

REGIONAL DISTRICT OF NANAIMO
AGRICULTURAL ADVISORY COMMITTEE
FRIDAY, FEBRUARY 19, 2016
2:00 PM

(Board Room)

A G E N D A

PAGES

CALL TO ORDER

MINUTES

Pgs 3-4 Minutes of the regular Agricultural Advisory Committee meeting held October 23, 2015

BUSINESS ARISING FROM THE MINUTES

COMMUNICATIONS/CORRESPONDENCE

UNFINISHED BUSINESS

REPORTS

Pgs 5-43 ALR Application No. PL2015-160 - Huntbatch – 2116 Alberni Highway, Electoral Area 'F'

Pgs 44-155 ALR Application No. PL2015-177 - Fowler – Part of Lot 1, Plan 2273, Virginia Road, Electoral Area 'F'

Bylaw & Policy Update Project – Current Status (verbal report)
(to view the Staff Report to the Electoral Area Planning Committee February 9, 2016, refer to the following link

<http://rdn.bc.ca/events/attachments/evID7286evattID2632.pdf>

BUSINESS ARISING FROM DELGATIONS OR COMMUNICATIONS

NEW BUSINESS

ADJOURNMENT

Distribution: **H. Houle (Chair)**, J. Fell, (Alt. J. McLean) C. Haime, , K. Reid, R. Thompson, C. Watson, M. Ryn, K. Wilson, J. Thony, G. Laird, W. Haddow, D. Trudeau, G. Garbutt. J. Holm, P. Thompson, T. Armet, K. Marks, B. Ritter

REGIONAL DISTRICT OF NANAIMO
AGRICULTURAL ADVISORY COMMITTEE
FRIDAY, OCTOBER 23, 2015 AT 2:00 PM
IN THE RDN BOARD CHAMBERS

Present:

Director H. Houle	Chairperson
Director C. Haime	District of Lantzville
Director J. Fell	Electoral Area 'F'
K. Reid	Regional Aquaculture Organization
J. McLeod	Regional Agricultural Organization
R. Thompson	Representative (North)
C. Watson	Representative (North)
M. Ryn	Representative (South)
K. Wilson	Representative (South)
J. Thony	Regional Agricultural Organization

Also in Attendance:

R. Turner	Turner Land Surveyor
M. Young	Electoral Area C
P. Thompson	Manager of Long Range Planning
J. Holm	Manager of Current Planning
K. Marks	Senior Planner
S. Boogaards	Planner
N. Hewitt	Recording Secretary

CALL TO ORDER

Chairperson Houle called the meeting to order at 2:00 pm.

MINUTES

Minutes of the Agricultural Advisory Committee meeting held Friday July 3, 2015.

MOVED K. Reid, SECONDED M. Ryn, that the minutes of the Agricultural Advisory Committee meeting held Friday July 3, 2015 be adopted.

CARRIED

COMMUNICATIONS/CORRESPONDENCE

Ministry of Agriculture, re Regulating Agri-Tourism and Farm Retail Sales in the Agricultural Land Reserve – Discussion Paper and Proposed Minister’s Bylaw Standards.

MOVED K. Reid, SECONDED J. Fell, that the correspondence from the Ministry Agriculture re: Regulating Agri-Tourism and Farm Retail Sales in the Agricultural Land Reserve – Discussion Paper and Proposed Minister’s Bylaw Standards be received.

CARRIED

REPORTS

ALR Application No. PL2014-017– Paugh– 2670 McLean’s Road, Electoral Area ‘C’.

MOVED J. Fell, SECONDED K. Reid, that the Agricultural Advisory Committee recommends the Agricultural Land Commission approve Section 946 subdivision application No. PL2014-017 – Paugh – 2670 McLean’s Road, Electoral Area ‘C’ as submitted.

CARRIED

Bylaw and Policy Update Project – Current Status.

K. Marks provided a brief verbal update on the Bylaw and Policy Update project.

Dogs at Large Bylaw Amendment.

J. Holm provided a brief verbal update on bylaw amendments to address dogs at large in Electoral Area ‘F’.

Agricultural Land Use Inventory Update.

K. Marks provided a brief verbal update on the agricultural land use inventory update.

AAC Membership expiring at the end of this year.

J. Holm thanked the Committee members for their work with the AAC and advised that members are welcome to re-apply for positions on the Committee and that the Board will approve new committee appointments in January.

NEW BUSINESS

Agricultural Study Tour - UBCM.

Director Houle joined the BC Ministry of Agriculture on a tour showing the latest in livestock production. The tour included an organic chicken egg farm, dairy farm, goat farm and a retired racehorse farm.

ADJOURNMENT

MOVED K. Reid, SECONDED C. Watson, that this meeting be adjourned.

CARRIED

Time 2:51 pm



CHAIRPERSON

TO: Agricultural Advisory Committee (AAC) **DATE:** February 3, 2016

FROM: Jamai Schile
Planner **FILE:** PL2015-160

SUBJECT: Request for Comment on Subdivision in the ALR Application No. PL2015-160
Lot 12, Salvation Army Lots, Nanoose District, Plan 1115, Except Part In Plan 734 RW
2116 Alberni Highway
Electoral Area 'F'

BACKGROUND

The Regional District of Nanaimo (RDN) has received an application for subdivision in the Agricultural Land Reserve (ALR) from Horst Neuman on behalf of Wendy Huntbatch (see Attachment 9 for applicant's submission). The subject property is approximately 8.32 ha in area and is contained entirely within the ALR. The parcel is bound by Alberni Highway to the north and Burgoyne Road to the south with and Agricultural (A-1) zone parcels to the east, west and south. The property currently contains the World Parrot Refuge; a residential dwelling; retail shop; commercial greenhouse, workshop and ground crops - lavender. A copy of the Subject Property Map and proposed Plan of Subdivision is included in the enclosed draft Local Government Report (see Attachments 1 and 3).

Agricultural Advisory Committee (AAC) Members were provided an opportunity to attend the site on January 26, 2016.

BOARD POLICY AND DISCUSSION

RDN Board Policy B1.8 – Review of Provincial Agricultural Land Reserve (ALR) Applications provides an opportunity for the AAC to review and provide comments on ALR applications for exclusion, subdivision and non-farm use on lands within the ALR. As per Policy B1.8, the applicable standing Board resolution is included for the Agricultural Land Commission's information as part of the Local Government Report. A copy of this draft report, including comments from the Area Director, is included for your review and comment. Following this review, the Local Government Report, including comments from the Area Director and the AAC, will be forwarded to the ALC for consideration.

In accordance with the AAC Terms of Reference, the role of the AAC members is to provide local perspective and expertise to advise the Regional Board (and in this case comment to the ALC) on a range of agricultural issues on an ongoing and as needed basis as directed by the Board. In addition to members' local knowledge and expertise, comment on ALR applications may be guided by Board approved policies such as the RDN Agricultural Area Plan, the Board Strategic Plan, the Regional Growth Strategy and the applicable Official Community Plan along with the relevant land use bylaws. AAC members can also find information related ALR land use and agriculture in BC on the Agricultural Land

Commission and Ministry of Agriculture websites. Local and contextual information can also be found on the RDN's Agricultural projects website at www.growingourfuture.ca.

Comment provided to the ALC by the AAC is consensus based through Committee adoption of a motion regarding the comment to be provided. If an AAC member has comments regarding an application to the ALC being considered by the AAC, the appropriate time to provide those comments is during discussion on the application at the AAC meeting prior to the Committee's adoption of its comment. Only the comment approved by the Committee will be forwarded to the ALC for its consideration. Comments from individual AAC members will not be included in the Local Government Report that is forwarded to the ALC.

The comment provided by the AAC is not an approval or denial of the application and is only a recommendation to the ALC regarding a specific application. Any comment from the AAC is provided in addition to the applicable standing Board resolution as per Policy B1.8 and the Electoral Area Director's comment if provided. The ALC is the authority for decisions on matters related to the ALR and will consider comments provided in making its decision on an application.



Report Writer



Local Government Report
 Under the Agricultural Land Reserve
 Use, Subdivision and Procedure Regulation

RD/Mun. File No.	PL2015-160
Fee Receipt No.	2015007704
Fee Amount	\$600.00
ALR Base Map No.	92F.029
ALR Constituent Map No.	
Air Photo No.	

Information supplied by:

Regional District of Nanaimo

In respect of the application of:

Wendy N. Huntbatch

PLANS and BYLAWS (*Attach relevant sections of bylaws*)

Civic Address	2116 Alberni Highway
Legal Description:	Lot 12, Salvation Army Lots, Nanoose District, Plan 1115, Except Part In Plan 734 RW
Community Plan or Rural Land Use Bylaw Name:	"Regional District of Nanaimo Electoral Area 'F' Official Community Plan Bylaw No. 1152, 1999"
OCP Designation:	Resource Lands within Agricultural Land Reserve (ALR)
Zoning Bylaw Name:	"Regional District of Nanaimo Electoral Area 'F' Zoning and Subdivision Bylaw No. 1285, 2002"
Zone Designation:	Comprehensive Development (CD-16) Zone
Minimum Lot Size:	4.0 ha
Permitted Uses:	Principal Uses: Dwelling Unit, Farm Use, Kennel, for keeping of Exotic Birds only Accessory Uses: Accessory Building and Structures, Accessory Restaurant, Accessory Retail Sales, Farm Business, Home Based Business
Maximum Density:	2 Dwelling Units per lot, provided that one Dwelling Unit is a Manufactured Home.

Are amendments to Plans or Bylaws required for the proposal to proceed?

Plan Yes No **Bylaw** Yes No, however it would be appropriate in support of the proposed Lot B Agriculture (A-1) rezoning.

Is authorization under Sec. 25 (3) or 30 (4) of the Agricultural Land Commission Act required?

Yes (*If yes, please attach resolution or documentation*) No

COMMENTS and RECOMMENDATIONS <i>(Include copies of resolutions)</i>	
Board or Council:	<p>The Regional District of Nanaimo Board of Directors has a standing Board resolution for subdivision of lands within the ALR as per Policy B1.8:</p> <p>As outlined in the Regional Growth Strategy, the Regional District of Nanaimo fully supports the mandate of the Agricultural Land Commission (ALC) and the preservation of land within the Agricultural Land Reserve (ALR) for agricultural use. The Regional District encourages the ALC to only consider subdivision where in the opinion of the ALC the proposal will not negatively impact the agricultural use of the land or adjacent ALR lands.</p>
Electoral Area Director:	<p>Comment of Electoral Area Director.</p> <p>This application has effects outside of just agriculture and represents a unique stand alone situation. The northern half of the property is being farmed with a perennial crop (lavender) and is the site of the World Parrot Refuge. The shut down of the refuge would disrupt the local economy, probably create a major headache for the local government and be attended by adverse publicity. Closing the refuge would not enhance the agricultural potential of the property.</p> <p>It is therefore in the best interests of all parties involved that the refuge continue. There is a proposal to establish a hazelnut orchard on the (not currently farmed) southern half. This southern half already has a residence, combined with an existing service building. I do not see a diminution of the agricultural potential of this lot as a result of a division. I support this subdivision application to divide this property so that the Parrot Refuge may continue to operate without being tied to the current land owner and that the owner and dependents and heirs may separate their private affairs from that of the refuge.</p> <p>Julian Fell</p>
Advisory Planning Commission:	n/a
Agriculture Advisory Committee:	Motion Pending
Others:	Currently none specified.
Planning Staff:	Jamai Schile, Planner Phone: 250-390-6510 Email: jschile@rdn.bc.ca

BACKGROUND

The subject property is legally described as Lot 12, Salvation Army Lots, Nanoose District, Plan 1115, Except Part In Plan 734 RW and the civic address is 2116 Alberni Highway. The property is approximately 8.32 ha in area and is contained entirely within the ALR. The parcel is bound by Alberni Highway to the north, Agricultural (A-1) zone parcels to the east, west and south.

The property currently contains the World Parrot Refuge; a residential dwelling; retail shop; commercial greenhouse, workshop and ground crops - lavender. Refer to Attachments 1 and 2 for Subject Property Map and Aerial Photo.

The applicant proposes to subdivide the parcel to preserve the front part of the parcel (proposed Lot A) for the current uses, including the World Parrot Refuge and to create a new parcel (proposed Lot B) for the purpose of constructing a new residential dwelling for the current owner's partner, which would enable him to carry on with his existing home based business and to establish a hazelnut farm in the near future. Refer to Attachments 3 for Proposed Subdivision Plan.

ZONING

The parcel is currently zoned Comprehensive Development (CD-16) Zone, pursuant to "Regional District of Nanaimo Electoral Area 'F' Zoning and Subdivision Bylaw No. 1285, 2002", see Attachment 4 for zoning regulations and minimum parcel size. The CD-16 Zone permits Residential Use, Farm Use, Kennel, for keeping exotic birds as well as accessory uses, including Accessory Buildings and Structures, Accessory Restaurant, Accessory Retail Sales, Farm Business, Home Based Business. The zoning regulation permits two Dwelling Units per lot, provided that one Dwelling Unit is a Manufactured Home, which is consistent with the requirements set for agricultural lands within the ALR. The zone also requires that the minimum lot size be no less than 4 ha.

The current CD-16 zone permits "Kennel, for keeping exotic birds" and associated accessory uses that are currently being undertaken on the area proposed as Lot A. If the subdivision application were approved under the existing CD-16 zoning, all of the current permitted uses in the CD-16 zone would apply to the proposed new parcel Lot B. In order to address this matter the Agriculture Land Commission (ALC) may wish to require that any approval for subdivision be subject to a zoning amendment from Comprehensive (CD-16) zone to Agriculture (A-1) zone for proposed Lot B. The A-1 zoning would support agricultural use of the property in a manner consistent with the ALR policy and regulations and retain the minimum parcel size of 4 ha, as met by the proposed Lot B. The owner is also supportive of this zoning amendment.

OFFICIAL COMMUNITY PLAN

The subject property is designated as Resource Lands pursuant to the "Regional District of Nanaimo Electoral Area 'F' Official Community Plan Bylaw No. 1152, 1999", see Attachment 5. The OCP policies support: uses identified by the Agriculture Land Commission (ALC), such as agriculture, primary processing and outdoor recreation uses, and a minimum permitted parcel size of 4.0 ha for future subdivision of Resource Lands within the ALR, when approved by the ALC.

The parcel is also designated within the Fish Habitat Development Permit Area. A development permit may be required prior to subdivision or alteration of the land.

REGIONAL GROWTH STRATEGY

The subject property is designated 'Resource Land and Open Spaces' pursuant to the "Regional District of Nanaimo Regional Growth Strategy Bylaw No. 1615, 2011" (RGS). The Resource Land and Open Spaces designation does not support the creation of new parcels that are smaller than the size supported by the

Official Community Plan in effect at the date of the adoption of the RGS, see Attachment 7. Further to this, the Regional Growth Strategy encourages the provincial government to protect and preserve the agricultural land base through the ALR, see Attachments 8.

A copy of the applicant's submission package is included in Attachment 9.

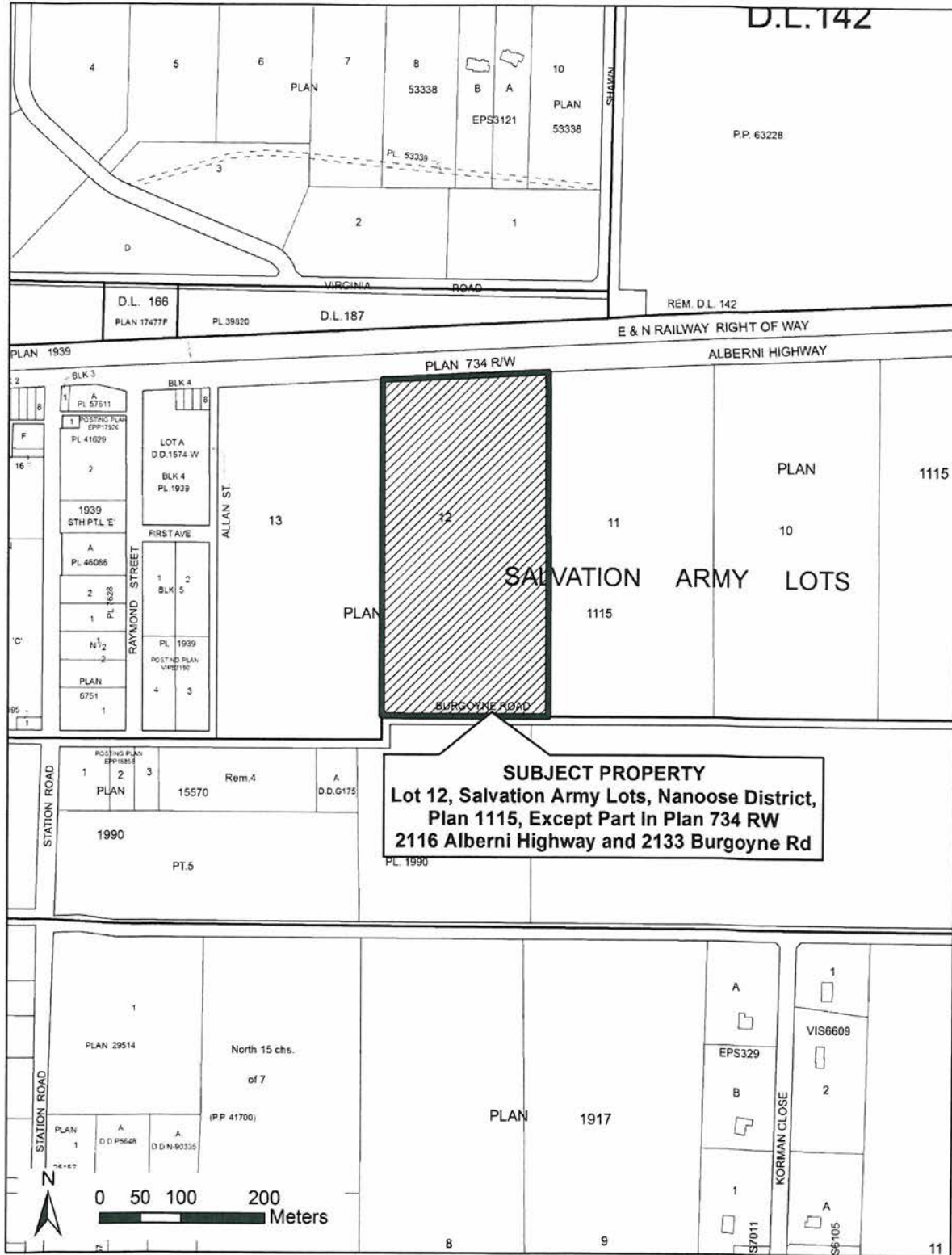


January 19, 2016

Signature of Responsible Local Government Officer

Date

**Attachment 1
Subject Property Map**



Attachment 2
2014 Aerial Photo



**Attachment 3
Proposed Sketch of Subdivision**



**SKETCH PLAN TO ACCOMPANY AN APPLICATION FOR SUBDIVISION OF LOT 12,
SALVATION ARMY LOTS, NANOSE DISTRICT, PLAN 1115, EXCEPT PART IN PLAN 734 RW**

PID 003-481-123
BCCS 02F.038
2116 Albern Highway and
2133 Burgoyne Road, Coamba

All Dimensions are in Metres and decimals thereof
 0 50 100 150
 The intended Scale of this Plan is 1:2000
 when plotted on a 432 mm x 580 mm (17"x22") Sheet

J.E. ANDERSON & ASSOCIATES
 S.C. Land Surveyors & Consulting Engineers
 # 203 - 177 Main St., PO Box 547
 Porterville, BC V8H 2G4
 250-248-5705 portville@jeanderson.com
 File : 60995-1

LEGAL NOTATIONS:
 E & N Railway Exceptions and Reservations - M70300
 This Title may be Affected by the ALC Act.

This Sketch Plan has been compiled from existing
 Land Title Office Records. The final Subdivision Plan
 will have small variations for Property Line Dimensions

This Plan has been prepared for an
 Application for Subdivision only. It is not
 to be interpreted that approvals have, or
 will be granted by Approved Agencies.

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 or alter this document in whole or in part
 without the consent of the signatory

This Plan has been Prepared in Accordance with
 the Professional Reference Manual and is Certified
 Correct this 21st Day of December, 2015.

Kenneth
 KYLER
 D1252H
 This document is not valid unless digitally signed.

CD-16 2116 Alberni Highway

Section 4.39

4.39.1 Permitted Principal Uses ¹

- a) Dwelling Unit
- b) Farm Use
- c) Kennel, for the keeping of Exotic Birds only

4.39.2 Permitted Accessory Uses

- a) Accessory Buildings and Structures
- b) Accessory Restaurant
- c) Accessory Retail Sales
- d) Farm Business
- e) Home Based Business

Notwithstanding the Permitted Principal Uses listed above, any use designated or permitted to be a 'farm use' by the Agricultural Land Commission or the Ministry of Agriculture, Food and Fisheries is permitted within this zone.

4.39.3 Regulations Table

Category	Requirements
a) Maximum Density	2 Dwelling Units per lot, provided that one Dwelling Unit is a Manufactured Home.
b) Minimum Lot Size	4 ha
c) Minimum Lot Frontage	100 metres
d) Maximum Lot Coverage	10%
e) Maximum Building and Structure Height	10 metres
f) Minimum Setback from	
i) Front and Exterior Side Lot Lines	4.5 metres
ii) All Other Lot Lines	4.5 metres
g) Minimum Setback of all buildings or structures housing livestock or manure from all lot lines and / or watercourses	30 metres
h) Runoff Control Standards	As outlined in Section 2.5
i) General Regulations	Refer to Section 2 – General Regulations
j) Parking Regulations	1 space per 100m ² of parrot refuge 1 space per 3 seats of concession
k) Other Parking Requirements	For stall dimensions and handicapped spaces, refer to Section 2.17.4

¹ (CD-16) Bylaw 1285.06, 2005, adopted July 28, 2005

Attachment 4
Existing Zoning (Page 2 of 2)

4.39.1 Regulations

- a) The maximum floor area permitted for the accessory restaurant and accessory retail sales shall not exceed a combined floor area of 50m².
- b) The maximum number of seats in the accessory restaurant area shall be 20.

Attachment 5
Official Community Plan Land Use Designation

Resource Lands

This designation applies to lands that are valued for agriculture, forestry, natural resource extraction or environmental conservation opportunities. This Plan designates as Resource Lands, lands located within the Agricultural Land Reserve, Forest Land Reserve, as well as Crown lands other than lands designated as Park Land. Lands designated Resource Lands are illustrated on Map No. 2.

It is recognized that there is a wide range of home based business activities occurring on ALR lands in Electoral Area 'F'. The Regional District of Nanaimo shall negotiate with the Agricultural Land Commission to obtain a General Order for Electoral Area 'F' to allow for an expanded definition of home based businesses beyond what is normally permitted by the ALC.

Objectives

1. Support the long-term viability of the natural resource land base and protect it from activities and land uses that may diminish its resource value and potential.
2. Ensure that resource operations comply with recognized standards and codes of practice and that unreasonable impacts on the natural environment are avoided.

General Policies

1. For properties within the ALR or FLR, the regulations and policies of the ALC and FLC apply. These properties may also be subject to other local government bylaws.
2. A 4.0-hectare minimum permitted parcel size for future subdivision shall apply to all lands designated Resource and currently situated in the ALR.
3. A 50.0-hectare minimum permitted lot size for future subdivision shall apply to all lands designated Resource and currently situated in the FLR or Crown lands.
4. Future residential development on Resource Lands shall be limited to one dwelling unit per parcel. Two dwelling units per parcel may be permitted where approval has been received from the ALC or FLC, if necessary, and subject to the zoning on the property.
5. Permitted uses shall be associated with those uses supported by the ALC and FLC, such as agriculture, forestry, primary processing and outdoor recreation uses, including campgrounds.
6. Where land is removed from the ALR or FLR, the Resource Lands designation shall remain and the permitted uses shall be limited to rural/resource activities as defined in the OCP and zoning.

Attachment 6 Regional Growth Strategy Land Use Designation

Resource Lands and Open Space

The Resource Lands and Open Space land use designation includes:

- Land that is primarily intended for resource uses such as agriculture, forestry, aggregate and other resource development; and
- Land that has been designated for long-term open space uses.

This designation includes:

- Land in the Agriculture Land Reserve;
- Crown land;
- Land designated for resource management or resource use purposes, including forestry, in official community plans;
- Recognized ecologically sensitive conservation areas;
- Provincial parks;
- Regional parks;
- Large community parks;
- Cemeteries;
- Existing public facilities outside of areas planned for mixed-use centre development;
- Destination Resorts; and
- Golf courses.

Resource activities on land in this designation should be encouraged to operate in ways that do not harm the functioning of natural ecosystems. Land use control, and resource management of lands in this designation is shared between landowners, local, provincial and sometimes federal government. Much of the forest land is privately owned. Forest companies, farmers, shellfish aquaculture (and associated research facilities) and aggregate resource development companies are recognized to have the right to operate on land within this designation in compliance with local, provincial and federal government regulations.

No new parcels that are smaller than the size supported by the official community plan in effect at the date of the adoption of this *Regional Growth Strategy* may be created on land in this designation.

Attachment 7

Regional Growth Strategy Goal 7 – Enhance Economic Resiliency - Agriculture

Agriculture

- 7.1 Recognize the importance of agriculture to the region's economy. To this end, the RDN and member municipalities agree to:
- Support the management of the Agriculture Land Reserve (ALR) by the provincial government;
 - Encourage the provincial government to protect the agricultural land base through the ALR;
 - Support the agricultural use of ALR lands within designated Urban Areas or Rural Village Areas except in instances where urban land uses have already been established at the time of the adoption of this RGS;
 - Recognize that all ALR lands will be subject to the regulations of the Agricultural Land Commission;

Attachment 8
Regional Growth Strategy Goal 8 – Food Security
(Page 1 of 3)

Goal 8 - Food Security - Protect and enhance the capacity of the region to produce and process food.

Most of the food we eat comes from other parts of the world. A study conducted by the Region of Waterloo Public Health in Ontario (M. Xuereb, 2005) found that *'Imports of 58 commonly eaten foods travel an average of 4,497 km to Waterloo Region'*. Although there are currently no regionally specific studies estimating the distance food travels to reach our plates, it is safe to estimate that many of the foods we regularly consume travel on average at least 2,400 km to reach us (a widely quoted figure for North America, based on research conducted in Iowa by R. Pirog, et al 2001).

Despite ongoing debate about the environmental benefits of 'buying local' food versus making dietary changes (C. Weber and H. Scott Matthews, 2008), it is clear that our dependence on imported foods means that our access to food is vulnerable to the effects of weather and political events that may occur thousands of kilometers away. As well, world energy prices play a large role in the cost of food production and distribution. Greater food security means that more food is grown locally and therefore is not as susceptible to events occurring outside the region.

Local food production generates numerous economic, environmental and social benefits. Agriculture employs almost 3,000 people and generates a flow of income into the region. Local sources of food help reduce the region's carbon footprint by reducing transportation-related GHG emissions. In addition, the nutritional content of locally produced food is often greater than imported food – providing a healthier choice of food for residents.

The '5 A's' of food security:

- *Available – sufficient supply*
- *Accessible – efficient distribution*
- *Adequate – nutritionally adequate and safe*
- *Acceptable – produced under acceptable conditions (e.g. culturally and ecologically sustainable)*
- *Agency – tools are in place to improve food security*

(J. Oswald, 2009)

Ensuring the long-term viability of farming and agricultural activity in the region requires a coordinated effort on the part of local, provincial and federal authorities. In addition to the provisions of Policy 5.4, the RDN and member municipalities can undertake a number of actions to support and enhance the viability of food production in the region as set out in the following policies (See Map 5 – Agricultural Lands).

Protecting the agricultural land base is a key requirement for enhancing food security. The Agricultural Land Reserve (ALR) established by the Province in 1973 has largely been effective in reducing the loss of agricultural lands. Since 1974 the percentage of land protected under the ALR in the RDN has decreased approximately 12%, from 10.10% of the total land base to approximately 8.85% (www.alc.gov.bc.ca/alr/stats).

The majority of ALR lands in the RDN are located in rural Electoral Areas, with smaller portions located within the boundaries of municipalities. This RGS recognizes and supports the jurisdiction of the ALC over all ALR lands and strongly supports the retention and use of all ALR lands for agriculture. The RDN will continue to endorse the Agricultural Land Commission's efforts in preserving agricultural lands. Other actions that would enhance food security in the region include:

- Supporting improved access to sustainable water supplies for irrigation;
- Encouraging best water management practices in agriculture;¹
- Providing drainage infrastructure for flood-prone lands that do not include environmentally sensitive areas;
- Improving infrastructure to provide agricultural services and processing; and improving access to markets.

Policies

The RDN and member municipalities agree to:

- 8.1 Encourage and support the Agricultural Land Commission in retaining lands within the ALR for agricultural purposes.
- 8.2 Discourage the subdivision of agricultural lands.
- 8.3 Include provisions in their official community plans and zoning bylaws to allow for complementary land uses and activities that support the on-going viability of farming operations.
- 8.4 Establish agriculture as the priority use on land in the ALR.
- 8.5 Minimize the potential impact non-farm land uses may have on farming operations and include policies in their official community plans and zoning bylaws that reduce the opportunity for land use conflicts to occur.
- 8.6 Encourage and support agricultural activity on lands that are not within the ALR. This may include small-scale home-based agricultural businesses.
- 8.7 Recognize the importance of value-added agricultural uses and complementary land use activities for the economic viability of farms. To support complementary farm uses, official community plans should consider:
 - The provision of appropriately located agricultural support services and infrastructure;
 - Reducing impediments to agricultural processing and related land uses;
 - Allowing compatible complementary land use activities (e.g., agri-tourism);
 - Allowing farmers' markets and other outlets that sell local produce to locate in

1

all parts of the community.

- 8.8 Encourage urban agriculture initiatives and support activities and programs that increase awareness of local food production within the region.
- 8.9 Support the appropriate use of water resources for irrigation of agricultural lands.
- 8.10 Support the provision of drainage infrastructure to flood-prone lands that do not lie within environmentally sensitive areas.
- 8.11 Work in collaboration with federal and provincial agencies, adjacent regional districts, and agricultural organizations to improve access to markets for agricultural products.
- 8.12 Support partnerships and collaborate with non-profit groups to enhance the economic viability of farms.
- 8.13 Support farms that produce organic agricultural products and use sustainable farming practices.
- 8.14 Support the production, processing, distribution and sale of locally grown produce (including shellfish).

Attachment 9
Applicant's Submission
 (Page 1 of 2)



APPLICATION BY LAND OWNER

NOTE: The information required by this form and the documents you provide with it are collected to process your application under the Agricultural Land Commission Act and regulation. This information will be available for review by any member of the public. If you have any questions about the collection or use of this information, contact the Agricultural Land Commission and ask for the staff member who will be handling your application.

TYPE OF APPLICATION (Check appropriate box)

- | | |
|---|---|
| <input type="checkbox"/> EXCLUSION
under Sec. 30(1) of the Agricultural Land Commission Act | <input checked="" type="checkbox"/> SUBDIVISION in the ALR
under Sec. 21(2) of the Agricultural Land Commission Act |
| <input type="checkbox"/> INCLUSION
under Sec. 17(3) of the Agricultural Land Commission Act | <input type="checkbox"/> Non-farm USE in the ALR
under Sec. 20(3) of the Agricultural Land Commission Act |

APPLICANT

Registered Owner: WENDY N HUNBATCH		Agent: Traci Neumann	
Address: 2116 ALBERNI HWY		Address: 2116 Alberni Hwy	
COOMBS			
Postal Code V0R 1M0	Coombes, BC	Postal Code V0R 1M0	
Tel. (home) 250 351 1166 (work) 250 951 2026	Tel. 250-351-2026		
Fax 250 351 20 86	Fax Cell: 250-451-1165		
E-mail wendy@worldpositivemfg.org	E-mail hatch@shaw.ca		

LOCAL GOVERNMENT JURISDICTION (Indicate name of Regional District or Municipality)

REGIONAL DISTRICT OF NANAITO

LAND UNDER APPLICATION (Show land on plan or sketch)

Title Number	Size of Each Parcel (Ha.)	Date of Purchase	
		Month	Year
<u>E1033337 from E1039255</u>	<u>3.138</u>	<u>June</u>	<u>2004</u>

OWNERSHIP OR INTERESTS IN OTHER LANDS WITHIN THIS COMMUNITY

(Show information on plan or sketch)

If you have interests in other lands within this community complete the following:

Title Number(s): _____

Attachment 9
Applicant's Submission
(Page 2 of 2)

PROPOSAL (Please describe and show on plan or sketch)

TO DIVIDE PARCEL INTO TWO AS PER SKETCH. WE WISH TO BE ABLE TO ENSURE THAT THE FRONT PARCEL ON ALBENI WAY CAN BE WILLED TO CONTINUE AS A PARROT SANCTUARY IN THE EVENT OF MY DEATH

THE PARCEL ON BURGONE WILL CONTINUE TO BE OUR HOME AND HOME BASED BUSINESS. WE PLAN TO USE A SUBSTANTIAL AMOUNT OF THE PARCEL AS A HAZELNUT FARM IN THE NEAR FUTURE

CURRENT USE OF LAND (Show information on plan or sketch)

List all existing uses on the parcel(s) and describe all buildings

LAVENDER FARM, PARROT SANCTUARY, HOME BASED BUSINESS (3 ACRES) (2500 SQFT) residential use (1 building)

USES ON ADJACENT LOTS (Show information on plan or sketch)

North RAILWAY
East HAY FEED AND HORSES
South PRIVATE HOMES
West HAY FEED

DECLARATION

I/we consent to the use of the information provided in the application and all supporting documents to process the application in accordance with the Agricultural Land Commission Act and regulation. Furthermore, I/we declare that the information provided in the application and all the supporting documents are, to the best of my/our knowledge, true and correct. I/we understand that the Agricultural Land Commission will take the steps necessary to confirm the accuracy of the information and documents provided.

Nov 26 2015 [Signature] MENDY NORMA HUONATCH
Date Signature of Owner or Agent Print Name

Please ensure the following documents are enclosed with your application:

- Application fee payable to the Local Government
Certificate of Title or Title Search Print
Agent authorization (if using agent)
Map or sketch showing proposal & adjacent uses
Proof of Notice of Application (See instructions)
Photographs (optional)

LAND TITLE ACT
FORM A (Section 185(1))
FREEHOLD TRANSFER Province of British Columbia

Your electronic signature is a representation that you are a subscriber as defined by the Land Title Act, RSBC 1996 c.250, and that you have applied your electronic signature in accordance with Section 168.3, and a true copy, or a copy of that true copy, is in your possession.

Gary Todd
Russell
9WQDXX

Digitally signed by Gary Todd Russell
9WQDXX
DN: c=CA, cn=Gary Todd Russell
9WQDXX, o=Lawyer, ou=Verify ID at
www.juricert.com/LKUP.cfm?
id=9WQDXX
Date: 2015.12.03 11:37:47 -0800

1. APPLICATION: (Name, address, phone number of applicant, applicant's solicitor or agent)

MARSHALL & LAMPERSON
Barristers & Solicitors
PO Box 879, 710 Memorial Ave.
Qualicum Beach BC V9K 1T2
Document Fees: \$71.58

File No.: Huntbatch
Tel.: 250-752-5615

Deduct LTSA Fees? Yes

2a. PARCEL IDENTIFIER AND LEGAL DESCRIPTION OF LAND:
[PID] [LEGAL DESCRIPTION]

003-481-123 LOT 12, SALVATION ARMY LOTS, NANOOSE DISTRICT, PLAN 1115, EXCEPT PART IN PLAN 734 RW

STC? YES

2b. MARKET VALUE: \$ 800,000.00

3. CONSIDERATION: \$ 1.00 and natural love and affection

4. TRANSFEROR(S):

WENDY NORMA HUNTBATCH

5. FREEHOLD ESTATE TRANSFERRED: **Fee Simple**

6. TRANSFEREE(S): (including occupation(s), postal address(es) and postal code(s))

WENDY NORMA HUNTBATCH, BUSINESSWOMAN
HORST NEUMANN, BUSINESSMAN
2116 ALBERNI HIGHWAY
COOMBS BRITISH COLUMBIA
AS JOINT TENANTS V0R 1M0 CANADA

7. EXECUTION(S): The transferor(s) accept(s) the above consideration and understand(s) that the instrument operates to transfer the freehold estate in the land described above to the transferee(s)

Officer Signature(s)

GARY T. RUSSELL
Barrister & Solicitor
PO Box 879, 710 Memorial Avenue
Qualicum Beach, BC V9K 1T2
(250) 752-5615

Execution Date

Y	M	D
15	11	26

Transferor(s) Signature(s)

Wendy Norma Huntbatch

OFFICER CERTIFICATION:

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the Evidence Act, R.S.B.C. 1996, c.124, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the Land Title Act as they pertain to the execution of this instrument.

TITLE SEARCH PRINT

File Reference:
Declared Value \$ 289900

2015-09-14, 14:01:31
Requestor: Christine Lupul

****CURRENT INFORMATION ONLY - NO CANCELLED INFORMATION SHOWN****

Land Title District VICTORIA
Land Title Office VICTORIA

Title Number EW83837
From Title Number EW39255

Application Received 2004-06-30

Application Entered 2004-07-16

Registered Owner in Fee Simple
Registered Owner/Mailing Address: WENDY NORMA HUNTBATCH, BUSINESSWOMAN
2116 ALBERNI HIGHWAY
COOMBS, BC
V0R 1M0

Taxation Authority PORT ALBERNI ASSESSMENT AREA

Description of Land
Parcel Identifier: 003-481-123
Legal Description:
LOT 12, SALVATION ARMY LOTS, NANOOSE DISTRICT, PLAN 1115, EXCEPT PART
IN PLAN 734 RW

Legal Notations
THIS CERTIFICATE OF TITLE MAY BE AFFECTED BY THE AGRICULTURAL LAND
COMMISSION ACT; SEE AGRICULTURAL LAND RESERVE PLAN NO. 5, DEPOSITED
JULY 26, 1974

Charges, Liens and Interests
Nature: EXCEPTIONS AND RESERVATIONS
Registration Number: M76300
Registered Owner: ESQUIMALT AND NANAIMO RAILWAY COMPANY
Remarks: A.F.B. 9.693.7434A; 97125G; SECTION 172(3)
FOR ACTUAL DATE AND TIME OF REGISTRATION
SEE ORIGINAL GRANT FROM E & N RAILWAY COMPANY

Nature: MORTGAGE
Registration Number: EW83838
Registration Date and Time: 2004-06-30 13:17
Registered Owner: FARM CREDIT CANADA



TITLE SEARCH PRINT

2015-09-14, 14:01:31
Requestor: Christine Lupul

File Reference:
Declared Value \$ 289900

Nature: MORTGAGE
Registration Number: CA3086415
Registration Date and Time: 2013-04-19 15:45
Registered Owner: ARBUTUS CAPITAL LEASING LTD.
INCORPORATION NO. BC0815434

Nature: MORTGAGE
Registration Number: CA4516599
Registration Date and Time: 2015-07-07 12:22
Registered Owner: ARBUTUS CAPITAL LEASING LTD.
INCORPORATION NO. BC0815434

Duplicate Infeasible Title NONE OUTSTANDING

Transfers NONE

Pending Applications NONE



Riparian Areas Regulations
Property Declaration Form

RECEIVED
JAN 05 2016
STRATEGIC & COMMUNITY
DEVELOPMENT

Property Subject Legal Description: lot 12, Salvation Army lots, Nanose District,

Subject Property Address: 2116 Alberni Highway Plan 11151
except part in plan 734RW

I (we) acknowledge that the province of British Columbia enacted the *Riparian Areas Regulation* to protect the critical features, functions, and conditions required to sustain fish habitat. Furthermore, this legislation prohibits the Regional District of Nanaimo from approving, or allowing a development to proceed adjacent to a watercourse until it has received notice that a report prepared by a Qualified Environmental Professional has been received by the Ministry of Environment.

I (we) understand that a water feature includes any of the following:

- a) any watercourse, whether it usually contains water or not;
- b) any pond, lake, river, creek or brook; and/or,
- c) any ditch, culvert, spring, or wetland.

I (we) declare that (*Please check the one that applies*):

- A. that there are no water features located on the subject property,
- B. there are water features located on the subject property.

I (we) declare that all proposed development including land alteration, vegetation removal, construction and / or building (*Please check the one that applies*):

- A. is greater than 30.0 metres from a water feature, or
- B. is less than 30.0 metres from that water feature.

I (we) acknowledge that I (we) are familiar with the property and area, and have inspected the property and immediate area for the existence of any water features prior to signing this form.

Property Owner / Agent Signature(s): 1 [Signature]

Print Name(s): 1 Horst Neumann

Mailing Address: PO Box 645 Coombs BC

Postal Code: V0R 1M0

Phone: 250-951-2026

Witnessed By: [Signature]

Date: Jan 5/16

DESCRIPTION OF SUBJECT PROPERTY

LAND

Location

The subject acreage is located fronting the Alberni Highway (Highway 4) in the unorganized community of Coombs lying west of the City of Parksville within the Regional District of Nanaimo Electoral Area F.

Extent

A rectangular-shaped site comprising approximately 8.438 ha (20.85 acres) with approximately 10 chains (201 m/660 feet) of frontage on the Alberni Highway.

Refer to Addendum 3, Site Survey Plan for visual configuration and actual dimensions.

Topography

A flat and level site that has been predominantly cleared, graded and drained. Soil composition comprises a mixture of Tolmie (60%), Fairbridge (20%) and Bowser (20%) soils which are silty clays and gravely loam marine soils. Soil classification is Class III (good) for agricultural purposes.

Use

The site is the location of the Parrot Refuge.

Access

Primary access is direct to the Alberni Highway with secondary access via Burgoyne Road to the rear of the acreage.



**CD-16 2116 Alberni Highway****Section 4.39****4.39.1 Permitted Principal Uses**¹

- a) Dwelling Unit
- b) Farm Use
- c) Kennel, for the keeping of Exotic Birds only

4.39.2 Permitted Accessory Uses

- a) Accessory Buildings and Structures
- b) Accessory Restaurant
- c) Accessory Retail Sales
- d) Farm Business
- e) Home Based Business

Notwithstanding the Permitted Principal Uses listed above, any use designated or permitted to be a 'farm use' by the Agricultural Land Commission or the Ministry of Agriculture, Food and Fisheries is permitted within this zone.

4.39.3 Regulations Table

Category	Requirements
a) Maximum Density	2 Dwelling Units per lot, provided that one Dwelling Unit is a Manufactured Home.
b) Minimum Lot Size	4 ha
c) Minimum Lot Frontage	100 metres
d) Maximum Lot Coverage	10%
e) Maximum Building and Structure Height	10 metres
f) Minimum Setback from	
i) Front and Exterior Side Lot Lines	4.5 metres
ii) All Other Lot Lines	4.5 metres
g) Minimum Setback of all buildings or structures housing livestock or manure from all lot lines and / or watercourses	30 metres
h) Runoff Control Standards	As outlined in Section 2.5
i) General Regulations	Refer to Section 2 – General Regulations
j) Parking Regulations	1 space per 100m ² of parrot refuge 1 space per 3 seats of concession
k) Other Parking Requirements	For stall dimensions and handicapped spaces, refer to Section 2.17.4

¹ (CD-16) Bylaw 1285.06, 2005, adopted July 28, 2005



4.39.4 Regulations

- a) The maximum floor area permitted for the accessory restaurant and accessory retail sales shall not exceed a combined floor area of 50m².
- b) The maximum number of seats in the accessory restaurant area shall be 20.



A-1 – AGRICULTURE 1

SECTION 4.1

4.1.1 Permitted Principal Uses

- a) Dwelling Unit
- b) Farm Use
- c) Medical Marihuana Production

4.1.2 Permitted Accessory Uses

- a) Accessory Buildings and Structures
- b) Farm Business
- c) Home Based Business
- d) Secondary Suite¹

Notwithstanding the Permitted Principal Uses listed above, any use designated or permitted pursuant to Section 2 of the *Agricultural Land Reserve Use, Subdivision and Procedure Regulation* or farm use permitted by the Ministry of Agriculture, Food and Fisheries, unless specifically prohibited or regulated by this Bylaw, is permitted within this zone. ²

4.1.3 Regulations Table

Category	Requirements
a) Maximum Density	2 Dwelling Units per lot, provided that one Dwelling Unit is a Manufactured Home
b) Minimum Lot Size	4 ha
c) Minimum Lot Frontage	100 metres
d) Maximum Lot Coverage	10 %
e) Maximum Building and Structure Height	10 metres
f) Minimum Setback from <ul style="list-style-type: none"> i) Front and Exterior Side Lot Lines ii) All Other Lot Lines 	4.5 metres 2 metres
g) Minimum Setback of all buildings or structures used for medical marihuana production ³ , housing livestock or manure from all lot lines and/or watercourses	30 metres
h) General Land Use Regulations	Refer to Section 3 – General Regulations

¹ Bylaw No. 1285.19, adopted May 27, 2014

² Bylaw No. 1285.01, adopted April 13, 2004

³ Bylaw No. 1285.18, adopted February 11, 2014



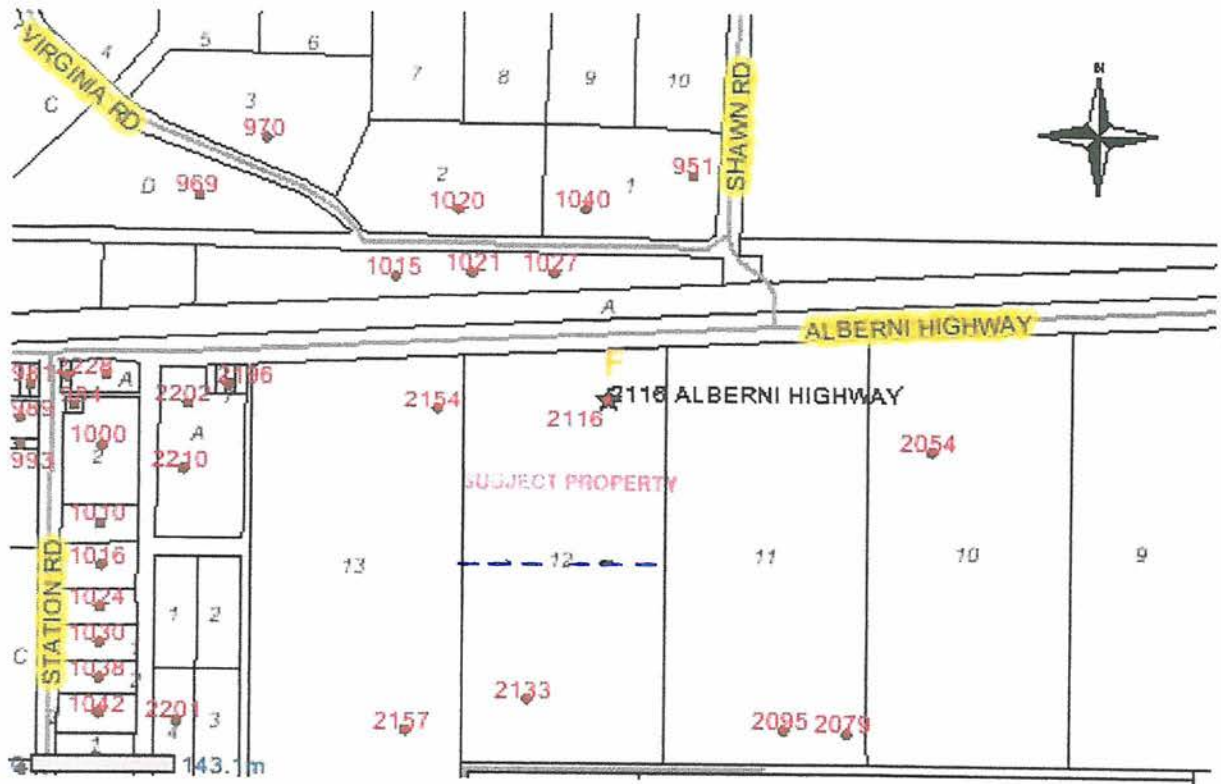
4.1.4 Regulations

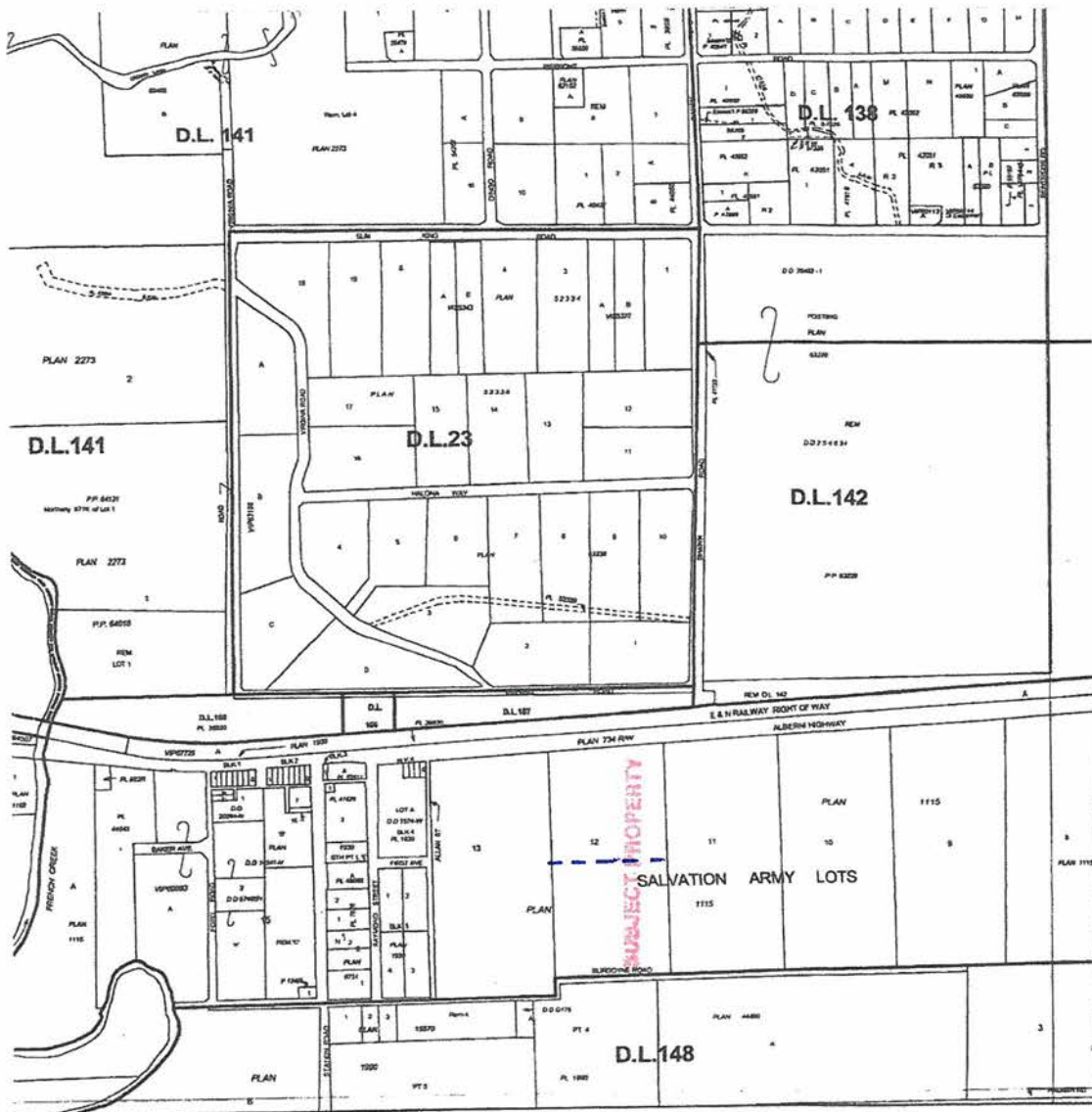
- a) Despite any regulation in this Bylaw, land established as "Agricultural Land Reserve" pursuant to the ***Agricultural Land Reserve Act*** is subject to the ***Agricultural Land Reserve Act*** and ***Regulations***, and applicable orders of the Land Reserve Commission.
- b) Any parcel existing prior to the date of adoption of this Bylaw, which fails to meet the minimum parcel size requirements contained in this Bylaw, shall not be reason thereof be deemed to be nonconforming, and may be used for any permitted use in the zone in which it is located except that where the zone allows residential use, only one dwelling unit shall be allowed on any such undersized parcel. Permitted uses shall be subject to all other conditions required of that zone.

4.1.5 Additional A-1 Zones

Principal and accessory uses as set out in Section 4.23 (A-1.1 to A-1.28 inclusive) are permitted in addition to those uses permitted in the A-1 zone. ¹

¹ Bylaw No. 1285.01, adopted April 13, 2004

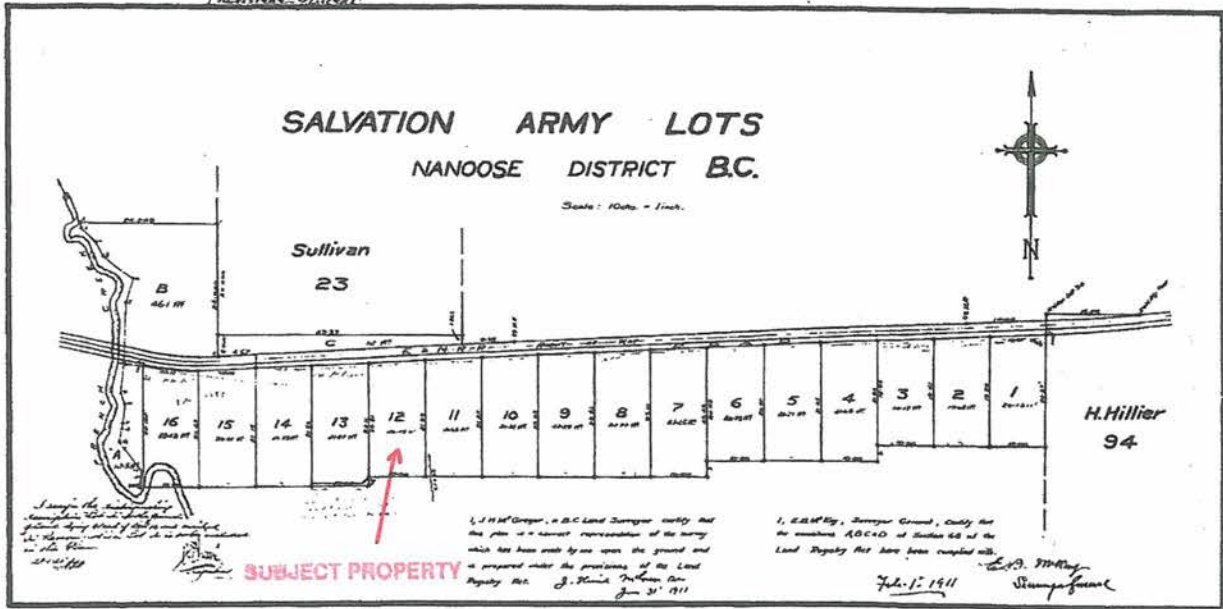


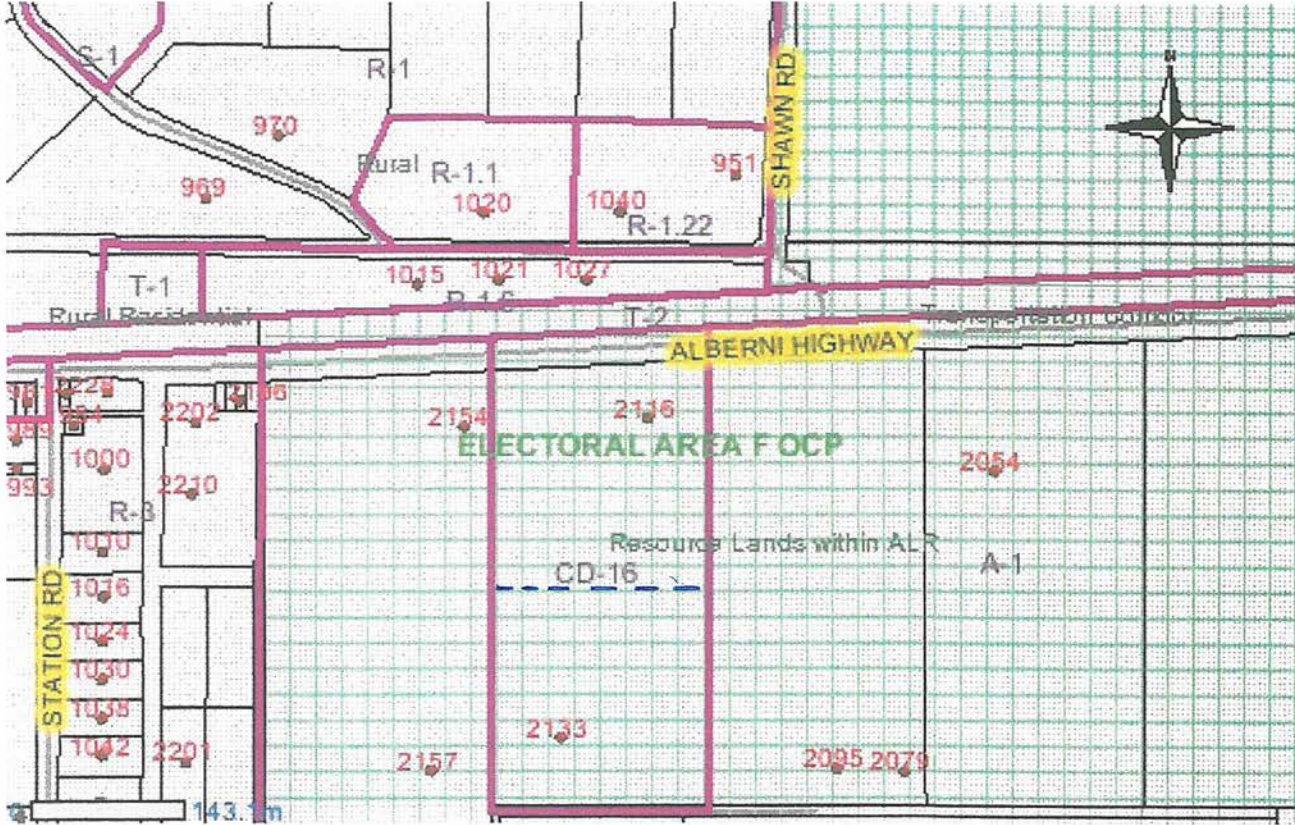


RECEIVED
NOV 26 2015
STRATEGIC & COMMUNITY
DEVELOPMENT



15 Deposited the 2nd day of February 1911
W. Hillier
Registrar-General







Zones
Section 4 – Page 54

CD-16 2116 Alberni Highway **Section 4.39**

4.39.1 Permitted Principal Uses

- a) Dwelling Unit
- b) Farm Use
- c) Kennel, for the keeping of Exotic Birds only

4.39.2 Permitted Accessory Uses

- a) Accessory Buildings and Structures
- b) Accessory Restaurant
- c) Accessory Retail Sales
- d) Farm Business
- e) Home Based Business

Notwithstanding the Permitted Principal Uses listed above, any use designated or permitted to be a 'farm use' by the Agricultural Land Commission or the Ministry of Agriculture, Food and Fisheries is permitted within this zone.

4.39.3 Regulations Table

Category	Requirements
a) Maximum Density	2 Dwelling Units per lot, provided that one Dwelling Unit is a Manufactured Home.
b) Minimum Lot Size	4 ha
c) Minimum Lot Frontage	100 metres
d) Maximum Lot Coverage	10%
e) Maximum Building and Structure Height	10 metres
f) Minimum Setback from	
i) Front and Exterior Side Lot Lines	4.5 metres
ii) All Other Lot Lines	4.5 metres
g) Minimum Setback of all buildings or structures housing livestock or manure from all lot lines and/ or watercourses	30 metres
h) Runoff Control Standards	As outlined in Section 2.5
i) General Regulations	Refer to Section 2 – General Regulations
j) Parking Regulations	1 space per 100m ² of parrot refuge 1 space per 3 seats of concession
k) Other Parking Requirements	For stall dimensions and handicapped spaces, refer to Section 2.17.4

Electoral Area 'F' Zoning and Subdivision Bylaw No. 1285, 2002





Zones
Section 4 – Page 55

4.39.4 Regulations

- a) The maximum floor area permitted for the accessory restaurant and accessory retail sales shall not exceed a combined floor area of 50m².
- b) The maximum number of seats in the accessory restaurant area shall be 20.

Electoral Area 'F' Zoning and Subdivision Bylaw No. 1285, 2002





Zones

Section 4 – Page 26

Site Specific Zoning Regulations

SECTION 4.23

Additional A-1 Zones

The following uses and regulations apply to lots in the following zones in addition to the regulations in the A-1 zone that would otherwise apply. The zoning and permitted uses of the following lots are set out below:

Zone	Lot Description	Regulations
A-1.1	Lot 6, District Lot 6, Plan 1889, Cameron District (1015 McLean Road).	Restaurant only
A-1.2	Block B, District Lot 143, Plan 4679, Nanoose District (2540 Alberni Highway)	Vehicle Wrecking Yard, Accessory Office and Retail Sales only
A-1.3	Block C, District Lot 143, Plan 4679, Nanoose District (2560 Alberni Highway)	Winery and Cidery only
A-1.4	Part of Lot 90, District Lot 139, Plan 1913, Nanoose District Lying to the South of McKibben Road as Said Road is Shown on Said Plan, and to the West of a Boundary Parallel to and Perpendicularly Distance 200 Feet from the Westerly Boundary of Said Lot 90 (D.D. F-21288) (1586 McKibben Road)	Vehicle Wrecking Yard as a Home Based Business only
A-1.5	Lot 1, District Lot 4, Plan 38539, Cameron District (3241 Alberni Highway)	Fire Hall only
A-1.6	District Lot 47, Nanoose District (1019 Errington Road)	Restaurant only
A-1.7	Lot A, District Lot 182, Nanoose District, Plan VIP65017 (2570 Peterson Road)	Composting Facility only, specifically excluding Waste Disposal
A-1.8	Lot 2, District Lot 94, Nanoose District, Plan 38808 (1580 Alberni Highway)	Three Dwelling Units and Sawmill to a maximum of 0.4 ha only
A-1.9	Lot 1, District Lot 24, Nanoose District, Plan 40600 (1607 Errington Road)	Manufacturing to a maximum of 1.2 ha only
A-1.10	Rem. Block I, District Lot 143, Nanoose District, Plan 4782 Except Part in Plan 735 RW (2595 Alberni Highway)	Fairground and Public Assembly and Outdoor Recreation only
A-1.11	Block G, District Lot 143, Nanoose District, Plan 4782 (2619 Alberni Highway)	Campground to a maximum of 48 camping spaces and 15 RV sites ¹
A-1.12 ²	Lot 2, Block A, District Lot 15, Cameron District, Plan 2017 (3230 Alberni Highway)	Design and metal fabrication shop to a maximum of 234 m ²
A-1.13 ³	Lot 1, District Lot 139, Nanoose District, Plan 24924 (1290 Ruffles Road)	RV Storage to a maximum of 2,428 m ²

¹ Bylaw No. 1285.01, adopted April 13, 2004

² Bylaw No. 1285.01, adopted April 13, 2004

³ Bylaw No. 1285.01, adopted April 13, 2004

Electoral Area 'F' Zoning and Subdivision Bylaw No. 1285, 2002





Zones
Section 4 – Page 27

Zone	Lot Description	Regulations
A-1.14 ¹ /R 2.48	Lot 2, District Lot 139, Nanoose District, Plan 22824 (1244 Ruffles Road)	A-1 portion horse riding ring, horse boarding and breeding. R-2 portion farm use
A-1.15 ²	Lot 17, District Lot 139, Nanoose District, Plan 1913 Except Part in Plan 20397 (1240 Leffler Road)	North Island Recovery Center and related buildings and one suite above the principal residence
A-1.16 ³	Block J, District Lot 143, Nanoose District, Plan 4791 Except Part in Plan 735 RW & VIP60681 (2685 Palmer Road)	Butterfly World
A-1.17 ⁴ /C-3	Lot 1, District Lot 43, Nanoose District, Plan 7795 (850 Allsbrook Road)	Moving and storage
A-1.18 ⁵	Lot 5, District Lot 139, Nanoose District, Plan 26295 (1273 Fraser Road)	One Dwelling Unit and one - one bedroom Dwelling Unit only
A-1.19 ⁶	Lot 1, District Lot 8, Cameron District, Plan 28493 (1149 Pratt Road)	Two Dwelling Units

Additional C-1 Zones

The following uses and regulations apply to lots in the following zones in addition to the regulations in the C-1 zone that would otherwise apply. The zoning and permitted uses of the following lots are set out below:

Zone	Lot Description	Regulations
C-1.1 ⁷	Lot 1, District Lot 139, Nanoose District, Plan 15854 (1548 Grafton Road)	Mini-storage, product assembly, office, and outdoor storage to a maximum area of 4,000 m ²

Additional C-3 Zones

The following uses and regulations apply to lots in the following zones in addition to the regulations in the C-3 zone that would otherwise apply. The zoning and permitted uses of the following lots are set out below:

¹ Bylaw No. 1285.01, adopted April 13, 2004
² Bylaw No. 1285.01, adopted April 13, 2004
³ Bylaw No. 1285.01, adopted April 13, 2004
⁴ Bylaw No. 1285.01, adopted April 13, 2004
⁵ Bylaw No. 1285.01, adopted April 13, 2004
⁶ Bylaw No. 1285.01, adopted April 13, 2004
⁷ Bylaw No. 1285.01, adopted April 13, 2004

Electoral Area "F" Zoning and Subdivision Bylaw No. 1285, 2002





Zones

Section 4 – Page 28

Zone	Lot Description	Regulations
C-3.1	Lot P/13, District Lot 156, Plan 1964, Nanoose District (1343 Alberni Highway)	Vehicle Wrecking Yard with outdoor storage limited to 400 m ² only
C-3.2	Lot A, District Lot 143, Plan 7666, Nanoose District (2430 Alberni Highway)	Two Dwelling Units only
C-3.3	Lot 27, District Lot 156, Plan 1964, Nanoose District (1282 Alberni Highway)	Value Added Lumber Remanufacturing only
C-3.4	Lot 13, District Lot 143, Plan 2064, Nanoose District (2458 Alberni Highway)	Vehicle Wrecking Yard with outdoor storage limited to 400 m ²
C-3.5	Lot 2, District Lot 94, Nanoose District, Plan 7379 (994 Errington Road)	Two Dwelling Units only
C-3.6	Lot 5, District Lot 7, Nanoose District, Plan 22313 (3097 & 3103 Van Horne Road)	Three Dwelling Units and 4 Manufactured Homes only
C-3.7	That Part of Lot 4, District Lot 143, Nanoose District, Plan 2064, Lying to the East of a Straight Boundary Parallel to and Perpendicularly Distant to 2.39 Chains From the Easterly Boundary of Said Lot 4 (2443 Alberni Highway)	Manufacturing and Boat Building and Repair only
C-3.8	That Part of Lot 4, District Lot 143, Nanoose District, Plan 2064 Lying to the West of a Straight Boundary Parallel To and Perpendicularly Distant 2.39 Chains from the Easterly Boundary of Said Lot 4 (2451 Alberni Highway)	Manufacturing and Boat Building and Repair only
C-3.9	That Part of Lot 3, District Lots 2 and 7, Cameron District, Plan 22313 Lying to the West of a Boundary Parallel to and Perpendicularly Distant 150 Feet From the East Boundary of Said Lot (3073 Van Horne Rd)	Manufacturing only
C-3.10	Lot 7, Salvation Army Lots, Nanoose District, Plan 1115, Except Parts in Plans 32644, 35528 and 734RW (979 Shearmer Road)	Value Added Lumber Remanufacturing and Marshalling Yard only
C-3.11	Lot 1 of Salvation Army Lots, Nanoose District, Plan 32644 (999 Shearmer Road)	Value Added Lumber Remanufacturing and Marshalling Yard only
C-3.12	Lot 2, Salvation Army Lots, Plan VIP69390, Nanoose District (1696 Alberni Highway)	Value Added Lumber Remanufacturing and Outdoor Storage only
C-3.13	Lot B, District Lot 143, Newcastle District, Plan 8057 (2494 & 2484 Alberni Highway)	Cement Product Manufacturing only
C-3.14 ¹	That Part of Lot 9, District Lot 7, Cameron District, Plan 22313 Lying to the Northwest of a Boundary Parallel to and Perpendicularly Distant 117.5 Feet from the Southeast Boundary of the Said Lot (3090 Rinvold Road)	Two Dwelling Units only

¹ Bylaw No. 1285.01, adopted April 13, 2004 (C-3.14 to C-3.18 inclusive)

Electoral Area 'F' Zoning and Subdivision Bylaw No. 1285, 2002



Date: 06/01/16 TITLE SEARCH PRINT - VICTORIA Time: 11:34:42
 Requestor: (PA75444) CUNNINGHAM & RIVARD APPRAIS. (NANAIMO)LTD Page: 001
 TITLE - EW83837

VICTORIA LAND TITLE OFFICE TITLE NO: EW83837
 FROM TITLE NO: EW39255

APPLICATION FOR REGISTRATION RECEIVED ON: 30 JUNE, 2004
 ENTERED: 16 JULY, 2004

REGISTERED OWNER IN FEE SIMPLE:
 WENDY NORMA HUNTBATCH, BUSINESSWOMAN
 2116 ALBERNI HIGHWAY
 COOMBS, BC V0R 1M0

TAXATION AUTHORITY:
 PORT ALBERNI ASSESSMENT AREA

DESCRIPTION OF LAND:
 PARCEL IDENTIFIER: 003-481-123
 LOT 12, SALVATION ARMY LOTS, NANOOSE DISTRICT, PLAN 1115, EXCEPT PART IN PLAN 734 RW

LEGAL NOTATIONS:

THIS CERTIFICATE OF TITLE MAY BE AFFECTED BY THE AGRICULTURAL LAND
 COMMISSION ACT; SEE AGRICULTURAL LAND RESERVE PLAN NO. 5, DEPOSITED JULY 26, 1974

CHARGES, LIENS AND INTERESTS:

NATURE OF CHARGE
 CHARGE NUMBER DATE TIME

EXCEPTIONS AND RESERVATIONS

M76300
 REGISTERED OWNER OF CHARGE:
 ESQUIMALT AND NANAIMO RAILWAY COMPANY
 M76300
 REMARKS: A.F.B. 9.693.7434A; 97125G; SECTION 172(3)
 FOR ACTUAL DATE AND TIME OF REGISTRATION
 SEE ORIGINAL GRANT FROM E & N RAILWAY COMPANY

MORTGAGE

EW83838 2004-06-30 13:17
 REGISTERED OWNER OF CHARGE:
 FARM CREDIT CANADA
 EW83838

MORTGAGE

EX56932 2005-05-19 09:53
 REGISTERED OWNER OF CHARGE:
 DANIEL NEUMANN
 FRIEDA NEUMANN
 AS JOINT TENANTS
 EX56932

"CAUTION - CHARGES MAY NOT APPEAR IN ORDER OF PRIORITY. SEE SECTION 28, L.T.A."

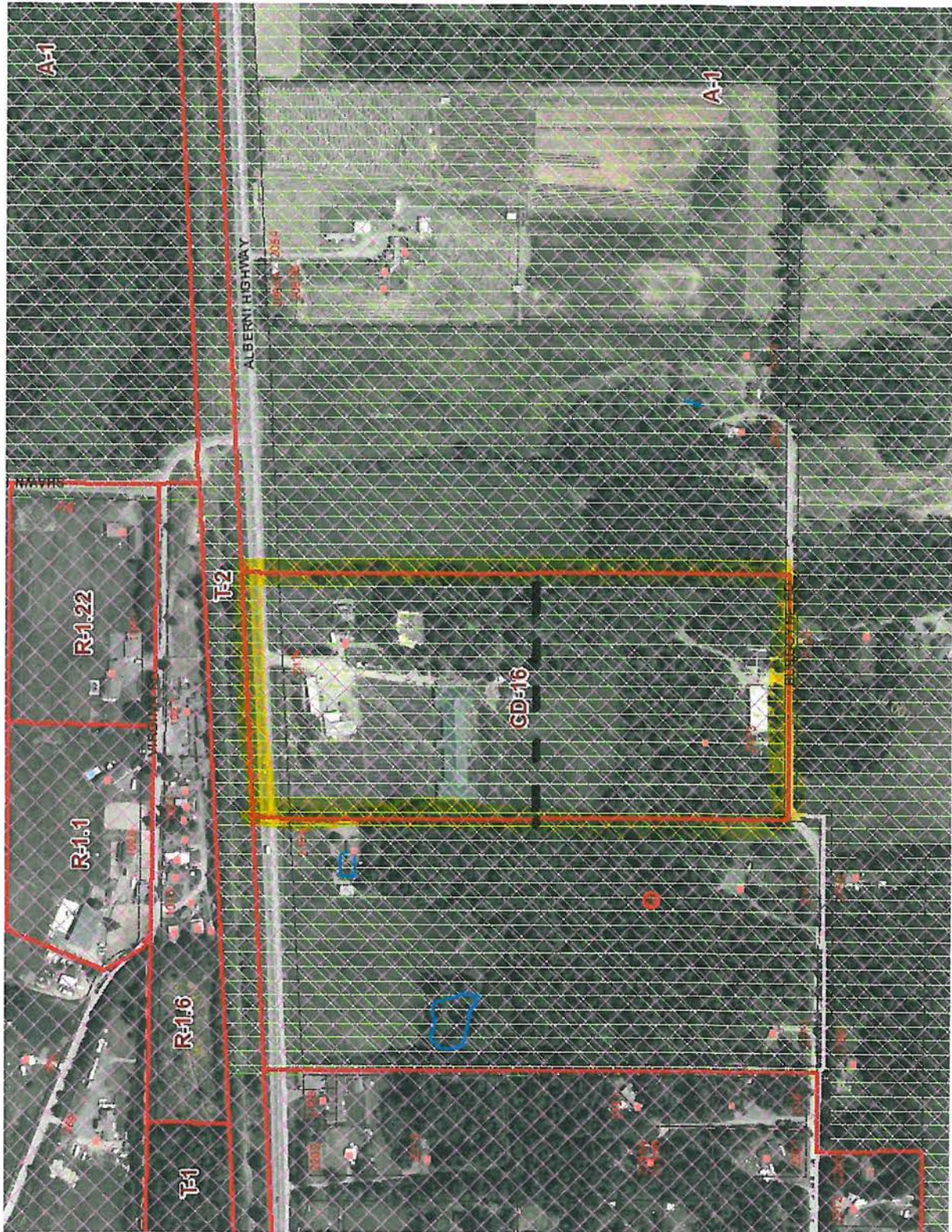
DUPLICATE INDEFEASIBLE TITLE: NONE OUTSTANDING

TRANSFERS: NONE

PENDING APPLICATIONS: NONE

*** CURRENT INFORMATION ONLY - NO CANCELLED INFORMATION SHOWN ***





TO: Agricultural Advisory Committee (AAC) **DATE:** February 10, 2016

FROM: Greg Keller
Senior Planner **FILE:** PL2015-177

SUBJECT: Request for Comment on Subdivision in the ALR Application No. PL2015-177
That Part of Lot 1, District Lot 141, Nanoose and Newcastle Districts, Plan 2273, Lying to
the North of a Boundary Parallel to and Perpendicularly Distant 977 Feet from the
Northerly Boundary of Said Lot 1
Electoral Area 'F'

BACKGROUND

The Regional District of Nanaimo (RDN) has received an application for subdivision in the Agricultural Land Reserve (ALR) from Elizabeth Puckering acting on behalf of Howard Fowler. The subject property is approximately 12.26 ha in area and is contained entirely within the ALR. The parcel is bound by French Creek to the west, an unnamed road to the east, and large ALR parcels to the north and south. The property is surrounded by farms and rural acreages. The property currently contains pasture and other agricultural improvements.

The applicant proposes to subdivide the parcel into three parcels, each greater than 4.0 ha. A copy of the applicant's submission, Subject Property Map, and Proposed Plan of Subdivision are included in the enclosed draft Local Government Report (attached).

Agricultural Advisory Committee (AAC) Members were provided an opportunity to attend the site on January 26, 2016.

BOARD POLICY AND DISCUSSION

RDN Board Policy B1.8 – *Review of Provincial Agricultural Land Reserve (ALR) Applications* provides an opportunity for the AAC to review and provide comments on ALR applications for exclusion, subdivision and non-farm use on lands within the ALR. As per Policy B1.8, the applicable standing Board resolution is included for the Agricultural Land Commission's (ALC) information as part of the Local Government Report. A copy of this draft report, including comments from the Area Director, is included for your review and comment. Following this review, the Local Government Report, including comments from the Area Director and the AAC, will be forwarded to the ALC for consideration.

In accordance with the AAC Terms of Reference, the role of the AAC members is to provide local perspective and expertise to advise the Regional Board (and in this case comment to the ALC) on a range of agricultural issues on an ongoing and as needed basis as directed by the Board. In addition to members' local knowledge and expertise, comment on ALR applications may be guided by Board approved policies such as the RDN Agricultural Area Plan, the Board Strategic Plan, the Regional Growth

Strategy and the applicable Official Community Plan along with the relevant land use bylaws. Agricultural Advisory Committee members can also find information related to ALR land use and agriculture in BC on the Agricultural Land Commission and Ministry of Agriculture websites. Local and contextual information can also be found on the RDN's Agricultural projects website at www.growingourfuture.ca.

Comment provided to the ALC by the AAC is consensus based through Committee adoption of a motion regarding the comment to be provided. If an AAC member has comments regarding an application to the ALC being considered by the AAC, the appropriate time to provide those comments is during discussion on the application at the AAC meeting prior to the Committee's adoption of its comment. Only the comment approved by the Committee will be forwarded to the ALC for its consideration. Comments from individual AAC members will not be included in the Local Government Report that is forwarded to the ALC.

The comment provided by the AAC is not an approval or denial of the application and is only a recommendation to the ALC regarding a specific application. Any comment from the AAC is provided in addition to the applicable standing Board resolution as per Policy B1.8 and the Electoral Area Director's comment if provided. The ALC is the authority for decisions on matters related to the ALR and will consider comments provided in making its decision on an application.



Report Writer



Local Government Report
Under the Agricultural Land Reserve
Use, Subdivision and Procedure Regulation

RD/Mun. File No.	PL2015-177
Fee Receipt No.	2016-7798
Fee Amount	\$600.00
ALR Base Map No.	92G.038.2.2
ALR Constituent Map No.	
Air Photo No.	

Information supplied by:

Regional District of Nanaimo

In respect of the application of:

Elizabeth Puckering

PLANS and BYLAWS *(Attach relevant sections of bylaws)*

Civic Address n/a

Legal Description: That Part of Lot 1, District Lot 141, Nanoose and Newcastle Districts, Plan 2273, Lying to the North of a Boundary Parallel to and Perpendicularly Distant 977 Feet from the Northerly Boundary of Said Lot 1

Community Plan or Rural Land Use Bylaw Name: "Regional District of Nanaimo Electoral Area 'F' Official Community Plan Bylaw No. 1152, 1999"

OCP Designation: Resource Lands

Zoning Bylaw Name: Regional District of Nanaimo Electoral Area 'F' Zoning and Subdivision Bylaw No. 1285, 2002"

Zone Designation: Agriculture 1 (A-1)

Minimum Lot Size: 4.0 ha

Permitted Uses: Dwelling Unit, Farm Use, Medical Marihuana Production

Maximum Density: 2 Dwelling Units per lot, provided that one Dwelling Unit is a Manufactured Home.

Are amendments to Plans or Bylaws required for the proposal to proceed?

Plan Yes No **Bylaw** Yes No

Is authorization under Sec. 25 (3) or 30 (4) of the Agricultural Land Commission Act required?

Yes *(If yes, please attach resolution or documentation)* No

COMMENTS and RECOMMENDATIONS <i>(Include copies of resolutions)</i>	
<p>Board or Council:</p>	<p>The Regional District of Nanaimo (RDN) Board of Directors has a standing Board resolution for subdivision of lands within the Agricultural Land Reserve (ALR) as per Policy B1.8:</p> <p>As outlined in the Regional Growth Strategy, the Regional District of Nanaimo (RDN) fully supports the mandate of the Agricultural Land Commission (ALC) and the preservation of land within the ALR for agricultural use. The Regional District encourages the ALC to only consider subdivision where in the opinion of the ALC the proposal will not negatively impact the agricultural use of the land or adjacent ALR lands.</p>
<p>Electoral Area Director:</p>	<p>After reading through 100+ pages of technical information, soil and engineering studies, and actual history including attempts to farm this property, it is now abundantly obvious that it has no agricultural viability in its current size and configuration.</p> <p>This property epitomizes a widespread problem with ALR lands in the Errington-Coombs-Hilliers area. The surface sediment types are predominantly of glacial origin and exist in a climate that cycles between winter monsoon and summer desert conditions; a combination that is deadly for large scale non-intensive farming.</p> <p>The ground sediment is fundamentally tillite, an unsorted sediment type containing erratics, cobbles, gravels, sands, and abundant rock flour mixed in a melange. The result is a hard, impervious ground resembling concrete that does not hold or absorb water, has little humus development and is damaging to farm equipment when attempts are made to break it. The surface is water-logged in winter and bone dry in summer.</p> <p>The conclusions of multiple consultants is that the land would have no ability to produce an economic crop that would recover the cost of improvements required to enable it to produce any large-scale crop at all.</p> <p>It is noted that smaller lots enable the higher concentration of labour and soil modification required to produce crops from small-scale intensive management.</p> <p>The most often heard complaint of would-be farmers in this area is that large lots are completely unaffordable.</p>

Electoral Area Director (cont):	<p>The conversion of this lot to three smaller lots within the ALR would increase the agricultural potential of this land. Accordingly I hope that the subdivision will be allowed.</p> <p>Julian Fell Electoral Area F. Regional District of Nanaimo</p>
Advisory Planning Commission:	n/a
Agriculture Advisory Committee:	Motion pending
Others:	Currently none specified
Planning Staff:	<p>Greg Keller, Senior Planner Phone: 250-390-6510</p> <p>Email: gkeller@rdn.bc.ca</p>

BACKGROUND

The subject property is legally described as That Part of Lot 1, District Lot 141, Nanoose and Newcastle Districts, Plan 2273, Lying to the North of a Boundary Parallel to and Perpendicularly Distant 977 Feet from the Northerly Boundary of Said Lot 1. The property is approximately 12.26 ha in area and is contained entirely within the ALR. The parcel is bound by French Creek to the west, an unnamed road to the east, and large ALR parcels to the north and south. The property is surrounded by farms and rural acreages. The property currently contains pasture and other agricultural improvements (see Attachments 1 and 2 for Subject Property Map and 2014 Aerial Photo).

ZONING

The parcel is zoned Agriculture 1 (A-1), pursuant to “Regional District of Nanaimo Electoral Area ‘F’ Zoning and Subdivision Bylaw No. 1285, 2002” (see Attachment 4 for zoning regulations and minimum parcel size). The A-1 zone specifies a 4.0 ha minimum parcel size that applies to each lot created through subdivision. With respect to land use, the A-1 zone permits Dwelling Unit, Farm Use, and Medical Marihuana Production, and allows two Dwelling Units Per lot, provided that one Dwelling Unit is a Manufactured Home. The applicant proposes to subdivide the subject property into three lots including the remainder. Each proposed lot would be greater than 4.0 ha, as shown on the proposed plan of subdivision (see Attachment 3). Although the proposed subdivision would be reviewed in more detail should this application be approved by the ALC, it is noted that proposed Lots 2 and 3 do not meet the 100 metre minimum lot frontage requirement. In addition, the amount of lot frontage provided has not been indicated for proposed Lot 1.

OFFICIAL COMMUNITY PLAN

The subject property is designated as Resource Lands pursuant to the “Regional District of Nanaimo Electoral Area ‘F’ Official Community Plan Bylaw No. 1152, 1999” (see Attachment 5). For lands designated ‘Resource Lands’ which are located in the ALR, a 4.0 ha minimum lot size is supported. The policies of this designation with respect to minimum parcel size are consistent with minimum parcel size specified in “Regional District of Nanaimo Electoral Area ‘F’ Zoning and Subdivision Bylaw No. 1285, 2002”.

The parcel is also designated within the Fish Habitat Protection Development Permit Area. A development permit may be required prior to any subdivision or alteration of the land.

REGIONAL GROWTH STRATEGY

The subject property is designated ‘Resource Lands and Open Spaces’ pursuant to the “Regional District of Nanaimo Regional Growth Strategy Bylaw No. 1615, 2011” (RGS) (see Attachment 7). The proposal is consistent with the direction provided by the ‘Resource Lands and Opens Spaces’ designation as the proposed subdivision includes minimum lot sizes which are consistent with both “Regional District of Nanaimo Electoral Area ‘F’ Official Community Plan Bylaw No. 1152, 1999” and “Regional District of Nanaimo Electoral Area ‘F’ Zoning and Subdivision Bylaw No. 1285, 2002”.

Further to this, the RGS encourages the provincial government to protect and preserve the agricultural land base through the ALR (see Attachments 7 and 8).

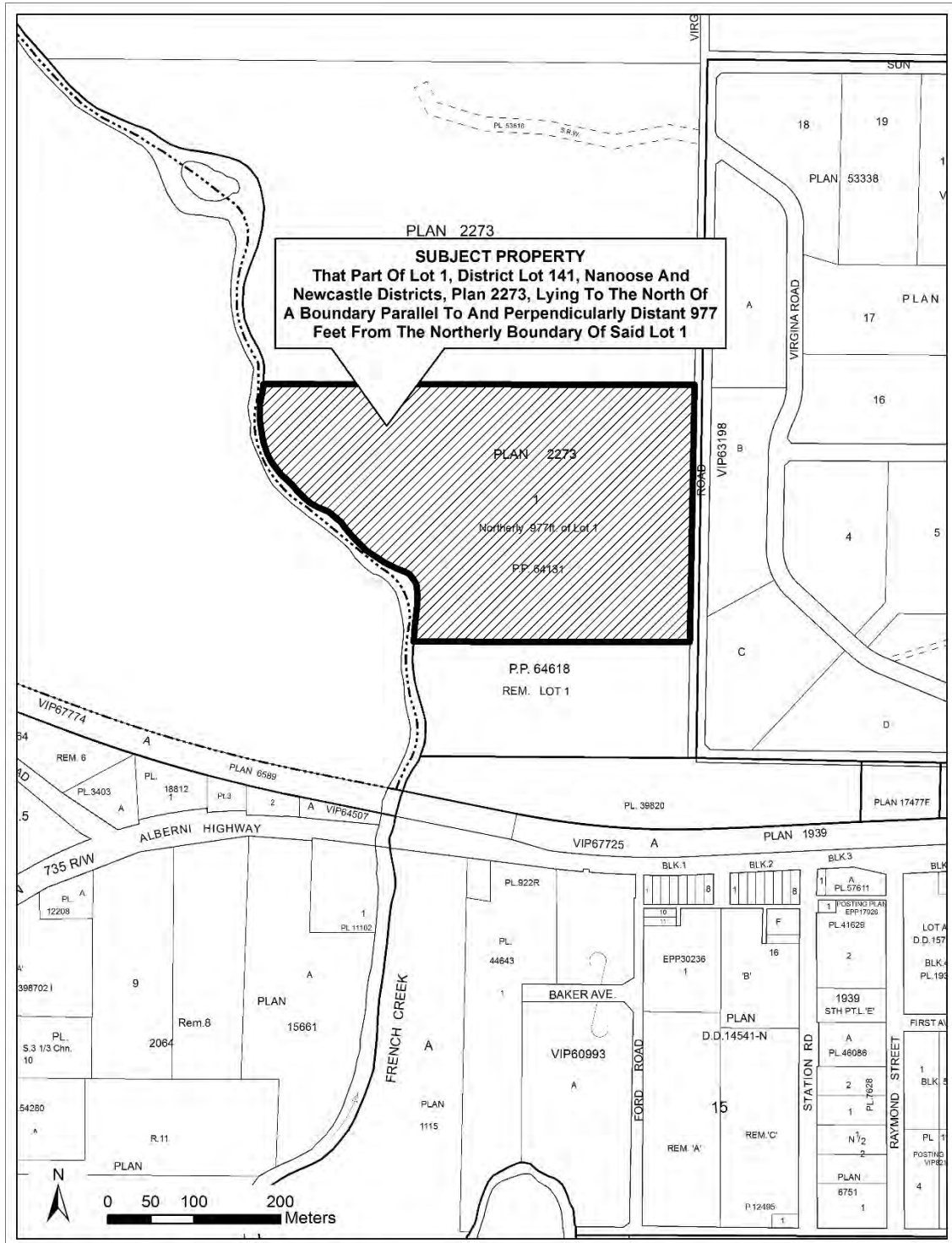
A copy of the applicant’s submission package is included in Attachment 9.

January 12, 2016

Signature of Responsible Local Government Officer

Date

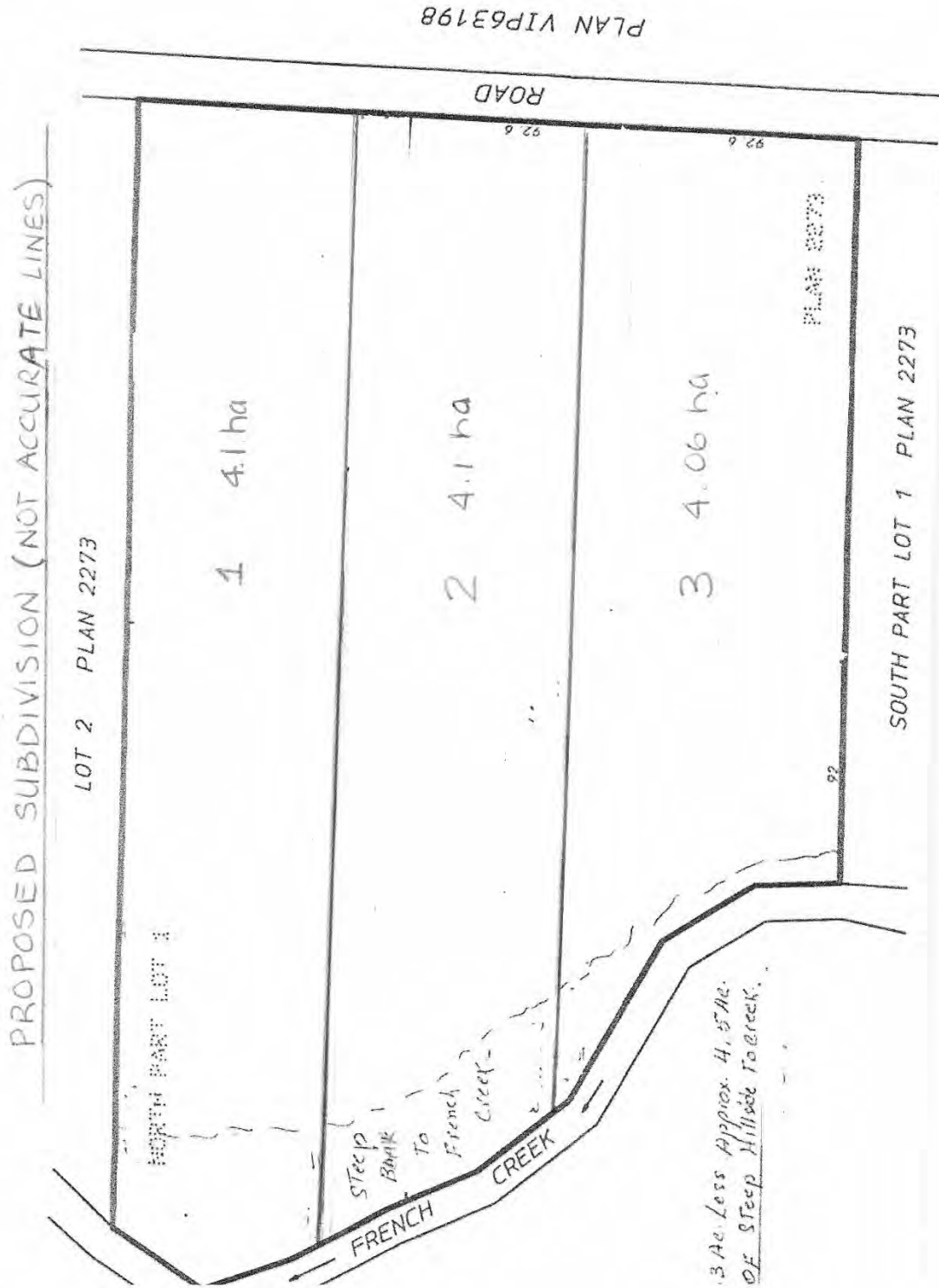
Attachment 1
Subject Property Map



Attachment 2
2014 Aerial Photo



**Attachment 3
Proposed Plan of Subdivision**



Attachment 4 (page 1 of 2)
Existing Zoning

A-1 – AGRICULTURE 1

SECTION 4.1

4.1.1 Permitted Principal Uses

- a) Dwelling Unit
- b) Farm Use
- c) Medical Marihuana Production

4.1.2 Permitted Accessory Uses

- a) Accessory Buildings and Structures
- b) Farm Business
- c) Home Based Business
- d) Secondary Suite¹

Notwithstanding the Permitted Principal Uses listed above, any use designated or permitted pursuant to Section 2 of the ***Agricultural Land Reserve Use, Subdivision and Procedure Regulation*** or farm use permitted by the Ministry of Agriculture, Food and Fisheries, unless specifically prohibited or regulated by this Bylaw, is permitted within this zone.²

4.1.3 Regulations Table

Category	Requirements
a) Maximum Density	2 Dwelling Units per lot, provided that one Dwelling Unit is a Manufactured Home
b) Minimum Lot Size	4 ha
c) Minimum Lot Frontage	100 metres
d) Maximum Lot Coverage	10 %
e) Maximum Building and Structure Height	10 metres
f) Minimum Setback from <ul style="list-style-type: none"> i) Front and Exterior Side Lot Lines ii) All Other Lot Lines 	4.5 metres 2 metres
g) Minimum Setback of all buildings or structures used for medical marihuana production ³ , housing livestock or manure from all lot lines and/or watercourses	30 metres
h) General Land Use Regulations	Refer to Section 3 – General Regulations

¹ Bylaw No. 1285.19, adopted May 27, 2014

² Bylaw No. 1285.01, adopted April 13, 2004

³ Bylaw No. 1285.18, adopted February 11, 2014

Electoral Area 'F' Zoning and Subdivision Bylaw No. 1285, 2002

Attachment 4 (page 2 of 2)

Existing Zoning

4.1.4 Regulations

- a) Despite any regulation in this Bylaw, land established as "Agricultural Land Reserve" pursuant to the **Agricultural Land Reserve Act** is subject to the **Agricultural Land Reserve Act** and **Regulations**, and applicable orders of the Land Reserve Commission.
- b) Any parcel existing prior to the date of adoption of this Bylaw, which fails to meet the minimum parcel size requirements contained in this Bylaw, shall not be deemed to be nonconforming, and may be used for any permitted use in the zone in which it is located except that where the zone allows residential use, only one dwelling unit shall be allowed on any such undersized parcel. Permitted uses shall be subject to all other conditions required of that zone.

4.1.5 Additional A-1 Zones

Principal and accessory uses as set out in Section 4.23 (A-1.1 to A-1.28 inclusive) are permitted in addition to those uses permitted in the A-1 zone. ¹

¹ Bylaw No. 1285.01, adopted April 13, 2004

Attachment 5

Official Community Plan Land Use Designation

Resource Lands

This designation applies to lands that are valued for agriculture, forestry, natural resource extraction or environmental conservation opportunities. This Plan designates as Resource Lands, lands located within the Agricultural Land Reserve, Forest Land Reserve, as well as Crown lands other than lands designated as Park Land. Lands designated Resource Lands are illustrated on Map No. 2.

It is recognized that there is a wide range of home based business activities occurring on ALR lands in Electoral Area 'F'. The Regional District of Nanaimo shall negotiate with the Agricultural Land Commission to obtain a General Order for Electoral Area 'F' to allow for an expanded definition of home based businesses beyond what is normally permitted by the ALC.

Objectives

1. Support the long-term viability of the natural resource land base and protect it from activities and land uses that may diminish its resource value and potential.
2. Ensure that resource operations comply with recognized standards and codes of practice and that unreasonable impacts on the natural environment are avoided.

General Policies

1. For properties within the ALR or FLR, the regulations and policies of the ALC and FLC apply. These properties may also be subject to other local government bylaws.
2. A 4.0-hectare minimum permitted parcel size for future subdivision shall apply to all lands designated Resource and currently situated in the ALR.
3. A 50.0-hectare minimum permitted lot size for future subdivision shall apply to all lands designated Resource and currently situated in the FLR or Crown lands.
4. Future residential development on Resource Lands shall be limited to one dwelling unit per parcel. Two dwelling units per parcel may be permitted where approval has been received from the ALC or FLC, if necessary, and subject to the zoning on the property.
5. Permitted uses shall be associated with those uses supported by the ALC and FLC, such as agriculture, forestry, primary processing and outdoor recreation uses, including campgrounds.
6. Where land is removed from the ALR or FLR, the Resource Lands designation shall remain and the permitted uses shall be limited to rural/resource activities as defined in the OCP and zoning.

Attachment 6 Regional Growth Strategy Land Use Designation

Resource Lands and Open Space

The Resource Lands and Open Space land use designation includes:

- Land that is primarily intended for resource uses such as agriculture, forestry, aggregate and other resource development; and
- Land that has been designated for long-term open space uses.

This designation includes:

- Land in the Agriculture Land Reserve;
- Crown land;
- Land designated for resource management or resource use purposes, including forestry, in official community plans;
- Recognized ecologically sensitive conservation areas;
- Provincial parks;
- Regional parks;
- Large community parks;
- Cemeteries;
- Existing public facilities outside of areas planned for mixed-use centre development;
- Destination Resorts; and
- Golf courses.

Resource activities on land in this designation should be encouraged to operate in ways that do not harm the functioning of natural ecosystems. Land use control, and resource management of lands in this designation is shared between landowners, local, provincial and sometimes federal government. Much of the forest land is privately owned. Forest companies, farmers, shellfish aquaculture (and associated research facilities) and aggregate resource development companies are recognized to have the right to operate on land within this designation in compliance with local, provincial and federal government regulations.

No new parcels that are smaller than the size supported by the official community plan in effect at the date of the adoption of this *Regional Growth Strategy* may be created on land in this designation.

Attachment 7

Regional Growth Strategy Goal 7 – Enhance Economic Resiliency - Agriculture

Agriculture

- 7.1 Recognize the importance of agriculture to the region's economy. To this end, the RDN and member municipalities agree to:
- Support the management of the Agriculture Land Reserve (ALR) by the provincial government;
 - Encourage the provincial government to protect the agricultural land base through the ALR;
 - Support the agricultural use of ALR lands within designated Urban Areas or Rural Village Areas except in instances where urban land uses have already been established at the time of the adoption of this RGS;
 - Recognize that all ALR lands will be subject to the regulations of the Agricultural Land Commission;

Attachment 8
Regional Growth Strategy Goal 8 – Food Security
(Page 1 of 3)

Goal 8 - Food Security - Protect and enhance the capacity of the region to produce and process food.

Most of the food we eat comes from other parts of the world. A study conducted by the Region of Waterloo Public Health in Ontario (M. Xuereb, 2005) found that *'Imports of 58 commonly eaten foods travel an average of 4,497 km to Waterloo Region'*. Although there are currently no regionally specific studies estimating the distance food travels to reach our plates, it is safe to estimate that many of the foods we regularly consume travel on average at least 2,400 km to reach us (a widely quoted figure for North America, based on research conducted in Iowa by R. Pirog, et al 2001).

Despite ongoing debate about the environmental benefits of 'buying local' food versus making dietary changes (C. Weber and H. Scott Matthews, 2008), it is clear that our dependence on imported foods means that our access to food is vulnerable to the effects of weather and political events that may occur thousands of kilometers away. As well, world energy prices play a large role in the cost of food production and distribution. Greater food security means that more food is grown locally and therefore is not as susceptible to events occurring outside the region.

Local food production generates numerous economic, environmental and social benefits. Agriculture employs almost 3,000 people and generates a flow of income into the region. Local sources of food help reduce the region's carbon footprint by reducing transportation-related GHG emissions. In addition, the nutritional content of locally produced food is often greater than imported food – providing a healthier choice of food for residents.

The '5 A's' of food security:

- *Available – sufficient supply*
- *Accessible – efficient distribution*
- *Adequate – nutritionally adequate and safe*
- *Acceptable – produced under acceptable conditions (e.g. culturally and ecologically sustainable)*
- *Agency – tools are in place to improve food security*

(J. Oswald, 2009)

Ensuring the long-term viability of farming and agricultural activity in the region requires a coordinated effort on the part of local, provincial and federal authorities. In addition to the provisions of Policy 5.4, the RDN and member municipalities can undertake a number of actions to support and enhance the viability of food production in the region as set out in the following policies (See Map 5 – Agricultural Lands).

Protecting the agricultural land base is a key requirement for enhancing food security. The Agricultural Land Reserve (ALR) established by the Province in 1973 has largely been effective in reducing the loss of agricultural lands. Since 1974 the percentage of land protected under the ALR in the RDN has decreased approximately 12%, from 10.10% of the total land base to approximately 8.85% (www.alc.gov.bc.ca/alr/stats).

The majority of ALR lands in the RDN are located in rural Electoral Areas, with smaller portions located within the boundaries of municipalities. This RGS recognizes and supports the jurisdiction of the ALC over all ALR lands and strongly supports the retention and use of all ALR lands for agriculture. The RDN will continue to endorse the Agricultural Land Commission's efforts in preserving agricultural lands. Other actions that would enhance food security in the region include:

- Supporting improved access to sustainable water supplies for irrigation;
- Encouraging best water management practices in agriculture;¹
- Providing drainage infrastructure for flood-prone lands that do not include environmentally sensitive areas;

- Improving infrastructure to provide agricultural services and processing; and improving access to markets.

Policies

The RDN and member municipalities agree to:

- 8.1 Encourage and support the Agricultural Land Commission in retaining lands within the ALR for agricultural purposes.
- 8.2 Discourage the subdivision of agricultural lands.
- 8.3 Include provisions in their official community plans and zoning bylaws to allow for complementary land uses and activities that support the on-going viability of farming operations.
- 8.4 Establish agriculture as the priority use on land in the ALR.
- 8.5 Minimize the potential impact non-farm land uses may have on farming operations and include policies in their official community plans and zoning bylaws that reduce the opportunity for land use conflicts to occur.
- 8.6 Encourage and support agricultural activity on lands that are not within the ALR. This may include small-scale home-based agricultural businesses.
- 8.7 Recognize the importance of value-added agricultural uses and complementary land use activities for the economic viability of farms. To support complementary farm uses, official community plans should consider:
 - The provision of appropriately located agricultural support services and infrastructure;
 - Reducing impediments to agricultural processing and related land uses;
 - Allowing compatible complementary land use activities (e.g., agri-tourism);

1

- Allowing farmers' markets and other outlets that sell local produce to locate in all parts of the community.
- 8.8 Encourage urban agriculture initiatives and support activities and programs that increase awareness of local food production within the region.
 - 8.9 Support the appropriate use of water resources for irrigation of agricultural lands.
 - 8.10 Support the provision of drainage infrastructure to flood-prone lands that do not lie within environmentally sensitive areas.
 - 8.11 Work in collaboration with federal and provincial agencies, adjacent regional districts, and agricultural organizations to improve access to markets for agricultural products.
 - 8.12 Support partnerships and collaborate with non-profit groups to enhance the economic viability of farms.
 - 8.13 Support farms that produce organic agricultural products and use sustainable farming practices.
 - 8.14 Support the production, processing, distribution and sale of locally grown produce (including shellfish).

**Attachment 9 (page 1 of 5)
Applicant's Submission**

Provincial Agricultural Land Commission - Applicant Submission

Application ID: 54599

Application Status: Under LG Review

Applicant: Howard Fowler

Agent: Elizabeth Puckering

Local Government: Nanaimo Regional District

Local Government Date of Receipt: 12/31/2015

ALC Date of Receipt: This application has not been submitted to ALC yet.

Proposal Type: Subdivision

Proposal: The purpose of the subdivision is to promote agricultural activity in the immediate area by creating viable and more manageable parcel sizes in keeping with the growing number of small farms in Lower mainland and coastal regions of British Columbia and with the immediate area of Virginia Estates AND to alleviate the applicant's huge financial burdens whereby currently his expenses far exceed his income. The Applicant, for necessary financial reasons, would like to create a small farm with a small house and barn on one of the proposed ten acre parcels. The Applicant has accumulated a large debt in purchasing and making costly improvements to land purchased for the purpose of growing hay and debts incurred in operating a horse breeding farm by having to purchase large quantities of hay to feed his horses due to the fact that the property would not produce any harvestable hay or grazing vegetation for his horses. He has had to prematurely sell 41 of his horses and close down his horse breeding operation to assist in the payment and management of his debts.

Agent Information

Agent: Elizabeth Puckering

Mailing Address:

PO Box 564

Coombs, BC

V0R 1M0

Canada

Primary Phone: (250) 927-1113

Email: lizpuckering@shaw.ca

Parcel Information

Parcel(s) Under Application

1. **Ownership Type:** Fee Simple

Parcel Identifier: 006-416-250

Legal Description: Lot 1, DL 141 Nanoose and Newcastle Districts Plan 2273, Lying to the North of a boundary parallel to and perpendicularly distant 977 feet from the Northerly Boundary of said lot 1

Parcel Area: 12.3 ha

Civic Address:

Date of Purchase: 12/23/1997

Farm Classification: Yes

Owners

Applicant: Howard Fowler

Attachment 9 (page 2 of 5)
Applicant's Submission

I. Name: Howard Fowler
Address:
891 Virginia Road (PO Box 59)
Coombs, BC
V0R 1M0
Canada
Phone: (250) 248-3882
Email: morganfarm@shaw.ca

Ownership or Interest in Other Lands Within This Community

1. Ownership Type: Fee Simple
Parcel Identifier: 023-401-681
Owner with Parcel Interest: Howard Fowler
Parcel Area: 2 ha
Land Use Type: Residential
Interest Type: Full Ownership

Current Use of Parcels Under Application

1. Quantify and describe in detail all agriculture that currently takes place on the parcel(s).

Non-productive pasture land that is fenced (in 2000 and 2001) and cross fenced. There is one horse on the property (and two horses on adjacent property owned by applicant) and Hay has to be brought in to subsidize the food requirements due to near non- existant quantity and very poor quality of the grazing vegetation.

2. Quantify and describe in detail all agricultural improvements made to the parcel(s).

The Applicant purchased the property in 1997 from MacMillan Bloedel based on the detailed soil data contained within the BC Soil Survey Report No. 57, MOE Technical Report 30 written by John Jungen and Phil Christie of the BC Ministry of Environment. The Applicant purchased the land with the intention of growing the much needed hay for his Morgan Horse Farm, a horse breeding farm operating on the adjacent property. After logging was completed by MacMillan Bloedel the Applicant contracted the clearing, disking and seeding of the property. The Property did not produce any harvestable hay crop or grazing vegetation that year or any of the following years despite the numerous attempts made by the Applicant. This resulted in not only expenses incurred to purchase and clear the land and try to grow hay but also did not alleviate the expenses of having to purchase considerable quantities of hay. The Applicant was now stuck with a costly parcel that would not produce. To find out why the land could not produce any quantity or quality of hay The Applicant hired a Soil Specialist. In August of 2001 the property was inspected by Mr Joe Fitzpatrick, P.Ag. who is a Soil Specialist. Mr Fitzpatrick dug ten test holes on the property and provided a detailed report as to the locations of the test holes and the findings of his soil examinations. Mr. Fitzpatrick begins in his report "much of the parcel has an agricultural capability rating of 5W" and describes several factors that may be restricting drainage. Mr Fitzpatrick speaks of the need of improvements made to irrigation and also improvements in soils fertility by way of organic amendments, liming and fertilization but states that this would not affect the Agricultural Capability Class unless drainage can be improved. Mr. Fitzpatrick compares his findings to Jungen et al, 1989 and explains that the Subject Parcel was not examined by anyone. The Applicant contracted a ditch to made along the entire length, just outside and parallel to, the entire length of the eastern boundary of the property and contracted swales to made throughout the parcel as to direct the surface run off water to the ditch just beyond the property lot line. A number of large Culverts were place where needed so as to assist the flow of water. The property was fenced and cross fenced so as to create a number of pasture areas to rotate livestock.

Applicant: Howard Fowler

**Attachment 9 (page 3 of 5)
Applicant's Submission**

3. Quantify and describe all non-agricultural uses that currently take place on the parcel(s).

No Non-agricultural activity takes place on this parcel.

Adjacent Land Uses

North

Land Use Type: Residential

Specify Activity: ALR, limited hobby farm, not agricultural

East

Land Use Type: Residential

Specify Activity: 5 acre parcels, residential use

South

Land Use Type: Residential

Specify Activity: ALR, 10 acre parcel, medicinal plants growing operation, residential

West

Land Use Type: Unused

Specify Activity: French Creek and land owned by Island Timberlands

Proposal

1. Enter the total number of lots proposed for your property.

4.1 ha

4.1 ha

4.1 ha

2. What is the purpose of the proposal?

The purpose of the subdivision is to promote agricultural activity in the immediate area by creating viable and more manageable parcel sizes in keeping with the growing number of small farms in Lower mainland and coastal regions of British Columbia and with the immediate area of Virginia Estates AND to alleviate the applicant's huge financial burdens whereby currently his expences far exceed his income. The Applicant, for necessary financial reasons, would like to create a small farm with a small house and barn on one of the proposed ten acre parcels. The Applicant has accumulated a large debt in purchasing and making costly improvements to land purchased for the purpose of growing hay and debts incurred in operating a horse breeding farm by having to purchase large quantities of hay to feed his horses due to the fact that the property would not produce any harvestable hay or grazing vegetation for his horses. He has had to prematurely sell 41 of his horses and close down his horse breeding opearation to assist in the payment and management of his debts.

3. Why do you believe this parcel is suitable for subdivision?

PLEASE REFER TO THE ATTACHMENT #23 WITH THE SAME TITLE - DUE TO TECHNICAL DIFFICULTIES - AFTER SEVERAL ATTEMPTS - THE ANSWER TO THIS QUESTION WOULD NOT UPLOAD TO THIS AREA.

4. Does the proposal support agriculture in the short or long term? Please explain.

The ALC, in support of promoting agricultural activities, has granted subdivision of larger parcels into smaller 10 acre parcels or less based on the recommendation of one, single Agrologist in areas that face challenges with soils or terrain. There have been four separate Agrologists who have attended and

Applicant: Howard Fowler

**Attachment 9 (page 4 of 5)
Applicant's Submission**

reported on this parcel. All agree that the parcel has magnificent challenges with soil and drainage and irrigation and three Agrologists state that exclusion of this parcel from the ALR would not affect the British Columbia Agriculture Industry. A large percentage of Farms in the Lower Mainland, Sunshine Coast and Vancouver Island are less than 10 acres in size. We have a unique growing season and climate in this region which supports the growing number of and very productive smaller farms in this climactic advantageous area. By dividing this particular parcel into more manageable sizes makes it more viable and therefore supports Agriculture on land that is otherwise unsuitable and economically not feasible for soil dependant agricultural activities. By providing the opportunity to purchase a manageable, feasible, viable size of property you are supporting Agriculture for the Long term. A person will have a better chance to succeed if the challenge is affordable. These farm sizes are proven successful throughout the province but moreso in this region.

5. Are you applying for subdivision pursuant to the ALC Homesite Severance Policy? If yes, please submit proof of property ownership prior to December 21, 1972 and proof of continued occupancy in the "Upload Attachments" section.

No

Applicant Attachments

- Agent Agreement - Elizabeth Puckering
- Proposal Sketch - 54599
- Other correspondence or file information - Proposal Question 3
- Professional Report - ALC Inspection Report
- Other correspondence or file information - ALC Maps
- Professional Report - Fitzpatrick Report
- Professional Report - Murrie Report
- Other correspondence or file information - Ike Neden Report
- Professional Report - Hinkley Report
- Professional Report - WPK Report
- Professional Report - WPK Site plan
- Professional Report - Emmerson Report
- Other correspondence or file information - Census Report- Farm Size
- Other correspondence or file information - Letter from AWCS
- Other correspondence or file information - Letter from Jungen
- Other correspondence or file information - Letter from Hilborne
- Other correspondence or file information - Applicants Credentials *
- Site Photo - Bi-monthly hay order -\$10K
- Other correspondence or file information - Explanation of Wanted Poster*
- Site Photo - Wanted Poster *
- Certificate of Title - 006-416-250

Also included in the package is Drainage Cost Estimate

ALC Attachments

None.

Decisions

None.

*Applicant's attachments followed by an asterisk are provided under separate enclosure pursuant to Section 22 of the *Freedom of Information and Protection of Privacy Act*.

Applicant: Howard Fowler

AUTHORIZATION TO ACT AS AGENT

Legal Description of Property LOT 1 DL 141
Nanoose and Newcastle District
Plan 2273

March 3, 2015

I, Howard Morris Fowler, of 891 Virginia Road, PO Box 59, Coombs, BC V0R 1M0, hereby give authorization/permission for Elizabeth Puckering to act as my agent on my behalf for the attached Application to Subdivide Land in the ALR of the above noted property. Any and all Correspondence shall be sent to my agent.

Howard Morris Fowler
Owner, Howard Morris Fowler

March 3, 2015
Date


Agent Signature

Elizabeth Puckering
Agent Print Name

03/03/2015
Date

Agent Contact Information:

P.O. Box 564 Coombs BC V0R 1M0
Address City/Town Postal Code

C. 250-927-1113, Home 250-954-0089 lizpuckering@shaw.ca
Phone Fax E-mail

PROPOSED SUBDIVISION (NOT ACCURATE LINES)

PLAN VIP63198

LOT 2 PLAN 2273

NORTH PART LOT 1

1 4.1 ha

2 4.1 ha

3 4.06 ha

PLAN 8879

SOUTH PART LOT 1 PLAN 2273

ROAD

FRENCH CREEK

Steep Bank To French Creek

3 Ac. Less Approx. 4.5 Ac. OF Steep Hillside To creek.

The Applicant purchased the property in 1997 from MacMillan Bloedel based on the detailed soil data contained within the BC Soil Survey Report No. 57, MOE Technical Report 30 written by John Jungen and Phil Christie of the BC Ministry of Environment. The Applicant purchased the land with the intention of growing the much needed hay for his Morgan Horse Farm, a horse breeding farm operating on the adjacent property. After logging was completed by MacMillan Bloedel the Applicant contracted the clearing, disking and seeding of the property. The Property did not produce any harvestable hay crop or grazing vegetation that year or any of the following years despite the numerous attempts made by the Applicant. This resulted in not only expenses incurred to purchase and clear the land and try to grow hay but also did not alleviate the expenses of having to purchase considerable quantities of hay. The Applicant was now stuck with a costly parcel that would not produce. To find out why the land could not produce any quantity or quality of hay The Applicant hired a Soil Specialist. In August of 2001 the property was inspected by Mr Joe Fitzpatrick, P.Ag. who is a Soil Specialist. Mr Fitzpatrick dug ten test holes on the property and provided a detailed report as to the locations of the test holes and the findings of his soil examinations. Mr. Fitzpatrick begins in his report "much of the parcel has an agricultural capability rating of 5W" and describes several factors that may be restricting drainage. Mr Fitzpatrick speaks of the need of improvements made to irrigation and also improvements in soils fertility by way of organic amendments, liming and fertilization but states that this would not affect the Agricultural Capability Class unless drainage can be improved. Mr.Fitzpatrick compares his findings to Jungen et al, 1989 and explains that the Subject Parcel was not examined by anyone in the past as test holes were dug at the rate of only one per 8ha and none at all on the subject Parcel. In Conclusion, Mr. Fitzpatrick stated that "the parcel is non-arable, so its exclusion from the ALR would not affect the British Columbia agriculture industry."

The Applicant, at great expense, contracted a ditch to be dug the full length of the eastern border of the property, swales to be made so as to direct the runoff water to the ditch and installation of large culverts to direct the flow of water under roadways. The Applicant admits that this did alleviate some of the wetness but not enough to support the growth of any harvestable hay or provide grazing vegetation for his horses.

The Applicant submitted to the ALC his Application for Exclusion in 2001

After a length of time the ALC agreed that The Staff Agrologist, Mr Trevor Murrie, P.Ag. attend the property for the purpose "to investigate whether an inherent bio-physical constraint or limitation exists on the property to invalidate the use of an 'improved' agricultural capability rating."

Mr Trevor Murrie, P.Ag. attended the property on a date not disclosed in his report of July 10, 2002, dug three test holes, one of which was in a burn pile and no other reference as to their locations on the property was given. In his report he concluded that in is professional opinion "The more limiting 'Land capability for agriculture in B.C.' , subclass limitations for the property are 'excess water', which prevails during the wetter months, and 'soil moisture deficiency' during the growing season. " Although Mr Murrie does not provide a soil class rating he states: " I again apply an improved Class (2A) or possibly Class (3A) agricultural rating to the subject property, given my opinion that the 'excess water' limitation can be alleviated." Mr Murrie further states: "with the installation of a suitably designed drainage

system, the 'excess water' limitation could be entirely alleviated," and later states that: "irrigation option is to construct a retention pond to receive and store during the winter months a portion of the drained water for future irrigation use. Construction of a dugout or detention pond would reduce the 'soil moisture deficiency' limitation."

The Applicant believes that a full analysis of the soil types on the 32 acre property could not be based on just two test holes in relatively close proximity to each other and further to that asks why no Current/Unimproved Agricultural Capability Rating was given of the soil on the Applicant's property in Mr Murrie's report but a rating based on the possibility of alleviating excess water.

The Applicant further states that he was present, as well as his friend Mr Ike Neden, when Trevor Murrie attended on the property. Mr Murrie was accompanied by Mr Geoff Hughes-Games, P. Ag. who stated to the Applicant that he was not there on an official capacity but merely a spectator. Mr Murre and Mr Hughes-Games came to the property at 1pm on the 23rd day of August, 2002. Mr Murrie began the first test hole at about 1:15 pm and left the property at 3:55 pm with Mr Hughes-Games.

Curious that a report could be written by Mr Murrie on July 10, 2002 prior to visiting the property on August 23, 2002.

The Applicant having already spent considerable sums of money on drainage agreed that the soil wetness could be alleviated by further means suggested by Trevor Murrie in his report and set about to find a company that could design such a system.

Worley Parsons Komex was hired in 2006 to conduct an irrigation storage and drainage study for the property based on the suggestions of Trevor Murrie. The report describes what would be necessary to facilitate the drainage of the large volumes of water due to the high rainfall received in this area and the size of pond required to supply water for the purpose of irrigation for a parcel of this size. The report shows that in order to facilitate the overflow for the retention pond the drainage ditch would have to be some 21 feet deep to enable the water to flow downhill to the adjoining French Creek. Having a ditch of that size creates a hazard to livestock and people not to mention the costs associated with its construction. The water retention pond of approximately four or five acres that would need to be lined with clay to seal in the water, the drainage tiles and the pump system and drainage ditch construction all added up to an estimated \$659,000 in 2006. It was in their professional opinion the cost of the improvements far out-weigh the benefits. The applicant felt that this sum was definitely well beyond his financial ability. And when the cost of improvements is beyond the value of the property and cannot be recovered by any means it becomes a question of insanity.

The Applicant felt it was necessary to have the opinion of a third Soil Specialist and hired an unbiased professional company to perform a detailed soil analysis. Mr Robert Hinkley P. Ag. of Whiskeyjack Land Management Corp, a Soil Specialist, determined that he would perform a detailed "Regional Soil Investigation" to discover the history of the soils analysis that have occurred in this area as well as a detailed inspection of property to assess the accuracy of the report produced by Mr Fitzpatrick.

In his 'Summary of Soil Investigation and Current Land Use on Adjacent Properties', Mr Hinkley states, "two major soil survey reports were produced for the soils within the region in 1959 and 1989, the first

being at a reconnaissance level and the second at a more detailed level. However, there is no evidence that soil surveyors from either of these mapping and reporting projects actually conducted site/soil investigation within the subject parcel or adjacent parcels.”

In his ‘Summary of Soil Investigations on The Subject Property’, Mr Hinkley states that the soil analysis performed by Mr Fitzpatrick in 2001 is accurate and that “the Class 5 capability ratings established by Mr Fitzpatrick would severely restrict cultivation and plant root growth.”

In his ‘Review of Agricultural Capability Ratings on the Subject Property’, Mr Hinkley states, “In the case of the drainage limitation, and as per previous comments by my Agrologist colleagues, installing a drainage and water containment system is impractical and very cost prohibitive. Drainage systems would have to be spaced very close together at a high cost. Bedrock depth in the area recommended for the detention pond is within 3.0 meters, so blasting of the dugout would be required and it would have to be lined with an impermeable tarp, all at high cost. The ditch required to drain the excess runoff from the pond would have to be dug to a depth of 13.0 meters at its western exit point, also requiring blasting. The ditch itself would be nearly 450 meters long and 3 to 5 meters wide, therefore requiring additional fencing and/or installation of a culvert or large drainage pipe and backfilling. As well a permit from Fisheries and Oceans would be required to allow pond runoff to enter the adjacent French Creek.”

After much debate with the ALC over the years, The Applicant felt it may be necessary to have the opinion of a fourth Agrologist and hired a Soil Specialist, to provide a detailed soil study and analysis and report of the finding of the Subject Property. Mr Ron Emmerson, P.Ag. provided his ‘Soil and Agricultural Capability Assessment of the Northerly 977 Feet of Lot 1 District Lot 141, Nanoose and Newcastle District’ in which his description of soils completed for his study were similar to those Completed by Joe Fitzpatrick a decade earlier.

Three of the four Agrologists who have performed soil analysis on the subject property, Fitzpatrick, Hinkley and Emmerson, provide an overall ‘Unimproved Agricultural Capability Rating’ of 5W where Murrie does not provide and Unimproved Agricultural Capability Rating.

All four Agrologists provide an explanation of Main Limitations for Agriculture to be “Excessive Wetness”

Three of the four Agrologists agree that the property would be better suited to smaller hobby farms and agreed that removing this land from the ALR would not have a negative impact on Agriculture in BC while Murrie made no mention of size, he stated that he recommend keeping the property in the ALR.

The immediate area has seen a notable increase in agricultural activity since the area known as Virginia Estates was subdivided into a number of smaller parcels some years ago. A large percentage of the land owners on this subdivision operate small hobby farms. Having smaller parcels makes participation in agricultural activities more viable especially in areas where soil conditions limit agricultural capability. This encourages agricultural activity and agricultural awareness.

The applicant, in a prior application, applied for this property to be excluded from the ALR. A letter received by the ALC on October 6, 2011 from the Arrowsmith Watershed Coalition Society opposed the exclusion but inadvertently supports that fact that by providing smaller, affordable parcel sizes in rural areas increases and promotes agricultural activity in their following statement, *“Lastly an examination of the ALC Maps would tend to suggest that the subject property is logically classified within an area that would be suitable for agricultural uses. Earlier subdivision of nearby land in*

the Virginia Estates area may have included removals from the ALR. It is interesting that many of these subdivided properties currently appear to host various farming activities.”

It is fact that agricultural activity has increased in the area of Virginia Estates since the subdivision of the area.

By Subdividing this subject property, it would be in keeping with the area and provide more affordable and viable land sizes for agricultural



Application #52581

(Fowler)

Site Inspection Details

Date:

August 27, 2012

Participants:

Richard Bullock (Commissioner)

Jennifer Dyson (Commissioner)

Roger Cheetham (ALC Staff)

Liz Sutton (ALC Staff)

Howard Fowler (Applicant)

Bill Marsh

Julian Fell (Director Area F (RDN))

Location:

Coombs

Local Government:

Regional District of Nanaimo







Swales and depressions on property. Western portion of property.
Ravine at tree line in the background.





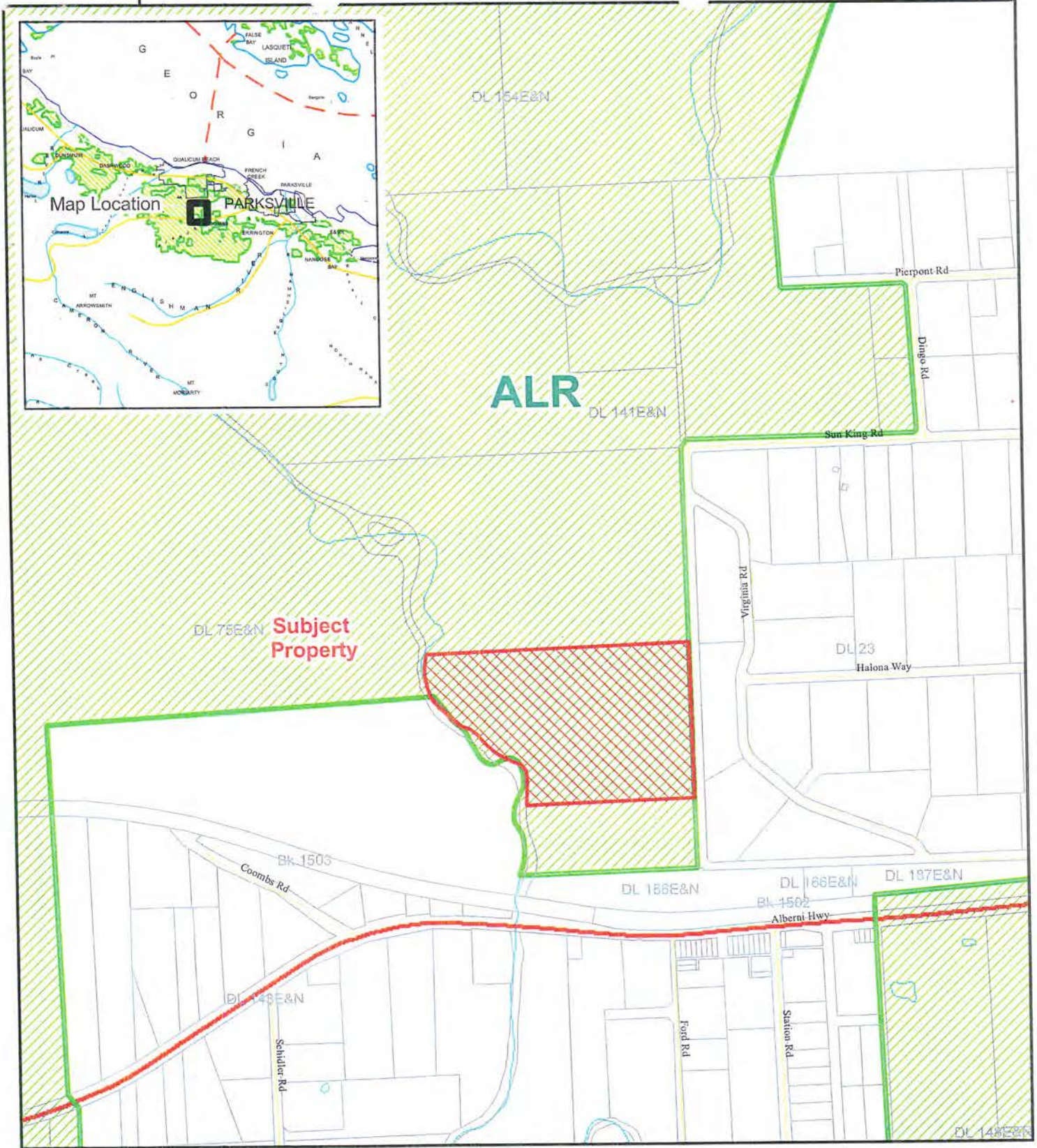






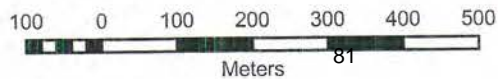
- There are currently 44 horses on the property. The applicant must ship in hay to supplement grazing.
- Trees were cleared from the proposed exclusion area, but there was insufficient soil
- Grass roots have difficulty penetrating the soil
- Clay soil near surface so water sits on top
- The property has swales, depressions, and hard ground
- The western edge of the property is a steep ravine

124°26'0"W



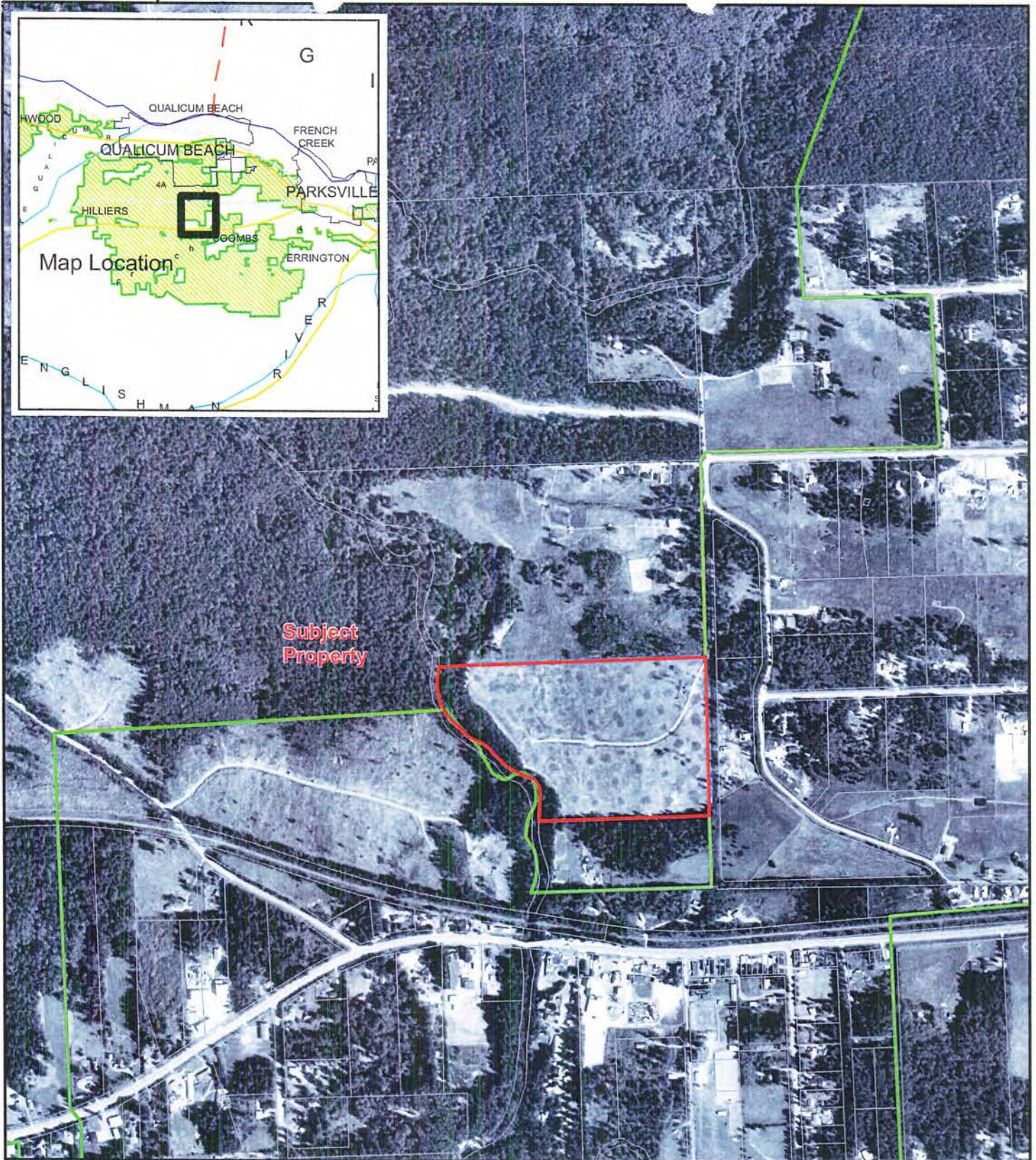
ALC Context Map

Map Scale: 1:10,000



ALC File #:	52581
Mapsheet #:	92F.038
Map Produced:	Feb 3, 2012
Regional District:	Nanaimo

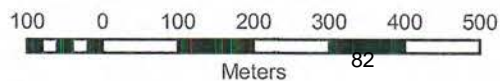
124°26'0"W



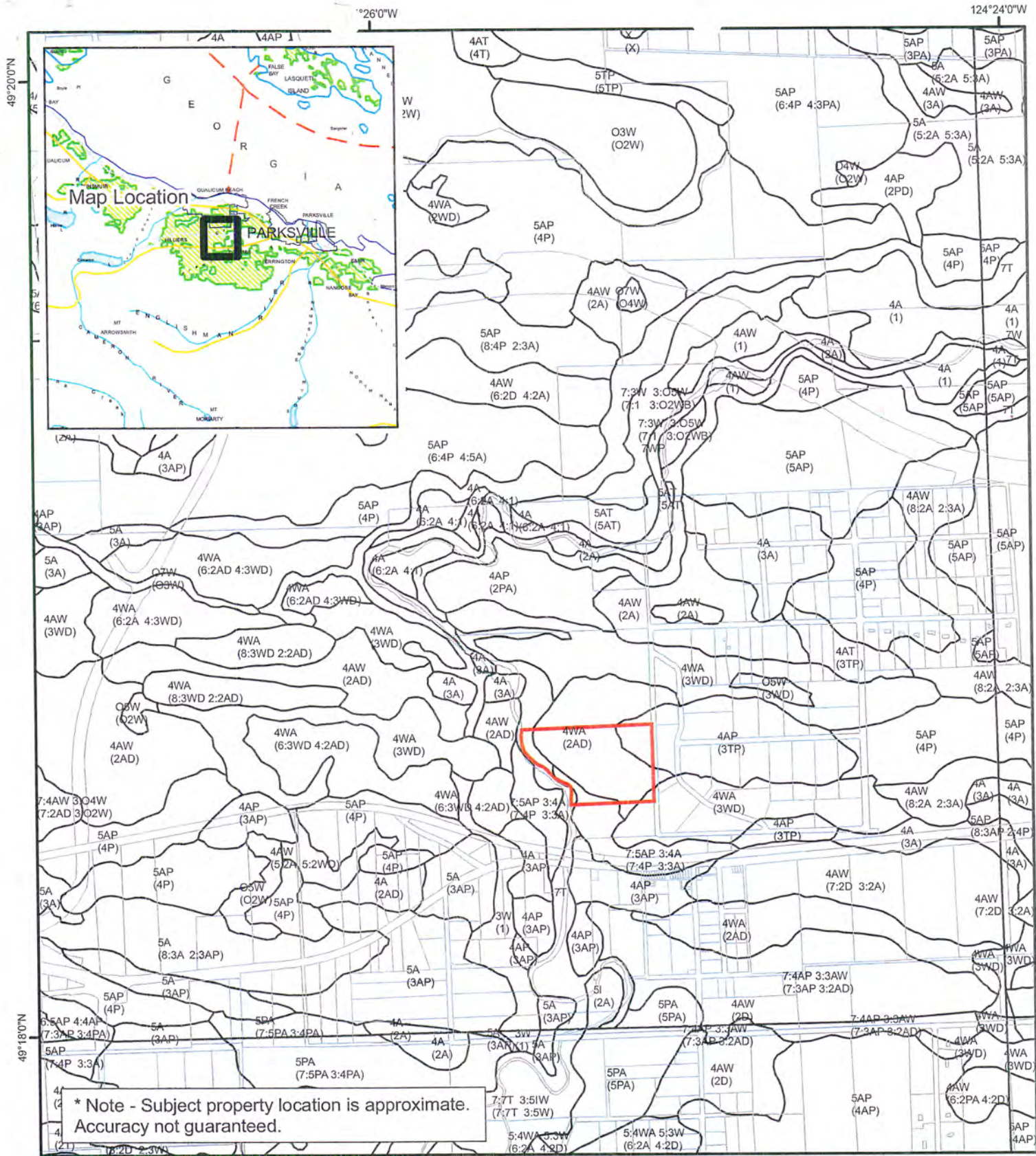
Airphoto Map

Timberwest Orthophoto 2002

Map Scale: 1:10,000

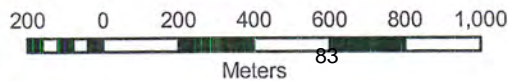


ALC File #:	52581
Mapsheet #:	92F.038
Map Produced:	Feb 3, 2012
Regional District:	Nanaimo



Agricultural Capability Map

Map Scale: 1:20,000



ALC File #: 52581
 Mapsheet #: 92F.038
 Map Produced: Feb 3, 2012
 Regional District: Nanaimo

AGROLOGIST'S REPORT

Application to the
Land Reserve Commission to
Exclude Land from the Agricultural Land Reserve

Parcel:
Northerly 977 Feet of Lot 1 D.L 141
near Coombs, BC

Owner:
Howard Fowler

Submitted:
August 31, 2001


Fitzpatrick Land Resource Consultants

1246 Edgewood Drive
Penticton BC
V2A 4B1

(250) 488-0544

joe_fitzpatrick@telus.net

Introduction

This report was prepared to provide supporting documentation for an application to exclude the northerly 977 feet of Lot 1 D.L. 141 from the Agricultural Land Reserve (ALR). The parcel would then be subdivided into low density residential lots of approximately 2 hectares each. Each new parcel would have a covenant placed on it preventing industrial development.

The parcel was inspected April 16-17 and August 30, 2001 by Joe Fitzpatrick P. Ag. Site and soil information was collected at ten locations, which are shown on Figure 1. The portion surveyed is shaded in yellow.

Lot Description and History

The Parcel is located approximately 300 metres north of Coombs. Access is by Virginia Road, which crosses railroad tracks and connects to Highway 4 east of Coombs.

The west side of the lot slopes steeply down to French Creek, and includes a portion of an inactive fluvial plain. Under this proposal, the fluvial plain area would not be disturbed or developed, as the creek provides salmon habitat.

The effectively arable (surveyed) portion of the parcel has an area of 10.8 hectares, is fenced into paddocks and provides pasture for horses. There are no buildings nor is irrigation water available. The elevation is approximately 85 metres.

Lot 23 to the east has been excluded from the ALR and subdivided into 2 hectare lots. The lots are primarily residential, though there are a few businesses located there, including a helicopter repair facility, an auto salvage yard, and a boarding stable.

The remainder of Lot 1, approximately 3.5 – 4 hectares shares the southern boundary of the subject parcel. Lot 2, about 20 hectares shares the northern boundary.

Mr. Fowler reports that the regional district has no zoning for this area

There is an abundance and variety of hobby farms in the area, but the nearest large scale agricultural enterprises are located at least 3 kilometres away. This parcel is separated from large parcels by the creek, small parcels and the village of Coombs.

Agricultural Potential

Detailed site and soil descriptions are presented at the end of this report. Most of the soil profiles are gleysols, with three Cowichan and five Parksville in a total of ten described. Sites near the west edge were identified as Brigantine (Gleyed Dystric Brunisol) and Fairbridge (Gleyed Eluviated Dystric Brunisol). Much of the parcel has an agricultural capability rating of 5W, which masks several limitations at the Class 2-3 level, including low fertility (F), complex topography (T), undesirable soil structure (D), and aridity (A).

Cowichan and Parksville soils generally are poorly drained and have perched water tables for much of the year. Soil pH is reported to be in the range of 4.6 to 5.7. Typical organic matter content for the surface 20 cm is around 9% in Cowichan and 5% in Parksville. These soils require drainage for optimum agricultural use, and in the case of Cowichan, tiles must be closely spaced. They are used for hay and pasture. For annual crops, spring planting is delayed by the wet soil conditions. (Jungen et al, 1989)

Silty clay loam is the dominant texture of the Cowichan profiles on this parcel. The thickness of the Ah horizon found on the parcel is typical for this soil series.

The Parksville soils at this parcel share traits of the imperfectly drained profiles. They differ from the Brigantine in drainage and taxonomy, but the textures are similar. Concretions were found in most Parksville pits, a trait of Fairbridge soil. The Ah horizon is thinner than is typical for Parksville.

There are several factors which may be restricting drainage:

1. The subsoil has a fairly dense, massive structure, hence low porosity and hydraulic conductivity.
2. There may be cemented layers lower in the profile. None were detected within the sampling depth, but cementation was found in a road cut near the creek (Site #5).
3. Bedrock is thought to be present within 3 metres of the surface.

For most of this field, soil drainage is not feasible. Tile drains would have to be installed at a close spacing. The water would be carried to the lowest point, which is in the ^{west}southeast corner. But from there, there is nowhere for the water to go. Proper drainage would require a regional effort and good coordination between governments and neighbours, which is unlikely to be achieved given the fact that this parcel is isolated from large, agricultural parcels. For this reason, drainage improvement ratings are not shown with the agricultural capability in the pit descriptions.

The average Climatic Moisture Deficit is estimated to be approximately 220 mm from which the Climatic Capability for Agriculture was determined to be 4A(1)

(Collgado, 1981). For most of the field there is a soil Agricultural Capability Subclass 3A for aridity, though three small mounds with Subclass 5A were observed. Irrigation water is unavailable: wells in the area have low flow rates, and French Creek is salmon-bearing, so gaining water rights is unlikely.

The field would benefit from improvements in soil fertility, including the addition of organic amendments, liming and fertilization. Organic amendments would also help to improve soil structure. However, this would not affect the Agricultural Capability Class unless the drainage can be improved.

There is 2T-3T complex topography throughout most of the field, though in the northwest corner it is classified at 4T.

Results of this site inspection may be compared to Jungen et al, 1989, the highest intensity soil survey to be performed in this area. An average inspection density of one pit per 8 hectares was reported. However, neither the subject parcel nor D.L. 23 (then not subdivided) were inspected in the survey though at the reported survey intensity they would have received one or two, and eight inspections respectively. The presence of Cowichan and Brigantine soils was correctly identified. However, the main component of the largest map unit, where Parksville was found was labelled McLean Creek, silt loam marine deposits over gravelly moraine. The area in the northeast corner, identified as Trincomali, is in fact Cowichan, a very different soil. A ridge in the southwest was identified as a Qualicum – Beddis complex, which is reasonable for the map unit, though on the parcel only a small amount was found.

Impact on Agriculture

The proposal to exclude and subdivide the northerly 977 feet of Lot 1 D.L. 141 will have no effect on existing major agricultural operations.

Given the small size of the parcel, and its separation from agricultural areas, opportunities for irrigation and drainage improvement are unlikely to be available. In its current state the parcel is non-arable, so its exclusion from the Agricultural Land Reserve would not affect the British Columbia agriculture industry.

Making five or six lots out of one parcel, located next to the village of Coombs, would provide opportunities for households to develop small businesses, which may contribute to agriculture or tourism in the area.

References

- Coligado, M.C. 1981. Letter to Howard Fowler regarding climate of the Coombs area.
- Day, J.H.; Farstad, L.; Laird, D.G. 1959. Soil survey of southeast Vancouver Island and Gulf Islands, British Columbia. Report No. 6 of the British Columbia Soil Survey.
- Howes, D.E.; Kenk, Evert. 1997. Terrain classification system for British Columbia (Version 2). MOE Manual 10.
- Jungen, J.R.; Christie, P.J.; Philp, J.P. 1989. Soils of southeast Vancouver Island – Parksville, Qualicum Beach, Courtenay, and Port Alberni areas. B.C. Soil Survey Report No. 57, MOE Technical Report 30. 219 p.
- Kenk, Evert and Cotic, Yvan. 1983. Land capability classification for agriculture in British Columbia. MOE Manual 1.
- Lacey, H.O. 1966. Drainage through ditches and surface grading. B.C. Department of Agriculture.
- Luttmerding, Herb; Demarchi, D.A.; Lea, E.C.; Meidinger, D.V.; Vold, T. 1990. Describing Ecosystems in the Field (2nd Ed.). MOE Manual 11.
- Soil Classification Working Group. 1998. The Canadian System of Soil Classification (3rd Ed.) NRC Research Press Table 1.

Site and Soil Profile Descriptions



Site #1

<i>Soil Name:</i>	Cowichan (CO)
<i>Soil Taxonomy:</i>	Humic Gleysol
<i>Terrain Classification:</i>	sczWp
<i>Slope:</i>	Complex 0-1%, Class 1 – 2
<i>Drainage:</i>	Poor
<i>Depth to Water Table</i>	50 cm
<i>Agricultural Capability:</i>	5W, some 6W nearby

Test Pit #1

<i>Horizon</i>	<i>Depth (cm)</i>	<i>Description</i>
AOp	0-17	Very dark grayish brown (10YR 3/2m); silt loam or silty clay loam mixed with peaty material; contains 10% soft rotting wood; moderate medium granular structure; friable; non-plastic; 5% gravel. Hand texturing was difficult due to high organic matter content.
Btjg	17-40	Dark grayish brown (2.5Y 4/2m); silty clay loam to silty clay; many prominent reddish yellow (7.5YR 6/6m) mottles; massive, breaking into moderate fine angular blocky structure; firm; 1% gravel. Estimated sand content 15%.
BCg	40-85	Dark grayish brown (2.5Y 4/2m); silty clay loam; many prominent reddish yellow (7.5YR 6/6m) mottles; massive structure; 1% gravel.

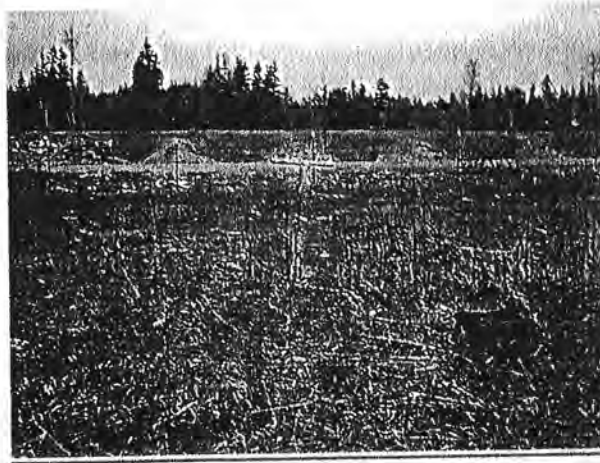


Site #2

<i>Soil Name:</i>	Parksville
<i>Soil Taxonomy:</i>	Orthic Gleysol
<i>Terrain Classification</i>	sWv sczWb
<i>Slope:</i>	Complex 0-6% short slopes, Class 3
<i>Drainage:</i>	Poor to imperfect
<i>Depth to Water Table</i>	35 cm
<i>Agricultural Capability:</i>	5W

Test Pit #2

<i>Horizon</i>	<i>Depth (cm)</i>	<i>Description</i>
Ah	0-5	Brown (10YR 4/3m) sandy loam; weak medium granular structure; very friable; 3% gravel.
Bmgj1	5-12	Sandy loam; few faint mottles; friable; 3% gravel.
Bmgj2	12-40	Light olive brown (2.5Y 5/3m); sandy loam; distinct (10YR 4/3m) mottles; 3% gravel.
BCg	40-80	Silty clay loam to clay loam; massive; firm.



Site #3

<i>Soil Name:</i>	Parksville
<i>Soil Taxonomy:</i>	Orthic Gleysol
<i>Terrain Classification:</i>	zsWb
<i>Slope:</i>	Complex 0-6% short slopes, Class 3
<i>Drainage:</i>	Poor to imperfect
<i>Depth to Water Table</i>	30 cm
<i>Agricultural Capability:</i>	5W

Test Pit #3

<i>Horizon</i>	<i>Depth (cm)</i>	<i>Description</i>
Ah	0-5	Brown (10YR 4/3m) sandy loam; weak medium granular structure; very friable; 3% gravel.
Bmgj1	5-12	Sandy loam; few faint mottles; friable; 3% gravel.
Bmgj2	12-42	Light olive brown (2.5Y 5/3m); sandy loam; distinct (10YR 4/3m) mottles; 3% gravel.
Bg	42-65	Loam; prominent mottles.

Site #4

Soil Name: Brigantine
Soil Taxonomy: Gleyed Dystric Brunisol
Terrain Classification: szWv
 sczWb
Slope: Complex 0-6% short slopes, Class 3
Drainage: Imperfect
Depth to Water Table >85 cm
Agricultural Capability: 4WA

Test Pit #4

<i>Horizon</i>	<i>Depth (cm)</i>	<i>Description</i>
Ah	0-6	Loam; weak fine granular; friable; 3% gravel.
Bmgj1	6-62	Loam to clay loam; faint mottles; moderate to weak medium angular blocky structure; friable; 1% gravel.
Bmgj2	62-85	Silty clay loam; distinct mottles; friable to firm; 1% gravel.

Site #5

Soil Name: Steep slope, coarse textured
 (cut is Fairbridge)
Soil Taxonomy: Gleyed Eluviated Dystric Brunisol
Terrain Classification: szWb
gszMb
 Rt
Slope: road cut at slope break
Drainage: -
Depth to Water Table: -
Agricultural Capability: 7T

Test Pit #5

<i>Horizon</i>	<i>Depth (cm)</i>	<i>Description</i>
Ahe	0-7	Dark yellowish brown (10YR 4/4m); loam; weak fine subangular blocky structure; very friable; slightly plastic; 1% gravel.
Bfj	7-42	Light yellowish brown (10YR 6/4m); loam; moderate fine angular blocky structure; friable; slightly plastic; zero coarse fragments.
BCgj	42-110	Loam; mottled; moderate coarse angular blocky; friable; slightly plastic; zero coarse fragments.
IICBx	110-215	Olive brown (2.5Y 4/4m); loam; firm held by silica cement, patchy but most common near the top and bottom of the layer; 15% gravel, 5% cobbles, 5% stones.
IIIRC	215+	shale bedrock



Site #6

Soil Name: Parksville
Soil Taxonomy: Orthic Gleysol
Terrain Classification: szWb
Slope: Complex 2-9% short slopes, Class 3 - 5
Drainage: Poor to imperfect
Depth to Water Table 40 cm
Agricultural Capability: 5W

Test Pit #6

<i>Horizon</i>	<i>Depth (cm)</i>	<i>Description</i>
Ahcc	0-5	Brown (10YR 5/3.5m); loam; weak fine granular structure; concretions 3 mm diameter; friable; slightly plastic.
Bmgjcc	5-37	Brown (10YR 4.5/3m); loam; faint mottles; weak coarse angular blocky structure; concretions; friable; slightly plastic.
Bg	37-65	Loam; many fine prominent mottles; massive (fairly compact) breaking into weak medium to fine angular blocky structure; friable; slightly plastic.

Site #7

Soil Name: Parksville
Soil Taxonomy: Orthic Humic Gleysol
Terrain Classification: czsWb
Slope: Complex 0-2%, Class 1 – 2
Drainage: Poor to imperfect
Depth to Water Table 50 cm
Agricultural Capability: 5W

Test Pit #7

<i>Horizon</i>	<i>Depth (cm)</i>	<i>Description</i>
Apcc	0-12	brown to dark brown (7.5YR 3.5/2m); loam; weak fine granular structure; concretions 4 to 8 mm diameter; friable; nonplastic; zero coarse fragments.
Bmgjcc	12-55	Brown (10YR 5/3m); loam; few faint mottles; friable; slightly plastic; zero coarse fragments.
Bg	55-70	Yellowish brown (10YR 5/4m) matrix & mottles mixed together; loam to sandy clay loam; many fine prominent mottles; 5% gravel.

Site #8

Soil Name: Parksville
Soil Taxonomy: Orthic Humic Gleysol
Terrain Classification: szWv
 cszWb
Slope: Complex 0-2%, Class 1 – 2
Drainage: Poor to imperfect
Depth to Water Table 40 cm
Agricultural Capability: 5W

Test Pit #8

Horizon	Depth (cm)	Description
Ahecc	0-18	Very dark grayish brown (10YR 3/2m); loam, abundant charcoal; friable; nonplastic; concretions smaller than 4 mm diameter; 2% gravel.
Bgcc	18-45	Light olive brown (2.5Y 5/3m); loam; common medium prominent (7.5YR 5/6m) mottles; friable; slightly plastic; zero coarse fragments; concretions up to 3 mm diameter
lIBg	45-65	Silty clay loam; many fine prominent mottles; firm; plastic; no concretions; zero coarse fragments.

Site #9

Soil Name: Cowichan
Soil Taxonomy: Orthic Humic Gleysol
Terrain Classification: czWp
Slope: Complex 0–1%, Class 1
Drainage: Poor
Depth to Water Table: 33 cm
Agricultural Capability: 5W

Test Pit #9

<i>Horizon</i>	<i>Depth (cm)</i>	<i>Description</i>
Ahe	0-11	Very dark brown (10YR 2/2m); silt loam or silty clay loam, charcoal present; friable; nonplastic; zero coarse fragments.
Btjg	11-55	Light olive gray (5Y 6/2m); silty clay loam; many medium prominent (7.5YR 5/5m) mottles; firm; plastic; zero coarse fragments.

Site #10

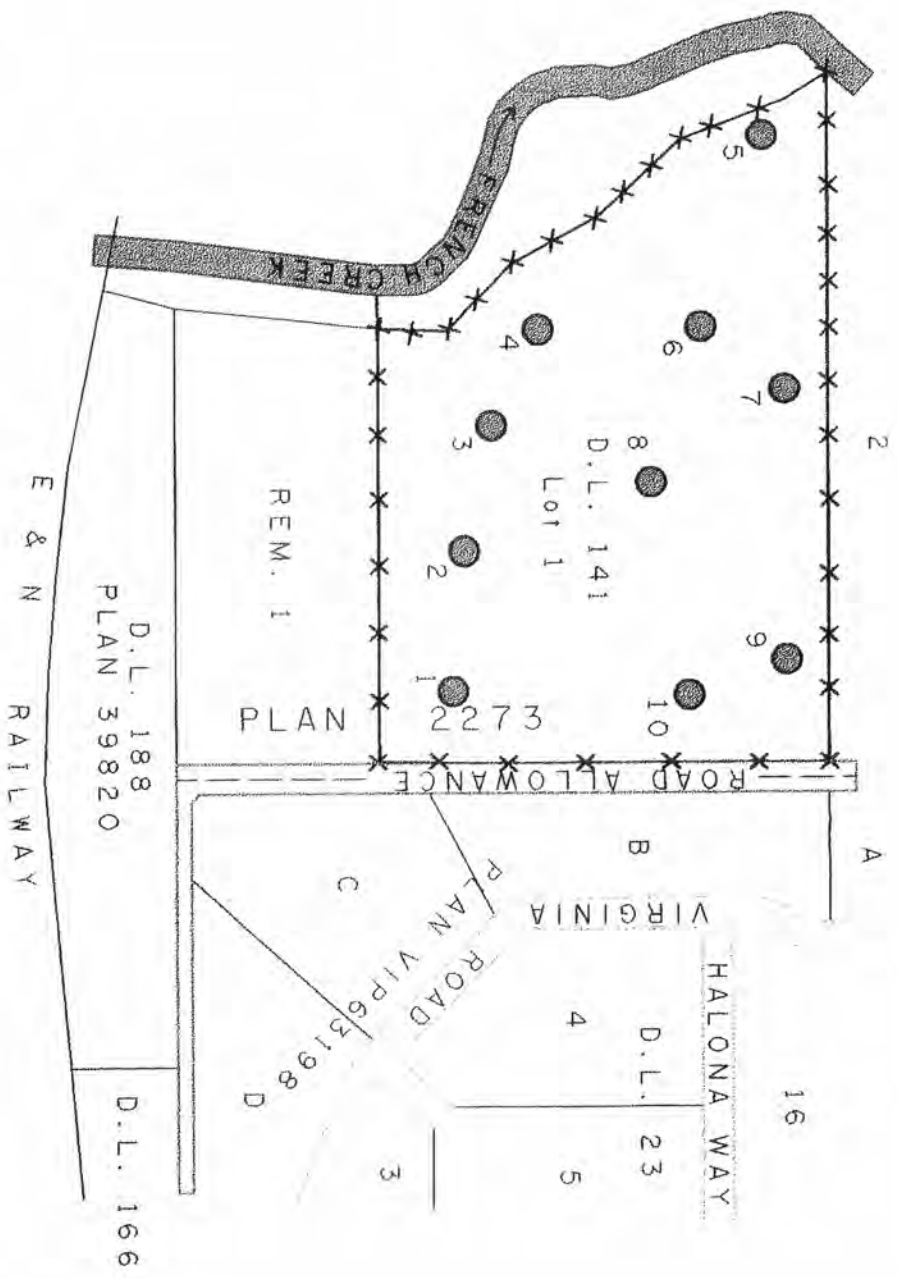
<i>Soil Name:</i>	Cowichan
<i>Soil Taxonomy:</i>	Orthic Humic Gleysol
<i>Terrain Classification:</i>	/bW ^G _y czWp
<i>Slope:</i>	Complex 0-1%, Class 1
<i>Drainage:</i>	Poor
<i>Depth to Water Table</i>	not checked
<i>Agricultural Capability:</i>	5W

Test Pit #10

<i>Horizon</i>	<i>Depth (cm)</i>	<i>Description</i>
	0-70	This was excavated with an auger beside a large rock (metamorphic, contains quartzite), apparently an erratic boulder. This rock is inconsistent with the bedrock (shale) found at Test Pit #5. The soil profile is similar to those of Test Pits #1 and #9.



- 17 Test Pit Location
- Lot 1 (surveyed portion)
- Road
- Road Allowance
- Fence
- Creek
- Adjacent Lots



Scale: 1:5,000

Wildstone ENGINEERS LTD	
Owner: Howard Fowler	
Northern 977 Feet of Lot 1, D.L. 141 Norose and Newcastle Districts, Plan 2273	
WSE 1548	Apr 11 26. 2001
Figure 1	



Land Reserve Commission
Working Farms, Working Forests

Staff Agrologist -- Note to File

Date: 10 July, 2002

File #: 02-S-EAS-2002-34255

RE: Improved 'Land Capability Classification for Agriculture' assessment of property owner by Mr. Howard Fowler:

Subject Property: That part of Lot 1, D.L. 141, Nanoose and Newcastle Districts, Plan 2273, Lying to the North of a Boundary Parallel to and Perpendicularly Distant 977 Feet from the Northerly Boundary of Said Lot 1.

Background

- It was summarized in my 'Staff Agrologist - Note to File' (dated 10 July, 2002), that should a suitably designed soil drainage / water detention system be installed, and sound soil management practices be adhered, the improvements to the land would warrant an improved 'agricultural capability' rating. From the information presented and available at that time, my opinion was that an improved 'Land capability classification for agriculture in B.C.' rating of Class (2A), or more conservatively (3A), would apply. The 'A' refers to a 'soil moisture deficiency' subclass limitation based on 'soil moisture deficits (SMD)'. Specific to 'soil moisture deficiency', the applicant's soils consultant gave a 'dryland', or unimproved, Class 3A rating to the property.
- The published (1:100,000 scale) mapped 'Climatic capability classification for agriculture' rating is 4A for the area, which includes the subject property. The rating is based on a 'climatic moisture deficit (CMD)' between 191 mm and 265 mm during the growing season (between May 1 and September 30). From the (same published source and scale) mapped 'Climatic Moisture Deficit/Surplus (mm)' an estimated CMD of approximately 220 mm was interpolated for the location of the subject property. The CMD exceeds the SMD in that the 'soil moisture deficit' also accounts for available soil moisture within the rooting zone (upper 50 cm of soil) at the beginning of the growing season, commonly referred to as 'available water storage capacity (AWSC)'. Should a supply of irrigation water be obtained, possibly from a water detention system in which water is collected and stored during the wetter months, an improved Class (2A) rating or better could be achieved.
- The applicant's soils consultant gave an unimproved Class 5W, 'Land capability classification' rating as the dominant overall rating for the property. The 'W' refers to 'excess water', based on the 'occurrence of excess water during the growing season'. The Class 5W rating indicates the frequent or continuous occurrence of water near the surface during periods that extend into the growing season, or the soil is very poorly drained. The 'excess water' associated with a Class 5W rating restricts the capability of the land to producing perennial forage crops, or other specially adapted crops. The opinion of the soils consultant was that there were no viable drainage outlet options for installing a drainage system, thus no improved 'Land capability for agriculture' rating was offered.
- The published (1:20,000 scale) mapped 'Agricultural Capability' ratings applies to two predominant soil mapping units shown on the property, albeit the soils and their distribution were differently described by the applicant's soils consultant. The soils on the eastern most part of the property, have a mapped 'agricultural capability' ratings of 4AP, improvable with irrigation to (3TP). For the remainder soils complex, 'agricultural capability' ratings of 7:5AP 3:4A are indicated, improvable with irrigation to (7:4P 3:3A).
- The Vancouver Island Panel of the Commission requested an on-site visit to the property

Attendees

Those attending the on-site visit were:

- | | |
|-------------------------------|--|
| Mr. Howard Fowler | - landowner and applicant |
| Ike | - acquaintance of the applicant |
| Mr. Geoff Hughes-Games, P.Ag. | - soil specialist, Resource Management Branch, Ministry of Agriculture, Food and Fisheries |
| Trevor Murrie, P.Ag. | - staff agronomist, Land Reserve Commission |

Purpose

The purpose of the visit was to investigate whether an inherent bio-physical constraint or limitation exists on the property to invalidate the use of an 'improved' agricultural capability rating (per the classification system described in 'Land Capability Classification for Agriculture in B.C.' 1983, MoE Manual 1).

Discussion

'Excess water (W)' and 'soil moisture deficiency (A)' were identified subclass limitations to agricultural capability of the subject property. Currently, their respective land capability classification ratings apply to the land in an unimproved state. In general, unless exceptional circumstance prevail, both of these limitations may be reduced through improvements associated with the installation of drainage and irrigation systems, respectively, and assuming adherence to sound, commonly applied, soil management practices. The objective was to determine what bio-physical constraints exist, that prevent these specifically identified limitations from being adequately alleviated and thereby prevents assessing the property with an improved rating.

Tasks as planned for the on-site visit:

- Provide the opportunity to the applicant to explain and/or identify those features that would prevent improvements to alleviate the identified agricultural capability limitations of the property.
- In locations that correspond to the different soils described by the applicant's soil consultant, three test soil pits would be dug by hand.
- Surface slopes along a traverse of the property would be determined to assess if the existing grades and elevation differential to the French Creek fluvial plain would allow for the installation of a drainage / irrigation system.

Prior to beginning the investigation, the tasks were explained to the applicant. The applicant expressed he understood my objectives and gave myself and Geoff Hughes-Games permission for them to be carried out. He explained that he, along with his acquaintance, would accompany us during the on-site, which they did.

Comments and Observations

Applicant's comments:

- The applicant commented that after the land was logged, he cleared the land with care and that the lay of the land was left intact without cutting or filling of high and low areas. An excavator was used to pull and stockpile the stumps (into 52 piles) on the property. The stumps were then burned.
- It was stated that attempts to cultivate the soil were unsuccessful, but that the soil surface was 'disked' and seeded.
- During the wetter months the water table is high. As well, significant amounts of water runs off the surface of the property.
- Swales were constructed to direct the surface runoff towards a ditch that runs parallel to the eastern boundary of the property, which eventually flows northward to French Creek. To convey the water beneath a gated access that crosses the ditch, the applicant also installed a culvert (estimated 600 mm diameter). The applicant indicated that the size of the culvert was necessary given the significant flow of water that runs off the property. In particular, the swales have helped keep the horse paddocks drier, where collected surface water has been a problem during the wetter months. The applicant further stated that he could not direct additional water to the ditch as it was on road right-of-way and crossed other private property.

Soil test pits:

The three, planned soil test pits were dug by hand with a spade shovel and trowel to depths ranging from 0.75 m to 0.95m. The soil profiles were examined by myself and Geoff Hughes-Games. Specifically of interest would be soil layers that may present significant mechanical resistance for deep tillage practices, or contain undesirable materials, such as coarse fragments or salts that may potentially be brought to the surface by such practices. The presence of roots, pores, mottles and soil moisture were noted.

Observations:

- Despite some physical resistance to the digging, under dry soil conditions, the soil test pits were successfully excavated by hand with a spade shovel and trowel. Greatest resistance was felt near the surface, with the resistance starting below the pasture LFH horizon. At one soil test pit, a surface layer of burned and loose material existed, which included ash, (the soil test pit was dug at the location of a burn pile). The resistant soil layers extended from depths of 5 cm to 25 - 30 cm, depending on the soil test pit. In all pits, the soils became easier to dig at greater depths.
- The dry consistence of soil within the resistant upper soil layers in the soil test pits ranged from 'slightly hard' to 'hard'. Below the resistant layer the 'dry consistence' was predominantly 'slightly hard' and where moist, the consistence was 'friable'. In no instance was the examined soil 'very hard', or of greater consistence such that the clod, or ped, could not be broken by force between the thumb and forefinger.
- At depths exceeding 80 cm, soil moisture was noted in two of the soil test pits.
- Mottles were observed near the surfaces of the soil profile, as were also described by the applicant's soil consultant. Their presence supports the claim that a seasonally fluctuating water table is either at or rises to cause soil saturation within the capillary fringe at shallow depths across the property.
- Few fine roots and (fine) pores were evident below the resistant layer at depths below 30 cm within the soil profiles.
- Salt accumulating, cemented or calcareous soil horizons were not observed, nor were any coarse gravels evident within the soil profiles (although scattered and infrequently observed, coarse fragments were observed on the field surface).

Topography and grade:

On an approximately south-west to north-east traverse across the property, the undulating surface sloped downwards approximately 2% towards the lowest part of the property, which was in the north-east corner of the property.

Over a limited area in the western part of the property, the increased slopes of the undulations approximated a hummocky surface expression.

It was estimated that the elevation drop to French Creek was approximately 24 m, from the south part of the top of embankment on the western side of the property. The embankment down to the fluvial plain was steep.

On various parts of the property swales were constructed to direct overland flow to a ditch along the eastern edge of the property. The applicant indicated that the ditch conveys the collected water northwards and eventually discharges to French Creek.

Summary and Conclusions

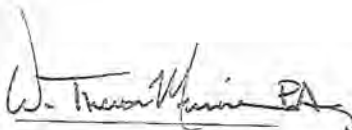
It is my professional opinion that:

1. The more limiting 'Land capability for agriculture in B.C.', subclass limitations for the property are 'excess water', which prevails during the wetter months, and 'soil moisture deficiency' during the growing season. I again apply an improved Class (2A), or possibly Class (3A), agricultural rating to the subject property, given my opinion that the 'excess water' limitation can be alleviated.
2. The potential for improvements, achievable through sound soil management practices alone, would alleviate much of the agricultural limitations experienced on the property.
3. With the installation of a suitably designed drainage system, the 'excess water' limitation could be entirely alleviated, with the potential for additional benefits to partially alleviate droughtiness as well, which is experienced during the drier months of the growing season.

4. Given that the soil test pits could be dug by hand using a spade shovel and from inspection of the soil profiles, no soil layer or soil physical constraints were observed that could not be broken through mechanical means at suitably low moisture contents. Nor was there any evidence of coarse fragments, salts or calcareous layers that would restrict or make unsuitable the practices of sub-soiling or deep-cultivation, given the potential for them being brought to the soil surface. [By breaking the resistant soil layer observed near the surface the rainfall infiltration rate will increase. This will allow precipitation to enter the soil except during low probability, extremely high intensity/duration, rainfall events where runoff cannot be avoided. Deep-tillage practices also increase the soil porosity, especially 'aeration porosity', within the cultivation zone and thereby decreases the soil bulk density. These represent improved soil conditions that will enhance root distribution and soil tilth, including soil biological activity. By adhering to these practices improved soil drainage is also expected. Moreover, with enhanced soil tilth, over time the AWSC of the soil is expected to increase. This will decrease the SMD and thereby reduce the 'soil moisture deficiency' limitation during the growing season as well. The improvements from tillage alone reduce the identified 'W' and 'A' subclass limitations and in my opinion warrants the use of improved 'agricultural capability' ratings on the property.]
5. Should the water table rise within the rooting zone, a soil drainage system could be installed to control the height of the water table. The ditch along the eastern boundary apparently already conveys a significant amount of water that concentrates from overland flow on the property. The drainage from in-field drains should result in reduced flow rates as the concentration (collection) time is increased as the water must conduct through the soil. With improved drainage infrastructure that meets a suitably designed drain system, including ditch maintenance, a ditch along the eastern boundary could provide a viable outlet (the applicant indicated however that this would require cooperation and participation with other landowners).
6. Another drainage option is to drain the land towards a collector pipe with an outlet draining to that reach of French Creek adjacent to the western boundary of the property. Sufficient elevation drop to French Creek exists such that the pipe could be graded across the entire field if required.
7. Another drainage / irrigation improvement option is to construct a retention pond to receive and store during the winter months a portion of the drained water for future irrigation use. [Over a relatively recent period of 8 years (1984 – 1988, 1990 – 1992), the mean winter month (Oct. – Apr.) period precipitation was 863 mm, ranging from 513 mm to 1164 mm]. Constructing a dugout or detention pond to store a portion of this precipitation for irrigation purposes would reduce the soil moisture deficiency limitation.
8. Generally stated, a host of improvement options exist to warrant the use of an improved agricultural capability rating on the subject property.

Recommendation

Based on the improved ratings for the subject property my recommendation to the Commission is to refuse the exclusion application.



Trevor Murrie, P.Ag.
Land Reserve Commission, Staff Agrologist

AUG. 23 / 2002

1:00 PM TIME

ARRIVAL

EXAMINE UPPER LAYER OF SOIL START 1:15 PM

3 HOLES

EXAMINATION STOP

3:55 P.M.

Done Maden

2 Hrs 40 min



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PROFESSIONAL AGROLOGIST REVIEW OF:

**AGRICULTURAL CAPABILITY AND SOIL
CLASSIFICATION**

OF THE:

**NORTHERLY 977 FEET OF LOT 1,
DISTRICT LOT 141,**

NANOOSE AND NEWCASTLE DISTRICT

COOMBS, BC

MARCH 20, 2006

PREPARED FOR:

**MR. HOWARD FOWLER
COOMBS, BC**

Phone/Cell: 250 – 213-6441 Fax: 250 – 383-9122 Email: hinkley1@telus.net

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1.0 INTRODUCTION

Whiskeyjack Land Management Corp. (WLMC) was retained by Mr. Howard Fowler of Coombs, BC to examine and report on the agricultural capability and soil classification of a 12.26 hectare parcel of his private land located on south-east Vancouver Island. The purpose of the report was to provide soils data in support of an application by Mr. Fowler previously submitted to the Provincial Agricultural Land Commission (ALC), for exclusion of the property from the Agricultural Land Reserve (ALR).

The subject parcel is located north of Coombs, BC, which is about 6 kilometers west of the town of Parksville on Vancouver Island, and contained within the Nanaimo Regional District (Figures 1 & 2 below display the location of the parcel in relation to Coombs and the Parksville area). The parcel is legally described as **“That part of Lot 1, District Lot 141, Nanoose and Newcastle District, Plan 2273, lying to the north of a boundary parallel to and perpendicularly distant 977 feet from the northerly boundary of said Lot 1”**. The entire parcel is contained within the ALR, although some adjacent parcels have been removed via the ALC application process in the past.

The parcel was purchased in 1997 by Mr. Fowler, as he was in serious need of hay and pasture land to support his existing purebred horse ranch operating on the adjacent property. He purchased the property from the previous owner, MacMillan Bloedel based on detailed soil classification data contained within BC Soil Survey Report No. 57, MOE Technical Report 30 written by John Jungen and Phil Christie of the BC Ministry of Environment (Refer to Section 5.0 References on page 20). After logging was completed by MacMillan Bloedel, Mr. Fowler contracted the clearing, disking, and seeding of the property, which did not produce a harvestable hay crop or grazing vegetation that year, or any year since. The result has been that the economics of continuing to operate the purebred horse ranch are inhibited by significant soil and water limitations, and the high cost of importing hay from outside the Region (*personal communication with Mr. Fowler*).

The subject parcel had been inspected and reported on by Joe Fitzpatrick, PAg in August of 2001. According to Mr. Fowler, it was at this point that he learned that the soils data contained within BC Soil Survey Report No. 57 incorrectly classified the soils within the subject parcel. Based on this information, Mr. Fowler submitted an exclusion application to the ALC with Mr. Fitzpatrick’s report providing supporting information¹. In his report, Mr. Fitzpatrick had determined that the soils classified within the parcel were non-arable, and recommended that **“its exclusion from the Agricultural Land Reserve would not affect the British Columbia agriculture industry”** (Fitzpatrick Land Resource Consultants Report, 2001, page 4; paragraph 6). However the application was refused by the ALC in March of 2003.

1. Fitzpatrick, Joe; AGROLOGIST’S REPORT, 2001. Fitzpatrick Land Resource Consultants, Penticton, BC

Additional soils investigations had been undertaken on adjacent parcels in the past by Pedologists, Soil Surveyors, as well as Regional District, ALC and BC government representatives. Refer to Section 2.1 below for a review of these various investigations and reports.

Mr. Hinkley inspected the subject parcel on August 30th and 31st of 2005. While the initial intention of the inspection was to produce a report describing the soil classification and arability within the parcel, it became apparent to Mr. Hinkley through his preliminary research, plus investigations of multiple documents and reports in Mr. Fowler's possession, that another report of this type would be redundant. Based on his review of the numerous documents and reports in Mr. Fowler's possession, Mr. Hinkley proposed to conduct an inspection of the subject parcel to assess the accuracy of the report produced by Mr. Fitzpatrick, and produce a summary report based on his review of all available documentation and mapping of the subject parcel and the surrounding area. Mr. Fowler agreed to this proposal and the following Sections address these topics.

FIGURE 1

AREA MAP SHOWING THE LOCATION OF THE SUBJECT PARCEL

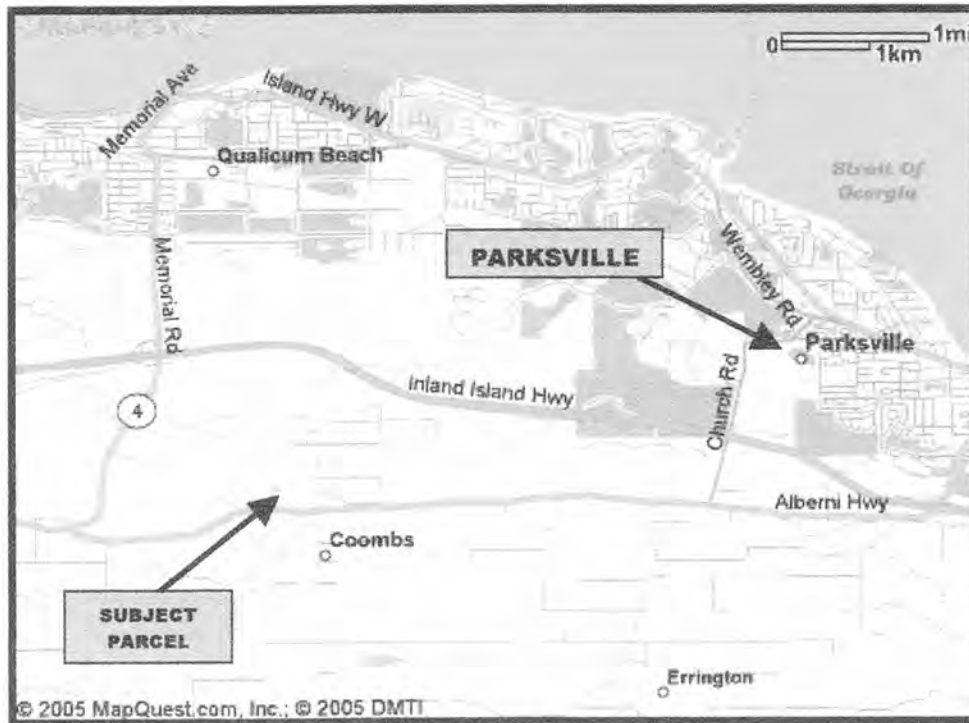
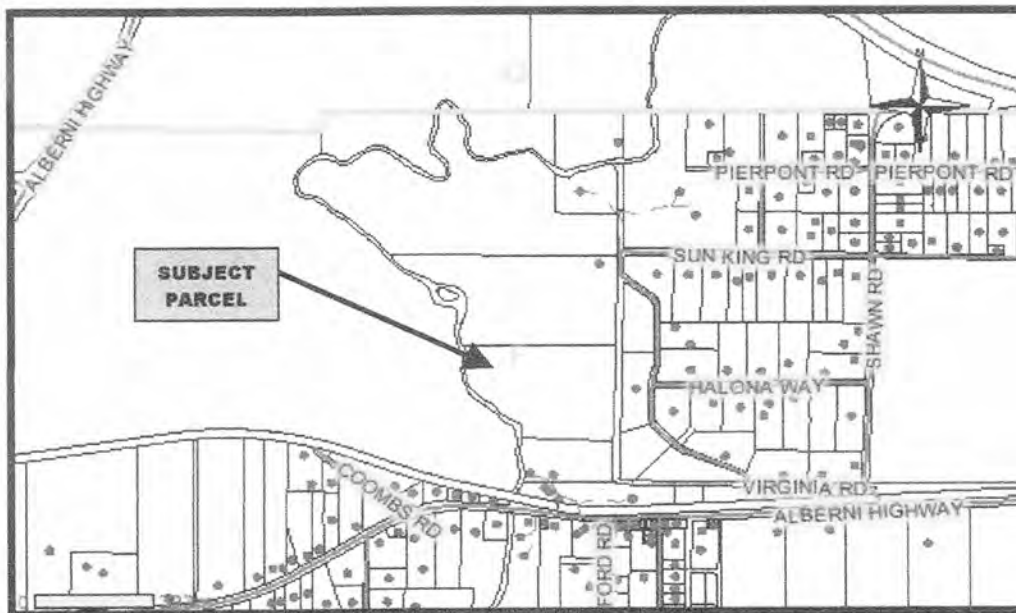


FIGURE 2

COOMBS NEIGHBOURHOOD MAP SHOWING THE LOCATION OF THE SUBJECT PARCEL



2.0 REGIONAL SOIL INVESTIGATION HISTORY

Soils within the Region were initially investigated and reported on by J.H. Day, L. Farstad, and D.G. Laird in 1959 ¹. This type of soil survey was considered to be at a reconnaissance level (mapping scale of 1:50,000), with access at the time relatively limited within the subject area. In verbal communications with Mr. Fowler, Mr. Farstad advised that "**none of their field crews had actually inspected the soils within the subject or adjacent parcels**", and that "**the majority of the soil mapping was completed with the use of reconnaissance airphoto's**" (verbal communication with Mr. Fowler).

Soils in the Region were again surveyed and reported on in 1989 by J.R. Jungen, P.G. Christie, and J.P. Philp ². This survey and report were conducted and produced at a much more detailed level (survey level 2 according to "A Proposed Mapping System for Canada, 1979" and at a mapping scale of 1:20,000), with "**at least one soil inspection in over 90% of map delineations, with boundaries frequently checked in cleared areas, or less frequently in forested areas**" (Ministry of Environment Report; page 20; section 2.2; paragraph 1). It should be noted that the subject parcel and adjacent lands were covered by a dense stand of second growth timber at the time the field work for this report was undertaken.

Soils occurring within the subject parcel were classified within the 1989 report as the Cowichan Soil Association (Orthic Humic or Humic Luvic Gleysols, developed on poorly drained fine, marine blanket materials, and Brigantine Soil Association (Gleyed Dystric or Gleyed Sombric Brunisols, developed on imperfectly drained sandy marine, fluvioglacial or fluvial veneer over fine silty marine materials). The agricultural capability classification of these soils was rated as Class 4WA (excess water and soil moisture deficiency in combination), improvable to Class 2AD (soil moisture deficiency and undesirable soil structure and/or low perviousness) throughout the map polygon, which covers approximately 80% of the soils within the subject property.

In 1981, Mark Walmsley, PAg of Pedology Consultants, of Victoria, BC was commissioned by Mr. Fowler to conduct a detailed soil survey and agriculture capability assessment of District Lot 23, which comprised 64 hectares and is immediately adjacent to the subject parcel along its eastern boundary ³. Please refer to Section 2.1 below for a more thorough review of the Pedology Consultants report and mapping.

1 Day, J.H.; Farstad, L.; Laird, D.F. 1959. Soil survey of southeast Vancouver Island and Gulf Islands, British Columbia. Report No. 6 of the British Columbia Soil Survey.

2 Jungen, J.R.; Christie, P.J.; Philp, J.P. 1989. Soils of southeast Vancouver Island – Parksville, Qualicum Beach, Courtenay, and Port Alberni areas. BC Soil Survey Report No. 57, MOE Technical Report 30. 219 p.

3 SOIL SURVEY AND AGRICULTURE CAPABILITY EVALUATION OF D.L. 23, NANOOSE DISTRICT; M.E. Walmsley; Pedology Consultants, 1981. Victoria, BC.

In December of 1982, Mr. Fowler was advised in a letter from Bob Maxwell, PAg of the Ministry of Environment that ***“Our mapping project experienced budget cuts in July/82; we had to lay-off ten employees. Consequently, we did not survey the area between Coombs and Qualicum Beach, which includes D.L. 23”*** (refer to Appendix 1). Later on, in November of 1983, Mr. Fowler received a letter from John Jungen, PAg, again of the Ministry of Environment explaining that ***“In carrying out our field program this summer the field surveyor noted that your property had been surveyed in much greater detail, (i.e. 1:10,000) than our mandate of 1:20,000, by Ministry personnel as well as several private agencies. Accordingly, the mapping on your property is based on these more detailed inspections which are on file with the Land Commission”*** (refer to Appendix 2).

According to Mr. Fowler, a qualified soil surveyor, soils specialist, or pedologist never inspected and reported on the soils within the subject parcel, prior to Mr. Fitzpatrick’s inspection of 2001. My research of the reports, maps and related information provided to me by Mr. Fowler reflects his comments. As well, soil classification and agricultural capability ratings covering the subject property do not reflect the detailed soil mapping and reporting on the adjacent D.L. 23 that was conducted by Mr. Walmsley in 1981. The map produced from these inspections was produced at an approximate scale of 1:2,400, which is more than 8 times greater detail than that conducted for Soil Survey Report No. 57. A more detailed review of this report is provided in Section 2.1 below.

2.1 SUMMARY OF SOIL INVESTIGATIONS AND CURRENT LAND USE ON ADJACENT PROPERTIES

As described in Section 2.0 above, two major soil survey reports were produced for the soils within the region in 1959 and 1989, the first being at a reconnaissance level and the second at a more detailed level. However, there is no evidence that soil surveyors from either of these mapping and reporting projects actually conducted site/soil investigations within the subject parcel or adjacent parcels.

In 1981, Mark Walmsley, PAg of Pedology Consultants, of Victoria, BC was commissioned by Mr. Fowler to conduct a detailed soil survey and agriculture capability assessment of District Lot 23, which comprised 64 hectares and is immediately adjacent to the subject parcel along its eastern boundary¹.

In his report, Mr. Walmsley classified the soils as a combination of mainly Podzolic and Gleysolic soil orders, with minor inclusions of Organic soils. The Podzolic soils were dominated by Duric Phases of the Humo-Ferric Great Group, whereas the Gleysolic soils were dominated by the Humic Gleysol Great Group. It is important to note that Mr. Walmsley classified the soil polygons bordering the subject parcel along its eastern boundary as Orthic Humic Gleysol; Peaty Phase (map unit 3). This classification is more or less confirmed in Mr. Fitzpatrick's report of 2001, which classifies the soils along the eastern boundary of the subject parcel as Orthic Humic Gleysol.

In assessing the agricultural capability of the soils adjacent to the subject parcel, Mr. Walmsley summarized his findings as follows:

"In the broad sense, the main limitations to agriculture on these soil types are climate and either soil wetness or droughtiness. This combination of inherent soil and climatic limitations will be difficult to overcome due to the lack of available irrigation water and the extensive amount of drainage required throughout most of the property. The nature of the fine textured subsoil will require a large investment in closely spaced drain tiles to adequately drain the property and even if this were accomplished, it will be extremely difficult to find an area where the soils can be drained to as a consequence of the depressional nature of the topography throughout much of the property" (Pedology Consultants Report, 1981, page 8).

Mr. Walmsley classified the agricultural capability of the soils bordering the subject property as Class 6WD (Excess water and undesirable soil structure and/or low perviousness), improvable to Class 5WD to Class 4W. However, based on his comments, the ability of the landowner to improve the capability class by installing drainage and irrigation systems would be limited by the soil and parent material characteristics and the costs would be extremely prohibitive.

1. SOIL SURVEY AND AGRICULTURE CAPABILITY EVALUATION OF D.L. 23, NANOOSE DISTRICT; M.E. Walmsley; Pedology Consultants, 1981. Victoria, BC.

It should be noted that Mr. Walmsley's report formed the basis of a subsequent application to the ALC by Mr. Fowler and the removal of all of D.L. 23 from the ALR was approved. Mr. Fowler eventually subdivided D.L. 23 into multiple 5 acre parcels, all of which have now been developed. Of all the parcels developed and built on within D.L. 23, only two have been developed for commercial or industrial use ***not related to agriculture***. All the rest have been developed as hobby farms or horse riding stables, all of which rely on outside agricultural operations to provide additional feed and related services for their animals.

As part of his investigations Mr. Hinkley inspected and photographed many of the properties developed within D.L. 23, and as noted above, the majority of these have been developed as hobby farm or agricultural business enterprises. A few notable properties are shown in photographs 1 through 4 below.

PHOTO 1



View of a hobby farm located within adjacent District Lot 23.

It should be noted that Mr. Walmsley's report formed the basis of a subsequent application to the ALC by Mr. Fowler and the removal of all of D.L. 23 from the ALR was approved. Mr. Fowler eventually subdivided D.L. 23 into multiple 5 acre parcels, all of which have now been developed. Of all the parcels developed and built on within D.L. 23, only two have been developed for commercial or industrial use ***not related to agriculture***. All the rest have been developed as hobby farms or horse riding stables, all of which rely on outside agricultural operations to provide additional feed and related services for their animals.

As part of his investigations Mr. Hinkley inspected and photographed many of the properties developed within D.L. 23, and as noted above, the majority of these have been developed as hobby farm or agricultural business enterprises. A few notable properties are shown in photographs 1 through 4 below.

PHOTO 1



View of a hobby farm located within adjacent District Lot 23.

PHOTO 2



View of a hobby farm located within adjacent District Lot 141.

PHOTO 3



View of a hobby farm located within adjacent District Lot 23.

As noted above, most if not all of these properties rely on outside agricultural operations to provide winter and quite often, summer feed for their livestock as the availability of irrigation water through drilled wells is rare, and very low in production volume when available. These small agricultural operations also rely on a range of agricultural services such as farriers, veterinarians, fencing contractors, etc., and occasional hay cutting and baling services when weather conditions are ideal.

2.2 SUMMARY OF SOIL INVESTIGATIONS ON THE SUBJECT PROPERTY

As described earlier, soils within the subject parcel were inspected and described by Joe Fitzpatrick, PAg in 2001. The results of my research indicated that Mr. Fitzpatrick was the only qualified Pedologist to actually inspect and report on the soil classification and agricultural capability within the parcel. In his report he states that the 1989 soil survey was at a level of detail that should have resulted in one or two inspections being conducted within the parcel, but none were completed. This was confirmed verbally by Mr. Fowler, who has owned the adjacent property since 1969, and in writing by both J.R. Jungen, and R. Maxwell of the Ministry of Environment who advised Mr. Fowler in separate letters that his private parcel (the adjacent parcel District Lot 23) was not inspected by Soil Surveyors mapping the area for the 1989 report (refer to Appendix A & B).

In his report, Mr. Fitzpatrick described the soils as mainly Gleysolic, ranging to Gleyed Brunisols near the western boundary of the parcel, on the floodplain adjacent to French Creek. Soil associations described in the report were Cowichan, Parksville, Brigantine and Fairbridge, which confirmed that only two of these soil associations were identified correctly in the 1989 survey report Number 57, which classified the soils in the area as Cowichan, Brigantine, McLean Creek and Trincomali. Surface soil textures ranged mainly from sandy loam to silty clay loam. These soils associations are described in detail in soil survey reports Number 6 and Number 57 identified in Section 2.0 above.

Mr. Hinkley conducted an inspection of the subject parcel initially on August 30th and again on August 31st utilizing a shovel and soil auger to inspect the soils. This inspection confirmed the accuracy of Mr. Fitzpatrick's findings stated in his report, although at that time of year the soil surface of the entire parcel was very dry, except for minor depressions where moisture had collected. The subsurface horizons were extremely hard to penetrate due to the combination of soil texture, structure, and very low soil moisture content. This obviously contributes to the Class 5 capability ratings established by Mr. Fitzpatrick and would severely restrict cultivation and plant root growth.

3.0 REVIEW OF AGRICULTURAL CAPABILITY RATINGS ON THE SUBJECT PROPERTY

The Land Capability Classification for Agriculture in British Columbia, 1983 was referred to for all ratings described in this report (Refer to the list of references in Section 5).

Mr. Fitzpatrick classified the agricultural capability of the soils on the subject property as mainly Class 5W. He also identified an aridity deficiency range of Class 3A – 5A. However, the combination of these two capability subclasses on the soils on the same parcel can be so limiting that improvements may not be practical and/or economical. Mr. Fitzpatrick describes in his report that installing a drainage system on such a relatively small parcel is not practical. He states ***“For most of this field, soil drainage is not feasible. Tile drains would have to be installed at a close spacing. The water would be carried to the lowest point, which is in the northeast corner. But from there, there is nowhere for the water to go”*** (Fitzpatrick Land Resource Consultants Report, 2001, page 3; paragraph 6). In regard to the soil moisture deficit, he goes on to state ***“Irrigation water is unavailable: wells in the area have low flow rates, and French Creek is salmon-bearing, so gaining water rights is unlikely”*** (Fitzpatrick Land Resource Consultants Report, 2001, page 4; paragraph 1). The fact of the low water well flow rates was confirmed by Mr. Fowler, in that he has drilled multiple wells in the area, but they do not provide adequate water for his household and livestock watering, let alone irrigation of hay crops. In fact, as of November, 2005 Mr. Fowler has advised that the well supplying water to his house has now run dry, and the well depth will have to be extended at considerable expense.

Given that the dominant soil associations classified on the subject property are Cowichan and Fairbridge, it is important to note the limitations also identified in the 1989, Soil Survey Report #57. These comments are as follows:

“Cowichan soils contain excess moisture during the spring which causes trafficability problems and planting delays. Winter ponding often kills or injures perennial crops as well. Both these limitations have historically restricted agricultural use to hay production or pasture. Many farms have increased the range and production of crops by installing artificial drainage. Drainage lines must be closely spaced due to the slow soil permeability” (Report #57, Page 84, Paragraph 2).

For the Parksville soil association the same report states:

“Present land use is mainly hay and pasture as spring planting of other crops is often impractical due to wet soil conditions. With irrigation and drainage Parksville soils can be used for growing a wide range of crops” (Report #57, Page 141, Paragraph 3).

The comments from that report mirror very closely Mr. Fitzpatrick's comments regarding the soils within the subject parcel, as well as Mr. Walmsley's comments for much of the soils within the adjacent D.L. 23. Given my recent investigation of the soils within the subject parcel, I would concur with all previous comments in their respective reports, and reinforce statements by Mr. Fitzpatrick and Mr. Walmsley alluding to the non-arable nature of the soils in this area.

Given my extensive experience in farming and related cultivation practices, I also concur with Mr. Fowler that regular cultivation to control weeds and manage crops is virtually impossible. In the case of weed control, this forces the land owner to resort to chemicals which harm the environment, potentially migrate into the adjacent Salmon bearing stream (French Creek), and adjacent properties, and possibly harm the livestock that would normally benefit from the control of weeds.

In the case of the drainage limitation, and as per previous comments by my Agrologist colleagues, installing a drainage and water containment system is impractical and very cost prohibitive. Drainage systems would have to be spaced very close together at a high cost. Bedrock depth in the area recommended for the detention pond is within 3.0 meters, so blasting of the dugout would be required and it would have to be lined with an impermeable tarp, all at high cost. The ditch required to drain excess runoff from the detention pond would have to be dug to a depth of ~13.0 meters at its western exit point, also requiring blasting. The ditch itself would be nearly 450 meters long and ~3 - 5 meters wide, therefore requiring additional fencing and/or installation of a culvert or large drainage pipe and backfilling. As well, a permit from the Federal Department of Fisheries and Oceans would be required to allow pond runoff to enter the adjacent French Creek.

In regard to the climatic moisture deficit, the area is incapable of producing a single cut of hay on a regular basis. As discussed earlier, the application of irrigation water is virtually impossible due to the lack of subsurface water or underground aquifers. The result is having to purchase hay from outside sources. Given the nature of the agribusiness conducted on this parcel, high quality hay from outside the region is required for the purebred Morgan horse operation, and Mr. Fowler has spent considerable sums of money over the years as a result of this limitation alone.

4.0 CONCLUSION

The subject parcel has been classified in detail by a qualified Pedologist as outlined earlier in this report. That report lists an agricultural capability Class of 5 with excess soil moisture in the spring, and soil moisture deficits occurring later in the growing season. As well, detailed soil surveys have been undertaken on adjacent parcels, by equally qualified Pedologists, with soil polygons rated as Class 6 that naturally would exist at least along the eastern boundary of the subject parcel and extend into it.

During Mr. Hinkley's inspections of the subject parcel, it was apparent that vegetative growth of the pasture grass species was limited and minor invasions of weed species was evident (refer to Photo 5 below). Mr. Fowler advised that he normally starts purchasing and importing hay bales in the early summer from as far away as Alberta, in order to keep his livestock fed with quality hay. This results in additional feeding costs that would not normally be required if the pasture lands provided adequate feed from spring through to fall, and hay land provided a means for the owner to put up hay for winter feeding of his livestock.

PHOTO 4



View of pasture vegetation within the subject parcel

The combination of the excess water in the spring and the soil moisture deficit as the season progresses severely restricts the agricultural capability of the soils within the subject parcel. As a result, the viability of the current ranch operation is called into question.

Given the agricultural nature of the subdivision development surrounding the subject parcel, I concur with Mr. Fitzpatrick in that the removal of this parcel from the ALR will not negatively affect the BC agriculture industry. In fact, as described earlier, I feel the opposite may be the case and the agriculture industry could benefit in general for the region and specifically for the local industry if additional small hobby farms result from the development of the subject parcel.

APPENDIX ONE

Letter to Howard Fowler from Mr. Bob Maxwell, dated December 15, 1982.



Dec. 15, 1982

File #1.0.16

Howard M. Fowler, P. Eng.,
Box 59,
Coombs, British Columbia,
V0R 1M0

Dear Sir:

With regard to your property D.L. 23 Nanoose
Land District.

Our mapping project experienced budget cuts
in July/82; we had to lay-off ten employees.
Consequently, we did not survey the area between
Coombs and Qualicum Beach, which includes D.L. 23.

Hopefully, next year we will complete this
area.

Yours truly,

ROBERT MAXWELL, P.Ag.

RM/pe

APPENDIX TWO

Letter to Howard Fowler from Mr. John Jungen, dated November 28, 1983.



Province of
British Columbia

Ministry of
Environment

Assessment and
Planning Division
Terrestrial Studies Branch
1873 Spall Road
Kelowna
British Columbia
V1Y 4R2

November 28, 1983.

File: 1.011

Mr. Howard M. Fowler,
P.O. Box 59,
Coombs, British Columbia
V0R 1M0

Dear Mr. Fowler:

Please be advised that Mr. K. Millar from the Agricultural Land Commission is in charge of Agricultural Land Reserve (ALR) Fine Tuning Program on Vancouver Island. My responsibilities include the supervision of the soil and agriculture capability surveys ensuring that provincial and national standards and procedures are followed.

The detailed soil and agriculture capability survey along the east coast of Vancouver Island provides new base information which can be used by the Land Commission for fine tuning the existing ALRs. Our survey includes lands both within and outside present ALR boundaries. In this program we produce agriculture capability maps at a scale of 1:20,000 whereas previous mapping was at a scale of 1:50,000. This increase in mapping detail greatly facilitates improving the ALR boundaries.

In carrying out our field program this summer the field surveyor noted that your property had been surveyed in much greater detail, (i.e. 1:10,000) than our mandate of 1:20,000, by Ministry personnel as well as several private agencies. Accordingly, the mapping on your property is based on these more detailed inspections which are on file with the Land Commission. Consequently, no personnel from the Vancouver Island Detail Survey have visited your property.

Mr. Howard M. Fowler

- 2 -

November 28, 1983

The field work for the Parksville-Qualicum area has been completed. The maps are now being prepared and will be submitted to the Land Commission by April, 1984. When these maps are released by the Land Commission we will be pleased to send you a copy of the appropriate map.

Yours truly,



J. Jungen, P.Ag.

JJ:jk

c.c. K. Millar, Agricultural Land Commission
R.H. Louie, Ministry of Environment

5.0 REFERENCES

Howes, D. and Kenk E. (Eds.). Terrain Classification System for British Columbia (version 2), 1997. MOE Manual 10. Victoria, BC.

Kenk, E. Land Capability Classification for Agriculture in British Columbia. MOE Manual 1, 1983. BC Ministry of Agriculture and Food, BC Ministry of Environment. Victoria, BC.

Day, J.H.; Farstad, L.; Laird, D.F.; Soil survey of southeast Vancouver Island and Gulf Islands, British Columbia, 1959. Report No. 6 of the British Columbia Soil Survey. Kelowna, BC

Jungen, J.R.; Christie, P.J.; Philp, J.P.; Soils of southeast Vancouver Island – Parksville, Qualicum Beach, Courtenay, and Port Alberni areas, 1989. BC Soil Survey Report No. 57, MOE Technical Report 30. Victoria, BC

Luttmerding, Herb; Demarchi, D.A.; Lea, E.C.; Meidinger, D.V.; Vold, T.; Describing Ecosystems in the Field (2nd Ed.), 1990. MOE Manual 11. Victoria, BC

Soil Classification Working Group; The Canadian System of Soil Classification (3rd Ed.), 1998. NRC Research Press, Ottawa, Canada.

Canada Land Inventory; Land Capability for Agriculture Maps (1:50,000 scale). BC Ministry of Environment, Victoria, BC

The Canada Land Inventory, Soil Capability Classification for Agriculture, Report No. 2 - 1972. Lands Directorate, Department of the Environment, Ottawa, Canada

Research Branch, Canada Department of Agriculture; Glossary of Terms in Soil Science, Publication 1459; Revised 1976. Ottawa, Canada

Fitzpatrick, Joe; AGROLOGIST'S REPORT, 2001. Fitzpatrick Land Resource Consultants, Penticton, BC

Walmsley, M.E.; SOIL SURVEY AND AGRICULTURE CAPABILITY EVALUATION OF D.L. 23, NANOOSE DISTRICT, 1981. Pedology Consultants, Victoria, BC



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Facsimile: (250) 384-1201

August 28, 2006
OUR FILE: V1934-0100

Island Morgan Horse Farm
PO Box 59
Coombs, B.C. V0R 1M0

Attention: Howard Fowler

Dear Mr. Fowler:

**Re: *Irrigation Storage and Drainage Study for Island Morgan Horse Farm
N. 977 Feet of Lot 1, District Lot 141, Plan 2273 DL***

WorleyParsons Komex was retained to conduct an irrigation storage and drainage study for Island Morgan Horse Farm. The property is owned by Mr. Howard Fowler and has a legal land designation of N. 977 Feet of Lot 1, District Lot 141, Plan 2273 DL.

1. SCOPE OF WORK

This preliminary design of irrigation storage and drainage improvement works on the Fowler property is intended to be used in discussions with the Agricultural Land Commission (ALC) to demonstrate the costs associated with land improvements suggested by Trevor Murrie, P.Ag., the staff agrologist for the Land Reserve Commission, in two reports both dated July 10, 2002 File #: 02-S-EAS-2002-34255 (Murrie, 2002a and b). To support this endeavour, WorleyParsons Komex completed the following tasks:

- dug test pits in the area of the proposed pond and along the overflow route to determine ground conditions and depth to bedrock;
- developed a drainage improvement plan for the Fowler property;
- developed a retention pond design to facilitate irrigation of the Fowler property;
- produced a schematic illustrating the layout of these systems; and
- determined the approximate costs of implementing the drainage system and irrigation storage.

2. OVERVIEW OF MAJOR ISSUES

Two climatic variables have been identified as limiting the agricultural potential of this land parcel in its unimproved state: an over abundance of water during spring planting and a moisture deficit during the growing season. Abundant rainfall in the fall and winter months leads to a saturated soil condition on the Fowler property during the spring planting season that is detrimental to plant root establishment. The shallow root structure developed early in the growing season leaves the crop susceptible to drought conditions which are prevalent later in the growing season. All agrologist reports reviewed as part of this project agree that the climatic variables noted above are limiting factors to the agricultural productivity of

the property (Fitzpatrick, 2001; Murrie, 2002 a and b). In his reports, Mr. Murrie (Murrie, 2002a and b) suggests that the climatic variables could be mitigated by installing subsurface drainage and an irrigation system. It is based on this suggestion that he states that the property be given an improved agricultural land rating.

To determine ground conditions in the vicinity of the proposed pond and overflow pipe locations, six test pits were dug on June 15, 2006 along the northern edge of the property. Test pit locations are presented on the attached map. The pits were dug between 2.6 m and 3.4 m below ground surface (bgs) and encountered a variety of materials. Deeply weathered shale with numerous cracks was encountered in test pit 2 at a depth of 2.6 m bgs. This shale rock was prevalent on the French Creek embankment that forms the western property boundary. All other test pits encountered cobbles and granular material that is ill suited to the retention of water at depths between 1 m and 3 m bgs. In light of these findings, it is recommended that any water retention structure on the property be lined with a clay or synthetic liner material.

During the June 15, 2006 site visit several large depressions were noted in the northwest portion of the property. To facilitate irrigation and subsurface drainage improvements in the area these depressions would require levelling. A detailed topographical survey of the area would be required to quantify the amount of fill needed to level these areas.

3. PRELIMINARY DESIGN ALTERNATIVE

To improve drainage on the property and encourage robust plant root growth, the installation of a subsurface drainage network consisting of small diameter, perforated pipes is proposed. This system would collect excess water being held in the soils and convey it to a solid central collection pipe that would ultimately drain to a pump sump next to the proposed irrigation storage pond. This network of pipes would be situated 0.8 to 1.2m bgs such that they would not interfere with farming activities. A high volume, low head pump would be installed in the pump sump to discharge the collected water to the irrigation pond. A potential layout of this system is illustrated in the attached drawing.

Evapotranspiration and precipitation data for the Nanaimo and Comox Airports from "farmwest.com" were used to determine the amount of irrigation required on the Fowler property (farmwest.com, 2004). Historically the average moisture deficit that occurs during the growing season from May 1 to Sept 30 is 468 mm at the Nanaimo Airport and 455 mm at the Comox Airport. Measurements taken from 2001 - 2005 at these locations have an average moisture deficit of 526 mm and 468 mm, respectively. To ensure an adequate supply of water is available for irrigation of the property, 468 mm was adopted as the moisture deficit for irrigation calculations. As Mr. Murrie points out in his report, more than adequate rainfall occurs during the winter months and can be stored to offset this deficit in the growing season.

The calculated water requirement for an irrigable area of 8.5 hectares was determined to be 41,500 m³ for the entire growing season. This was determined using the method of calculating the water

requirements outlined in the Landscape Irrigation Scheduling Calculator – User Guide (Van der Gulik, 2005). Due to a lack of water sources in the area, all irrigation water required would have to be collected and stored onsite in an excavated irrigation pond. Most of the water stored will originate as surface runoff and a small proportion from subsurface drainage. As previously stated, this irrigation pond would need to be lined to retain irrigation water and prevent infiltration. A 0.5 m thick clay liner is recommended for this application due to the potential for puncturing a synthetic liner by the animals present on the farm. The dimensions of the pond have been estimated at 165 m long (east to west), 120 m wide (south to north) and 2.5 m deep with 3:1 sideslopes. Approximately 2 hectares of land would need to be taken out of potential production to accommodate a storage pond of this size. In order to impound water in British Columbia a water storage licence and water use licence must be acquired from the Ministry of Environment under the Water Stewardship Division (Van der Gulik, 2003). Costs associated with the procurement of these licences have not been accounted for in this study.

4. COST ESTIMATE OF IMPROVEMENTS

Costs associated with the excavation of the detention pond and construction of a low permeability clay liner is highly dependent on the topography and the type of soil that exists in the area. Approximately 51,000 m³ of soil would need to be excavated for the irrigation pond. An additional 7,100 m³ of material would need to be excavated, backfilled and compacted for the installation of the overflow pipe to French Creek. Bedrock is likely to be encountered at 3 m bgs significantly increasing excavation costs. The estimated unit cost of excavating and backfilling the overflow trench has accounted for the expected bedrock excavation. The excess soil removed from these excavations could potentially be used to build up the low lying areas of the site, depending on its quality. Due to the large amount of material that may not be used onsite, a suitable disposal site would need to be located. The hauling and dumping of excess fill has not been accounted for in this cost estimate. To ensure the pond is capable of holding water through the growing season, approximately 9,000 m³ of clay would need to be imported, placed and compacted to form a 0.5m thick liner. The approximate cost of the pond construction including the overflow pipe to French Creek is \$505,000. This cost does not include the installation or purchase of irrigation equipment.

Inglis Drainage, of Ladysmith, was contacted to provide a rough cost estimate for the installation of subsurface drainage on 8.5 ha of the Fowler property. The cost of the subsurface drainage network was estimated (without the benefit of a detailed site investigation) at \$53,000 plus an additional \$10,000 for the pumping station. More accurate information relating to the soil condition in the area may change this price significantly. The cost of the mechanical and control equipment for the pump was estimated to be \$5,000.

Engineering activities associated with the design, inspection and project management of the irrigation pond, the overflow and energy dissipater is expected to be on the order of 10% of the total construction

costs.

Costs associated with the levelling of depressions noted in the western portion of the property have not been accounted for in this assessment as no means of quantifying the amount of fill required was available. The cost for filling these depressions could add significantly to the total construction cost.

A breakdown of the aforementioned costs has been provided in the attached cost estimate. A contingency of 5% has been added to the construction cost estimate to account for any items overlooked in this preliminary assessment.

The estimated total cost of the works described above, exclusive of legal fees, permits, upgrades or extensions of electrical services, removal and replacement of fences and meetings or negotiations with government agencies, is estimated to be \$659,000 \pm 30% in 2006 construction dollars.

In 2013 dollars this could easily exceed \$1,000,000⁰⁰


HMF

5. CLOSING

The preliminary designs outlined above have the potential to improve the agricultural rating of the Fowler property as suggested by Mr. Murrie's report (Murrie, 2002a and b). If these improvements were completed and an irrigation program implemented, it is expected that Mr. Fowler could harvest two cuts of forage per season to feed his horses. Assuming an average crop yield of 5 tons/acre (reduced from 7 tons/acre as mentioned in Jill Hatfield's correspondence with Robert Hinkley, to account for low soil fertility) Mr. Fowler could expect to harvest approximately 100 tons of forage per season. Using a value of \$140.00 per ton of grass hay this would equate to \$14,000.00 per annum gross revenue. Using an interest rate of 5% applied for perpetuity this yield equates to a net present value of \$280,000. Comparing this expected return on investment to the total improvement cost of \$659,000, it is our opinion that the costs of improving the land far outweigh the benefits.

If you have any questions regarding the proposed drainage improvement please contact Mike Thompson or Matt Schuett.

Respectfully,
WorleyParsons Komex



M. V. Thompson, P.Eng

DISCLAIMER

The information presented in this document was compiled and interpreted exclusively for the purposes stated in section 1 of the document. WorleyParsons Komex provided this report for Mr. Howard Fowler solely for the purpose noted above.

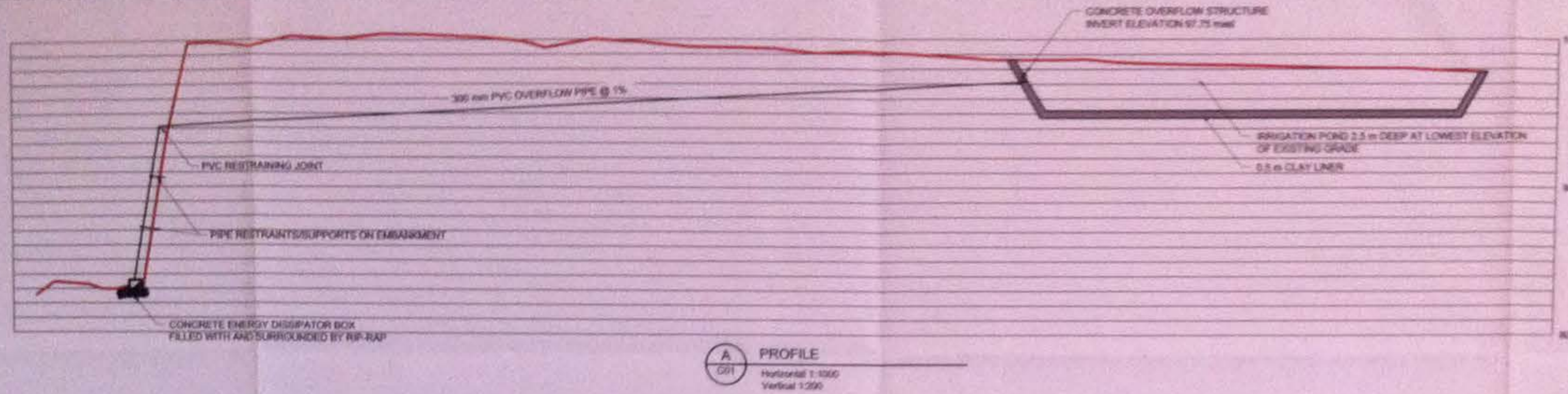
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Any questions concerning the information or its interpretation should be directed to ***Mike Thompson***.

6. REFERENCES

- Farmwest.com, K1 marketing corp. 2004. Evapotranspiration – Schedule your irrigation. Viewed August 8, 2006. <http://www.farmwest.com/index.cfm?method=climateet.showgraph>
- Fitzpatrick, J. 2001. Application to the Land Reserve Commission to Exclude Land from the Agricultural Land Reserve. Agrologists Report, Penticton, B.C.
- Hatfield, J. 2006. Fax to Robert Hinkley regarding Hay Production. Ministry of Agriculture and Lands.
- Jungen, J.R. et al. 1989. Soils of Southeast Vancouver Island – Parksville, Qualicum Beach, Courtenay and Port Alberni Areas. B.C. Soil Surveys Report No. 57, Co-published by the Ministry of Agriculture and Fisheries, Victoria, B.C.; including Port Alberni, 92F/SE, 92G/SW, 1:100,000 soils map.
- Murrie, T. 2002a. Improved 'Land Capability for Agriculture' assessment for Subject Property: That part of Lot 1, L.L. 141, Nanoose and Newcastle Districts, Plan 2273, Lying to the North of a Boundary Parallel to and Perpendicularly Distan 977 Feet from the Northerly Boundary of Said Lot 1. Land Reserve Commission File #: 02-S-EAS-2002-34255.
- Murrie, T. 2002b. Improved 'Land Capability Classification for Agriculture' assessment of property owner by Mr. Howard Fowler. Subject Property: That part of Lot 1, L.L. 141, Nanoose and Newcastle Districts, Plan 2273, Lying to the North of a Boundary Parallel to and Perpendicularly Distan 977 Feet from the Northerly Boundary of Said Lot 1. Land Reserve Commission File #: 02-S-EAS-2002-34255.
- Nyvall, J. 1998. Drainage Factsheet. Economics of Subsurface Drainage. Resource Management Branch, Ministry of Agriculture and Food, Abbotsford, B.C.
- Nyvall, J. 2001. Water Conservation Factsheet. Sprinkler Irrigation Scheduling using a Water Budget Method. Resource Management Branch, Ministry of Agriculture, Food and Fisheries, Abbotsford, B.C.
- Nyvall, J. 2002. Water Conservation Factsheet. Soil Water Storage Capacity and Available Soil Moisture. Resource Management Branch, Ministry of Agriculture, Food and Fisheries, Abbotsford, B.C.
- Van der Gulik, T. 2005. Landscape Irrigation Scheduling Calculator – Users Manual. Irrigation Industry Association of British Columbia.
- Van der Gulik, T. 2003. Water Supply Factsheet. Farm Water Storage. Resource Management Branch, Ministry of Agriculture and Food, Abbotsford, B.C.
- Van der Gulik, T. 2000. Water Conservation Factsheet. WORLD Water Use Reporting and Land-use Database. Resource Management Branch, Ministry of Agriculture and Food, Abbotsford, B.C.
- Van der Gulik, T. 2001. Water Conservation Factsheet. Crop Coefficient for use in Irrigation Scheduling. Resource Management Branch, Ministry of Agriculture, Food and Fisheries, Abbotsford, B.C.



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DRAWN BY:	KM	APPD BY:	MS
DATE:	26-JUL-06	DATE:	
DESIGNED BY:	CF	SCALE:	AS SHOWN
DATE:	2006-08-01		

REV	DESCRIPTION	DATE	REV BY	APPD BY
A	ISSUED FOR REVIEW	2006-08-01	CF	MS

LEGEND	
	PROPOSED OVERFLOW PIPELINE
	PROPOSED COLLECTION PIPELINE
	PROPOSED DRAINAGE PIPELINE
	TESTPITS
	PROPOSED 150 mm PERFORATED PIPELINE

ISLAND MORGAN HORSE FARM
 IRRIGATION STORAGE AND DRAINAGE STUDY
 SITE PLAN

PROJECT NO. V18340100
 SHEET NO. 1 of 1
 DRAWING NO. C01
 REV. A

Soil and Agricultural Capability Assessment of the
Northerly 977 Feet of Lot 1 District Lot 141,
Nannose and Newcastle District

Coombs, B.C.

Prepared by:

Ron Emerson, B.Sc., P.Ag.
Soil Specialist

Prepared for:

Howard Fowler

July 14, 2011

Introduction and Background

The subject property was assessed in April and August, 2001 by Joe Fitzpatrick, P.Ag. (Professional Agrologist) and subsequently by Robert Hinkley, P.Ag. in 2006. These two assessments are cited in the reference section of this report. The purpose of the current study of the soils on the subject property was specifically to verify (or otherwise) the original assessment made by Mr. Fitzpatrick.

Field Methodology

On July 7th, 2011 ten soil pits were excavated by hand to a depth of 80 cm and described according to the "Canadian System of Soil Classification" (1998). The location of each site was within 15 meters of the sites originally described by Mr. Fitzpatrick.

Description of Soils

Soils within a landscape exhibit natural variability hence profile descriptions would never be expected to be identical even when sites are within 15 m of one another. For the purpose of this report a description of the soil characteristics of each site will be given alongside those described by Mr. Fitzpatrick.

Site #1

Soil Characteristic	Ron Emerson, P.Ag.	Joe Fitzpatrick, P.Ag.
Topsoil depth	11 cm	17 cm
Topsoil texture	Loam	Silt loam to silty clay loam
Depth to Distinct or Prominent mottles	11 cm	17 cm
Subsoil texture	Silty clay loam to silty clay	Silty clay loam to silty clay
Soil Drainage	Poor	Poor
Soil Series	Cowichan	Cowichan
Unimproved Agricultural Capability Rating	5WD	5W
Main Limitations for Agriculture	Excessive wetness and root restricting layer within 25 cm	Excessive wetness

Site #2

Soil Characteristic	Ron Emerson, P.Ag.	Joe Fitzpatrick, P.Ag.
Topsoil depth	9 cm	5 cm
Topsoil texture	Sandy loam	Sandy loam
Depth to Distinct or Prominent mottles	9 cm	12 cm
Subsoil texture	Clay loam	Silty clay loam to clay loam
Soil Drainage	Poor	Poor to Imperfect
Soil Series	Parksville	Parksville
Unimproved Agricultural Capability Rating	5W	5W
Main Limitations for Agriculture	Excessive wetness	Excessive wetness

Site #3

Soil Characteristic	Ron Emerson, P.Ag.	Joe Fitzpatrick, P.Ag.
Topsoil depth	7 cm	5 cm
Topsoil texture	Sandy loam	Sandy loam
Depth to Distinct or Prominent mottles	29 cm	12 cm
Subsoil texture	Clay loam	Loam
Soil Drainage	Poor	Poor to Imperfect
Soil Series	Parksville	Parksville
Unimproved Agricultural Capability Rating	5W	5W
Main Limitations for Agriculture	Excessive wetness	Excessive wetness

Site #4

Soil Characteristic	Ron Emerson, P.Ag.	Joe Fitzpatrick, P.Ag.
Topsoil depth	6 cm	6 cm
Topsoil texture	Loam	Loam
Depth to Prominent or Distinct mottles	36 cm	62 cm
Subsoil texture	Silty clay loam	Silty clay loam
Soil Drainage	Poor	Imperfect
Soil Series	Parksville	Brigantine
Unimproved Agricultural Capability Rating	5W	4WA
Main Limitations for Agriculture	Excessive wetness	Excessive wetness/Soil Moisture Deficit

Parksville soils differ from Brigantine soils based on soil drainage. Imperfectly drained soils such as the Brigantine soil series are characterized by having distinct or prominent mottles below 50 cm from the soil surface whereas poorly drained soils such as the Parksville soil series have distinct or prominent mottles within 50 cm of the soil surface. It is probable that Mr. Fitzpatrick's site #4 was at a higher landscape position than the site currently described.

Site #5

Soil Characteristic	Ron Emerson, P.Ag.	Joe Fitzpatrick, P.Ag.
Topsoil depth	8 cm	7 cm
Topsoil texture	Loam	Loam
Depth to Prominent or Distinct mottles	40 cm	42 cm
Subsoil texture	Loam	Loam
Soil Drainage	Imperfect	Imperfect
Soil Series	Fairbridge	Fairbridge
Unimproved Agricultural Capability Rating	7T	7T
Main Limitations for Agriculture	Steep slopes	Steep slopes

Site #6

Soil Characteristic	Ron Emerson, P.Ag.	Joe Fitzpatrick, P.Ag.
Topsoil depth	6 cm	5 cm
Topsoil texture	Loam	Loam
Depth to Prominent or Distinct mottles	51 cm	37 cm
Subsoil texture	Silt loam	Loam
Soil Drainage	Imperfect	Poor to Imperfect
Soil Series	Brigantine	Parksville
Unimproved Agricultural Capability Rating	4WA	5W
Main Limitations for Agriculture	Excessive wetness/Soil Moisture Deficit	Excessive wetness

Site #7

Soil Characteristic	Ron Emerson, P.Ag.	Joe Fitzpatrick, P.Ag.
Topsoil depth	7 cm	12 cm
Topsoil texture	Loam	Loam
Depth to Prominent or Distinct mottles	42 cm	55 cm
Subsoil texture	Silt loam	Loam to sandy clay loam
Soil Drainage	Poor to imperfect	Poor to Imperfect
Soil Series	Parksville	Parksville
Unimproved Agricultural Capability Rating	5W	5W
Main Limitations for Agriculture	Excessive wetness	Excessive wetness

Site #8

Soil Characteristic	Ron Emerson, P.Ag.	Joe Fitzpatrick, P.Ag.
Topsoil depth	12 cm	18 cm
Topsoil texture	Loam	Loam
Depth to Prominent or Distinct mottles	12 cm	18 cm
Subsoil texture	Silty clay loam	Silty clay loam
Soil Drainage	Poor	Poor to Imperfect
Soil Series	Parksville	Parksville
Unimproved Agricultural Capability Rating	5W	5W
Main Limitations for Agriculture	Excessive wetness	Excessive wetness

Site #9

Soil Characteristic	Ron Emerson, P.Ag.	Joe Fitzpatrick, P.Ag.
Topsoil depth	7 cm	12 cm
Topsoil texture	Silt loam	Silt loam to silty clay loam
Depth to Prominent or Distinct mottles	7 cm	11 cm
Subsoil texture	Silty clay loam/Silty clay	Silty clay loam
Soil Drainage	Poor	Poor
Soil Series	Cowichan	Cowichan
Unimproved Agricultural Capability Rating	5WD	5W
Main Limitations for Agriculture	Excessive wetness and root restricting layer within 25 cm	Excessive wetness

Site #10

Soil Characteristic	Ron Emerson, P.Ag.	Joe Fitzpatrick, P.Ag.
Topsoil depth	10 cm	Similar to sites # 1 and #9
Topsoil texture	Silt loam	Similar to sites # 1 and #9
Depth to Prominent or Distinct mottles	7 cm	Similar to sites # 1 and #9
Subsoil texture	Silty clay loam/Silty clay	Similar to sites # 1 and #9
Soil Drainage	Poor	Poor
Soil Series	Cowichan	Cowichan
Unimproved Agricultural Capability Rating	5WD	5W
Main Limitations for Agriculture	Excessive wetness and root restricting layer within 25 cm	Excessive wetness

Conclusion

The descriptions of soils completed for the current study were similar to those completed by Joe Fitzpatrick, P.Ag. Differences in profile descriptions were consistent with the natural variability of soils expected within the landscapes described and were generally attributed to differences in soil drainage because of landscape position.

The predominant limitations for agriculture observed were resulting from excessive wetness in the spring, heavy soil textures causing root restriction and soil moisture deficits occurring within the growing season. As a regional drainage and irrigation strategy is not forthcoming these soils are not improvable.

The subject parcel is not well suited for commercial agriculture based on the current observations and those reported in the two separate reports by Joe Fitzpatrick, P.Ag. and Robert Hinkley, P.Ag. As has been concluded in these two reports, the subject property is better suited to smaller hobby farms.

About the Author

Ron Emerson, P.Ag. has worked as a soil specialist since 1981 when he began work on the soil survey to rationalize the boundaries of the Agricultural Land Reserve on the east coast of Vancouver Island. Since that time Mr. Emerson has completed a number of soil surveys and studies in Alberta, Saskatchewan and British Columbia. Mr. Emerson is a member of the BC Institute of Agrologists and can be reached by phone (250-335-2047), e-mail (ronemerson@telus.net) or by mail (Mount Rd. 1-8, Hornby Island, B.C., V0R 1Z0).

References

- B.C. Ministry of Environment. 1983. MOE Manual 1. Land Capability Classification for Agricultural in British Columbia.
- B.C. Ministry of Environment. 1985. MOE Technical Report 15. Soils of Southeast Vancouver Island, Duncan-Nanaimo Area.
- Soil Classification Working Group. 1998. The Canadian System of Soil Classification. Agriculture and Agri-Food Canada Publication 1646.
- Fitzpatrick, Joe. 2001. Agrologist's Report for the Northerly 977 Feet of Lot 1, District Lot 141, Nanoose and Newcastle District Coombs, BC.
- Hinkley, R. (For Whiskeyjack Land Management Corp.). 2006. Professional Agrologist Review of: Agricultural Capability and Soil Classification of the: Northerly 977 Feet of Lot 1, District Lot 141, Nanoose and Newcastle District Coombs, BC. 2006.

INVOICE

Travel	6 hours @ \$20/hour	\$120.00
Ron Emerson, B.Sc., P.Ag.	9 hours @ \$50/hour	\$450.00
Shawn Jamieson	7 hours @ \$15/hour	\$105.00
Disbursements	Ferries	<u>\$ 47.20</u>
Total		\$722.20

Distribution of farms by farm size

The province has a large variety of farm types and sizes. By way of background, according to the 2006 agriculture census, there were nearly 20,000 farms in the province with an average size of just over 350 acres. In total, the census indicated that more than 7,000,000 acres were in farming of one type or another. While the total gross annual revenue generated in 2005 was over \$2.6 billion, just under half of all farms had total annual gross receipts of less than \$10,000, while less than 6% generated gross annual revenue of over \$500,000.

Percent of farms less than 10 acres

In total, more than 5,300 farms, or just over one quarter (26.88%) of all BC farms, had a size of less than 10 acres. Geographically, the regions with the highest percentage of smaller farms of this nature occurred in the southwest corner of the province, particularly in the lower mainland, southern and eastern parts of Vancouver Island, and parts of the Okanagan in the southern interior. These were all clustered in and around the major population sections of the province. Of particular note, Sunshine Coast had over two thirds (67.71%) of its farms in this size category, while more than half of the farms in Capital fell into this category. Greater Vancouver, Nanaimo, Cowichan Valley, Okanagan-Similkameen, Central Okanagan, and Fraser Valley all had more than one third of their farms in this size category. At the other extreme, Peace River, Bulkley-Nechako, Cariboo, and Fraser-Fort George had less than 10% of their farms in this smallest category.

Percent of farms 10 to 69 acres

This is the most common farm size category in BC, including just over 7,250 farms (36.54%). While there are some similarities in geographical patterns with those in the smallest farm category, more than half of the farms in Central Okanagan (53.98%) and Okanagan-Similkameen (51.39%), and more than 45% of farms in Central Kootenay, Cowichan Valley, Fraser Valley, Powell River, Comox Valley, Strathcona, and North Okanagan fell into this size category. Again, the more northern and central interior regions of the province had one quarter or less of their farms in this category.

Percent of farms 70 to 239 acres

Only about 3,600 farms (18.01%) in the province were in this size category. Geographically, as might be expected, patterns were reversed from those evident in the two smaller size categories. Those regions with the greatest

Regional District	< 10 acres (%)	10 - 69 acres (%)	70 - 239 acres (%)	240+ acres (%)
29 Sunshine Coast	67.71	23.96	6.25	2.08
17 Capital	51.56	38.95	6.96	2.52
15 Greater Vancouver	46.98	40.95	9.28	2.79
21 Nanaimo	39.70	42.30	13.88	4.12
19 Cowichan Valley	37.43	47.14	12.29	3.14
7 Okanagan-Similkameen	37.20	51.39	5.68	5.74
35 Central Okanagan	36.48	53.98	6.78	2.75
9 Fraser Valley	33.81	46.32	16.52	3.35
27 Powell River	32.94	47.06	16.47	3.53
25 Comox Valley	31.79	46.08	17.30	4.83
26 Strathcona	31.79	46.08	17.30	4.83
23 Alberni-Clayoquot	26.97	43.82	19.10	10.11
5 Kootenay Boundary	24.23	32.40	19.64	23.72
3 Central Kootenay	23.84	47.69	17.79	10.68
37 North Okanagan	23.06	46.13	19.23	11.57
45 Central Coast	18.75	31.25	31.25	18.75
49 Kitimat-Stikine	17.16	34.33	25.37	23.13
31 Squamish-Lillooet	15.50	40.31	24.03	20.16
39 Columbia-Shuswap	15.22	43.91	28.21	12.66
1 East Kootenay	13.92	25.06	24.56	36.46
59 Northern Rockies	13.33	16.67	20.00	50.00
33 Thompson-Nicola	12.30	32.29	25.76	29.64
53 Fraser-Fort George	7.25	20.13	33.17	39.45
41 Cariboo	4.83	18.88	31.38	44.91
51 Bulkley-Nechako	4.40	10.61	32.62	52.37
55 Peace River	1.65	5.30	27.43	65.63
43 Mount Waddington	N/A	N/A	N/A	N/A
47 Skeena-Queen Charlotte	N/A	N/A	N/A	N/A
57 Stikine	N/A	N/A	N/A	N/A
British Columbia	26.88	36.54	18.01	18.56

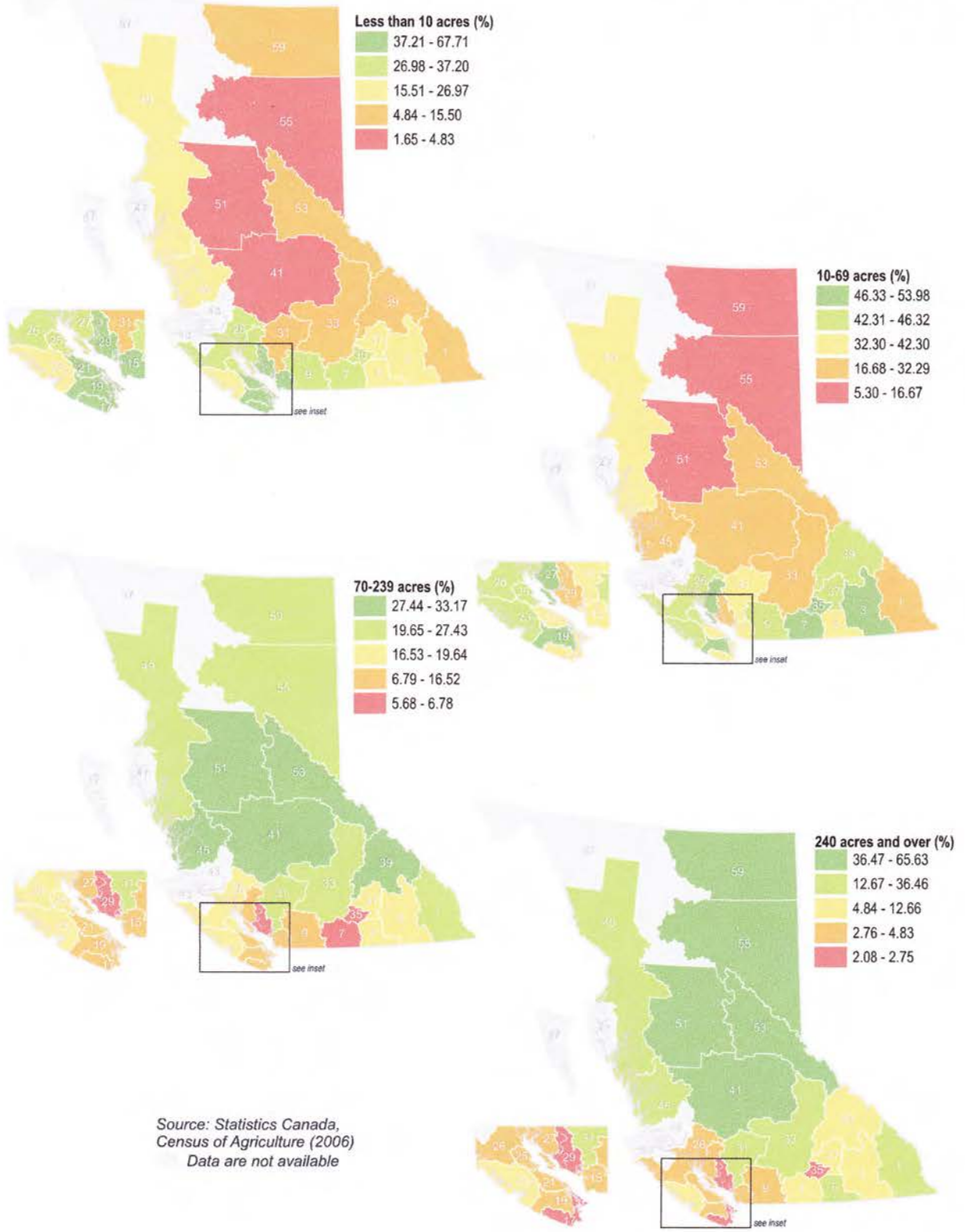
N/A: No data

percentage of their farms in this mid-size category were found away from the main population areas, and were mainly in the northern and central interior parts of the province. Four regional districts – Fraser Fort-George, Bulkley-Nechako, Cariboo, and Central Coast – had more than 30% of their farms in this size category.

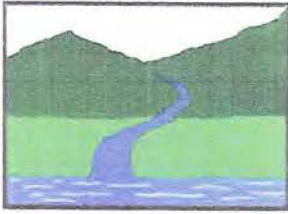
Percent of farms 240 or more acres

Nearly 3,700 farms (18.56%) fell into this largest size category, and the geographical distribution was quite similar to that for the 70 to 239 acre group. The areas with the largest percentage of their farms in this category were distant from the higher population density parts of the southwest parts of the province. Peace River, Bulkley-Nechako, and Northern Rockies all had half or more of their farms in this highest acreage category. As might be expected, at the other extreme, Sunshine Coast, Capital, Central Okanagan, and Greater Vancouver had less than 3% of their farms in this size category.

Distribution of farms by farm size



Source: Statistics Canada,
Census of Agriculture (2006)
Data are not available



Arrowsmith Watersheds Coalition Society

October 3, 2011

Regional District of Nanaimo
6300 Hammond Bay Road
Nanaimo, B.C. V9T 6N2

Attn. Paul Thorkelsson,
General Manager Development Services

Dear Sirs:

**Re: Exclusion of Land from ALR
Lot 1 Plan 2273 D.L. 141 Nanoose and Newcastle Districts
Northerly 977 feet**

This is in response to an advertisement in the PQB NEWS on September 23, 2011.

It would seem that this advertisement is a repeat of notices given in late 2008 and October 2009 for the same parcel.

We object to the exclusion of the subject property from the Agricultural Land Reserve (ALR) without an equal or greater amount of land being added elsewhere to the reserve (on Vancouver Island) by the proponent. Agricultural land must be administered on a no net loss principle so as to ensure sustainability into the future.

Over the years we have heard numerous reasons why some lands within the agricultural reserve are not suitable for farming. We are convinced that the Agricultural Land Commission (ALC) has done a good job of identifying the extremely small amount of land in B.C. that is appropriate to place into a reserve for agriculture only. And, with respect to Vancouver Island, any land that is not suited to farming is in all likelihood better for growing timber – in the truest sense of the term, the highest and best use of land on our Island.

Further, we understand the Regional District of Nanaimo has embraced an Agricultural Advisory Committee. The advisory committee and RDN Planning Department have embarked on preparing an Agricultural Area Plan. We recommend that the ALC should expect that notice of application to exclude in this regional district be submitted or

Arrowsmith Watersheds Coalition Society

Email: arrowsmithwater@shaw.ca

referred to the advisory committee before consideration by the regional district board or direct referral to the ALC.

Lastly, an examination of the ALC maps would tend to suggest that the subject property is logically classified within an area that would be suitable for agriculture uses. Earlier subdivision of nearby land in the Virginia Estates area may have included removals from the ALR. It is interesting that many of these subdivided properties currently appear to host various farming activities.

As before we draw your attention to comments by Rex Weyler regarding BC's Agricultural Land Reserve:

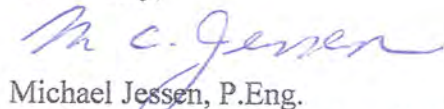
"Farmlands represent our common public asset for food security."

"The ALR is critical to the survival of town sites and must not be considered for urban development....."

"We should not only protect agricultural land and green belts, but also turn back the clock to the smart decisions of the 1970s."

We recommend that the subject parcel not be excluded from the Agricultural Land Reserve.

Yours truly,



Michael Jessen, P.Eng.
Treasurer, Arrowsmith Watersheds Coalition Society

cc. Directors, Arrowsmith Watersheds Coalition Society
Friends of French Creek Conservation Society
Oceanside Coalition for Strong Communities
Mid Vancouver Island Habitat Enhancement Society
Mr. Scott Fraser, MLA

Arrowsmith Watersheds Coalition Society

Email: arrowsmithwater@shaw.ca

Letter to Howard Fowler from Mr. John Jungen, dated November 28, 1983.



Province of
British Columbia

Ministry of
Environment

Assessment and
Planning Division
Terrestrial Studies Branch
1873 Spall Road
Kelowna
British Columbia
V1Y 4R2

November 28, 1983.

File: 1.011

Mr. Howard M. Fowler,
P.O. Box 59,
Coombs, British Columbia
V0R 1M0

Dear Mr. Fowler:

Please be advised that Mr. K. Millar from the Agricultural Land Commission is in charge of Agricultural Land Reserve (ALR) Fine Tuning Program on Vancouver Island. My responsibilities include the supervision of the soil and agriculture capability surveys ensuring that provincial and national standards and procedures are followed.

The detailed soil and agriculture capability survey along the east coast of Vancouver Island provides new base information which can be used by the Land Commission for fine tuning the existing ALRs. Our survey includes lands both within and outside present ALR boundaries. In this program we produce agriculture capability maps at a scale of 1:20,000 whereas previous mapping was at a scale of 1:50,000. This increase in mapping detail greatly facilitates improving the ALR boundaries.

In carrying out our field program this summer the field surveyor noted that your property had been surveyed in much greater detail, (i.e. 1:10,000) than our mandate of 1:20,000, by Ministry personnel as well as several private agencies. Accordingly, the mapping on your property is based on these more detailed inspections which are on file with the Land Commission. Consequently, no personnel from the Vancouver Island Detail Survey have visited your property.

Mr. Howard M. Fowler

- 2 -

November 28, 1983

The field work for the Parksville-Qualicum area has been completed. The maps are now being prepared and will be submitted to the Land Commission by April, 1984. When these maps are released by the Land Commission we will be pleased to send you a copy of the appropriate map.

Yours truly,



J. Jungen, P.Ag.

JJ:jk

c.c. K. Millar, Agricultural Land Commission
R.H. Louie, Ministry of Environment



File: 11400-20/Parkville

September 24, 2014

Mr. Howard Fowler
PO Box 59,
Coombs, British Columbia
V0R 1M0

Dear Howard Fowler:

Our agency is the Crown Land Authorizations division of the Ministry of Forests, Lands and Natural Resource Operations and our function is to adjudicate land use decisions on the Crown land base. We have held air photos in the past but these were catalogued and dispensed to the appropriate agencies in Victoria a number of years ago.

However in response to your visit and information request last week I have checked our records for both the air photos and the air photo flight lines you're interested in locating.

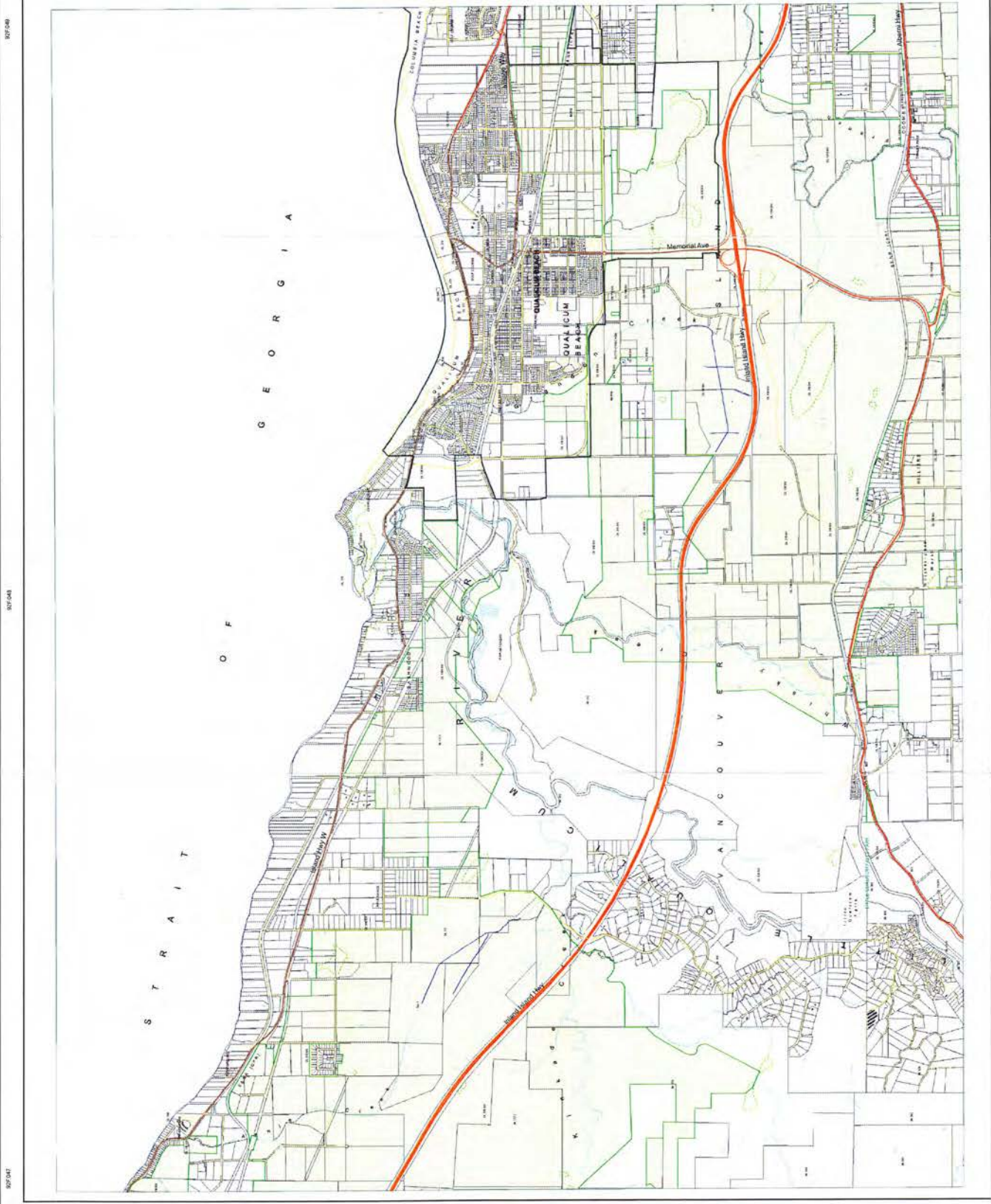
Unfortunately I was unable to discover the information you requested from our office. Further, I have checked with the Ecosystem Information Section of the Ministry of Environment in Victoria and neither do they hold any records concerning air photo flight lines over the Coombs area for the timeframe specified.

Yours truly,

Tom Hilborn
Land Officer

Attachment: ALC Map 92F.038

Map Amendment History as of 2007	
NOV 07	133-4940
JAN 11	133-4940
JAN 12	133-4940
JAN 14	133-4940



Agricultural Land Commission
 133-4940 Columbia Way
 Nanaimo B.C. V9S 4G5
 Fax: (604) 660-7033
 ALC Website: www.alc.gov.bc.ca

This map represents Agricultural Land Reserve boundaries with the exception of those areas designated by the Agricultural Land Commission.
 Map amendment period: July 1, 2014

Not licensed by the Geographic Information Systems Department, Agriculture and Communities.
 Data provided by the Agricultural Land Commission.
 The Agricultural Land Commission assumes no liability for the accuracy of the base mapping information.

- Agricultural Land Reserve
- Regional District Boundaries
- Municipal Boundaries
- Property Boundaries
- Indian Reserves



Costium Interval 20 metres
 B.C. Albers Projection
 NAD 83

REGIONAL DISTRICT
 Nanaimo
 SCALE: 1:50,000

B.C.G.S. MAP REFERENCE NUMBER:

92F.038



Drainage Cost Estimate



WorleyParsons Komex

resources & energy

DRAINAGE COST ESTIMATE

Fowler Property
Irrigation Storage /
Drainage Improvement

Wednesday, August 09, 2006

Rough Construction Costs for Drainage Improvements and Irrigation system (Retention Pond, Water Conveyance Structures and Subsurface Drainage Network)

Water Conveyance

Description	Amount	Units	Unit Cost	Total	Ext.
Pipe excavation, installation and backfilling*	7100	m ³	\$ 15	\$ 106,500	
300 mm PVC Ultrarib Pipe	300	m	\$ 26	\$ 7,800	
Energy dissipater	1	L.S.	\$ 3,000	\$ 3,000	
Restraining joints	3	ea.	\$ 100	\$ 300	
Construction Total					\$ 117,600

Irrigation Pond

Description	Amount	Units	Unit Cost	Total	Ext.
Excavate	51000	m ³	\$ 5	\$ 255,000	
Clay liner material cost and hauling	8950	m ³	\$ 6.5	\$ 58,200	
Clay liner placement and compaction	8950	m ³	\$ 8	\$ 71,600	
Concrete overflow structure	1	L.S.	\$ 3,000	\$ 3,000	
Construction Total					\$ 387,800

Subsurface Drainage System

Description	Amount	Units	Unit Cost	Total	Ext.
Subsurface drainage network (Inglis)	1	L.S.	\$ 53,000	\$ 53,000	
Pump Sump (Inglis)	1	L.S.	\$ 10,000	\$ 10,000	
Pump and controller (Carry Pumps)	1	L.S.	\$ 5,000	\$ 5,000	
Construction Total					\$ 68,000
Construction Total All Phases					\$ 573,400
Contingency (5%)					\$ 28,700

Engineering

Description	Amount	Units	Unit Cost	Total	Ext.
Engineering (design, inspection, & project management)	1	L.S.	\$ 57,300	\$ 57,300	
Engineering Total					\$ 57,300

TOTAL ESTIMATED COST	\$ 659,000
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(excludes GST)

Note: Excludes Costs associated with permitting and negotiations with the ALC, DFO and Regional Districts.

Note*: Unit cost of excavation, installation and backfilling of overflow pipe assumes rock excavation 3 m bgs