cut off by the extension of the new build and the 6.0 metres of rear yard that the applicant is requesting to waive. The side yard on the west side will back up directly on the path which will inhibit wildlife routes. Bears, moose and deer regularly feed, traverse and bed in the proposed area. Certainly, this should be a consideration as wildlife in the area are already stressed with the busy highway and walkways throughout the subdivision. This green space needs to be preserved.

We are also wondering how long a landowner has to build on a property. The applicant has left a yard full of detritus, building materials, unsightly overgrown grass and mounds of dirt on lots for over twenty years. Is there a building statute?

We oppose this application for the reduction of setbacks due to the magnitude of changes. The current green space and snow space is home to families, wildlife, and owners. New residents of the proposed condo/townhome units will be on private land the moment they step outside their back door without the setbacks. The RS-2A zone and CG-8 zone should be maintained within the current BC building codes.

Further, the Notice of Intent for the Development Variance Permit No. 28-19 is unclear at best. There was no proper map, no explanation, no information, no return phone calls from the Planning Technician, and an incredibly short window in which to respond to this application.

We look forward to a response to this letter.

Very truly yours,

Robert and Jill Gibson

[redacted]

Krista Gilbert

From: [redacted]
Sent: July 17, 2019 8:39 AM
To: Info
Cc: Krista Gilbert
Subject: Development Variance Permit No. 28-19 - 4576 Timberline Crescent, Fernie

Attn: Regional District of East Kootenay – Board of Directors

Re: Development Variance Permit No. 28-19 – 4576 Timberline Crescent, Fernie

We hereby submit our opposition to the approval of this development permit as outlined in the letter dated June 24,2019. As property owners in Timberline Crescent we feel this development would be detrimental to the area, citing an increase in problems typically associated with a increase in housing density. The current approved development in the area will already pose challenges to those living around Fernie Alpine Resort as the construction continues and the problems do not need to increase further with changes to current zoning.

Thank you.

Colin & Michele Magee,
[redacted]

Objection to RDEK Development Variance Permit N0. 28-19

Attention: Andrew McLeod, Planning & Development Services Manager
Krista Gilbert, Planning Technician

From: Anna Lowther & Mike Birmingham
4592 Timberline Crescent, Fernie, [redacted]

We are writing to register our strong opposition to the proposed Development Variance Permit No. 28-19. Our opinion is that proposing to reduce the required setbacks to zero is frankly outrageous, and represents a desire to overdevelop the site which is driven by simple greed on the part of the developer. It is basically an attempt at a land-grab.

Property setbacks are an essential requirement in every modern society across the planet for numerous reasons, including:

- aesthetics;
- prevention of over-development of a site;
- privacy;
- fire safety;
- to minimise sound pollution to neighbouring properties;
- to minimise light pollution to neighbouring properties;
- to allow for landscaping between properties;
- to allow access for original construction without encroaching on adjacent properties;
- to allow access for building maintenance without encroaching on adjacent properties;
- to maintain the neighbourhood character;
- to prevent spoiling views from neighbouring properties;
- to prevent devaluation of neighbouring properties.

For all of the above reasons the idea of allowing a zero setback in this proposal is ridiculous. Clearly to construct a building with a zero setback will require access to the neighbouring property. Beyond initial construction access to the neighbouring property will be necessary to maintain the building. It is obvious that once built the residents and strata will start treating a few metres of the adjacent property as if it were their own, whether it be by landscaping or access. What right does the developer think he has to clear trees on the adjacent property to build in the first place, which obviously would be a necessity?

We bought our property in Timberline Crescent on the clear understanding that there are rules to development of all properties that must be upheld by the RDEK. We expect the RDEK to uphold those rules in respect of this case, but we will not hesitate to join with our fellow neighbours to take the appropriate legal action if you fail to do so.

Regards,

Anna Lowther
15 July 2019

Re: Opposition to the Development Variance Permit No. 28-19

As one of the owners of 4580 Timberline Cresent, Fernie, BC (lot 24 on your information package map)I am writing to register my opposition to the proposed variance. At the outset, I have some major issues with the whole "Notice of Intent" process as it applies to this application.
First, the notice you provided to homeowners such as myself was very short. While the "notice of intent" from Andrew was dated June 24, 2019, the letter was not mailed until July 2, 2019 according to the stamped envelope. I did not receive the letter in the mail until July 8. That has left very little time for obtaining additional information and conferring with neighbours and other owners in order to provide a considered response by July 17. I am wondering now when the variance application came to your office in the first place.

Secondly, the "map" provided on the reverse side of the "notice of intent" letter is woefully inadequate. While the "subject property" is outlined, there is no reference to the two zones within it and no indication of the location of the proposed building.

And thirdly, what is the point of referencing "DL 8901", "Lot1, Plan NEP 59794" and "Strata Plan NES199(Phases 4,5,6 and7)" if they are not shown on the map?

To your credit Krista, the additional information you provided after our phone conversation has cleared up the last two points but it raised another - that being how "side yard" is determined by the RDEK. If I understand you correctly, looking at proposed building 8, the "front" of the building is the wall facing the street even if it is actually the side of the building. Thus the "side" is either a back wall or a front wall, the longest walls on the proposed building. In reality, this variance requests a zero setback on the back of a building which should, according to bylaws Section 7.16 (5)(a)(ii) and Section 7.05 (A)(5)(a)(ii), have a setback of 6m(19.7ft).

Setback standards are there for a reason. They are supposed protect present and future owners on all sides of property lines. We bought lot 24 in 1989 because of it's access to the ski hill and because it had a residential lot on only one side. While we knew there would be future development on the Polar Peak side we expected the developers would respect the setbacks just as we have.
The setbacks in the area of Timberline Cresent allow for a screen of trees that is appreciated by homeowners on the Cresent itself and within the Polar Peak development. Any construction such as this variance would permit would negatively affect our property value, it would negatively affect our views of the mountain and be a distraction from this beautiful natural space.

We strongly oppose this development variance. While it apparently only applies to proposed building 8, we certainly do not want to see precedents set for future developments. Proposed buildings 9 and 10 come even closer to our property.

Finally, as I mentioned to you on the phone, many Timberline Cresent and Polar Peak homeowners do not have a great deal of trust in the Polar Peak developer and he has some history with the RDEK. A number of years ago he started an unauthorized condo development in the area of building 7 and proposed building 8. It was ordered removed.

Thanks for the opportunity to express our views on this matter, Krista.

Sincerely, Myles and Phyllis Radchenko

[redacted]

Krista Gilbert

From: Robert Laird <[redacted]>
Sent: July 12, 2019 4:46 PM
To: Krista Gilbert
Subject: Re: Polar Peak -4576 Timberline

Thank you for this.
I am apposed to any change in density as we have parking issues already.

Further to that the present strata rules forbid suites so im not certain why the applicant would waste your time with it.

This hasn't been socialized with the current owners in any fashion. This plan seems to continually change.

I am the owner at #16.

Please call if you have any questions.

Thanks

Rob Laird
[redacted]w
[redacted]c

> On Jul 9, 2019, at 12:00 PM, Krista Gilbert <kgilbert@rdek.bc.ca> wrote:
>
> Hello Rob,
>
> I have attached a copy of the notice that was sent out for the Polar Peak Properties Inc. DVP application. The reasoning behind the application is the property currently has two zoning designations and we have a regulation in our bylaw that states where properties are split zoned each zone will be treated as a separate parcel for calculating setbacks. The proposal is to build a new multiple family dwelling along the zone boundary so they need to reduce the setback to zero to be able to build on the zone boundary. They are still going to be complying with setbacks from roads and from other properties. I've attached a bit more information from their application. Please note when reviewing the site plan they are currently proposing to construct Building 8. Buildings 9, 10 and 11 have not been constructed yet. The applicants are also going through a zoning bylaw amendment process to make the property zoned completely CG-8 and get rid of the split zone on the property, but they are wanting to move forward with constructing the multiple family dwelling and the DVP process is quicker than the bylaw amendment process. Let me know if you have any further questions.
>
> Krista Gilbert
> Planning Technician

Krista Gilbert

From: Gina A Cosco [redacted]
Sent: July 10, 2019 5:29 PM
To: Krista Gilbert
Subject: Development variance no. 28-19

We are the owners of 4572 Timberline Crescent, the lot adjacent to the applicant for the proposed variance. We are opposed to any variance for the purpose of reducing any setbacks and feel that this would represent a very bad precedent for the subdivision, let alone the rest of the Polar Peaks lot. Should other variance be requested at a future date on our common boundary, we and our property would be directly adversely affected by granting of the variance. Thus, we are very strongly opposed to this application.
thankyou
Gina and David Cosco
4572 Timberline Crescent
Fernie, B.C.

Krista Gilbert

From: stay@blackbearchalet.com
Sent: July 11, 2019 5:42 PM
To: Krista Gilbert
Cc: Colin Radchenko [redacted]
Subject: Development Variance Permit No. 28-19

Krista,

Re: Opposition to the Development Variance Permit No. 28-19

As the owners (Lana Radchenko, Colin Radchenko and Myles Radchenko) of Black Bear Chalet (located at 4580 Timberline Crescent, Fernie, BC), we are communicating to RDEK that we strongly **oppose** the request made in Permit No. 28-19 to reduce the setbacks to 0.0 m. Reducing the setbacks will negatively impact the our property value, as well as our views and enjoyment of the natural space between the proposed development and our lot and building. We are the original owners of this lot (since 1989) and while we expect future development in the area, we do not believe it is necessary to eliminate the setback.

Unfortunately, we are not able to attend the Board meeting on August 2, 2019. We understand RDEK will accept this email submission as our official opposition to this variance permit. Please confirm receipt of this email with a reply to us.

If you have any questions, please do not hesitate to contact us.

Respectfully,
Lana Radchenko [redacted]
Owner

cc:
Colin Radchenko [redacted]
Owner

Myles Radchenko [redacted]
Owner

Jay Hamilton and Terri Cooper
32 Mountainside Drive, Morristown, New Jersey
[redacted]

July 22, 2019

The Board of Directors
Regional District of East Kootenay
19-24 Avenue South
Cranbrook, B.C. V1C3H8

Reference: Development Variance Permit No. 28-19

Dear Directors;

I, and my partner, own unit 326 in Timberline Village which we purchased in the summer of 1999. We, and I believe many owners and visitors, purchased in or visit to, Fernie because of the integration of the ski hill's development into the natural surroundings. Fernie simply does not look like a corporate ski hill development. This was, and continues to be, one of the primary factors which influenced us both to purchase a unit in Timberline and to continue to use it, summer and winter, twenty years later.

The variance application by Polar Peak Properties proposes to construct a multi-family development with zero lot line clearance. This proposed development is directly across Timberline Crescent from our condominium unit 326 in Timberline Village (a maximum distance of 100 feet from our unit). I know of no other development within the Fernie community that has been allowed to build with zero lot line clearance. Such a request (zero clearance) is directly opposite the philosophy, which in my view, has underpinned development at Fernie for the last 30 years, namely integrate development into the natural setting rather than dominating nature with the development.

Certainly, there are multi-family developments within the ski resort, Timberline Village being an example, but in every case these developments, to my knowledge, have generous open space around the multi-family units. This proposed high-density development close to our property will, in my view, have significant negative impact on the market value of our unit.

Looking out from our unit at present, we look directly on to the bowls of the ski hill, and most of the current dwellings between us and the ski hill are single family dwellings build within tree settings which affect neither our site line or destroy the nature vistas.

This proposed development will not be hidden within the natural setting and will negatively affect our enjoyment of our unit and of Fernie.

This proposed variance strongly impacts the quantitative value and qualitative enjoyment of our property. We strongly recommend that the Board reject this variance request.

Should the Board not reject this request, we shall initiate an action against the Board and the developer, Polar Peaks for damages.

Regards

Jay Hamilton T.A. Cooper

Jay F. Hamilton and Teresa A. Cooper

Regional District of East Kootenay

Staff Report ...

Development Variance Permit Application

Date: July 29, 2019
File: P 719 529
DVP No. 29-19

Applicant: Russell and Diane Hemsing
Location: 4975 Falcon Drive in the Fairmont Hot Springs area
Legal: Lot 54, District Lot 138, KD, Plan 8297 (PID: 013-293-028)

Proposal:

Application to waive the Subdivision Servicing Bylaw No. 1954, 2008, section 11.01 (5), for Proposed Lot B to permit a parcel consolidation. This section requires parcels less than 2 ha with a house or business connected to an existing individual sewerage disposal system, to provide proof that the existing system won't create a health hazard and that a suitable future dispersal area is achievable on the parcel.

Mr. Hemsing and his neighbour have purchased the vacant lot between them and are consolidating it with their two lots. Both of their residential lots will become larger and are developed with existing onsite sewer systems. No additional lots are being created.

Options:

1. THAT Development Variance Permit No. 29-19 be granted subject to an easement being registered across Proposed Lot A to allow for future connection of Proposed Lot B to the community sewer system.

2. THAT Development Variance Permit No. 29-19 be refused.

3. THAT Development Variance Permit No. 29-19 be granted without the requirement that an easement be registered on Lot A.

Recommendation:

Option #1
Proposed Lot B is too small to accommodate a back-up sewerage disposal location. An easement to Proposed Lot B should be registered along the west boundary of Proposed Lot A to allow for connection to the nearby community sewer system in future if it is required.

Property Information:

OCP Designation: R-SF, Residential Low Density which includes single family residential subdivisions, duplexes, and zoning that supports secondary suites.

OCP Policies Related to Residential Development:

- New subdivisions of single family or greater density should be serviced by community water and sewer servicing where connections and capacity are available.

Zoning: R-1, Single Family Residential Zone, minimum parcel area: 1390 m^2 when serviced by either community water or community sewer.

Property Information - cont'd:

Parcel Size:
Lot 54 is currently 0.077 ha (0.19 ac) and it is proposed to become: 0.113 ha (0.28 ac)

Density: The subject lot will become larger and no additional dwellings are proposed.

ALR Status: Not within

Interface Fire Hazard Rating: Medium, within the Fairmont fire service area

BC Assessment: Residential with a SFD and suite

Flood Hazard Rating: The properties are not identified as being within a floodplain or a special policy area for flood hazard.

Water and Sewer Services:
Water: Fairmont Hot Springs community water.

Sewer: The community sewer line runs along Wills Road but it was installed after the subject property was developed with a dwelling therefore the subject property is serviced by an individual onsite sewerage disposal system.

Additional Information:

- The applicant has provided a letter from Ole Westergaard, ROWP, in which Mr. Westergaard states that a backup field area may be considered utilizing the front lawn between the house and the street for the disposal field area. This ROWP letter also states that, if the existing system fails, a Type 2 system is suggested for the same location as the current system.

Consultation:

Advisory Commissions:

APC Areas F & G: Support

Response(s) to Notice: Forty-four (44) notices were mailed on June 26, 2019 to all property owners within 100 m of the subject property. No notices were returned as undeliverable and 8 responses were received, all in support (letters attached).

Documents Attached:

- Permit
- Location Map
- Land Use Map
- Bylaw Regulations
- Proposed Subdivision

RDEK Contact:

Tracy Van de Wiel, Planning Technician
Phone: 250-489-0306
Email: tvandewiel@rdek.bc.ca

Regional District of East Kootenay

Development Variance

Permit No. 29-19

Permittee: Russell and Diane Hemsing

1. This Development Variance Permit is issued subject to compliance with all RDEK bylaws applicable thereto, except as specifically varied or supplemented by this Permit.

2. This Permit applies to and only to those lands described below:

   Lot 54, District Lot 138, KD, Plan 8297
   [PIDs: 013-293-028]

3. Regional District of East Kootenay – Subdivision Servicing Bylaw No. 1954, 2008, Section 11.01 (5), which requires parcels less than 2 ha with a house or business connected to an existing individual sewerage disposal system, to provide proof that the existing system won't create a health hazard and that a suitable future dispersal area is achievable on the parcel, is waived for Proposed Lot B in a consolidation subdivision at 4975 and 4979 Falcon Drive in the Fairmont Hot Springs area, subject to registration of a utility easement along the west boundary of Proposed Lot A, to allow future connection of Lot B to the existing community sewer system located in Wills Road.

4. The lands described herein shall be developed strictly in accordance with the terms and conditions of this Permit and in substantial compliance with the development variance permit application received on May 21, 2019.

5. This Permit shall come into force on the date of an authorizing resolution passed by the RDEK.

6. This Permit is not a building permit.

7. If development authorized by this Permit does not commence within two years of the issue date of this Permit, the Permit shall lapse.

8. A notice pursuant to Section 503(1) of the *Local Government Act* shall be filed in the Land Title Office and the Registrar shall make a note of the filing against the title of the land affected.

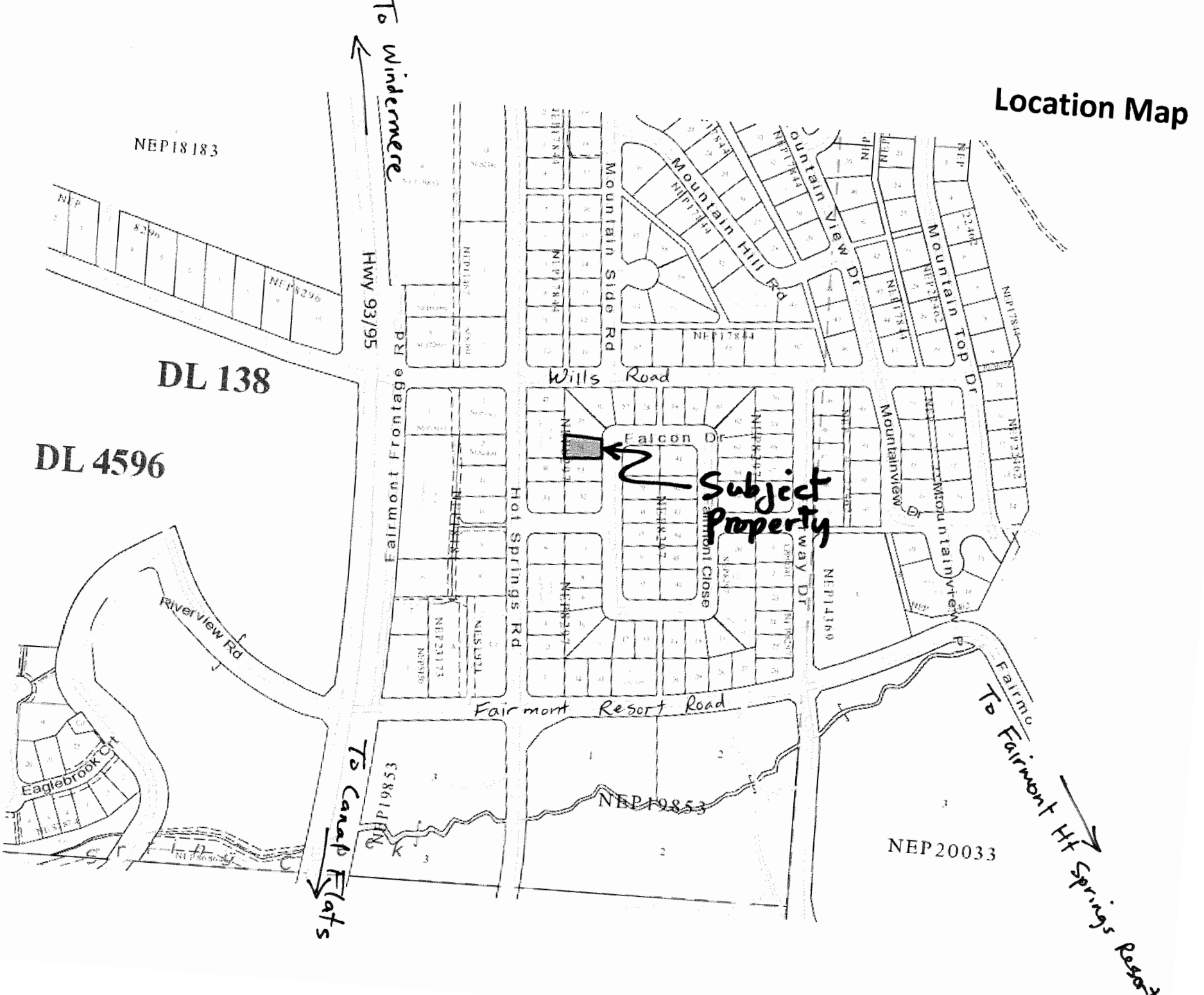
9. It is understood and agreed that the RDEK has made no representations, covenants, warranties, guarantees, promises, or agreement (verbal or otherwise) with the developer other than those in this Permit.

10. This Permit shall inure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, successors, and assigns.

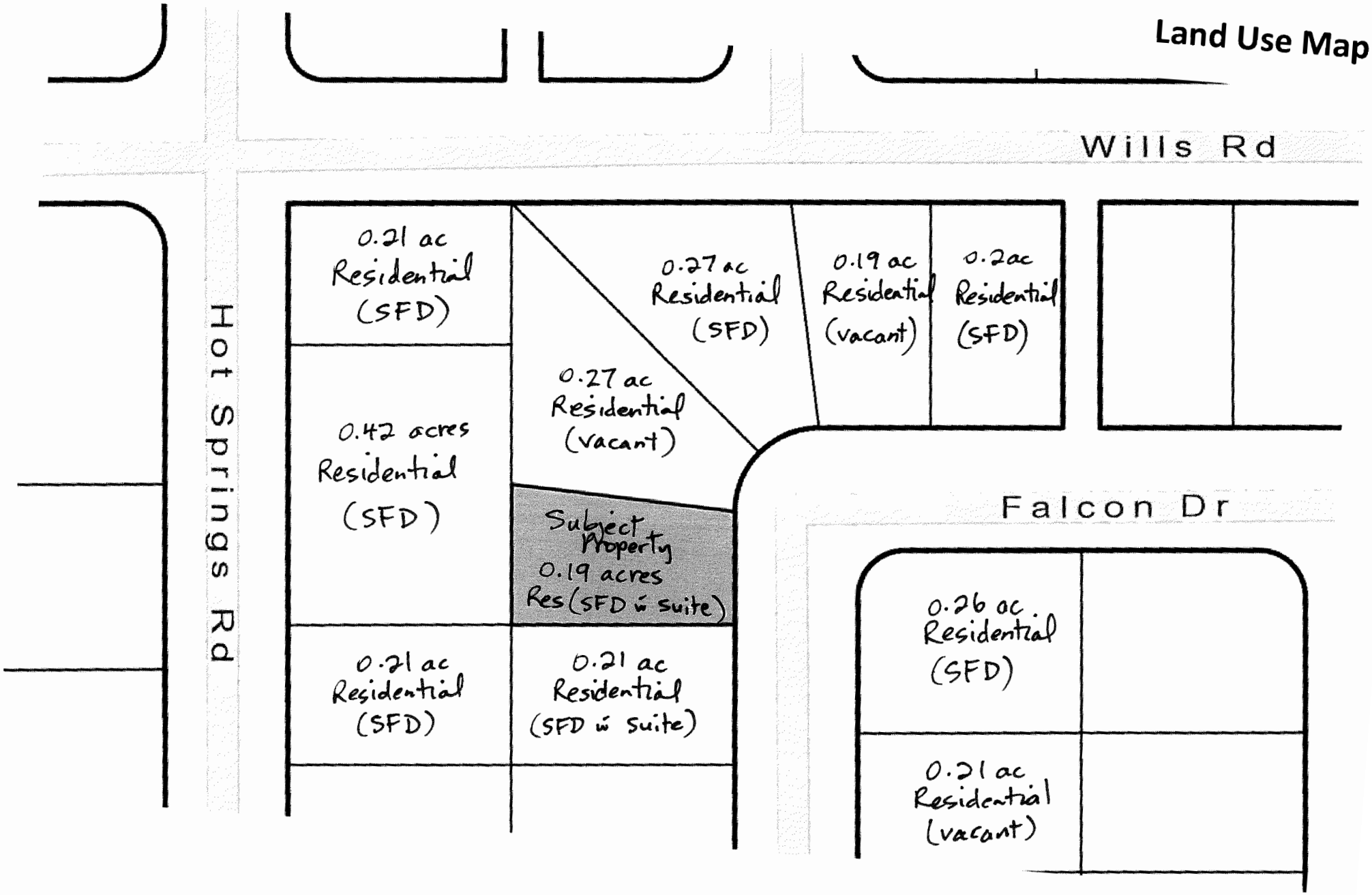
Authorizing Resolution No. adopted by the Board of the Regional District of East Kootenay on the day of , 2019.

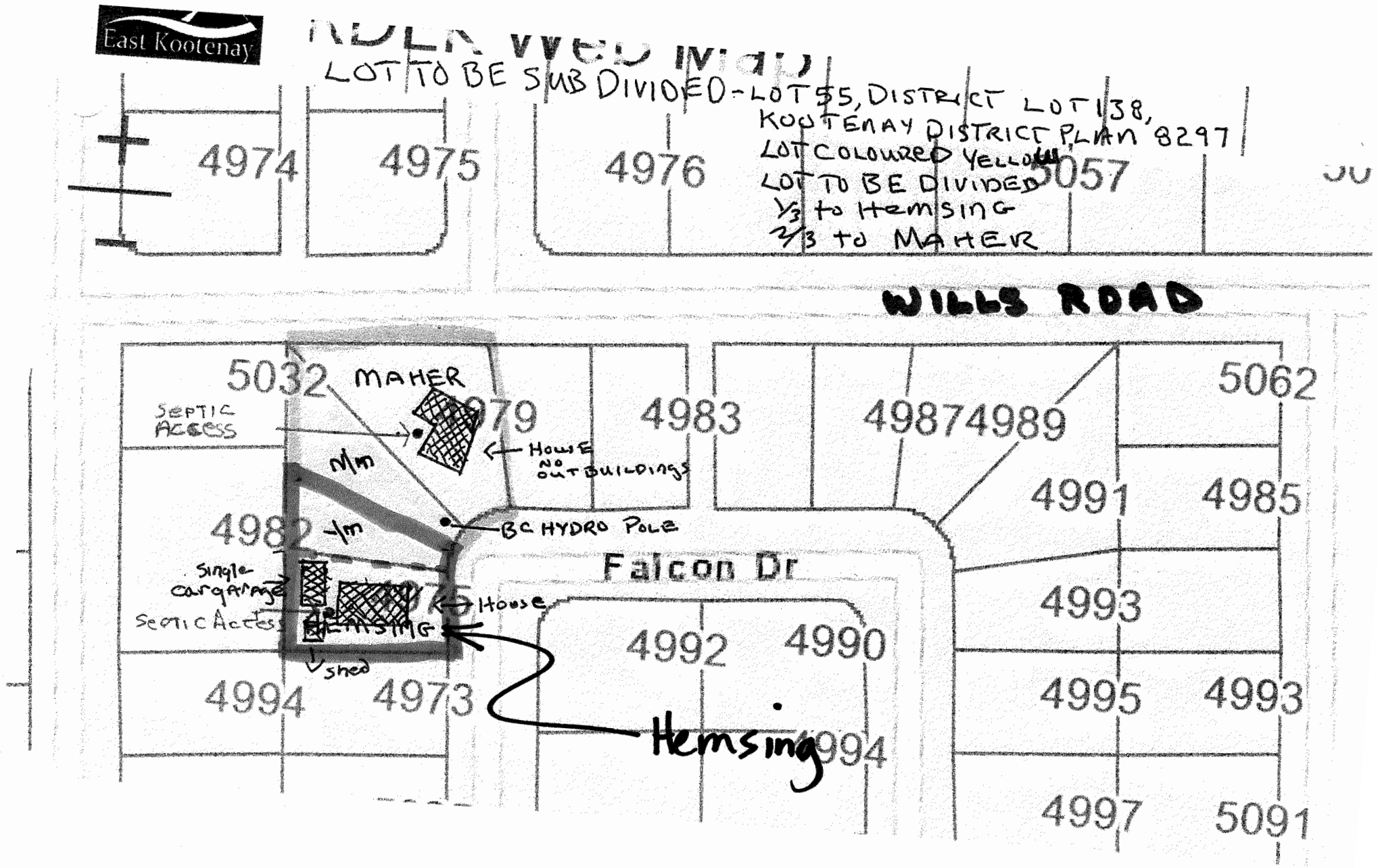
Shannon Moskal
Corporate Officer

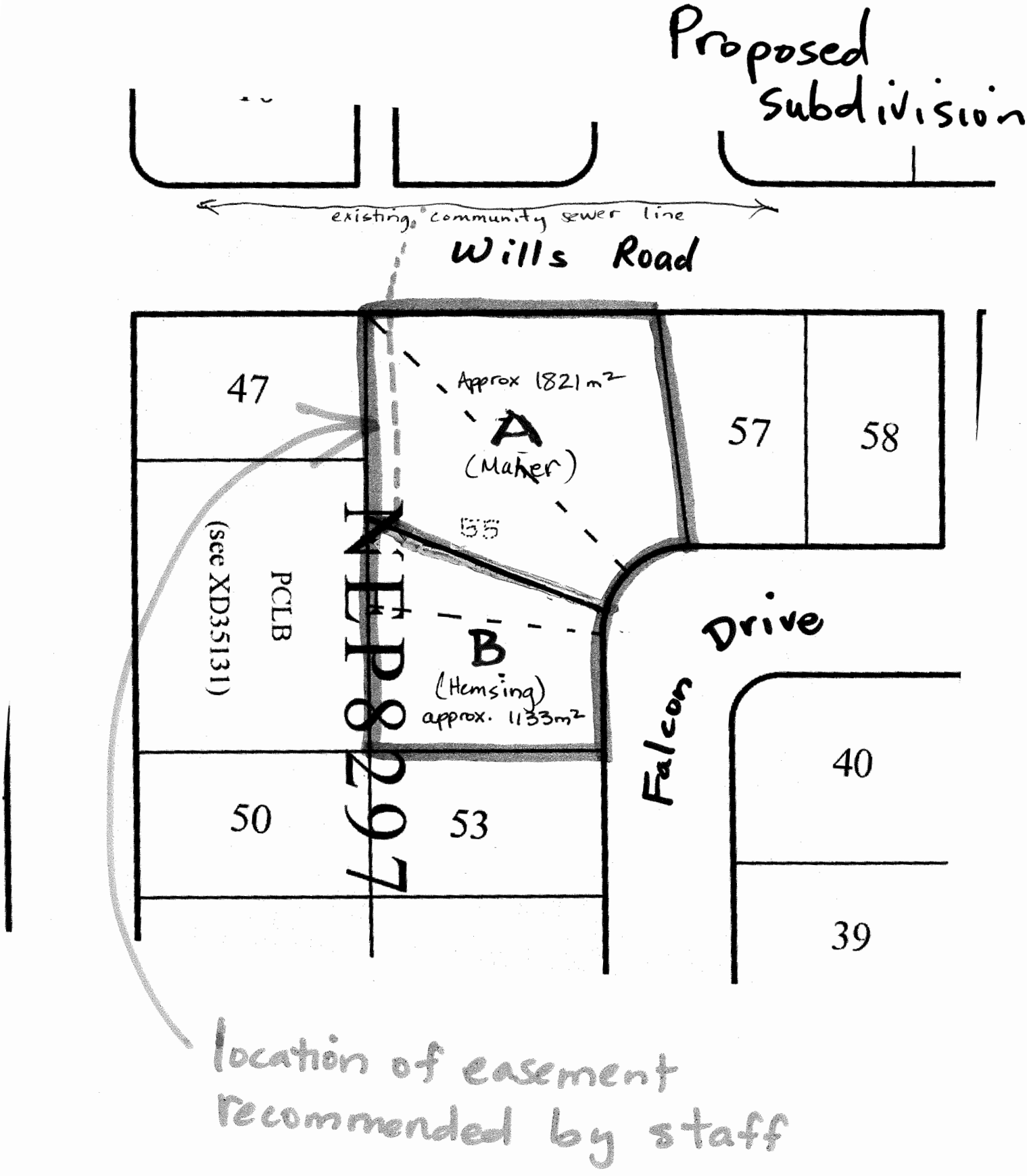
Location Map



Land Use Map


Wills Rd
Hot Springs Rd
Falcon Dr
0.21 ac Residential (SFD)
0.27 ac Residential (SFD)
0.19 ac Residential (vacant)
0.2ac Residential (SFD)
0.27 ac Residential (vacant)
0.42 acres Residential (SFD)
Subject Property 0.19 acres Res (SFD w suite)
0.21 ac Residential (SFD)
0.21 ac Residential (SFD w suite)
0.26 ac Residential (SFD)
0.21 ac Residential (vacant)


East Kootenay
LOT TO BE SUB DIVIDED - LOT 55, DISTRICT LOT 138, KOOTENAY DISTRICT PLAN 8297
LOT COLOURED YELLOW
LOT TO BE DIVIDED
1/3 to Hemsing
2/3 to MAHER
4974
4975
4976
5057
WILLS ROAD
5032
MAHER
SEPTIC ACCESS
HOUSE NO OUTBUILDINGS
4983
4987
4989
5062
4991
4985
N/m
BC HYDRO POLE
4982
Falcon Dr
Single car garage
House
SEPTIC ACCESS
HEMSING
shed
4993
4992
4990
4994
4973
4995
4993
Hemsing
4997
5091


Proposed subdivision
existing community sewer line
Wills Road
47
Approx 1821 m²
A
(Maher)
55
57
58
PCLB
(see XD35131)
EP82907
B
(Hemsing)
approx. 1133m²
Falcon Drive
40
50
53
39
location of easement
recommended by staff

Tracy Van de Wiel

From: Paul Barrett [redacted]
Sent: July-20-19 6:44 PM
To: Tracy Van de Wiel
Subject: Permit application 29-19

Personal information has been withheld in accordance with Section 22(1) of the *Freedom of Information and Protection of Privacy Act.*

Hi

I am a neighbour of Russell Hemsing on falcon drive Fairmont hotsprings.

I know that he is sub dividing the lot next to him be part of his lot.

I have absolutely no problems with what he is doing it actually makes a lot of sense.

I could write you a essay on this but if you would like to talk please feel free to do so.

I live at 4973 Falcon drive my number is [redacted]

Paul Barrett

Tracy Van de Wiel

From: [redacted]
Sent: July-06-19 6:27 PM
To: Tracy Van de Wiel
Subject: Development Variance Permit Application No 29-19

Personal information has been withheld in accordance with Section 22(1) of the *Freedom of Information and Protection of Privacy Act.*

Dear Tracy,

RE: Development Variance Permit Application No 29-19

We are a neighbouring property owner and are in support of waiving section 11.01(5) of the RDEK Subdivision Servicing Bylaw 1954 for Lot 54, District Lot 138, KD, Plan 8297 belonging to Diane and Russ Hemsing, so that the consolidation of lot 55 and the boundary adjustment to lot 54 and 56 can be completed. If you have any further questions or wish to discuss anything with us, do not hesitate to contact us.

Best regards,

Anne Hamilton and Chris Dillistone

4992 Falcon Drive

Fairmont Hot Springs, BC

[redacted]

Granite River Gear Ltd
5434 Dutch Creek Rd
Fairmont Hot Springs, BC
V0B 1L2

July 4, 2019

Tracy Van de Wiel
Planning Technician
Regional District of East Kootenay

Re: Development Variance Application 29-19

Dear Tracy

As a neighbouring property owner, I am supportive of waiving section 11.01 (5) of the RDEK Subdivision Servicing Bylaw 1954 for Lot 54, District Lot 138, KD, Plan 8297 belonging to Diane and Russ Hemsing so that the consolidation of lot 55 and the boundary adjustment to lot 54 and 56 can be completed.

Please let me know if you have any questions.

Kind Regards,

Wendy Booth
Owner; Granite River Gear Ltd.

Tracy Van de Wiel

From: Hi Dang [redacted]
Sent: July-10-19 9:01 AM
To: Tracy Van de Wiel
Subject: Development Variance Permit Application No 29-19

Personal information has been withheld in accordance with Section 22(1) of the *Freedom of Information and Protection of Privacy Act.*

Dear Tracy,

As a neighboring property owner, I am in support of waiving section 11.01(5) of the RDEK Subdivision Service Bylaw 1954 for Lot 54, District Lot 138, KD, Plan 8297 belonging to Diane and Russ Hemsing so that the consolidation of lot 55 and the boundary adjustment to lot 54 and 56 can be completed.

Regards,

Hiep Dang

Tracy Van de Wiel

From: Morley Dougall <MDougall@gatewaypm.com>
Sent: July-05-19 10:45 AM
To: Tracy Van de Wiel
Cc: Gayle Dougall [redacted]); Info
Subject: RE : Development Variance Permit Application No 29-19

Hi Tracy,

As a neighbouring property owner, I am supportive of waiving section 11.01(5) of the RDEK Subdivision Servicing Bylaw 1954 for Lot 54, District Lot 138, KD, Plan 8297 belonging to Diane and Russ Hemsing so that consolidation of lot 55 and the boundary adjustment to lot 54 and 56 can be completed.

Sincerely,

Personal information has been withheld in accordance with Section 22(1) of the *Freedom of Information and Protection of Privacy Act.*

Gayle & Morley Dougall, [redacted]
5004 Fairmont Close
Fairmont Hot Springs, BC [redacted]

GATEWAY

Morley Dougall
Strata Manager
Gateway Property Management
101-124 Seymour Street
Kamloops, BC V2C 2E1
Direct 250-270-9440

Tracy Van de Wiel

From: Terry [redacted]
Sent: July-10-19 1:07 PM
To: Tracy Van de Wiel
Subject: Re:Development Variance Permit Application #29-19

Personal information has been withheld in accordance with Section 22(1) of the *Freedom of Information and Protection of Privacy Act.*

Hello Tracy,
Please find us as neighbouring property owners, that we are supportive of waiving section 11.01(5) of the RDEK Subdivision Serving Bylaw 1954 for Lot 54, District Lot 138, KD, Plan 8297 belonging to Diane and Russ Hemsing so that the consolidation of lot 55 and the boundary adjustment to lot 54 and 56 can be completed.

Terry and Helen Ohlhauser
4985 Facon Drive
Fairmont Hot Springs, BC

02 July 2019

Tracy Van de Wiel

Planning Technician

Regional District of East Kootenay

Dear Tracy,

Re Variance Application regarding waiving section 11.01 (5) of the RDEK Subdivision Servicing Bylaw 1954, Lot 54, District Lot 138, KD, Plan 8297

As the Hemsing's next door neighbor and the resident most affected by the outcome of this application, I would like to give my support to the requested variance.

Together with the Hemsings my wife and I have made an application for a consolidation/boundary adjustment. As indicated above, the Hemsing's own lot 54, the Maher's own lot 56 and we both own lot 55 in a 1/3 - 2/3 split. We are wishing to simplify our ownership through a consolidation of lot 55 by boundary adjustment to lot 54 and 56.

Sincerely,

Gary Maher

4979 Falcon Drive

Fairmont Hot Springs, BC

Tracy Van de Wiel

From: Bevnelda [redacted]
Sent: July-11-19 1:18 PM
To: Tracy Van de Wiel
Subject: Fwd: Development variance application no.29-19

Subject: Development variance application no.29-19

As neighboring property owners,we are supportive of waiving section 11.01 of the RDEK subdivision servicing bylaw 1954 for lot54.district lot 138.KD,plan 8297 belonging to Diane and Russ Hemsingso that the consolidation of lot 55 and the boundary adjustments to lot 54 and 56 can be completed.

Nelda Harker
Beverley Palfrey
5008 Fairmont Close
Fairmont Hot Springs
BC.
[redacted]

Regional District of East Kootenay

Staff Report ...

Natural Resource Operations Referral

Date: July 25, 2019
File: P 151 200
NRO #4470576

Applicant: Koocanusa Recreation Steering Committee
Location: Dorr/Grasmere area, between Lake Koocanusa, Grasmere, the USA border and the Elk River
Legal: Unsurveyed Crown Land in the vicinity of Dorr/Grasmere

Proposal: Crown land application pursuant to Section 57 of the *Forest and Range Practices Act* proposing roads and trails for motorized and non-motorized recreation, camping areas and parking and staging areas for recreation use.

Options:

1. THAT the Ministry of Forests, Lands, Natural Resource Operations and Rural Development, be advised the RDEK supports the Koocanusa Recreation Strategy Committee Crown land application to establish and maintain a recreation area in the vicinity of Dorr/Grasmere.

2. THAT the Ministry of Forests, Lands, Natural Resource Operations and Rural Development be advised the RDEK does not support the Koocanusa Recreation Strategy Committee Crown land application to establish and maintain a recreation area in the vicinity of Dorr/Grasmere.

Recommendation: **Option # 1**
OCP policies support development of a management plan for roads, trails and recreation sites that respect and protect resource values.

Property Information:

OCP Designation: RR, Rural Resource supports agricultural, rural residential and rural resource land uses with parcel sizes 8.0 ha and larger. The RR designation also recognizes the use of these lands for public utility use, resource extraction, green space and recreation.

OCP Policies:

- The Regional District encourages management of Crown land in an environmentally responsible manner which:
  - Protects surface and groundwater sources;
  - Manages forest ingrowth
  - Minimize risk of interface fire and wildfire;
  - Enhances wildlife habitat
  - Protects viewscapes and scenery;
  - Protects watershed ecological values, including waterfowl and fish and their corresponding habitat; and
  - Maintains diverse plant communities by managing invasive plants.

Property Information - cont'd:

- Subsequent to adoption of the Lake Koocanusa OCP, the RDEK will request that the Province develop a management plan and enforcement strategy pertaining to unauthorized occupation of Crown land by recreational vehicles and associated structures.

- Subsequent to adoption of the Lake Koocanusa OCP, the RDEK will request that the Province develop an off-road vehicle management plan for the Lake Koocanusa area, including the specific identification of existing roads and trails on which off-road vehicle use is permitted, and to develop an associated education and enforcement strategy which directs off-road vehicle users to appropriate locations for activity participation and ensures user compliance with existence off-road vehicle regulations.

- Identification of potential trails in the plan area for motorized and non-motorized use is supported.

Zoning Designation: Multiple - RR-60, Rural Resource Zone, minimum parcel size: 60 ha and P-2, Parks and Open Space. Recreation reserves are a permitted use in all zones

Parcel Size: Area under application: approx. 12,750 ha (31,500 ac)

Density: N/A

ALR Status: Within the ALR. Applicant must contact the Agricultural Land Commission to confirm whether a non-farm use application will be required.

BC Assessment: N/A

Water / Sewer Services: N/A

Interface Fire Hazard Rating: Low to high, Crown land is not serviced by RDEK fire services.

Flood Hazard Rating: The subject area is adjacent to Lake Koocanusa and several unnamed watercourses run through the subject area. Development must comply with floodplain regulations.

Crown Land Management Plans:

- The Cranbrook West Recreation Management Strategy designates the area as partially motorized and partially ungulate winter range: grasslands (hard surfaces only) in snow-free months and as ungulate winter range: motorized use on roads and identified travel corridors only in snowbound months.

- Proposal is consistent with the Koocanusa Recreation Strategy (2017)

Lake Management Plans: N/A

Shoreline Management Guidelines: N/A

Additional Information:

- The referral states that the trails, camping and parking areas will subsequently be designated as established recreation sites and trails under FRPA Section 56. The designation will assist Recreation Sites and Trails BC together with the Koocanusa Recreation Steering Committee partners to effectively implement and enforce the Dorr-Grasmere Recreation Strategy.
- For more information see attached documents.

Consultation: **Advisory Commissions:**

APC Area B: Not support. Road access to the river north of the Elk River Bridge be open to the public for motorized access. What does rough road (restricted) mean?

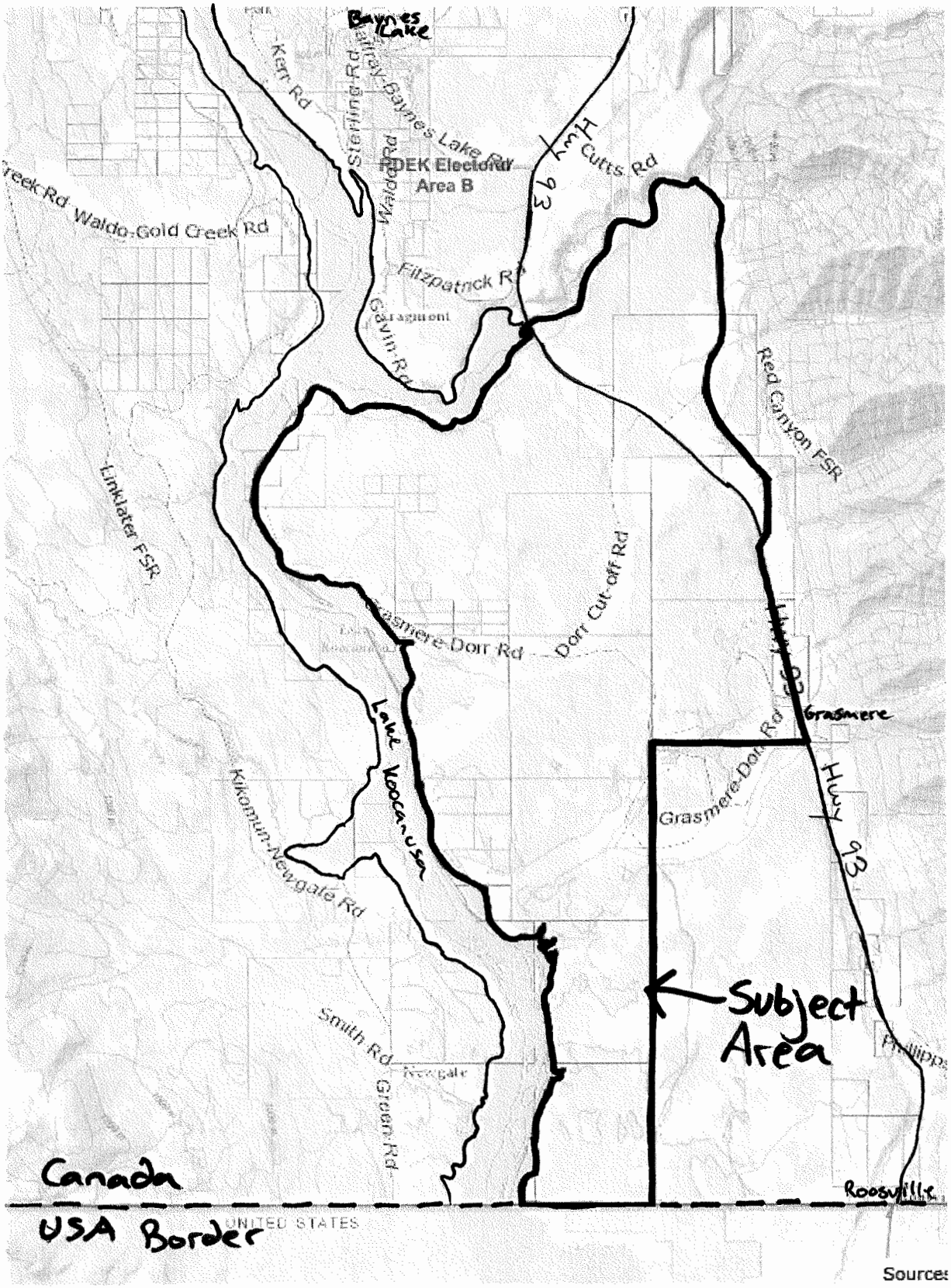
Documents Attached:

- Location Map
- Land Referral Package
- Proposal

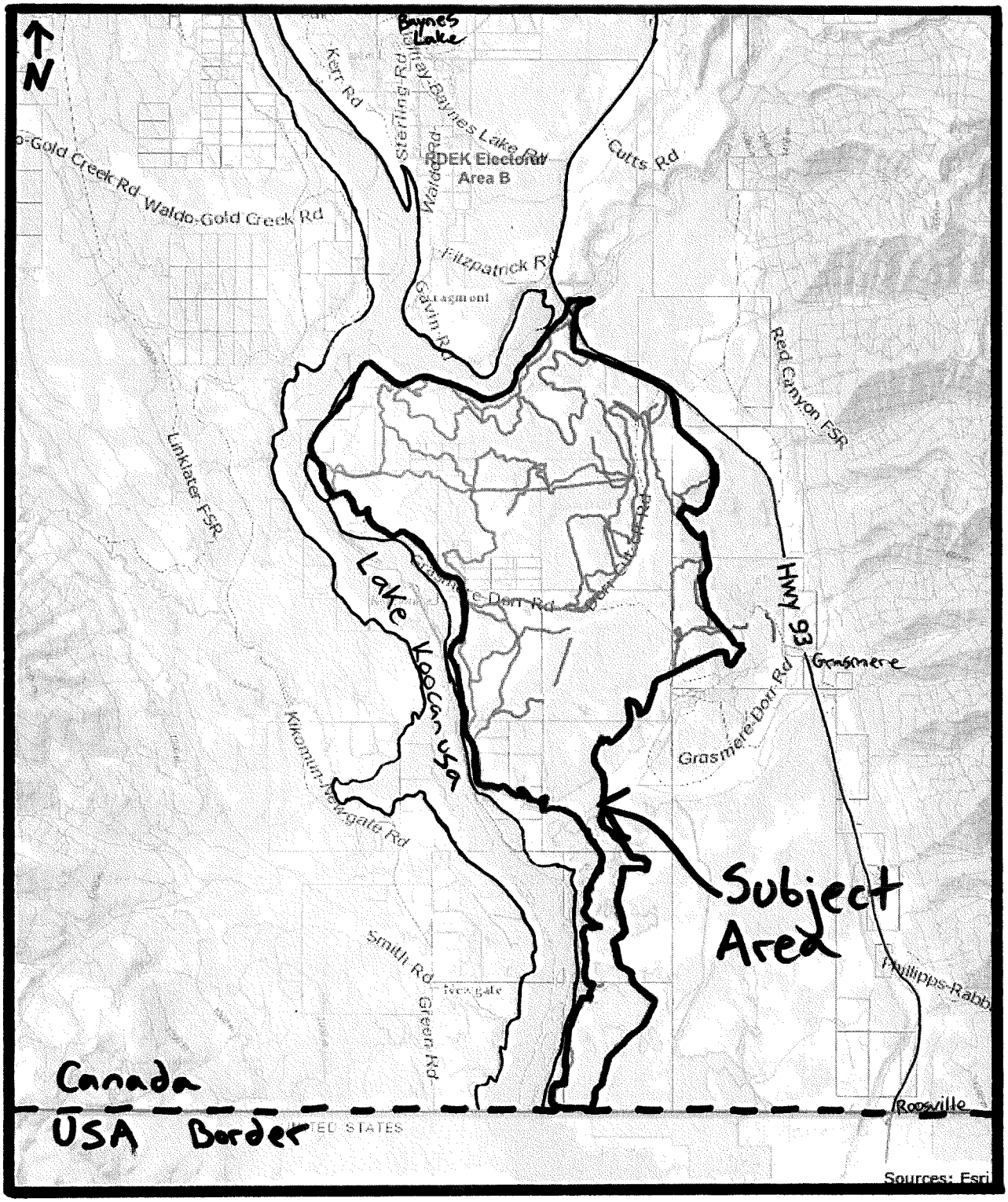
RDEK Contact:

Krista Gilbert, Planning Technician
Phone: 250-489-0314
Email: kgilbert@rdek.bc.ca

Location Map



Location Map



1 Background

The Dorr-Grasmere area is 127 square kilometres in size and defined as the area south of the Elk River, west of Elko-Grasmere Road and Highway 93, extending south to the United States border, and west to approximately the low-water mark on the east shore of Koocanusa Reservoir. In the Ktunaxa language this area is called *ʔakinkumɬasnuqɬiʔit*, or rolling prairie. Dorr-Grasmere was identified as an area where current recreation use patterns are significantly impacting Crown land values to the point where these values are being severely degraded. This section introduces recreation management approaches to deal with these issues in the Dorr-Grasmere area.

2 Important Values in Dorr-Grasmere

The Dorr-Grasmere area is part of the traditional territory of the Ktunaxa Nation. The area has high archaeological potential and there are several previously recorded archaeological sites, as well as areas with potential to contain archaeological material that have not been recorded.

The Dorr-Grasmere area also contains important wildlife and ecosystem values, including sensitive grasslands which provide important wintering range for ungulates including elk, moose and mule deer. As well, the area provides critical habitat for several species and ecosystems at risk including Spalding's Campion, Lewis's Woodpecker, Painted Turtle, Long-billed Curlew, Antelope-brush/bluebunch wheatgrass and Pinewood Peavine.

In addition to important cultural, archaeological and ecosystem values, Dorr-Grasmere is one of the most popular and important recreation areas in the Koocanusa area, particularly for motorized recreation use. Management activities seek to balance the need for protection of important values, while providing opportunities for continued recreation use and enjoyment of the area.

3 Dorr-Grasmere Recreation Strategy

Beginning in 2017, based on overwhelming feedback from local First Nations, recreation stakeholders and residents in the Koocanusa region, a new recreation management approach was implemented in the Dorr-Grasmere area. The vision, to be implemented over several years, is a well-maintained network of recreation trails for motorized and non-motorized users. The trail network will provide opportunities for all ages and abilities and include loop trails and connections leading to and from points-of-interest, camping and parking areas. The trail network will be managed in partnership with recreation stewardship groups in the area. Vehicle-access camping and day-use parking areas will be designated and will facilitate access to the trail network while minimizing impacts to important values. This approach is intended to mitigate the growing number of recreation impacts in this area, while avoiding relocation of recreation issues and problems to adjacent areas.

The KRSC will work towards implementation of management strategies in the Dorr-Grasmere area based on three core management goals:

1. Vehicle-access camping will be restricted to designated areas;
2. Motorized recreation use will be restricted to designated roads and trails; and

3. Day-use parking and staging areas for recreation users will be designated and will facilitate access to the trail network.

This management approach will yield important benefits, including:

- Mitigation of impacts on highly sensitive areas with significant ecological or cultural values;
- Mitigation of potential impacts on Aboriginal rights and traditional use activities;
- Improved health of grasslands and ecosystems for local wildlife populations, species at risk and ranching operations;
- Reduction in potential for conflicts with other Crown land users;
- Improved public health and safety; and
- Enhanced experiences for responsible recreation users.

Presented below, and in the Dorr-Grasmere Recreation Strategy Map (attached separately), are details of the recreation management approach for Dorr-Grasmere area, including:

- A designated area and trail for non-motorized recreation;
- Designated trails for motorized recreation;
- Recreation access roads;
- Three designated camping areas; and
- Four designated parking areas.

The locations of designated trails, camping and parking areas are subject to change as a result of, for example, additional assessment on the ground, including archaeological assessments.

3.1 Non-motorized area and recreation trails

A 25 square kilometre area along the Elk River is identified as a non-motorized recreation area. This area has been identified as containing important wildlife, cultural and archaeological values, and deemed of high important for protection.

The Elk Rim Trail is an existing designated non-motorized trail in this area which is managed through a partnership agreement with a local stewardship group. 14 kilometres of the existing Elk Rim Trail is maintained within the designated non-motorized area. An additional 6.4 kilometres of trail is proposed for development to complete this non-motorized loop trail.

3.2 Single-track motorized trails

A total of 83 kilometres have been identified as designated trails for single-track motorized recreation, including motorcycles and electric bikes. The trail network includes a perimeter loop trail with several linking and connecting trails which provide opportunities for riders to make shorter or longer loops, and/or to connect with viewpoints, camping areas and other recreation features. The Dorr-Grasmere Recreation Trail Assessment[1] identified several trail issues which require improvements, for example seasonally wet areas that may require installation of a culvert or raised trail bed, and steep hill climbs which are subject to erosion and may require reinforcement or re-routing.

At this time, no additional single-track motorized trails are proposed for development. However, the Dorr-Grasmere Recreation Trail Assessment identified several new trail sections which could be

[1] In the summer of 2017, the KRSC engaged a recreation contractor (Cordillera Technical Services) to assess and make recommendations regarding recreation use and access in the Dorr-Grasmere area (Dorr-Grasmere Recreation Trail Assessment)

developed to improve the quality of the single-track motorized trail network. These trail sections be developed in the future, it and when an appropriate stewardship group is identified.

3.3 Double-track motorized trails

A total of 57 kilometres of double-track trails for ATVs, quads and side-by-sides (UTVs) currently exist in the area. Some double-track trails exist on old road surfaces, while others started as single-track trails and have been widened over time. Given the extent of existing roads which are suitable for double-track motorized recreation activities, no additional double-track trails are proposed for development at this time.

3.4 Recreation use roads

There are over 184 kilometres of existing wilderness roads in the Dorr-Grasmere area. Many of these roads were developed by forestry tenure holders; some are still in use today. Many of these historically developed roads have become access roads for recreation users, including 4x4 trucks, ATVs, side-by-sides, OHVs and motorcycles.

95 kilometres of this existing road network is identified for managed recreation use and access. The Dorr-Grasmere Recreation Strategy Map shows the extent of recreation roads that are recommended for recreation use and access in the Dorr-Grasmere area. In the short-term, recreation users will be directed towards the recreation roads identified on the Map. Users will be discouraged from using other roads, with informational signage, maps and education. Over time, unsustainable and unusable roads may be deactivated, reclaimed and restored to maintain and improve important values in the area.

3.5 Public access roads and crossings

Public access roads in the Dorr-Grasmere area include Highway 93, Dorr Cut-off Road, Grasmere-Dorr Road and Elko-Grasmere Road. Public access roads are maintained by the BC Ministry of Transportation and Infrastructure. Off-road vehicles including ATVs and motorcycles, are not permitted on public access roads, but can cross access roads at designated public road crossings.

There are currently six public road crossings proposed in the Dorr-Grasmere area. Road crossings must be reviewed and approved by the BC Ministry of Transportation and Infrastructure and are subject to change.

Table 1 provides a summary of managed recreation uses in the Dorr-Grasmere area, reflecting the types of recreation uses that will be designated on different road and trail types.

Table 1: Summary of managed recreation uses

Road or trail type	Managed uses						
	Pedal bike	Hike	Equestrian	Motorcycle	Quad / ATV / UTV	4x4 truck	2WD car
Non-motorized trail	♦	♦	♦				

Single-track trail	♦	♦	♦	♦			
Double-track trail	♦	♦	♦	♦	♦		
Rough road (4WD)	♦	♦	♦	♦	♦	♦	
Public road (2WD)	♦	♦	♦			♦	♦

* **Note**: Off-road recreation vehicles are not permitted on public roads

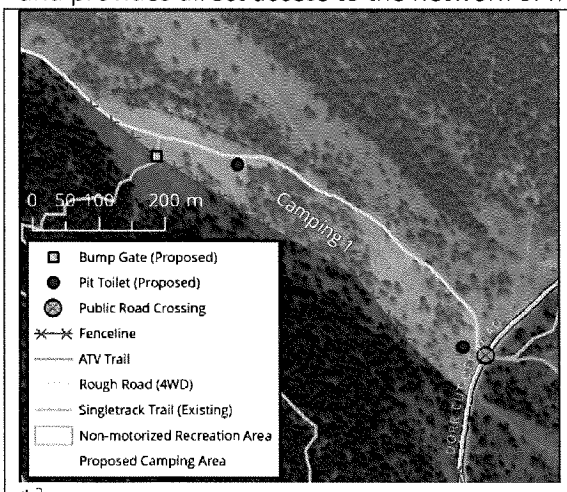
3.6 Designated vehicle-access camping areas

There are three existing public recreation and camping sites in the Dorr-Grasmere area at Dorr (59 camp sites), Loon Lake (40 sites) and Edwards Lake (6 sites). Several private camping sites also exist in the area. Three designated vehicle-access camping areas have been identified in the Dorr-Grasmere area. These camping areas are meant to complement the existing suite of public and private camping options available in the area to serve the needs of recreation users. The sites were identified as recommended options as they:

- Avoid areas with exceptionally high value such as sensitive grasslands, habitat for species and ecosystems at risk, wetlands or important wildlife and livestock watering areas, and Ktunaxa cultural or archaeological values;
- Are already being utilized for Crown land camping and take advantage of existing recreation use patterns;
- Provide easy road access, as well as access to the proposed network of recreation trails; and
- Are attractive and appealing camping locations.

Camping Area #1:

This is a large, flat and heavily used area with capacity for 50 to 60 camping units. It is near Highway 93 and provides direct access to the network of motorized recreation trails in the area.

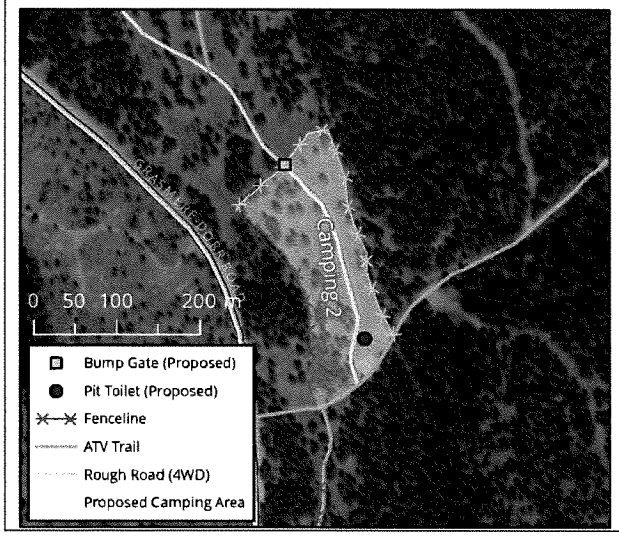


*2

[2] Imagery Sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

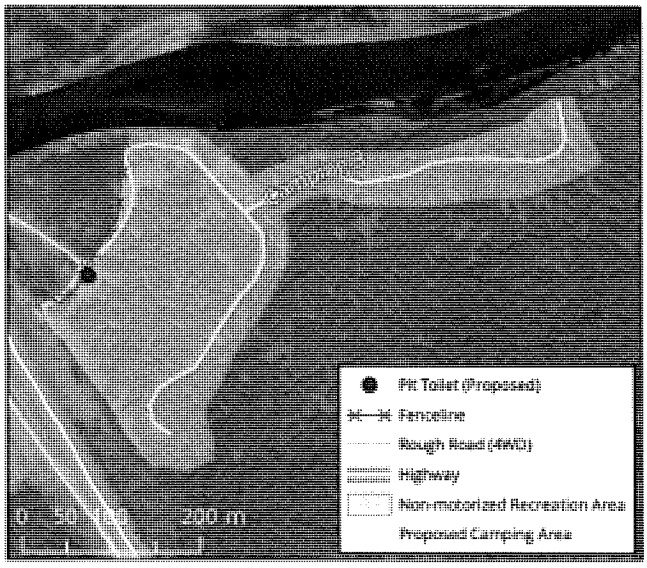
Camping Area #2:

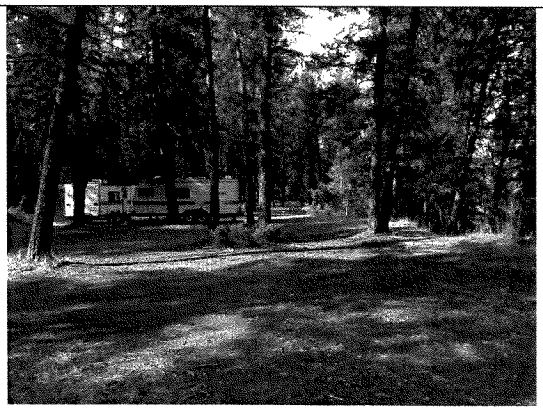
This is another large flat area with capacity for 50 to 60 camping units. Portions of the site are open grassland and portions are treed and shaded. It is located near Loon Lake Recreation Site and provides direct access to the network of motorized recreation trails in the area.



Camping Area #3:

This area along the Elk River was historically designated as a recreation site but never established. The camping area sits within a designated non-motorized area and could serve as a base for non-motorized recreation activities in the region.



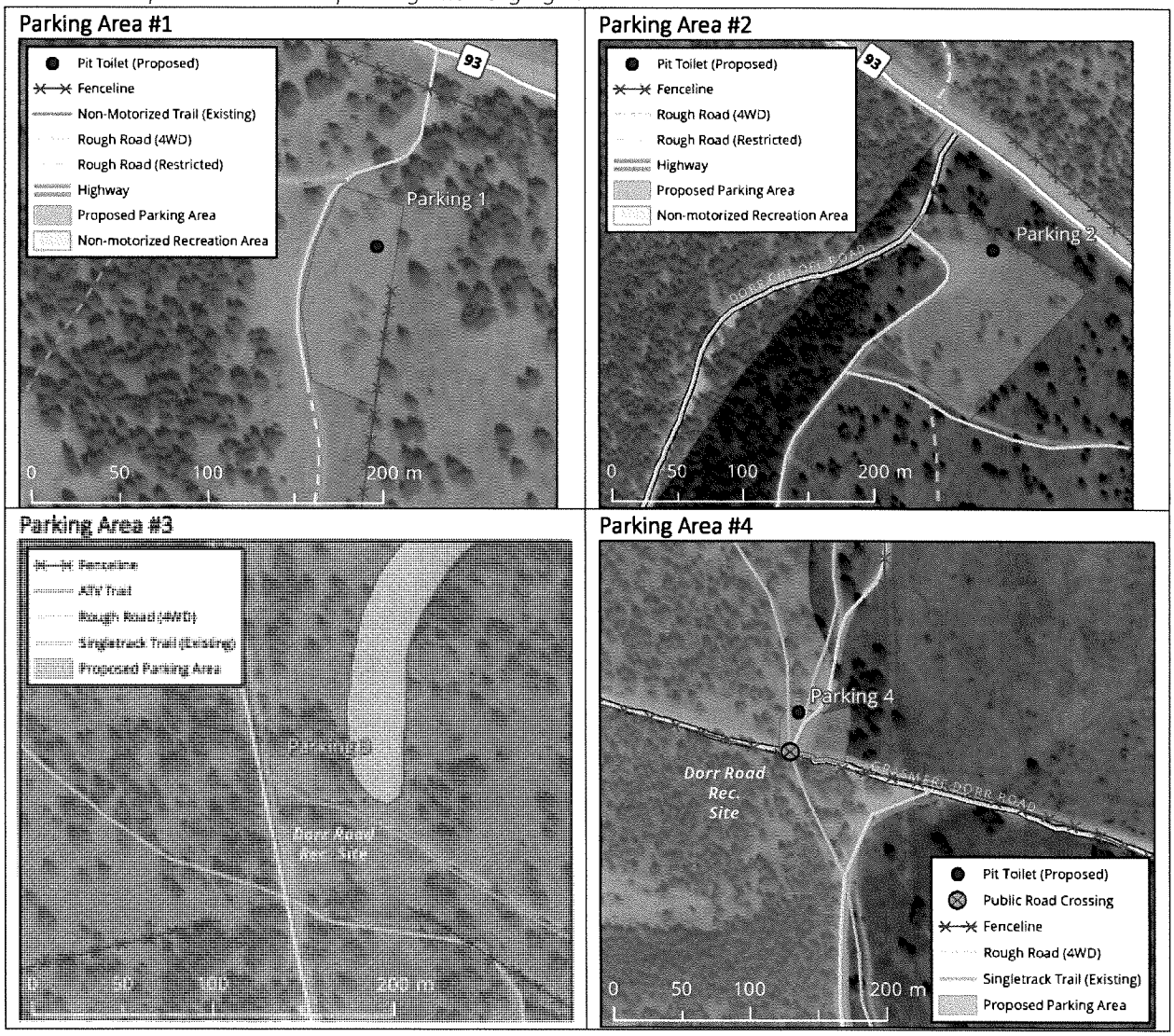


3.7 Designated parking and staging areas

Four sites have been identified to serve as parking and staging areas for recreation use.

Parking area #1 is located within the proposed non-motorized area and is meant to serve non-motorized recreation users. All other parking areas are near the network of designated motorized recreation trails; and intended to serve motorized recreation day users. The approximate location and proposed size of each location is shown in Table 2.

Table 2: Proposed recreation parking and staging area



While recreation users will be encouraged to use designated parking and staging areas, parking and staging will not be restricted to these areas.

Implementation

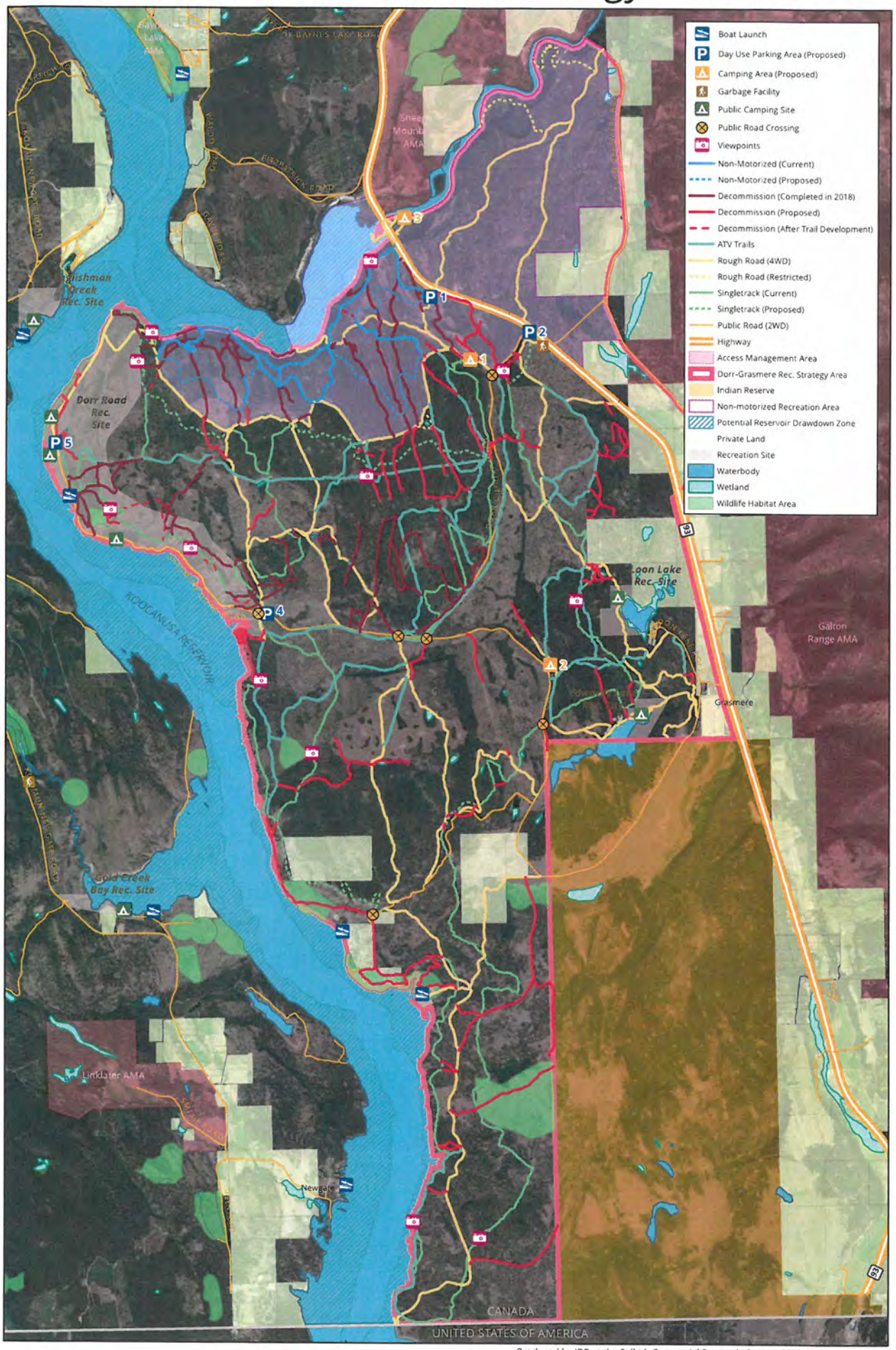
The following table provides a description of works proposed over the coming years to implement the Dorr-Grasmere Recreation Strategy. The Dorr-Grasmere Recreation Map shows the specific location of each implementation activity listed below.

An archaeological review is currently being completed for the Dorr-Grasmere area. The review will provide guidelines for implementation activities where ground disturbance will occur, such as installation of pit toilets, signage, road and trail decommissioning, and trail construction. The location of, and the works required to implement some activities may change based on recommendations from the archaeological review, and further archaeological assessments.

Implementation Activity	Description of works and improvements
Camping Area 1	• The boundary of the camping area will be delineated with signage • Two pit toilets will be installed • The road will be improved with gravel and grading to repair a large wet area that is causing braiding of the road. • A bump gate will be installed to allow access to the trail network • Install large (3-panel) informational signage with maps and information
Camping Area 2	• The boundary of the camping area will be delineated with fencing and signage • Install cattle guard • A bump gate will be installed to allow foot access in and out • A pit toilet will be installed • Install large (3-panel) informational signage with maps and information
Camping Area 3	• The boundary of the camping area will be delineated with signage • A pit toilet will be installed • The road will be improved with gravel and grading • Install large (3-panel) informational signage with maps and information
Road and trail decommissioning	Unauthorized single-track and double track recreation trails which are not part of the designated trail network will be decommissioned and restored to improve range values and wildlife habitat. The decommissioning work may involve erosion control activities such as ditching, water barring and/or re-contouring of the land, and may include installation of natural structures, and/or creating physical access barriers. The surfaces of decommissioned roads and trails will be scarified and then seeded with appropriate grasses to restore wildlife and range values. Vegetation and/or rocks will be placed at trailheads to disguise the trail and block access.
Trail signage	Trail markers and directional signage will be installed along the designated trail network
Public road crossings	Where a designated trail crosses a public road, signage will be installed to warm trail users of the crossing.
Road improvements	Several sections of access road, specifically roads accessing designated camping and parking areas, will be improved to reduce erosion and braiding, and to maintain important values. Road improvements will likely be completed using machines and tools, and may involve erosion control activities such as ditching, water barring and/or re-contouring of the land, and may include installation of natural structures, and/or placing fill such as gravel. Specific road improvement requirements will vary from site to site, based on road condition and soil type, and will be determined through a more detailed assessment.
Trail improvements	Some sections of the existing motorized and non-motorized trail network will be improved to reduce erosion and braiding, and to maintain important values. Trail improvements will likely be completed using machine and hand tools, and may involve erosion control activities such as ditching, water barring and/or re-contouring of the

Implementation Activity	Description of works and improvements
	land, and may include installation of natural structures, and/or placing fill such as gravel. Specific trail improvement requirements will vary from site to site, based on trail condition and soil type, and will be determined through a more detailed assessment.
New trail construction	To develop a contiguous trail network, some sections of non-motorized trail will be constructed. Trails will be constructed using machine and hand tools, by qualified and experienced trail construction crews, utilizing best practices for sustainable trail construction. Trail construction may involve erosion control activities such as ditching, water barring and/or re-contouring of the land, and may include installation of natural structures, and/or placing fill such as gravel. Specific trail construction requirements will vary from site to site, based on trail condition and soil type, and will be determined through a more detailed assessment.
Parking Area 1	• The boundary of the parking area will be delineated with a hardened (gravel) parking lot surface, and barriers (signage, rocks, etc.) • Install large (3-panel) informational signage with maps and information • A pit toilet will be installed
Parking Area 2	• The boundary of the parking area will be delineated with a hardened (gravel) parking lot surface, and barriers (signage, rocks, etc.) • Install large (3-panel) informational signage with maps and information • A pit toilet will be installed
Parking Area 3	• Install large (3-panel) informational signage with maps and information
Parking Area 4	• The boundary of the parking area will be delineated with a hardened (gravel) parking lot surface, barriers (signage, rocks, etc.) • Install large (3-panel) informational signage with maps and information • A pit toilet will be installed

Dorr-Grasmere Recreation Strategy — **DRAFT**



Produced by JDR at the Selkirk Geospatial Research Centre, 2019-01-11, Version #17
Imagery Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Regional District of East Kootenay

Staff Report ...

Natural Resource Operations Referral

Date: July 24, 2019
File: P 151 300
NRO #459798

Applicant: Harvey and Karen Bombardier
Location: Crown foreshore across from 7547 Green Bay Rd, Moyie Lake area
Legal: Unsurveyed Crown land in the vicinity of Moyie Lake

Proposal: License of Occupation for specific permission to legalize an existing private recreational dock that is approximately 18 m^2 in total area.

Options:

1. THAT the Ministry of Forests, Lands, Natural Resource Operations and Rural Development, be advised the RDEK supports the Bombardier Crown land application for Specific Permission for an existing private residential dock on Moyie Lake.

2. THAT the Ministry of Forests, Lands, Natural Resource Operations and Rural Development be advised the RDEK does not support the Bombardier Crown land application for Specific Permission for an existing private residential dock on Moyie Lake.

Recommendation: **Option # 1**
Docks are considered low risk in the subject area. This location is not anticipated to provide public access to the lake as there are other public access options in the surrounding area. The application is also consistent with other previous proposals.

Property Information:

Zoning Designation: Moyie Lake is not zoned. The adjacent property is RS-1(A), Residential (Semi-Rural Single Family) Zone, minimum parcel size: 1670 m^2.

Land Use Objectives and Policies:

- To protect water quality for the purposes of drinking water, recreation and aquatic life.

- To protect sensitive riparian habitats and other ecologically significant areas.

- The Regional District encourages the management of Crown land in an environmentally responsible manner which:
    a) Protects surface and groundwater sources;
    b) Manages forest ingrowth;
    c) Minimizes the risk of interface and wildfires;
    d) Enhances wildlife habitat and riparian areas;
    e) Protects watershed ecological values including fish and fish habitat; and,
    f) Protects viewscapes and scenery.

Property Information - cont'd:

- No person may carry out a work or undertaking that will cause the harmful alteration, disruption or destruction (HADD) of fish habitat unless it has been authorized by the Department of Fisheries and Oceans (DFO) and/or Ministry of Environment. Works include but are not limited to:
  a) Adding or removing fill;
  b) Maintenance or construction of retaining walls, docks, boathouses, bank protection installations, marinas, groynes or breakwaters, or other structures within the foreshore;
  c) Any activity that alters, disrupts or destroys fish habitat;
  d) Removing of foreshore or riparian vegetation;
  e) Other significant works;
  f) Any and all changes in and about a stream or body of water.

Parcel Size: The adjacent parcel is 0.4 ha (1 acres)

Density: One single family dwelling permitted per parcel

ALR Status: Not within

BC Assessment: Residential (with single family dwelling)

Water / Sewer Services: Onsite

Interface Fire Hazard Rating: High, not within a fire protection area.

Crown Land Management Plans: None

Lake Management Plans: None

Shoreline Management Guidelines:

- The Moyie Lake Shoreline Management Guidelines designate the shoreline type in this area as grey with lower value habitats that may require some protection. The Guidelines state that this shoreline type accounts for 15% of the total shoreline length of Moyie Lake.
- New development and redevelopment in these areas may be considered.
- Docks are identified as a low risk activity within this shoreline type.

Additional Information:

- The referral states that the existing dock fronts the land owner's private property, separated by a Ministry of Transportation and Infrastructure road (Green Bay Rd). No new construction is proposed at this time.
- The referral states that the dock has existed for over 20 years. The ramp and floats are made of treated wood and are supported by rubber floatation devices. The ramp is 5.5 m long and the dock is 17.8 m^2.
- The referral states that the dock is used to moor boats seasonally in July and August, when the applicants visit their family cabin.

Consultation:

Advisory Commissions:

APC Area C: Support

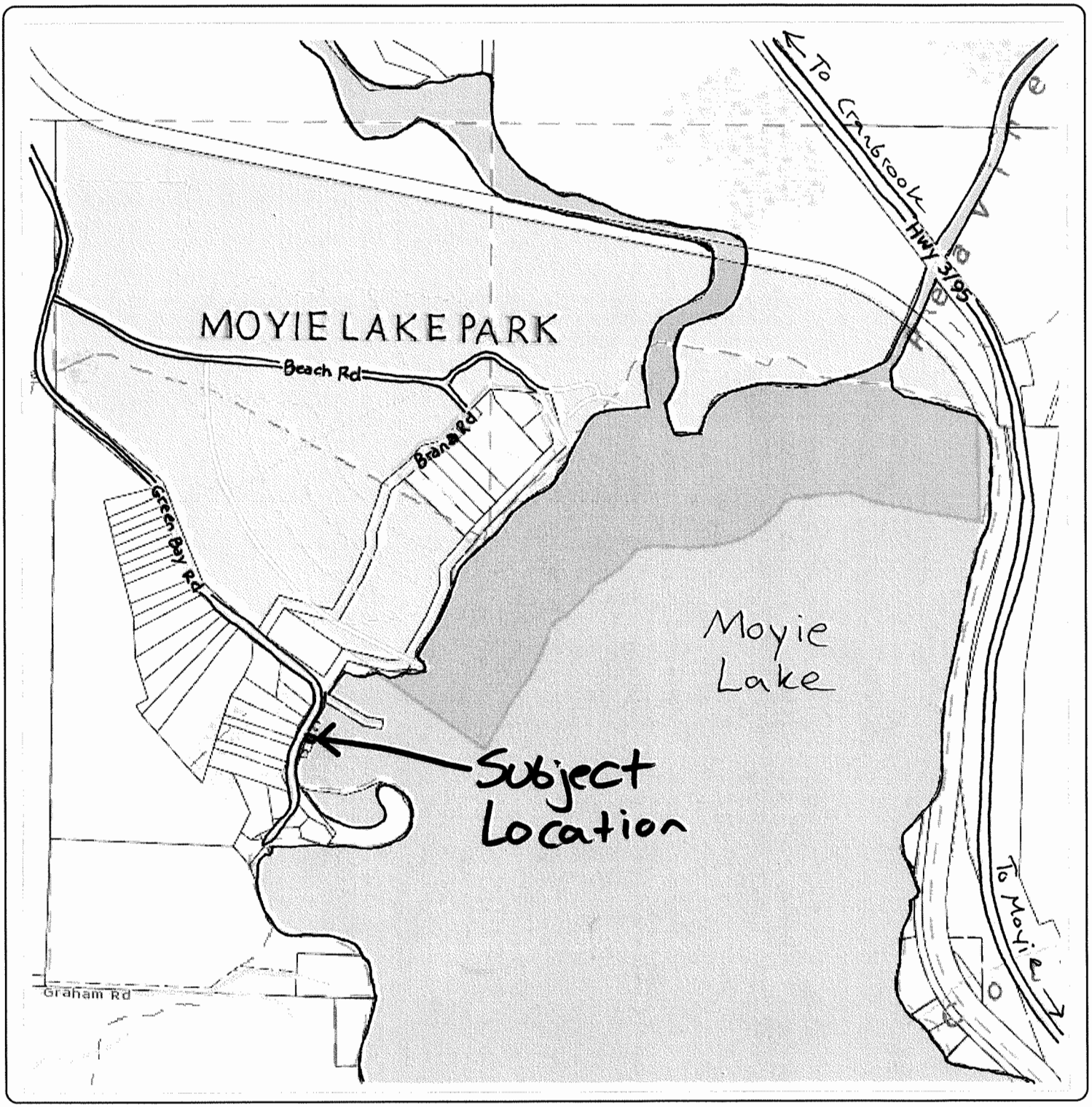
Documents Attached:

- Location Map
- Proposal
- Photo Provided by Applicant

RDEK Contact:
Krista Gilbert, Planning Technician
Phone: 250-489-0314
Email: kgilbert@rdek.bc.ca

Regional District of East Kootenay

Location Map



Notes:

375 0 188 375 Meters

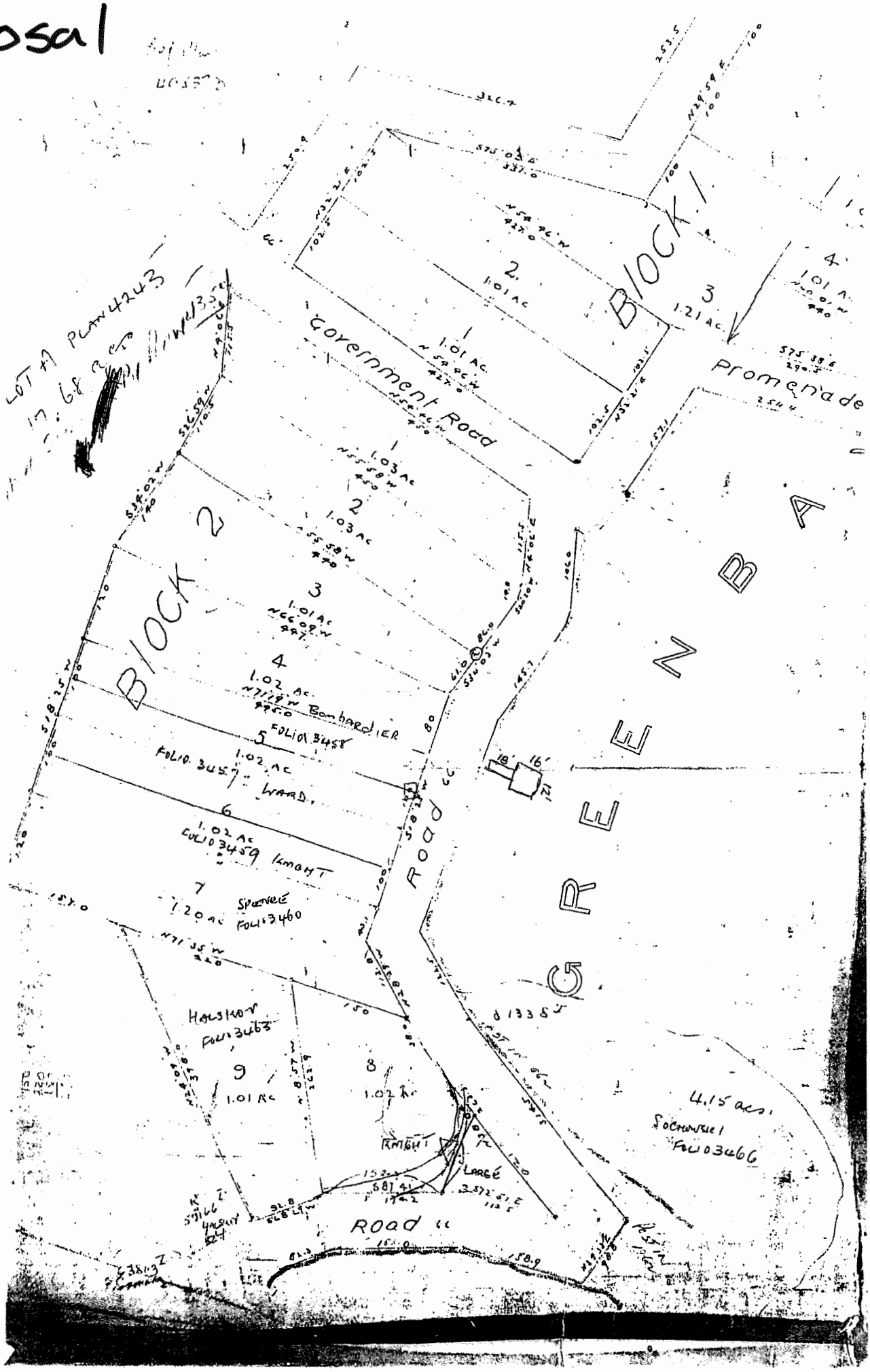
WGS_1984_Web_Mercator_Auxiliary_Sphere
RDEK GeoViewer - 6-11-2019 9:52 AM

Scale = 1: 15,000

THIS MAP IS NOT TO BE USED FOR NAVIGATION

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.

Proposal


LOT 1 PLAN 4243
Government Road
BLOCK 1
BLOCK 2
promenade
GREENBAY
ROAD
Road
Bombardier
FOLIO 3458
FOLIO 3459
FOLIO 3460
FOLIO 3463
FOLIO 3466
4.15 acres

Regional District of East Kootenay

Request for Decision

File: Friedley & Pery

Date	July 23, 2019
Author	Tracy Van de Wiel, Planning Technician
Subject	Request for Exemption from Providing a Professional Report – Friedley & Pery

REQUEST

Katherine Friedley and Adrian Pery have requested an exemption from the requirement to provide a report from a qualified professional in support of their ALR non-farm use application. Their ALR non-farm use application will request permission to host outdoor education courses such as orienteering, hiking and camping and will request use of a 1.0 ha portion of their property as the base for support facilities for the outdoor education activities. The application states that the 1 ha area will contain tent sites, a cooking and washing location, and a basic toilet facility. The owners plan to supplement their outdoor education operation by hosting other special events such as reunions, educational seminars, sports events etc. The owners expect to accommodate groups in the range of 16 – 75 individuals depending on the length of stay (larger groups will stay for a shorter length of time). The subject property is located at 3550 Highway 95 near Brisco north of Radium.

OPTIONS

1. THAT the Friedley and Pery request for exemption from providing a report from a qualified professional in support of a proposed ALR non-farm use application for property located at 3550 Highway 95 near Brisco be approved.

2. THAT the Friedley and Pery request for exemption from providing a report from a qualified professional in support of a proposed ALR non-farm use application for property located at 3550 Highway 95 near Brisco be refused.

RECOMMENDATION

Option 1

The property has marginal agricultural capability ratings and the proposed non-farm use is not anticipated to be intensive. An agrologist report is not required to review the ALR non-farm use application.

BACKGROUND / ANALYSIS

The owners have stated that their outdoor activities are low impact and will utilize existing logging trails and cleared sites throughout the property. They say the 1.0 ha area proposed for use as their seasonal base is located in a historically cleared log landing site at a high elevation on the property. They also state that they've been reclaiming / restoring the land by getting rid of old slash piles, reseeding and restoring natural ground cover, and working with the RDEK to administer an invasive weed control program.

SPECIFIC CONSIDERATIONS

Zoning Bylaw

Upper Columbia Valley Zoning Bylaw
Current Designation: A-2, Rural Residential (Country) Zone which has a minimum parcel area requirement of 8.0 ha and permitted uses that include: single-family dwelling, agricultural use, wildland use, extraction of sand and gravel, equestrian centre, and sawmill. Accessory uses include: home based business and cement plant.

Official Community Plan

Steamboat-Jubilee Mountain Official Community Plan
Designation: RR, Rural Resource which includes rural residential and rural resource land uses with parcel sizes 8.0 hectares and larger. The RR designation also recognizes the use of these lands for agriculture, resource extraction, open space and working landscape.

OCP Section 5.3(3) – Agriculture
ALR applications for non-farm use, subdivision or exclusion must be accompanied by a report from a qualified professional unless an exemption from the requirement has been approved by the Regional District Board. The report must include: (a) identification of the level of agricultural suitability and opportunity for both soil bound and non-soil bound agricultural uses; (b) identification of the agricultural capability of the parcel; and (c) demonstration of the impact that the proposal will have to the agricultural capability of the parcel, surrounding area and adjacent agricultural operations.

ATTACHMENTS

- Letter of Request
- Location Map
- Agricultural Capability Map
- Arial Photos Provided by Applicant

Request Letter

Hi Tracy,

Thank you for your call today and followup email. We have had a chance to look at the information regarding the agologist's report, and have decided to proceed without it.

As such, please consider this our request for an exemption from the requirement for an agrologist's report per section 5.3(3) of the OCP policies.

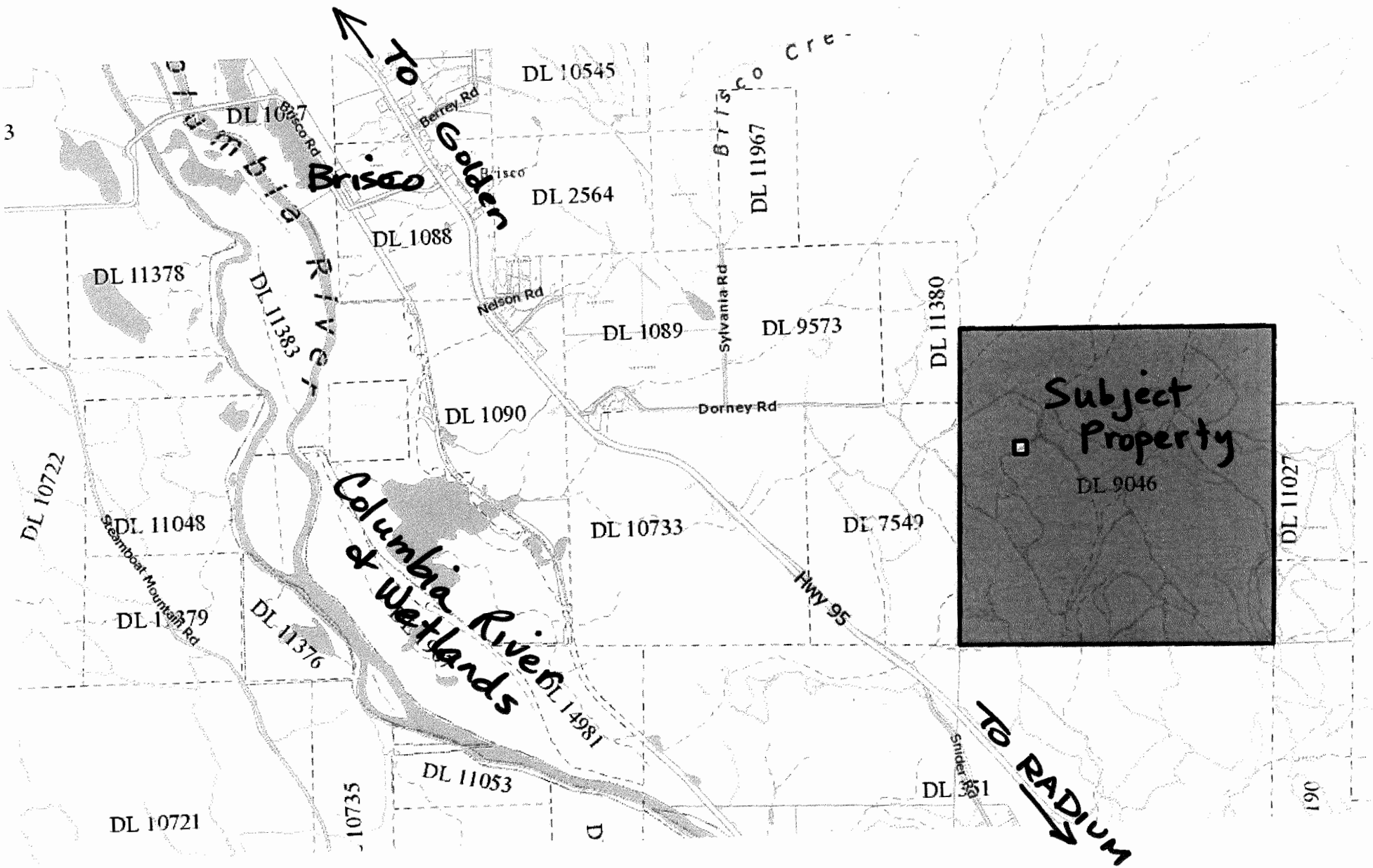
Please let us know if we need to supply anything further at this time.

Many thanks,

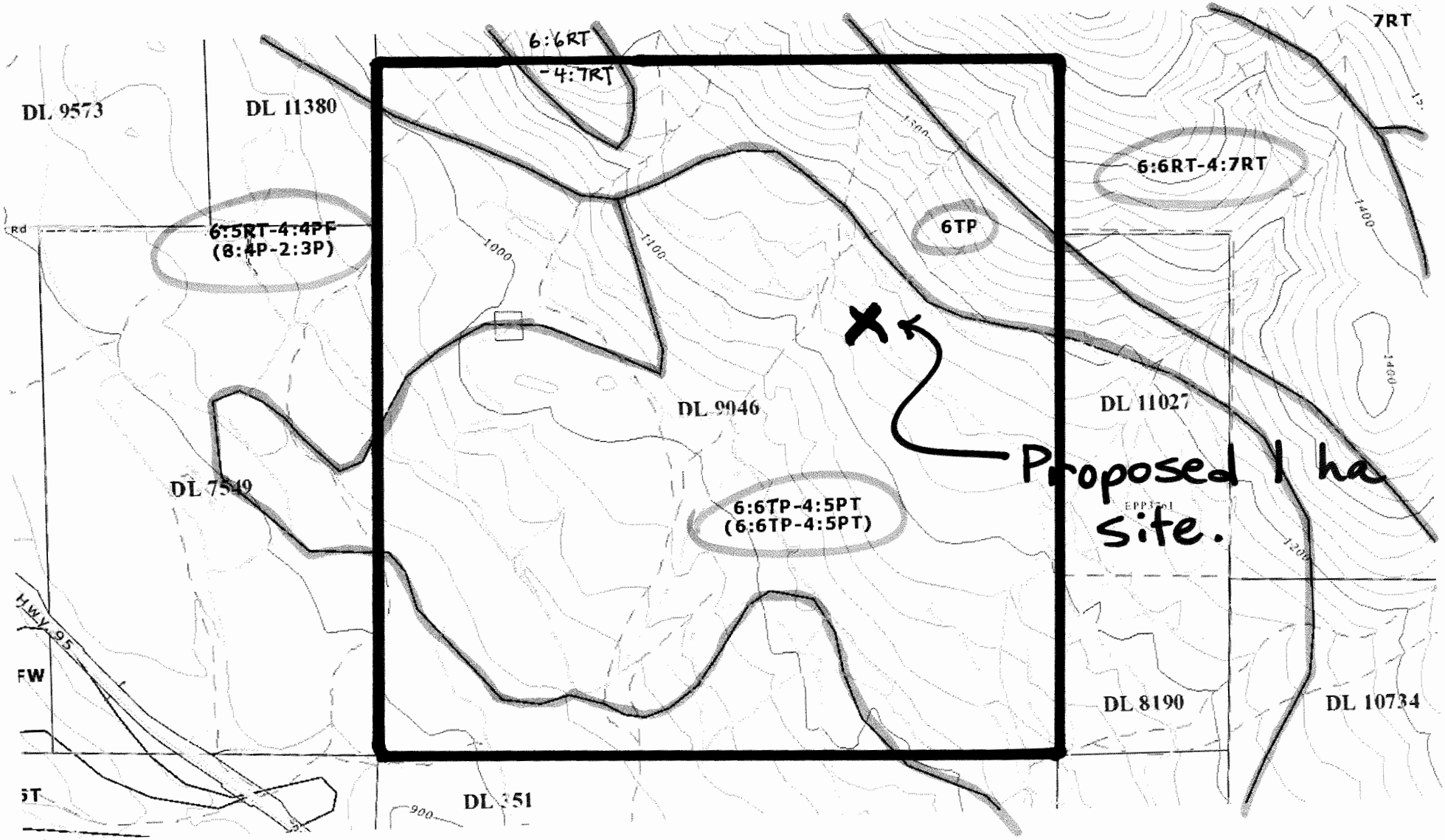
Katherine Friedley

Adrian Pery

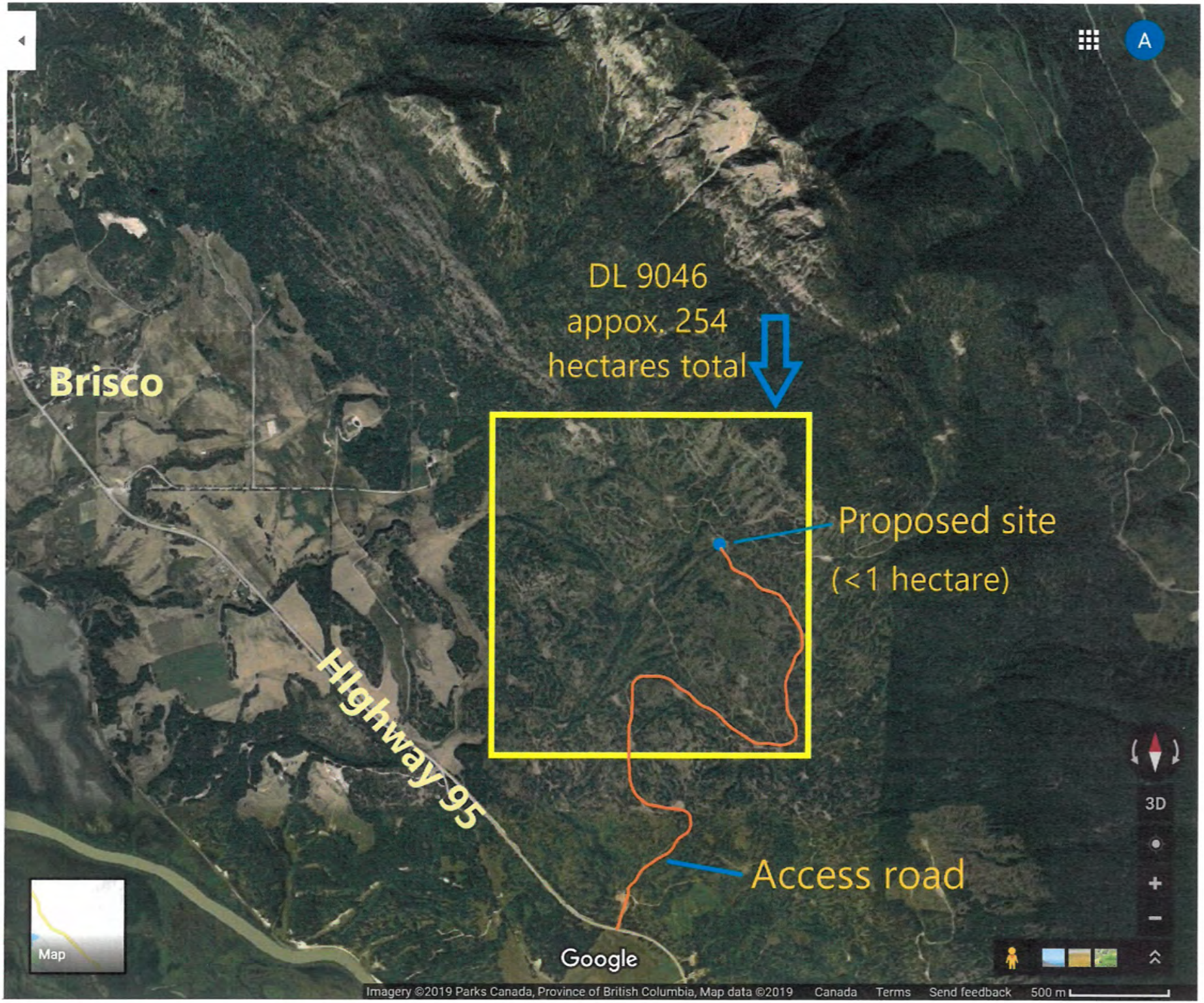
Location Map

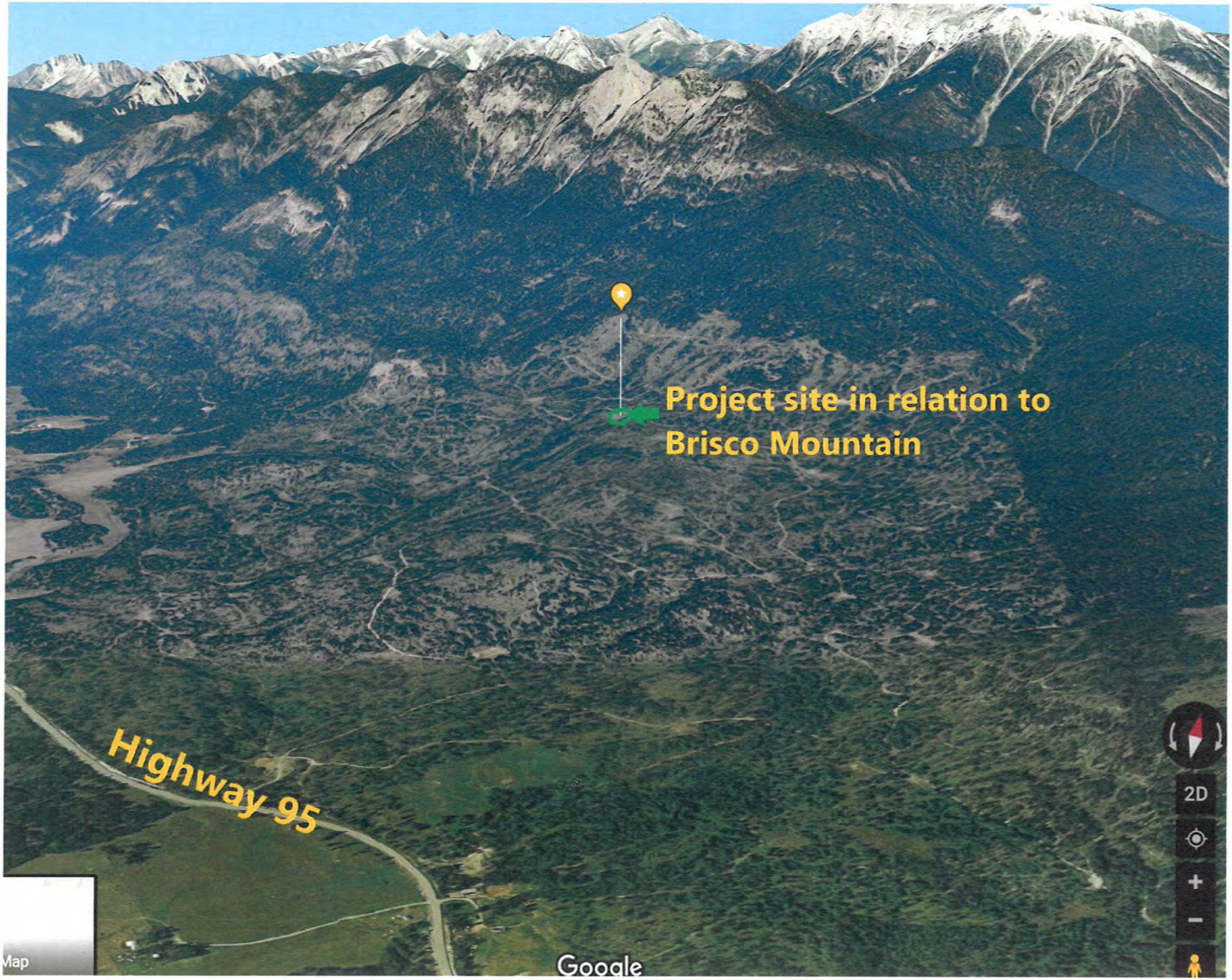


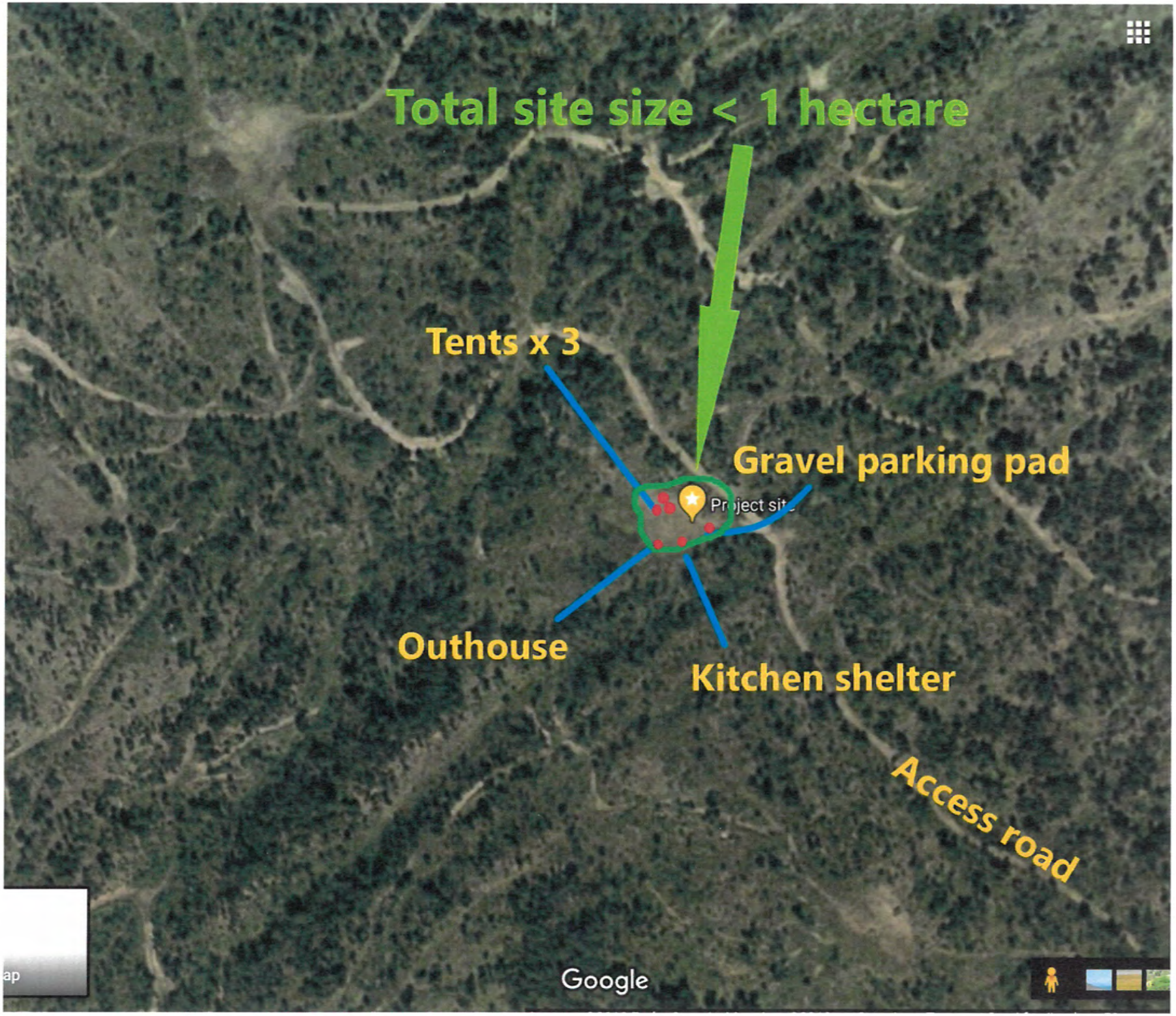
CLI Map – Agricultural Capability of Soil



(20 m contours)


DL 9046
appox. 254
hectares total
Brisco
Proposed site
(<1 hectare)
Highway 95
Access road
Map
Google
3D
Imagery ©2019 Parks Canada, Province of British Columbia, Map data ©2019
Canada
Terms
Send feedback
500 m


Project site in relation to
Brisco Mountain
Highway 95
2D
Google


Total site size < 1 hectare
Tents x 3
Gravel parking pad
Outhouse
Kitchen shelter
Access road
Google

Regional District of East Kootenay

Staff Report ...

Liquor Licensing Application

Date: July 25, 2019
File: P 719 116
Food Primary Licence # 131271 (Island Lake Lodge)

Applicant: Island Lake Lodge
Agent: Doug Feely
Location: 4330 Mt Fernie Park Road, Fernie
Legal: Sublot 4, DL 4590, KD Plan X28

Proposal:

Application for a permanent change to the operating hours of liquor service for a Food Primary Licence at the Bear Bistro and Tamarack Dining Room located at Island Lake Lodge. The current hours of liquor service are 11:00 am to 12:00 am seven days per week. The proposed hours are 9:00 am to 2:00 am seven days per week. No other changes to the facility or liquor service are proposed.

Options:

Option 1: Support

THAT the application by Island Lake Lodge for a permanent change to the operating hours of liquor service in the Bear Bistro and Tamarack Dining Room at Island Lake Lodge be supported;

and further, be it resolved that, the Board recommends issuance of the amended Food Primary Liquor Licence because the use of the property is consistent with the zoning bylaw and the proposal will not significantly affect the existing use of the property.

The Board's comments on the prescribed considerations are as follows:

a. The Bear Bistro and Tamarack Dining Room are located in the resort core area and ongoing recreational activities with associated noises are expected. There is nearby multi-family guest accommodation that could potentially be affected by noise.

b. The existing and proposed use of the area is not expected to conflict with the use of social, recreational and residential buildings in the Island Lake Lodge area.

c. The views of the public were not gathered as the nearest private property owners are approximately 6.5 km away from Island Lake Lodge.

d. The proposal is consistent with the uses permitted within the RES-4, Resort Core Zone and parking is not expected to be a concern because the venue has adequate parking area available.

Options - cont'd:

e. The proposal will result in operating in a manner consistent with that expected of a liquor service establishment within a resort location.

Option 2: Not Support

THAT the Liquor and Cannabis Regulation Branch be advised the RDEK does not support the Island Lake Lodge application for a permanent change of operating hours of liquor service at the Bear Bistro and Tamarack Dining Room.

Recommendation: **Option #1**

Property Information:

OCP Designation: RES-CORE, Resort Core

OCP Objectives and Policies:

- To direct commercial facilities to designated areas within the plan area.
- To ensure that commercial facilities are designed to complement the character of the plan area.
- To ensure that the commercial offerings provided within the plan area are programmed and scaled to effectively satisfy the on-site needs of guests and owners at the Resort.
- The provision of commercial facilities and amenities such as food & beverage venues, retail and service commercial space as an integral part of the resort expansion program is supported.
- Commercial facilities shall be limited to those areas designated as RES-CORE, Resort Core and RES-REC, Resort Recreation.

Current Zoning: RES-4, Resort Core Zone which permits food services, bar, lounges and nightclubs, among other uses.

Parcel Size: 2115 ha (5227 ac)

Density: N/A

ALR Status: Not within the ALR

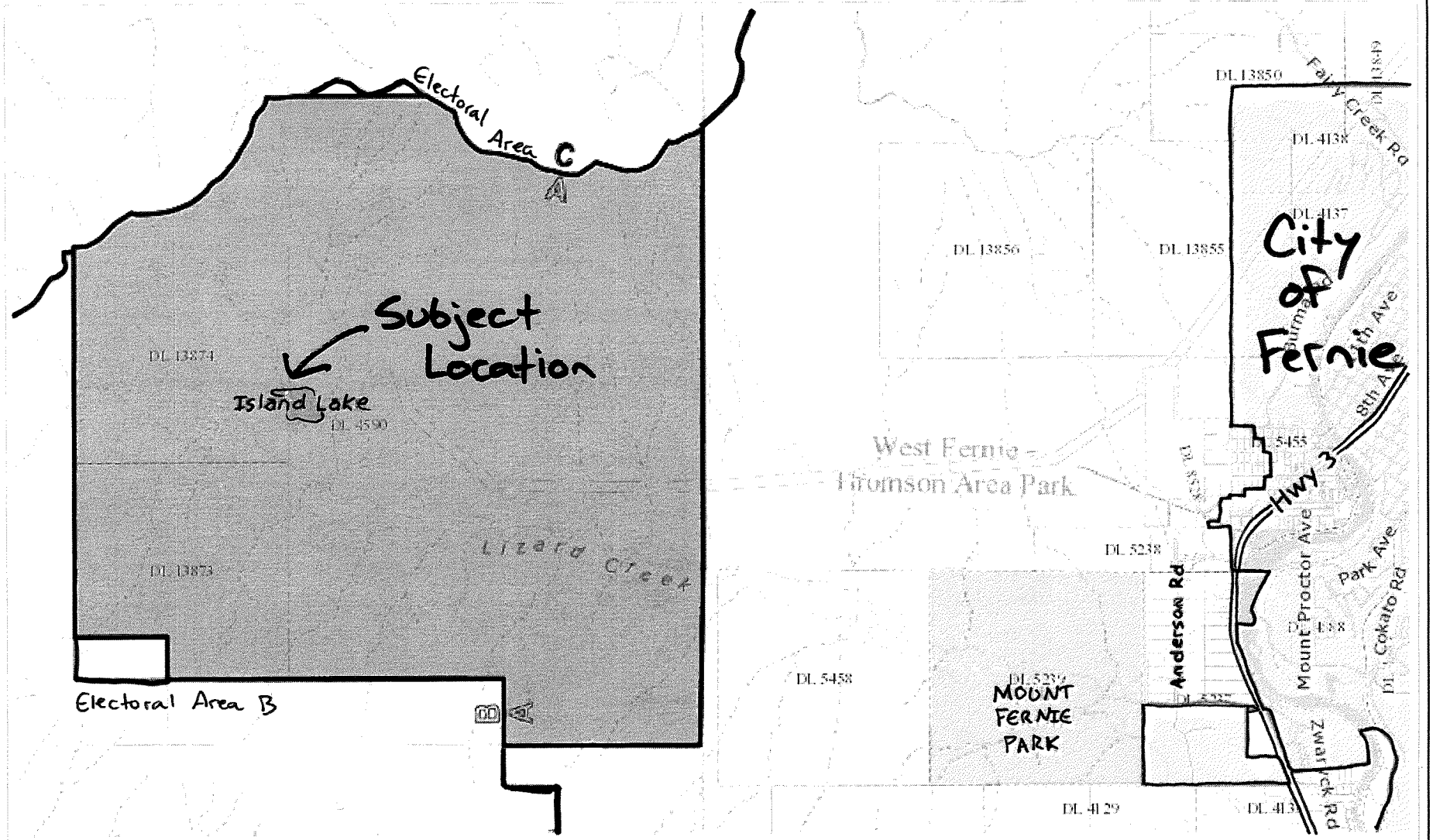
BC Assessment: Residential, Business/Other, Managed Forest, and Recreation (Seasonal Resort)

Flood Hazard Rating: Lizard Creek, Island Lake and several unnamed seasonal creeks flow through the property. Flood regulations apply.

Water / Sewer Services: Onsite

Property Information – cont'd:	**Interface Fire Hazard Rating:** Low to moderate; not within a fire protection area
Additional Information:	▪ No notices of Intent were mailed as the nearest private property owners are approximately 6.5 km away from Island Lake Lodge. ▪ The application states that the reason for the change in hours is due to their growing and thriving wedding and event business, and that they have had many requests from guests for this extended service.
Consultation:	**Advisory Commissions:** **APC Area A:** Support.
Documents Attached:	▪ Location Map ▪ Island Lake Lodge Map ▪ Current Liquor Licence ▪ Floor Plans ▪ Zoning Designation Map ▪ Letters
RDEK Contact:	Krista Gilbert, Planning Technician Phone: 250-489-0314 Email: kgilbert@rdek.bc.ca

Location Map



Notes:

1,625 0 813 1,625 Meters

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RDEK GeoViewer - 6-13-2019 9:33 AM

Scale = 1: 65,000

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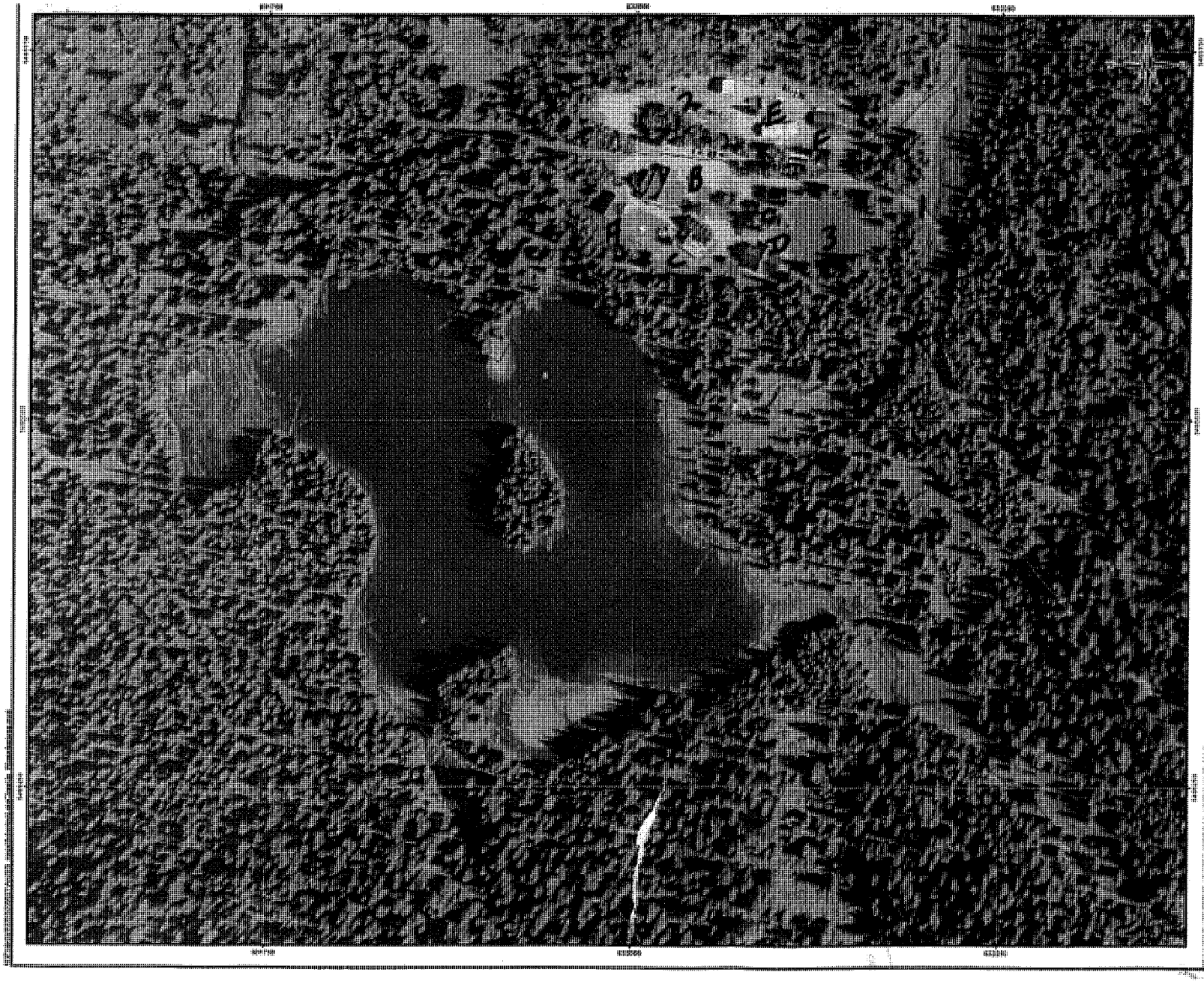


LEGEND

- Road
- Trail
- River
- Intermittent Contour (20m)
- Index Contour (100m)

A Red Eagle Lodge
B Tamarack Lodge
C Beaver Lodge
D Cedar Lodge
E Shop/Utility Bldg.
F Staff Accomodation

1. Access Road
2. Parking
3. Septic Tanks/Field
4. Becawic Spring Domestic Water Source

Base data source: BC Government, TRIM

ISLAND LAKE LODGE

Liquor Control and Licensing Branch

Food Primary Licence #131271

Expires on June 30, 2019

Establishment Name: **Island Lake Lodge**
Licence Name: **Island Lake Lodge**
Location Address: Cedar Valley Road
PO Box 1229
FERNIE, BC V0B 1M0
Issued to: Island Lake Resort Group (2003) Ltd.

TERMS AND CONDITIONS

HOURS OF SALE

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Open	**11:00 AM**	**11:00 AM**	**11:00 AM**	**11:00 AM**	**11:00 AM**	**11:00 AM**	**11:00 AM**
Close	**Midnight**	**Midnight**	**Midnight**	**Midnight**	**Midnight**	**Midnight**	**Midnight**

CAPACITY

Patio1	**85**	**Patio2**	**50**	**Person01**	**65**	**Person02**	**114**

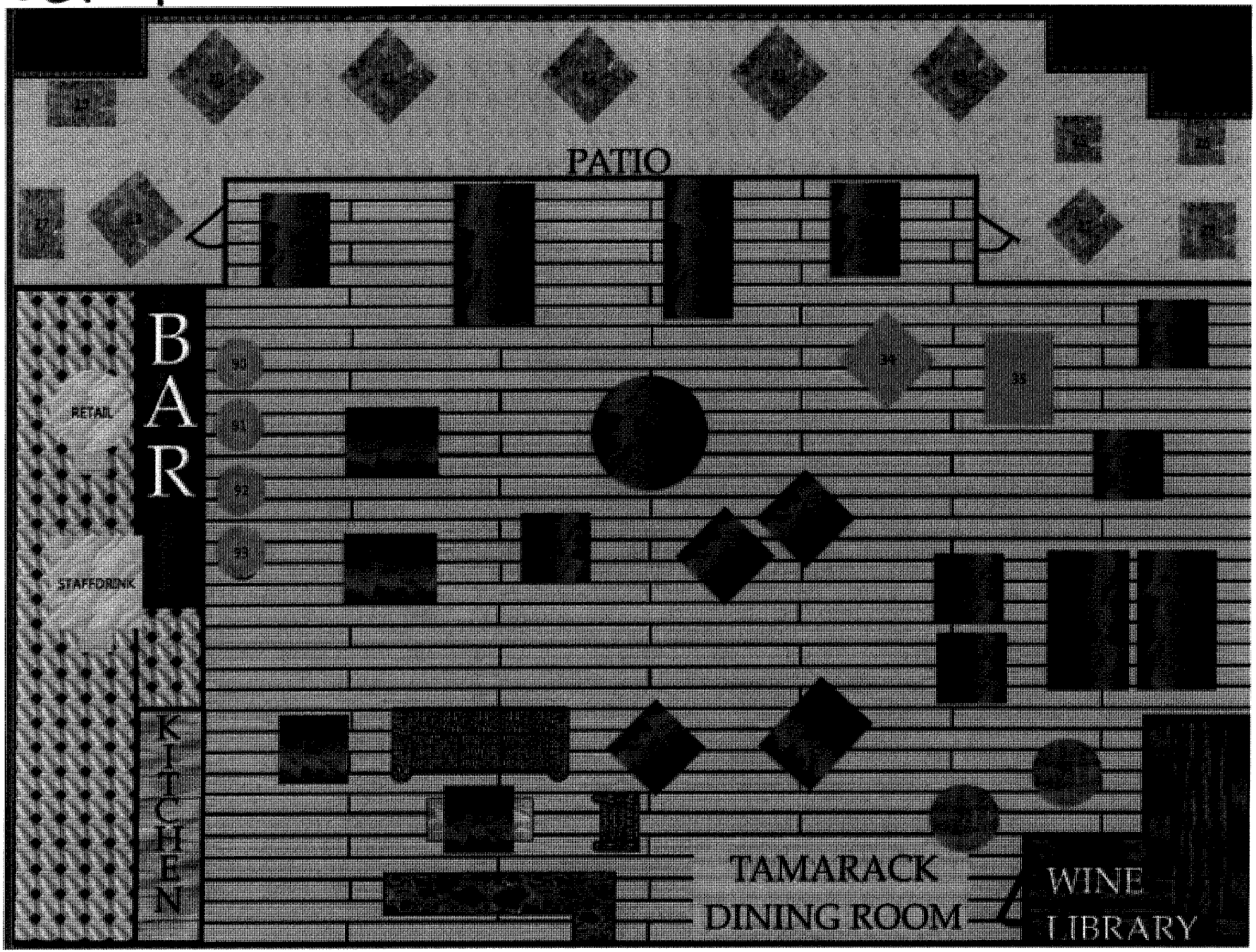
- For the sale and consumption of all types of liquor in establishments with a primary focus on the service of food.
- The terms and conditions to which this licence is subject include the terms and conditions contained in the licensee Terms and Conditions Handbook, which is available on the Liquor Control and Licensing Branch website. The Terms and Conditions Handbook is amended from time to time.
- Liquor may only be sold, served and consumed within the service areas outlined on the official plan, unless otherwise endorsed or approved by the LCLB.
- Patio extension permitted as outlined in red on the official plan.
- Patron participation entertainment other than games permitted within the premises.

YOUR CURRENT VALID LICENCE MUST BE PROMINENTLY DISPLAYED AT ALL TIMES. TAMPERING, ALTERING OR DEFACING THIS LICENCE IN ANY MANNER MAY RESULT IN THE LICENCE BEING CANCELLED.

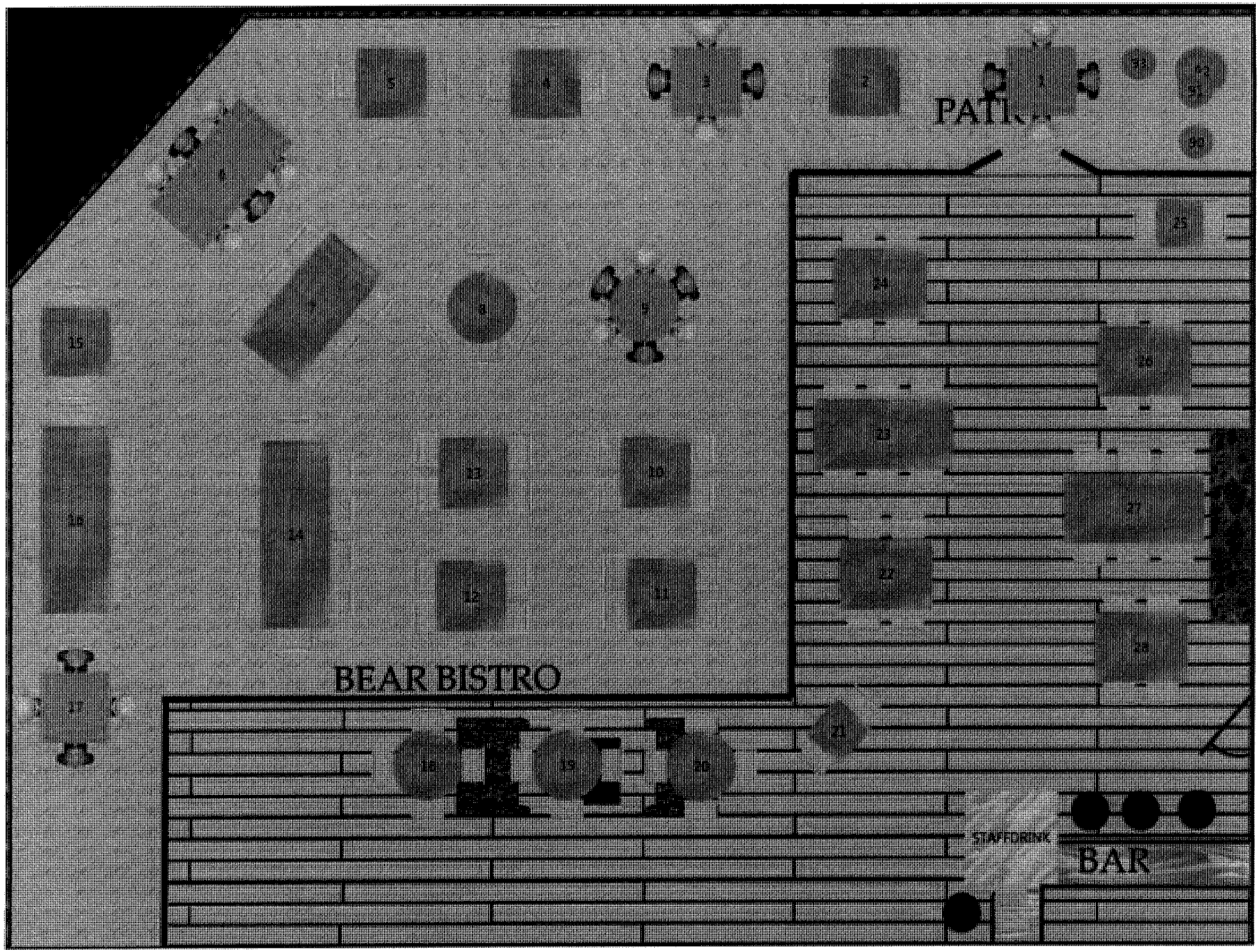
June 01, 2018
DATE

GENERAL MANAGER
LIQUOR CONTROL AND LICENSING BRANCH

Floor Plan

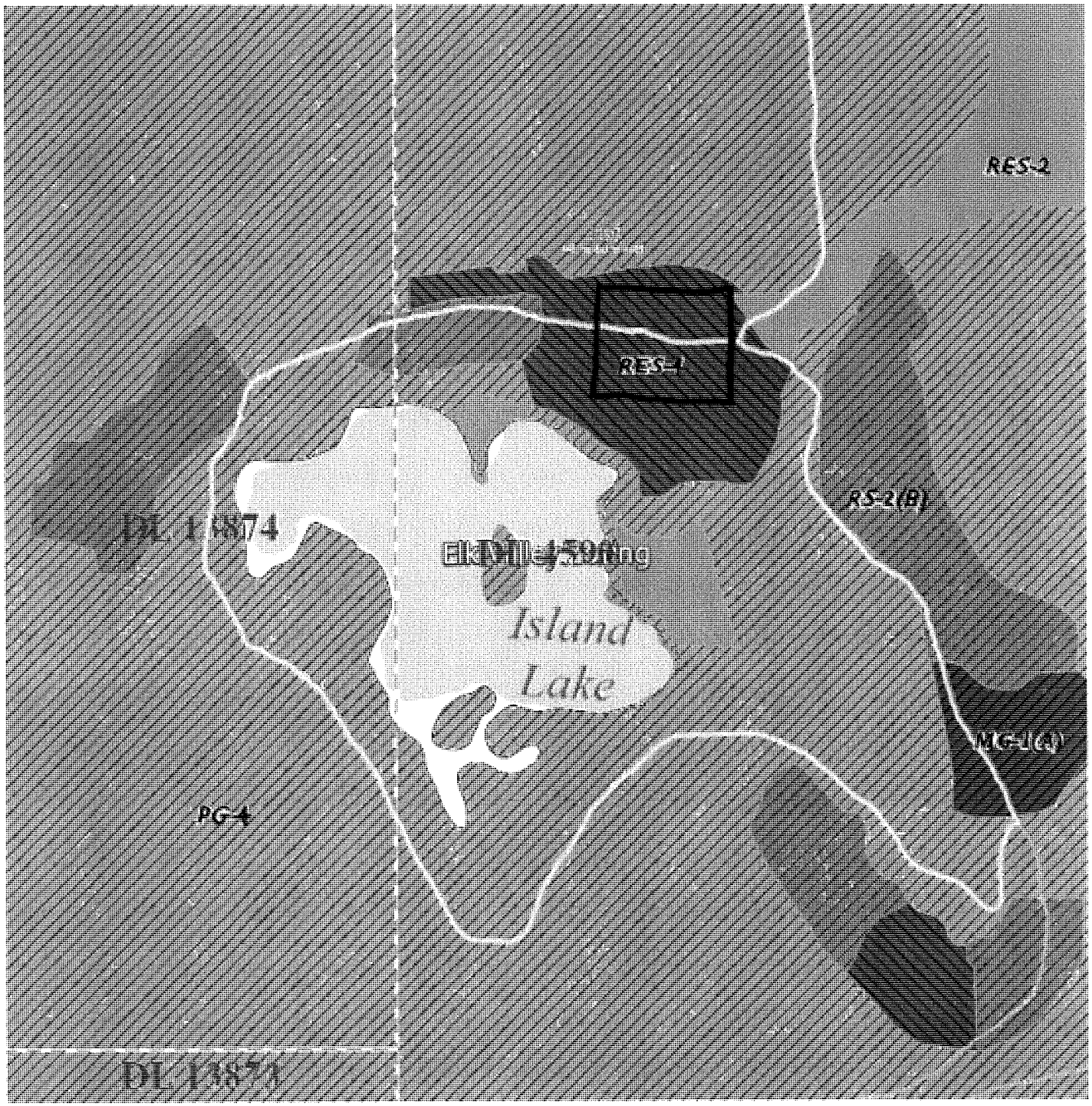

PATIO
BAR
RETAIL
STAFFDRINK
KITCHEN
TAMARACK
DINING ROOM
WINE
LIBRARY

Floor Plan



Regional District of East Kootenay

Zoning Designation Map



Notes:

200 0 100 200 Meters

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