

REGIONAL DISTRICT OF NANAIMO

ELECTORAL AREA 'B' PARKS AND OPEN SPACE ADVISORY COMMITTEE
MONDAY, SEPTEMBER 19, 2016
7:00 PM

(Gabriola Arts Centre - Women's Institute)

A G E N D A

PAGES

CALL TO ORDER

ELECTION OF SECRETARY

DELEGATIONS

Motion to receive late delegation.

MINUTES

3-4 Notes of the Regular Electoral Area 'B' Parks and Open Space Advisory Committee meeting held May 17th, 2016 *(The May 17th, 2016 meeting did not have a quorum).*

Motion to receive the Notes of the last meeting for information

5-7 Minutes of the Regular Electoral Area 'B' Parks and Open Space Advisory Committee meeting held March 1, 2016.

Motion to adopt the Minutes.

BUSINESS ARISING FROM THE MINUTES

CORRESPONDENCE/COMMUNICATIONS

8-9 D. Cavil, Gabriola Lions Club to E. McCulloch, RDN **RE: Funding Application**

10-11 N. Doe to T. Osborne, RDN **RE: Gabriola Coats Marsh Trail Proposal** (For information)

12 W. Marshall, RDN to N. Doe **RE: Trail Development – Coats Marsh Regional Park**
(For information)

13-14 T & B Ballantyne to H. Houle, RDN **RE: Trail request at fawn Place ROW to 707 North Trail**

15 G. Hanson, Nanaimo Foundation to E. McCulloch, RDN **RE: 2016 Grant Application to the Nanaimo Foundation & Community Fund for Canada's 150th.**

Motion to receive Correspondence/Communications

REPORTS

- 16-36 Monthly Update Regional and Community Parks and Trail Projects – Feb-April 2016
- 37-49 Monthly Update Regional and Community Parks and Trail Projects - June-August 2016
- 50-51 5-year planning 2016-2020
- 52-219 Bylaw Referral Park Implications – Gabriola Island Local Trust Committee Bylaw Nos. 289 & 290 (Density Transfer)

Motion to receive Reports.

BUSINESS ARISING FROM DELEGATIONS/CORRESPONDENCE

NEW BUSINESS

COMMITTEE ROUND TABLE

ADJOURNMENT

Motion to adjourn.

NEXT MEETING

TBD

Disbursement: H. Houle (Chairperson), M. Walker, R. Young, S. Betts, K. Clifford, A. Johnston T. Osborne, W. Marshall, E. McCulloch

REGIONAL DISTRICT OF NANAIMO

**NOTES OF THE ELECTORAL AREA 'B' PARKS AND OPEN SPACE ADVISORY
REGULAR COMMITTEE MEETING HELD
TUESDAY, MAY 17, 2016
7:00PM**

(WOMEN'S INSTITUTE HALL)

Attendance: Howard Houle, Director, RDN Board, Chair
Kyle Clifford
Randy Young

Staff: Elaine McCulloch, Park Planner

Regrets : Sam Betts
Megan Walker
Allen Johnston

CALL TO ORDER

Chair H. Houle noted the lack of a quorum (4 required) at 7:05 p.m.

AGENDA

An informal information discussion was requested by Howard Houle.

ELECTION OF SECRETARY

No secretary elected or appointed.

DISCUSSIONS

- Derek Kilbourn, from the Sounder, presented two pictures showing small bicycle pit boles suitable for small children riding on their first bicycle. The idea was to provide a location where parents could sit and supervise small children riding in a safe fenced location. Derek noted that several local parents would be available to install a temporary riding circle. A Huxley Community Park Preferred Concept Plan was provided, and Derek noted the location proposed for the skate bowl. Other locations such as the proposed bump path were discussed.
- Elaine McCulloch reported that the funding application for Huxley Park from the Lions Club through the Co-op Community Spaces 2016 was not successful. An application will be made again for Community Spaces 2017. Nanaimo Foundation grant applications are under way, but full development of the Huxley Park Concept Plan will depend on future grants.

- Nick Doe was present as a member of the public, and explained his opposition to the proposed Coats Marsh trail. Although Coats Marsh is a jointly owned The Nature's Trust and Regional Parks, not a Community Park, and as such does not fall under the preview of the Parks and Open Spaces Advisory Committee, all public information is appreciated. In a message to Tom Osborne, Nick showed that Mallard and Bufflehead ducks are particularly sensitive to disturbance to their chicks. Passing people, and particularly dogs, can scare the chicks out into open water where they are subject to the local predators. A similar situation may occur on the east side of Coats Marsh if that privately owned section is transferred to become an extension of the 707 Community Park.
- Randy Young read a message from Rick Jackson, Fire Chief, Gabriola Volunteer Fire Department. "Our Emergency services were very worried about locating lost or injured in there (in the 707)." A report presented by GaLTT at the March POSAC meeting was discussed as a method of identifying locations by using numbered posts at all trail intersections. Modification of the 707 management plan may be necessary for this to occur.
- Elaine McCulloch discussed the current Area B POSAC projects:
 - Mudge Island volunteer property pin location continuing with new detector. Existing grants will continue if not used this year.
 - Cox Community Park entrance sign will be based on a new RDN design.
 - Whalebone Parks entrance signs have been installed and trails improved.
 - 707 trail brushing will continue.
 - Bell's landing grading for water diversion to be discussed with Emcon by Howard Houle.
 - Joyce Lockwood toilet and surround is planned for this summer.
 - Dog park in Rollo-McClay under discussion.
- Randy Young discussed concrete 'Public Access' beach signs, one broken and re-painted on the stairs, one moved from private property, and four or five necessary for north Gabriola beach accesses.

ADJOURNMENT

H. Houle adjourned 7:59pm

REGIONAL DISTRICT OF NANAIMO

**MINUTES OF THE ELECTORAL AREA 'B' PARKS AND OPEN SPACE ADVISORY
REGULAR COMMITTEE MEETING HELD
TUESDAY, MARCH 1, 2016
7:00pm**

(WOMEN'S INSTITUTE HALL)

Attendance: Howard Houle, Director, RDN Board, Chair
Sam Betts
Randy Young
Megan Walker

Staff: Elaine McCulloch, Park Planner

CALL TO ORDER

Chair Houle called the meeting to order at 7:00 p.m.

AGENDA

Softball Association delegation added to the agenda by Howard Houle.

MOVED R. Young, SECONDED M. Walker to adopt the amended agenda.

CARRIED

ELECTION OF SECRETARY

R. Young volunteered to be secretary on a temporary basis.

DELEGATIONS

Gabriola FIDO (Fenced In Dog Park) Committee

Heather Aneoffie of the Gabriola FIDO (Fenced in Dog Park) Committee presented slides of Phase 1, 2, and 3 of a fenced in dog park in Rollo-McClay Park. The Phase one located in 2.4 acres of the south-east corner would contain one double-gated entrance, two single gates, a vehicle access gate, together with dog agility stations, open spaces, dog walking trails, and an open air shelter. Phase 2 would contain a mini park for small dogs with a double gate leading from the parking lot. Phase 3 would extend the Phase 1 by 0.96 acres, and include a rain catchment pond together with single and double gates.

Gabriola Softball Association

Steve Finney of the Gabriola Softball Association presented a proposal to build a 70 ft. softball batting cage in Rollo-McClay Park parallel to the 1st base line on the lower field. The net cage would contain a pitching machine, ball feeder and batting net, with the pitching machine stationary and covered against rain and vandalism. Power would be supplied by extension cord from the gear locker room. All costs and installation would be handled by the Gabriola Softball Association.

MINUTES

MOVED M. Walker, SECONDED R. Young that the the Minutes of the Regular Electoral Area 'B' Parks and Open Space Advisory Committee meeting held October 6, 2015 be adopted as presented.

CARRIED

CORRESPONDENCE/COMMUNICATIONS

Western Economic Diversification Canada to E. McCulloch, RDN, **RE: Canada 150 CIPA - Huxley**

E. McCulloch noted that the Regional District of Nanaimo's application to the Canada 150 Infrastructure Program for development funds for Huxley Park was not successful.

MOVED M. Walker, SECONDED R. Young that the correspondence be received.

CARRIED

REPORTS

Monthly Update Regional and Community Parks and Trail Projects – Oct 2015 - Jan 2016

Monthly Update Regional and Community Parks and Trails projects were discussed.

- DeCoursey Islands residents meeting to choose names of the Community Parks
- Village Way discussions with MOTI continue.
- Work on the Coats Marsh trail is awaiting dryer conditions.
- The 5-year Park Operator contract for Descanso Bay Regional Park has been awarded to Jim Demler who has held the contract since the RDN purchased the park in 2004.

Huxley Park Community Park

\$12,000 is budgeted in 2016 for the skatepark design.

The Gabriola Lions Club submitted an application to the Co-op Community Spaces Program requesting \$45,000 towards the development of the children's playground in Huxley Park. If the application is successful, the Lions Club will contribute \$5,000 towards the project, with the RDN funding the remainder. If the grant is successful, the skatepark design will be postponed to a future year and the playground construction will occur in 2016.

707 Signage Plan

R. Young and R. Brockley (GaLTT delegate) presented a plan for posts and signs based on existing trails in the 707, with directions to exits a priority. Four maps would be mounted at the most used 707 entrances. Posts and installation would be provided by GaLTT. R. Brockley also noted the proposal to provide a 707 map on the back of the next year's GaLTT map to allow people to locate their position based on the post numbers. Posts and installation would be provided by GaLTT.

MOVED M. Walker, SECONDED S. Betts that staff be directed to work with GaLTT to review and update the 707 Community Park directional signage.

CARRIED

RDN Electoral Area 'B' Community Parks Project Planning 2015 -2016

- Bells landing grading by Emcon can follow gravel supply delivery.
- Whalebone trails and parks improvements are continuing.
- Joyce Lockwood toilet and garbage can are planned near the entrance.

Parkland Dedication as Part of Subdivision Development Application - 1520 McCollum Rd

H. Houle noted east edge trail is unlikely due to marsh conditions, north edge duplicates existing trails.

MOVED M. Walker, SECONDED S. Betts, that the proposed 5% cash-in-lieu of parkland dedication in conjunction with proposed subdivision of 1520 McCollum Road be accepted.

CARRIED

BUSINESS ARISING FROM CORRESPONDENCE/COMMUNICATIONS

MOVED M. Walker, SECONDED S. Betts, to direct the RDN Parks staff to review and discuss the Gabriola Fenced In Dog Park (FIDO) committee's proposal for Rollo-McClay Park, with the view to providing a public meeting to discuss the proposal.

CARRIED

MOVED M. Walker, SECONDED S. Betts, that staff be directed to provide support to the Gabriola Softball Association with their installation of a batting cage at Rollo-McClay Park.

CARRIED

NEW BUSINESS

ADJOURNMENT

MOVED H. Houle that the meeting be adjourned at 8:50pm.

CARRIED

Chairperson

McCulloch, Elaine

Subject: FW: Thank you for your application.

From: "Doug Cavill" <dgcavill@shaw.ca>

Date: April 28, 2016 at 10:10:11 AM PDT

To: "McCulloch, Elaine" <EMcCulloch@rdn.bc.ca>, "Houle, Howard" <Howard.Houle@rdn.bc.ca>

Cc: "Gabriola Lions" <gabriolalions@gmail.com>, "Betsy Banford" <hectech@telus.net>

Subject: FW: Thank you for your application.

Rats!

I checked their website for this "contest" in May but it doesn't seem to be there yet. Will check again later.

Doug Cavill
Gabriola Lions Club
250 247-8929

From: do-not-reply@sponsor.com [<mailto:do-not-reply@sponsor.com>] **On Behalf Of** Federated Co-operatives Limited

Sent: April 28, 2016 09:25

To: Doug Cavill <dgcavill@shaw.ca>

Subject: Thank you for your application.



Thank you for your interest and application for project funding through Co-op Community Spaces 2016. We received an overwhelming number of applications from many valuable projects across Western Canada.

Unfortunately, we are not able to support your project this year. All the projects submitted are worthwhile community initiatives and we encourage you to re-apply to the program next year. We are not able to provide individual project feedback based on the high number of applications received.

The successful projects for this year's Co-op Community Spaces Program will be announced in June 2016. Visit www.communityspaces.ca to see the list of 2016 funded projects and sign-up to receive program updates.

**The application period for Co-op Community Spaces 2017 will be
January 10 - February 15, 2017**

More Funding Available

From May 2- 31, 2016 Co-op is launching a new contest and there is another opportunity to nominate your project to receive up to \$25,000. Visit www.communityspaces.ca and nominate your favorite community space for a chance to win \$1,000 for yourself and up to \$25,000 to help improve the space. Contest winners will be announced in June.

Co-op is committed to improving the places where Western Canadians meet, play, learn and share. We appreciate your dedication and contributions to causes that matter in the community. Efforts like yours make all the difference.

The Co-op Community Spaces Team

Federated Co-operatives Limited

----- Forwarded Message -----

Subject: Gabriola Coats Marsh trail proposal

Date: Sun, 17 Apr 2016 22:44:15 -0700

From: nick doe <nickdoe@island.net>

To: tosborne@rdn.bc.ca

CC: wmarshall@rdn.bc.ca, galtt <info@galtr.ca>, streamkeepers org
<streamkeepers-org@npogroups.org>

hi Tom

As you may or may not know I have been doing a fair bit of monitoring of Coats Marsh, Coats Marsh Creek, East Path Creek, and the NW Arm including its hydrology, water levels (beaver dam and flood control at the weir), water quality, and rainfall

A lot of this work has involved regular access (more than once a week for almost a year now) to the marsh including to the east shore of the marsh, which is outside the park boundaries and doing this required permission from the landowner. The details of this ongoing research is posted at:

<http://www.nickdoe.ca/pdfs/Webp673.pdf>

<http://www.nickdoe.ca/pdfs/Webp673d.pdf> 2015 field notes

<http://www.nickdoe.ca/pdfs/Webp673e.pdf> 2016 field notes

The reason for my writing is that I was concerned to read that the RDN is planning to construct a trail in the marsh which I gather would extend from the causeway at the west end of the marsh, to the main entrance on Stanley Road.

If this surmise is correct, I would be very strongly against any such trail building.

In the course of many hours spent at the marsh, I have met only a few visitors; nearly everyone of the relatively few people I do meet are locals and almost all, perhaps not quite all but close, have been walking their dogs. Given that the number of people so doing is small, that the dogs are well controlled, and that many are walking the trails outside the park boundary on the east side which are for the most part setback from the shores of the marsh, I have never seen a problem.

However, if a trail is built along the south shore, the chances are that there will be a significant increase in foot traffic and that people using this new trail will be as they have in the past be walking their dogs. This has the potential of severely reducing the area of the marsh that is available for the ducks, particularly the mallards and resident buffleheads, and other wildlife that inhabit it and that require peace and quiet. The ducks particularly are extremely sensitive to the presence of people, a result no doubt of their being of interest to hunters. It is impossible to walk the proposed trail route without disturbing them -- I have tried it -- particularly when moving toward the lake now and then to obtain a view as most walkers will want to do.

There is also abundant evidence in the park that trails encourage the spread of invasive species and weeds.

This marsh is a beautiful property and a delightful combination of nature reserve and recreational area for naturalists and nature lovers.

In my view, any funds that the RDN has available would be far better spent on helping the community to acquire all of the eastern shore of the marsh, which is an integral part of the marsh's ecology. In contrast, opening the marsh up to more human and canine interference would be a regrettable step backwards and not at all in keeping with the objective of keeping this area primarily as a nature reserve.

Any hope that walking dogs be avoided by posting signs forbidding it is quite unrealistic. That's not how it works on Gabriola.

Sincerely

--

Nick Doe
1787 El Verano Drive
Gabriola, BC Canada
V0R 1X6

Phone: 250-247-7858
E-mail: nickdoe@island.net
Internet: <http://www.nickdoe.ca>

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1787 El Verano Drive
Gabriola, BC Canada
V0R 1X6

Phone: 250-247-7858
E-mail: nickdoe@island.net
Internet: <http://www.nickdoe.ca>



April 27, 2016

Nick Doe
Sent via email to: nickdoe@island.net

Dear Mr. Doe:

Re: Trail Development – Coats Marsh Regional Park

Thank you for your email letter of April 17, 2016, which outlines your concerns regarding the proposed trail development in Coats Marsh Regional Park that will connect the existing trail over the berm at the north-western end of wetland to the Stanley Rd park entrance. The proposed trail route is located in the forest approximately 15-30 meters back from the high water mark of the wetland and follows along the south-western edge of the wetland. The proposed trail alignment was reviewed and supported by the ecological assessment of the property completed for the management plan (Ecological Features and Management Recommendations for Coats Marsh Regional Park, 30 December 2010), is supported by The Nature Trust, and has been approved by Environment Canada's Ecological Gift Program (EGC). Please find enclosed a copy of the proposed trail route as approved by The Nature Trust and the EGC.

The above-noted trail connection is proposed in Section 3.3.4 of the *Coats Marsh Regional Park Management Plan*. The Plan reflects the community's desire to connect the north and south ends of the park by means of a trail along the south-western side of the wetland. Your concern that the addition of this trail would increase pedestrian and canine presence near the wetland thereby negatively impacting wildlife, particularly the resident duck populations, and potentially transmitting invasive species into the Park is understood. This potential impact has been considered and in an effort to reduce habitat disturbance, the trail has been routed away from the shoreline, except where it crosses the berm at the far western edge of the wetland. As per the recommendations in the Plan, signage will be installed identifying that no dogs be allowed in this sensitive area of the park. The Plan also recommends a viewing platform be developed on the southern end of the wetland near the Stanley Rd park entrance to provide controlled access to the edge of the wetland area for educational purposes.

Your advice regarding the specific trail route location and/or any mitigation measures would be greatly appreciated. If you are interested, please contact Elaine McCulloch, RDN Parks Planner at 250-248-4744 (ex. 656) or emcculloch@rdn.bc.ca.

Sincerely,

Wendy Marshall
Parks Manager

AH

CC: T. Osborne, General Manager of Recreation and Parks, RDN
E. McCulloch, Park Planner, RDN
J. Lobb, Parks Operations Coordinator, RDN
T. Reid, Manager, Vancouver Island Conservation Land Management Program

RECREATION AND PARKS DEPARTMENT

HEAD OFFICE:
Oceanside Place
830 West Island Highway
Parksville, BC
V9P 2X4
(250) 248-3252
Fax: (250) 248-3159
Toll Free: 1-888-828-2069

Ravensong Aquatic Centre
737 Jones Street
Qualicum Beach, BC
V9K 1S4
(250) 752-5014
Fax: (250) 752-5019

RDN Website: www.rdn.bc.ca

From: [Houle, Howard](mailto:Howard.Houle@rdn.bc.ca)
To: [McCulloch, Elaine](mailto:Elaine.McCulloch@rdn.bc.ca); [Marshall, Wendy](mailto:Wendy.Marshall@rdn.bc.ca); [Osborne, Tom](mailto:Tom.Osborne@rdn.bc.ca)
Subject: Fwd: Trail request at Fawn Place ROW to 707 North Trail
Date: Monday, July 18, 2016 11:23:03 AM
Attachments: [Trail request Fawn Place Lot 4 Ballantyne.png](#)

See request
Howard

Sent from my iPad

Begin forwarded message:

From: "Ballantynes" <balntyne@telus.net>
To: "Houle, Howard" <Howard.Houle@rdn.bc.ca>
Cc: "ROBERT BROCKLEY" <rbrockley@shaw.ca>, "norman harburn" <norm.harburn@gmail.com>
Subject: Trail request at Fawn Place ROW to 707 North Trail

Hi Howard,

Thank you for your interest in this trail request. I am attaching a Google Earth image of our property location and the existing trails in use. There is one primary trail used by walkers and bikers. It would be ideal if a new trail, connecting directly along the Fawn Place ROW with the existing 707 North trail, could be approved in order to allow convenient and continued access to the park. The existing access will be too close to our house and workshop area when we begin building next spring.

Please contact me if you need additional information.

Our property details:

PID 028-727-070
Folio Number 768013884.054
Map sheet 92G.012.3.1
Description LOT 4, SECTION 15, GABRIOLA ISLAND, NANAIMO DISTRICT
Plan No EPP12025

Regards,

Todd & Barb Ballantyne
604-809-3358 (Todd's cell)

From: ROBERT BROCKLEY [<mailto:rbrockley@shaw.ca>]
Sent: Sunday, July 17, 2016 9:07 AM
To: balntyne@telus.net
Cc: norman harburn

Subject: Trail

Hi Todd -- I spoke with Howard Houle, our RDN Director, yesterday about the proper channels to follow regarding your recent trail request. He was very sympathetic to your situation and asked that I contact you. He requests that you email him directly (howard.houle@rdn.bc.ca) with your request. Please give the legal description of your property and describe your request to have a new trail routed from the end of Fawn Place along the ROW and directly into the 707 Community Park, linking up with the North Road trail. He is the Chair of the Parks and Open Spaces Committee (POSAC) and will ensure that it gets on the agenda for the next meeting. Since you plan house construction in the not-to-distant future, he said he will give this request high priority. Once the new trail is approved, the actual trail construction will likely be done by our GaLTT volunteer work crew.

Let me know if you have any further questions.

It was great to meet you last week. All the best with your construction project.

Cheers,

Rob Brockley
GaLTT, Trail Operations Co-ordinator
(250) 247-9467



June 23, 2016

Elaine McCulloch
Regional District of Nanaimo
emcculloch@rdn.bc.ca

RE: 2016 Grant Application to the Nanaimo Foundation & Community Fund for Canada's 150th

Dear Elaine McCulloch,

Your application for Inclusion and Accessibility in Huxley Park has been reviewed by the Nanaimo Foundation. I am pleased to advise you that a grant in the amount of \$7,000 (\$3,500 from the Community Fund for Canada's 150th, \$3,500 from the Nanaimo Foundation) has been approved.

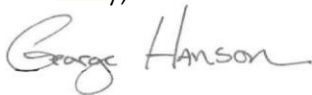
Please see the attached grant agreement. This grant agreement must be signed and uploaded to your account on <https://cfc150.fluidreview.com/>. This upload must happen before your organization will receive this grant. Upon the completion of this agreement, you will be contacted shortly to arrange for presentation of the grant funds.

All grant recipients are required to share their project and stories on the 150Alliance, a pan-Canadian network of organizations undertaking projects related to Canada's 150th. At the completion of the project or within one year from the date of this letter, please submit a completed Nanaimo Foundation grant recipient report (attached). Please be aware that authorization of this grant remains in effect for twelve months from this date, and unless acted upon within that time, may be cancelled.

The Nanaimo Foundation would appreciate having recognition of this grant and would be happy to hear your plans in this respect. Additionally, we request you alert us of any media opportunities you secure in respect to this project and the assistance we have been able to provide.

We are pleased to assist your organization with this important project, and wish you every success. Should you have any questions, please feel free to contact me.

Sincerely,



George Hanson

TO: Tom Osborne
General Manager of Recreation & Parks

DATE: March 16, 2016

FROM: Wendy Marshall
Manager of Park Services

MEETING: D69 Recreation Commission –May 31,2016
All POSAC's, RPTSC

FILE:

SUBJECT: Monthly Update of Community Parks & Regional Parks and Trails Projects- February 2016

RECOMMENDATION

That the Parks Update Report for February 2016 be received as information.

Regional and Community Parks and Trails

During February staff have been involved with the following projects and issues.

Electoral Area Community Parks

Area A

Park staff continued design revision work for the future kiosk structure at Cedar Plaza scheduled for installation in Summer 2016.

Staff prepared and distributed the February 17th Electoral Area A Parks, Recreation and Culture Commission meeting agenda package, attended the meeting and prepared meeting minutes.

Hazard tree management investigation continued for Ivor Road Community.

At the Cedar Skatepark staff removed dumped garbage and completed a park inspection. Staff are currently investigating a drainage issue around the toilet.

Area B

Staff provided information to the Gabriola Lions Club to support their Coop Community Spaces Grant application for the construction of a playground at Huxley Park.

Staff prepared a report to POSAC to provide information with respect to the consideration of a 5% park land dedication or cash-in-lieu contribution as part of a subdivision application proposing to create 7 fee simple parcels at 1520 McCollum Rd.

At Rollo McClay Community Park staff and the RCMP are involved in the investigation and repair of ongoing vandalism and graffiti issues. Following receipt of cost estimate information, chain link fence improvement (raising) work for the lower field is planned for the spring. Ongoing maintenance work and chlorine monitoring of the water system was carried out.

Staff met with community volunteers (Gabriola Land and Trails Trust (GaLTT)) regarding trail maintenance, drainage and signage work for Cox Community Park. This work is expected to commence in the spring.

Staff have contracted the removal of three hazard trees at Decourcy Drive Community Park. This work will be completed in March.

Staff received a price estimate for pressure washing of the tennis courts, ball hockey court and skateboarding area at Huxley Community Park. This work is scheduled for early March.

Area C – Extension

Park staff completed revision work for a memorial sign in Extension Miners Community Park which will be installed in the spring of 2016.

At Extension Miners Community Park staff made improvements to drainage around the new stairs and bridge.

Area C – East Wellington / Pleasant Valley

At Creekside community park staff removed garbage from the parking lot.

Staff reviewed conceptual drawings for a future picnic shelter in Meadow Drive Community Park and met with the project contractor on site.

Staff prepared and distributed the February 29th East Wellington / Pleasant Valley POSAC meeting agenda package, attended the meeting and reviewed the meeting minutes.

Area E

Staff prepared and distributed the February 10th Electoral Area E POSAC meeting agenda package, attended the meeting and reviewed the meeting minutes.

A biologist was contracted to carry out an ecological inventory and assessment of the future community park on Oakleaf Drive. Assessment work will begin in March.

Staff provided parks feedback regarding two rezoning referrals received from the RDN Planning Department.

At Brickyard the bollard was painted safety yellow.

Parks staff investigated a tree removal issue in a community park and are following up with the Bylaw Department.

Area F

Additional gravel and grading work was ordered and completed at Errington Community Park, making further improvements to the recently developed roadside parking area. Staff also liaised with a park neighbour regarding planned survey work and trail access.

Area G

Staff prepared and distributed the March 7th Area G POSAC meeting agenda package.

Staff reviewed parkland dedication proposals related to Area G subdivision and rezoning applications.

Area H

At Thompson Clarke Trail park staff removed moss from the stairs.

At Henry Morgan the paths were weeded and the wheel stops were leveled.

At the Deep Bay beach access boards were replaced on the bench.

At Leon Marshall trail staff met with Branching out Urban Forestry to do a tree assessment along the trail.

At the Buccaneer beach access staff repaired the bench and cleaned garbage.

At the Big Qualicum River Hatchery directional signs are being installed on federal land.

Staff prepared and distributed the February 25th Electoral Area H POSAC meeting agenda package, attended the meeting and prepared meeting minutes.

Staff prepared the Dunsmuir Community Park Open House Community Consultation Summary.

Community Works Fund Projects**Area B**

Staff researched examples of sidewalk projects completed elsewhere on Vancouver and Gulf Islands.

Area E**Claudet**

At Claudet Road community park staff are continuing to make drainage improvements along the trails. Trails and parking area were grass seeded. Rebar was removed from the old foundation for safety purposes.

Regional Significant Gas Tax Project**E&N Rail Trail**

Working with project engineer, staff concluded the final revisions to the Island Corridor Foundation (ICF) and Southern Vancouver Island Rail (SVI) submissions. Gravel specifications were review by an ex-Ministry of Transportation and Infrastructure (MOTI) road builder and these were forwarded and accepted by the ICF review engineer. Staff researched hydro-seeding specifications and the handling of merchantable timber and obtained an updated RDN Insurance Certificate to cover the Coldwater Rd strata Statutory Right of Way (SRW). Tender documents were updated, reviewed and revised and 'issue for tender' drawings prepared. The invitation to tender was sent to five pre-qualified firms with tenders due March 17th. Staff liaised and attended a site meeting with ICF and the Alberni Pacific Railway group concerning safety protocols along the Alberni Line during trail construction, and the Coombs-end start of the Regional Rail Trail.

Regional Parks and Trails**Arboretum**

Staff cleared illegally dumped garbage around the entrance gate and fence at this site.

Beachcomber Regional Park

Park staff conducted park inspections and trail maintenance. Park staff removed a rope swing from a tree.

Benson Creek Falls Regional Park

Security patrols took place on Feb 6 and 7 enforcing parking at the Creekside parking lot. No issues were reported.

Coats Marsh Regional Park

Trail development work at this park continues to be on hold due to weather conditions.

Descanso Bay Regional Park

The Parks Operator Contract was awarded to Jim Demler who has held the contract since 2004 when the property became an RDN Regional Park. Staff introduced the Park Operator to the Greater Nanaimo Cycling Coalition in regard to developing alternate transportation, i.e., come by cycle or kayak, camping event at the Park in the fall. Staff liaised with the Park Operator concerning a planned SHAW video interview involving GalTT and concerning trails at the Park and in Cox Community Park.

Staff submitted advertisement copy to be featured in the "Great Stays" section of the Snowbirds and RV Travelers magazine.

A change room has been constructed at the park. This added amenity will provide for an improved visitor experience for the day use area.

Englishman River Regional Park

Park Staff carried out routine inspections of Englishman River Regional Park and Top Bridge Park. Staff responded to maintenance issues identified by the Volunteer Park Warden including garbage issues, ATV trespass, vandalism, graffiti and suspect hazardous trees. Staff repaired footbridge and relocated due to high water flooding.

Staff requested MoTI look into the installation of 'no camping' signs at the end of Allsbrook Rd, further to complaints from park neighbours.

Staff worked with GIS Mapping on the clarification of park boundaries and definition of the Parksville Qualicum Beach Wildlife Management Area (PQBWMA).

Horne Lake Regional Park

Park staff conducted park inspections. Staff demoed the old gazebo in north park. The area was leveled and grass seeded. A hazard tree assessment was completed with RLC Parks Services, the park operator, for the park. Staff marked future campsites with RLC. The forest fire centre visited the site. Trees that have to be removed for the future campsites will be removed by them giving them a training opportunity for firefighting. The majority of trees that will be removed are dead or immature, minimal removal was the primary consideration.

Staff submitted advertisement copy to be featured in the "Great Stays" section of the Snowbirds and RV Travelers magazine.

Lighthouse Country Regional Trail

Park staff conducted trail inspections and trail maintenance. Staff spread grass seed along the fence and bank at Lioness parking area. Staff also removed moss from the guide rail.

Little Qualicum River Regional Park

Vandalism and vehicle access continues to be an issue at this park. Additional barricade work is scheduled for mid-March. Staff continued with park inspections in the course of monitoring vehicle access, and removed illegally dumped garbage from the gate area. Staff issued access keys to Fisheries and Oceans Canada to allow for policing of fishing and/or poaching activities at the site. This increased monitoring will commence in late spring and continue through the summer.

Staff also met with park neighbours, investigating a trespass issue.

Moorecroft Regional Park

Park staff conducted park inspections and trail maintenance. Staff boarded up Mrs. Moore's Cabin windows due to vandalism. The entrance gate was seriously damaged by criminals during a nighttime police chase. The gate was repaired in short order.

Staff met with members of the Moorecroft Stewards to discuss future Moorecroft projects and allocation of donated funds.

Staff met with the Nanoose Bay Elementary School Principal and Outdoor Classroom Teacher to review the first semester's use of this Regional Park as an outdoor classroom (every Monday). Overall, it is working well. A number of items were identified for both parties to work on.

Morden Colliery Regional Trail

Staff are still awaiting cost estimates for upcoming trail development work along the parking lot to Thatcher Creek section of the trail. Staff also conducted trail clearing and maintenance work along the trail.

A vandalized lexan cover was replaced on the interpretive nature sign/kiosk on the trail.

Mount Benson Regional Park

Park staff cleaned off graffiti from the Park Identification sign at the Witchcraft parking area. A post and trail sign were also cleared of graffiti.

Staff developed a framework for the permitting of running events at Mount Benson Regional Park for discussion at the Regional Parks and Trails Select Committee and Board.

Staff processed the park covenant for execution by all signatories.

Parksville Qualicum Beach Links

A missing PQB Links sign at the corner of Lee and Barclay was reported to MoTI; they will replace it.

Miscellaneous

Staff continued to work on the development of the Parks Division SharePoint set-up. All Parks staff participated in half-day training session hosted by the Information Technology department.

Staff received and reviewed the 2016 Wildfire Response Agreement from the Ministry of Forests, Lands and Natural Resource Operations (MFLNRO). Edits were provided and the final document processed for signature. There was a slight increase to the fee from \$800 to \$1,000.

Staff assisted the Tourism Vancouver Island consultant with preparation for a March Hiking Trails workshop.

Staff concluded work on Parks' component of Spring/Summer Active Living Guide.

Staff continued to provide support regarding two potential regional park property donations.

Park Use Permits and Events

Area A

Staff concluded work on Vancouver Island University's (VIU) 2015 permit to propagate and replant Nanaimo River Regional Park Wild Ginger. Following consultation, staff identified a good place to replant the 25 plants returning to the RDN: along the Morden Colliery Regional Trail. The balance will be planted at VIU's Milner Gardens and Woodland.

Area B

Staff worked with the Gabriola Soccer Association on a park use permit to use the concession at Rollo McClay Community Park, as part of the U-11 Boys Soccer Jamboree. Staff liaised with Gabriola Recreation Society and the Vancouver Island Health Authority. Permit approved.

Initiated work on a permit for the Backcountry Horsemen of BC, Central Vancouver Island Chapter on a fundraiser at the 707 Community Park, and the 4-H Club for Rollo McClay concession use during softball season.

Area E

Initiated work on a permit for a summer wedding at Moorecroft Regional Park.

Area F

Initiated work on a permit with Arrowsmith Community Recreation Association (ACRA) for the 2016 Coombs Family Picnic to be held again at the French Creek School Open Space.

Area G

Initiated work with Department of Fisheries and Ocean (DFO) at Englishman River Regional Park on a permit for the installation of an electronic fish counter at the existing weir near the outtake of the CW Young fish channel.



Manager of Parks Services



General Manager Concurrence

TO: Tom Osborne
General Manager of Recreation & Parks

DATE: April 14, 2016

FROM: Wendy Marshall
Manager of Park Services

MEETING: D69 Recreation Commission –May 21,2015
All POSAC's, RPTSC

FILE:

SUBJECT: Monthly Update of Community Parks and Regional Parks and Trails Projects- March 2016

RECOMMENDATION

That the Parks Update Report for March 2016 be received as information.

Regional and Community Parks and Trails

During March staff have been involved with the following projects and issues.

Electoral Area Community Parks

Area A

Staff worked with project engineers to complete a second round of design revisions for the future kiosk structure at Cedar Plaza scheduled for installation in Summer 2016.

Hazard tree management investigation continued for Ivor Road Community.

Drainage and water infiltration continues to be monitored at the Cedar Skatepark, where staff also repaired a vandalized electrical junction box, removed graffiti, and conducted a park clean up.

Staff removed a large log jam from the Nelson Road boat launch, which was deposited during a storm event.

Area B

VIHA's 2016 permit to the RDN to operate a water supply at Rollo McClay Community Park was received and posted at the park.

Staff prepared and distributed the March 1st Electoral Area B Parks and Open Space Advisory Committee meeting agenda package, attended the meeting and reviewed the meeting minutes.

Staff worked with community volunteers in the planning of pitching machine at Rollo McClay Community Park. Trail repair and drainage improvements were made. Graffiti was painted over on the Gabriola

Recreation Society building and the concession washroom doors. Water and chlorine level monitoring was carried out.

Following an arborist assessment, several hazard trees were removed from Decourcy Drive Community Park.

Pressure washing work was completed at Huxley Community Park. This included the tennis courts, ball hockey court and skateboarding area.

A damaged signpost was replaced at the Jeannette Road entrance to the 707 Community Park.

Area C – Extension

Staff coordinated site work completed by a landscape contractor in preparation for hydroseeding in April.

Staff completed draft designs for plaques acknowledging donated funds and labour for the covered footbridge in Extension Miners Park. The plaques will be manufactured in April.

At Nanaimo River Canyon Community Park staff removed a large volume of illegally dumped garbage.

Area C – East Wellington / Pleasant Valley

Staff completed a toilet installation plan for Meadow Drive Community Park. Park staff installed a bench and a contractor made the concrete pad.

At Benson Meadows path park staff replaced boulders on the trail which continuously are being removed by dirt bikers. Staff are looking into other solutions.

At Creekside community park staff removed garbage from the parking lot.

Area E

Staff attended a meeting with a biologist at the site of the future Oakleaf Community Park in preparation for biological inventory and environmental assessment work.

At Schooner Ridge Trail staff removed Euphorbia from trail and disposed at Regional transfer station, and installed three new regulation signs/post.

At Blueback CP staff repaired damaged silt fence due to storm event.

At Brickyard CP staff removed garbage and cleared trails of debris.

At Ainsley Stairs staff inspected stairs and cleared debris.

At Stone Lake CP park staff talked to some kids who were reported to be cutting down trees to make forts.

At Carmichael CP trees were removed from the park without formal approval. Bylaw has sent a letter to those responsible.

Area F

Staff prepared and distributed the March 9th Electoral Area F Parks and Open Space Advisory Committee meeting agenda package, attended the meeting and reviewed the meeting minutes.

Staff reviewed the November 26th, 2015 Arrowsmith Community Trails (ACT) Sup Group meeting minutes and updated the ACT map to reflect the proposed trail development priorities.

Staff provided support to the volunteer group regarding the Errington School Community Trail Interpretive Forest Trail entrance signage. The group will provide the signage for RDN staff to install and donate funds towards the installation of a bear-proof garbage can at the school trailhead.

Staff worked with Planning staff to provide comment regarding the rezoning application on Springhill Road.

At the recently developed Cranswick Road trail, staff met with a park neighbour, responding to a complaint of a fallen tree on their fence. Staff removed the tree and repaired the fence.

At Meadowood Community Park staff responded to a vandalism complaint. Staff noted some minor damage to grass area, and conducted a park clean-up. Staff also met on site with the fire chief and applicants of a Park Use Permit for an upcoming Bluegrass Festival. Logistics, health and safety, vehicle access and control, and parking area development were addressed, and will be dealt with this spring during the lead-up to the event.

Area G

Staff prepared and distributed the March 7th Electoral Area G POSAC meeting agenda package, attended the meeting and reviewed the meeting minutes.

Staff completed a site assessment of an undeveloped road right-of-way that extends west of Stanhope Road in preparation for future community trail planning.

At Neden CP staff removed cedar split rail for MOTI road upgrades from Wembley Road access.

At Lee Road CP staff responded to complaint regarding a tree fallen across river, staff spoke to the Ministry of Forest Lands and Natural Resources seeking advice and was advised to leave the tree.

At Boulton CP staff picked up and installed two yards of gravel to alleviate a tripping hazard complaint from park user.

At Riley Road Staff responded to complaint regarding trees on the trail and removed the tree.

Area H

The Crown Licence of Occupation renewal paperwork for Oakdowne Community Park was processed for signature and fee payment further to February Board approval to proceed. A Board report was prepared for Crown Licence of Occupation renewal for Oakdowne Community Park Adjunct II (trails on parcels adjacent to the main park).

Staff provided support to the volunteers working on the Bowser Cultural Learning Space project.

At Sunnybeach staff replaced old boards on a bench.

Directional signage was installed by a contractor and RDN staff at the Big Qualicum River Hatchery.

Community Works Projects

Claudet

At Claudet Road CP staff inspected park drainage and parking area.

Regional Significant Gas Tax Project

E&N Rail Trail

An appeal of the Agricultural Land Commission's requirement to install over 1.5 km of fencing along the boundary of the Island Corridor Foundation (ICF) was successful. Project approval was received from Southern Vancouver Island Railway (SVI) for two proposed pedestrian rail crossings, and from the ICF's consulting engineer for the overall Coombs to Parksville rail trail proposal. Staff worked with ICF and RDN lawyers to refine the proposed Alberni Line compliance Memorandum of Understanding. Tender addenda were provided to the five pre-qualified firms bidding for the construction of the rail trail. Five tenders were publicly opened and later reviewed for completeness and compliance. A report to the April Board was prepared to provide tender results and a recommendation to advance to construction.

Regional Parks and Trails

Beachcomber Regional Park

Staff disassembled park entrance sign re-stained/painted and replaced.

Coats Marsh Regional Park

Staff monitored the marsh level and the operation of the Clemson Pond Leveler at the beaver dam location.

Descanso Bay Regional Park

Staff met on site with the campground operator to assess numerous maintenance issues including hazard trees, campsites, beach access and road conditions. Road grading work is planned for the spring. New park signage and several padlocks were delivered to the park.

SHAW video shoot held at the Park as part of story on GaLLT.

Englishman River Regional Park

Further to the RDN's request and complaints received from residential neighbours, MoTI has installed 'No Camping' signage at the end of paved Allsbrook Rd.

Park Staff carried out routine inspections of Englishman River Regional Park and Top Bridge Park. Staff responded to maintenance issues identified by the Volunteer Park Warden including; garbage issues, ATV trespass, vandalism, graffiti and suspect hazardous trees.

Horne Lake Regional Park

Forest fire centre crews cut trees in the new campsites. Picnic tables were delivered to Horne Lake.

Little Qualicum River Regional Park

Vandalism and vehicle access continues to be an issue at this park. A culvert was replaced and another one was added due to pressure and road damage from beaver damming activity and seasonal high water. ATV and 4x4 vehicle barricades were added and some others improved following ongoing penetration by ATV users. The park identification sign was power washed.

Moorecroft Regional Park

Staff provided the Moorecroft Stewards with design information and confirmation of donated funds in consideration of a proposed entrance kiosk structure.

Park staff conducted park inspections and trail maintenance. Storm damage repair occurred in the park.

Morden Colliery Regional Trail

Staff coordinated garden maintenance work along a section of the MCRT east of Cedar Plaza which included pruning, tree staking, weeding, planting and soil work in preparation for hydroseeding in April.

Staff have now received final cost estimates for upcoming trail development work along the parking lot to Thatcher Creek section of the trail. These trail improvements are scheduled for the spring.

A large volume of donated Wild Ginger was planted along the Morden Colliery Trail in the vicinity of Thatcher Creek. Sign maintenance and pressure washing work was also carried out.

Mount Arrowsmith Massif Regional Park

Following a report from trail users, staff investigated and assessed an eroded section of trail close to the McBey Creek bridge. Signage work to redirect users to an improved trail and brushing was carried out to remedy the problem.

Mount Benson Regional Park

The conservation covenant and associated statutory right of way all in favour of the Nanaimo & Area Land Trust and the Cowichan Community Land Trust was submitted to Land Titles is now registered on the titles of the four park parcels. A draft memorandum of understanding to terminate the 2006 RDN-NALT Contribution Agreement was prepared.

Nanaimo Area Land Trust (NALT) installed new signs at the trail heads. The signs were designed by RDN staff and NALT. NALT, Search and Rescue and RDN met to go over the most recent rescue effort.

Nanaimo River Regional Park

The kiosks, garbage can, and identification signs were power washed. Thin ice/season safety signage was taken down.

Parksville Qualicum Beach Links

MoTI agreed to replace the missing PQBL way-finding sign at the corner of Lee and Barclay.

Trans Canada Trail

The temporary closure of the Extension Ridge Trail section of the TCT was ended by landowner Island Timberlands; notice was posted on the RDN web site. Staff liaised with MFLNRO (Ministry of Forests, Lands and Natural Resource Operations) Enforcement and the Conservation Officer about use of firearms on Crown lands west of the Spruston Rd trailhead area. The activity is not prohibited.

The kiosks at Spruston and Harewood Mines were power washed. The trail closure signage at Extension Ridge was taken down. Staff installed new sign posts at Extension Ridge.

Miscellaneous

Staff executed the copy of the 2016 Wildfire Response Agreement with the MFLNRO covering park and trail situated outside of local fire protection areas submitted to the Province.

Staff met with representatives of the Greater Nanaimo Cycling Coalition to review cycling infrastructure development efforts.

Staff participated in Tourism Vancouver Island's Hiking Strategy Workshop as part of consultant Stantec's work on developing a Sunshine Coast/VI hiking experience plan.

Staff provided a letter of support to the Nanaimo Mountain Bike Club in regard to their grant application to MEC.

Staff continued to assist the Capital Regional District with the use of the Haslam Creek Suspension Bridge engineered plans for a CRD bridge over the Goldstream River, and provided advice on suspension bridge development and maintenance.

Work continued on creating a Parks Sharepoint area and moving existing files into the system. Detailed instructions for inclusion in Parks Division policy were created.

An order for new copies of the Regional Parks and Trails Guide has been placed.

Staff continued to work on two potential regional park property donations.

Material Safety Data Sheet information was updated for the Operations shop.

The mowing and park maintenance contract for several community parks was completed and sent out to the contractor.

Staff developed a draft design for new Community Park entrance signs.

Park Use Permits and Events

Area A

Over 60 young wild ginger plants were put in the ground around the Thatcher Creek Bridge along the Morden Colliery Regional Trail. These plants were propagated under permit to the VIU Horticulture Centre from stock at Nanaimo River Regional Park.

Area B

Issued a park use permit to the 4H Club to operate the Rollo McClay Community Park concession during ball season; VIHA copied. Reviewed Tourism Nanaimo's proposed InstaMeet photography event on Gabriola, so far not involving RDN park properties.

Area C

Began work with Tourism Nanaimo on a permit for an InstaMeet photography event along the Ammonite Falls Regional Trail and into Benson Creek Falls Regional Park mid-May. Addressed parking issues and assisted them with effort to plant in the woodlot or undertake broombusting activities.

Area E

Worked with a groom on a wedding permit application for mid-July at Moorecroft Regional Park.

Area F

Began work with the Bluegrass Society on a festival permit for use of Meadowood Community Park. The festival had been held under permit at Lions Community Park in Area H these last five years. Liaised with Dashwood Fire Chief and event organizers. Site visit scheduled for April 1st.

Area G

Met with the Mid-Vancouver Island Habitat Enhancement Society organizers of the River Run, held annually these last five years at Englishman River Regional Park, to review what learned, issues, and where want to go with the event.

Issued a park use permit to DFO regarding installation of an electronic fish counter at the metal weir over the C.W. Young Fish Channel at Englishman River Regional Park.

Area H

Worked with the Silver Spur Riding Club on planning a competitive ride in Bowser, with overnight camping proposed for the MFLNRO compound beside Wildwood Community Park. Will not likely involve any RDN park or trail.



Manager of Parks Services



General Manager Concurrence

TO: Tom Osborne
General Manager of Recreation & Parks

DATE: May 6, 2016

FROM: Wendy Marshall
Manager of Park Services

MEETING: D69 Recreation Commission
All POSAC's, RPTSC

FILE:

SUBJECT: Monthly Update of Community Parks and Regional Parks and Trails Projects- April 2016

RECOMMENDATION

That the Parks Update Report for April 2016 be received as information.

Regional and Community Parks and Trails

During April staff have been involved with the following projects and issues.

Electoral Area Community Parks

Area A

Staff provided the Electoral Area Director with development costs for a selection of regional and community trail projects.

A picnic table was ordered for the Cedar Skate Park. Funds for the table were donated by the Cedar Skate Park Association. Also at the Cedar Skate Park staff cleaned up garbage, and repaired electrical lock box due to vandalism. Drainage and water infiltration continues to be monitored at the Park.

Final design revisions for the future kiosk structure at Cedar Plaza were submitted by staff to project engineers. Engineered drawings for building permit application are anticipated in May 2016.

Hazard tree management investigation continued for Ivor Road Community.

Area B

Staff completed a Board report regarding the Islands Trust proposed park land dedication subdivision application referral for 1520 McCollum Rd.

Staff received notification that the Gabriola Lions Club was unsuccessful in their Co-op Community Spaces grant application for playground construction at Huxley Community Park.

Staff met with an arborist and tree faller and subsequently had a large maple in Hummingbird Community Park pruned. Staff inspected the trails along Whalebone for any trespass issues. A patch of

Japanese Knotweed was cut down along Whalebone Drive within the road right-of-way outside of the Whalebone Parks. Several hazard trees were felled and chipped off of Queequeg in the Whalebone area trail system.

Field aeration and seeding, and the addition of sand and fertilizer were conducted at Rollo McClay Community Park. The fields are in great condition this season and receiving compliments from the Gabriola Softball Association. Ongoing monitoring of graffiti and vandalism was kept up at Rollo McClay Community Park, where water and chlorine level monitoring has also continued for the 2016 season. Remediation and repair work was carried out at the concession building following a small fire in the Coaches Storage area.

Area C – Extension

Staff contacted the Extension Recreation Commission to request a post-construction clean-up of the playground installed on the MOTI ROW next to the Recreation Commission property. Volunteers will be working on this in the upcoming month.

At Extension Miners Community Park staff approved final proofs for plaques acknowledging donated funds and labour for the covered footbridge in Extension Miners Park. The plaques will be ready for installation in June. Staff coordinated the hydro seeding of the picnic area in the park. Staff installed a new culvert at the park.

Staff provided comments on a planning referral regarding a proposed subdivision in Extension Village.

Area C – East Wellington / Pleasant Valley

At Benson Meadows path park staff replaced boulders on the trail which were removed by dirt bikers.

At Creekside community park staff graded the parking lot and installed a bear proof garbage can.

Staff coordinated and attended a community meeting at Creekside Place on April 21 with residents and the area Director to discuss issues related to the Creekside parking lot, unauthorized street parking and access to Benson Creek Falls Regional Park.

Area E

At Stone Lake Community Park staff repaired the concrete head wall for a culvert in one of the retention ponds.

At Blueback CP staff repaired the walkway and met with an arborist to look at the health of the trees in the park. The remainder of the drainage system was installed and rough grading completed.

Staff communicated with a number of interested local Dive Outfitters regarding the upcoming Director's Forum at which the management of Nanoose Public Water Accesses will be discussed.

Staff met with the Superintendent of the Fairwinds Golf Club to discuss the replacement of trees and shrubs that were removed without permission from an RDN-owned Community Park. Planting will be completed by Fairwinds in the fall of 2016 in accordance with a restoration plan prepared by park staff.

Area F

At the Cranswick Rd Trail, burning of small slash piles from trail construction was completed by the contractor. Staff also repaired a fence delineating the trail from a neighbouring private property due to tree damage and installed approximately 50 ft. of galvanized fence and five posts to support the existing fence. The remainder of the trail work is scheduled to be completed in May.

Staff reviewed the Little Qualicum River Estates subdivision application referral and provided parks comments.

Staff and the Dashwood Fire Department Chief met on site at Meadowood Community Park to with applicants for a Park Use Permit for the upcoming Bluegrass Festival, to discuss logistics and safety issues surrounding the event. Staff conducted a park clean-up at the site.

Staff liaised with the Friends of French Creek Society regarding Giant Hogweed removal at French Creek School Community Park. At the same site staff also removed garbage and debris from the playground area.

A price quote was received for fence repair work at Errington Community Park. The field mowing has begun for the season and the Errington Farmers Market had the season opening event on Saturday, May 30th. Staff also inspected the trails.

Area G

At Miller Road CP staff removed giant hogweed.

At Riley Road CP staff responded to neighbor complaint regarding trees down on the trail. Staff removed low limbs and trees blocking trail.

At Columbia Drive CP staff removed garbage from trails and garbage can.

At Lee Road CP staff inspected /assessed tree down across river.

At Dashwood CP staff installed four yards of pea-gravel in playground to increase surface level of fall material.

Staff reviewed a parkland dedication proposal related to an Area G subdivision application. A POSAC site tour of the proposal site was arranged for May 9.

Area H

MOTI (Beach Accesses)-Staff have been building and/or repairing all of the beach access benches. At Sunnybeach Water Access, staff graded the parking lot and realigned the wheel stops. At Shoreline Drive Water Access, staff improved applied two yards of crush gravel to the stairs to improve access to beach.

Staff participated in the planning of the OCP Public Outreach Open House scheduled for May 3rd, 2016.

Community Works Projects

Area A – Morden Colliery

Staff toured undeveloped sections of the MCRT with members of the Agricultural Land Commission as part of the application process for future trail development in the ALR, which includes the planned construction of two steel-truss multi-use bridges over the Nanaimo River.

Staff met with Herold Engineering to discuss budget and tasks related to detailed design work for the planned multi-use bridges over the Nanaimo River within the MCRT.

Area B -Village Way

Additional information provided to the Ministry of Community, Sport and Cultural Development in regard to the Area B Community Park bylaw update that if approved, will permit the development of sidewalks through the Community Park function.

Regional Significant Gas Tax Project

Coombs to Parksville Rail Trail

A Memorandum of Understanding with the Island Corridor Foundation (ICF) that permits the RDN to defer compliance with respect to federal road-rail crossing requirements until such time as the Alberni Line of the E&N becomes active was concluded. Final approval of the Coombs to Parksville Rail Trail project was received from ICF as well as the RDN Board. A Notice of Award was issued to David Stalker Excavating Ltd. to construct the trail for a tendered price of \$2.7M. Notice of project advancement was communicated to all neighbours of the project. The project page on RDN web site was updated.

Regional Parks and Trails

Arboretum

Parks staff met with Solid Waste staff and park stewards to discuss property management, maintenance and development issues and options. Staff also removed garbage from the entrance area, inspected the park and surrounding Solid Waste areas.

Big Qualicum Regional Trail

Staff re-installed posts/signs due to incorrect placement.

Coats Marsh Regional Park

Staff responded to a letter from a concerned park user regarding the planned trail development along the western side of Coats Marsh. The trail connection, identified in the Park Management Plan, will link the Stanley Pl. park entrance to the existing berm and trails on the western side of the Marsh. Staff reviewed the proposed route and modified it slightly back from the marsh edge. The new route has been approved by The Nature Trust, co-owners of the Park.

Staff monitored the marsh level and the operation of the Clemson Pond Leveler at the beaver dam location.

Descanso Bay Regional Park

Staff met on site with the campground operator to discuss park maintenance and operation issues for the coming camping season.

Englishman River Regional Park

Park Staff carried out routine inspections of Englishman River Regional Park and Top Bridge Park. Staff responded to maintenance issues identified by the Volunteer Park Warden including; garbage issues, ATV trespass, vandalism, graffiti and suspect hazardous trees.

Park staff trimmed the grass around the picnic tables and bridges.

Horne Lake Regional Park

Staff disassembled, cleaned, sanded and re-finished park entrance sign then re-installed.

The Park Operator reported a higher than usual call volume on their first day open for reservations. Parks staff posted a notice on the Horne Lake Regional Park webpage noting this temporary inconvenience.

Lighthouse Country Regional Trail

Staff installed a culvert on the trailhead of the north loop to alleviate seasonal flooding issues.

The new Lighthouse community sign at Lions Way and Hwy 19A was installed by local community members. The sign includes direction to the Regional Trail as well as Lions Community Park.

Little Qualicum River Regional Park

Staff inspected several incidents of gate breaches, discovered flooding issues at the newly installed culverts due to beaver activity, and continue to relieve culverts of branch debris. Ongoing monitoring of beaver activity will continue at the park until transfer of ownership to the Regional District of Nanaimo occurs. At this point a Clemson Pond Leveler will likely be installed in order to reduce maintenance visits and costs.

Moorecroft Regional Park

Park staff conducted park inspections and trail maintenance. Storm damage repair and drainage installation was done within the park. Additional picnic tables were ordered for Moorecroft.

Staff met with the Parksville Museum to discuss issues related to the possible restoration and management of Miss Moore's Cabin.

Mount Benson Regional Park

The park covenant was accepted by Land Titles and is now registered on the four park parcels. Executed copies of the covenant provided to covenant holders NALT and CCLT. Memorandum of Understanding between the RDN and NALT concerning the termination of the 2006 Contribution Agreement, all work having been accomplished, was issued and executed.

Morden Colliery Regional Trail

Park Operations and Planning staff met on site at the park to install new locks on bollards, and allow for contractor access for upcoming hydro-seeding. Staff also pruned blackberry, grass and brush and did fence repair work along the trail off of Hemer Road.

A significant trail surfacing and drainage maintenance project was conducted on the trail on the portion from the parking lot to Thatcher Creek. The parking lot was also graded and enlarged, providing parking for an additional five vehicles.

Nanaimo River Regional Park

Staff removed seasonal high water signage from the park and conducted a park inspection.

Parksville Qualicum Beach Links

As requested, MoTI has installed the missing way-finding sign at the corner of Barclay Crescent and Lee Road.

Top Bridge Regional Trail

Park staff cut the grass and blackberry around the park identification sign and along the trail.

Trans Canada Trail

Staff provided a letter of support to the Backcountry Horsemen of BC Central Vancouver Island Chapter in regard to the proposed development of their recreation site at the end of Spruston Road. It will provide camping opportunity for all users of the trail.

Further to the re-opening of the Extension Ridge Trail after the landowner's logging operations, a post-logging assessment of the trail condition was made. Trails BC and TCT National were updated.

Miscellaneous

Staff were involved in an asset management working group to review and rate Asset Risk for parks and trails infrastructure.

Staff attended Tourism Vancouver Island's workshop to review the consultant's draft hiking experience plan for the Island and Sunshine Coast.

Staff assisted the Comox Valley and Cowichan Valley RDs with rail trail agreement work and continued to assist the Capital Regional District with suspension bridge development plans.

Staff arranged for minor edits to the 2016 reprint of the Regional Parks and Trails Guide, ordered up and received 7,000 copies. Liaised with information centres and local government offices across region and including Ladysmith, and arranged for shipment out of over 5000 guides.

Staff attended a Municipal Insurance Association risk management conference.

Staff assisted the Finance Department with the identification of parks not actively managed.

Staff reviewed and revised the 2016 work plan for an upcoming Strategic Planning Session to be held in May.

Staff continued to work on three In Camera acquisitions.

Mowing and park maintenance contract work for several community parks continued for the season.

The Recreation and Parks Department boat trailer was picked up from Gabriola and returned to the compound at the Operations office.

A new metal detector/survey pin finder was purchased and received.

Park Use Permits and Events

Area A

- Assisted RDN WaterSmart with planned guided walks at Nanaimo River Regional Park for SD68 Gr 4/5 kids.

Area B

- Liaised with the Gabriola Recreation Society and 4-H concession permit holder about the poor condition of the concession after a soccer tournament and the need to follow-through on agreed-to inspection procedures.
- Worked with the Nanaimo Economic Development Corp. on a park use permit for an instameet photo event at Malaspina Galleries Community Park.

Area C

- Worked the Nanaimo Economic Development Corp. on a park use permit for an instameet photo event at Ammonite Falls in Benson Creek Falls Regional Park. Permit approved with conditions concerning restricted parking.

Area E

- Initiated work with Quality Foods regarding permit for the annual Teddy Bear Picnic held at Jack Bagley Field.
- Approved a park use permit application for a wedding at Moorecroft Regional Point in early August.
- Worked with the North Island Film Commission and Chesapeake Shores on a permit to use the parking area and access road at Moorecroft Regional Park for film project parking (20 days between mid-May and the end of July). Liaised with other park special event organizers who will be affected should the film go forward.

Area F

- Meetings held with Bluegrass Festival organizers and the Dashwood VFD Chief concerning the 2016 festival. If all permits are approved for the festival, camping associated with the five day event is to take place at Meadowood Community Park, with the music component to be held on the Meadowood Store property. Dashwood Volunteer Fire Department conditions for the event communicated to the organizers as part of permit process.
- Ozero were advised that any further hauling through Meadowood Community Park will require a park use permit.
- Worked with ACRA on permitting of the 26th annual Coombs Family Picnic, to be held again at French Creek School Community Park.

Area G

- Nanoose Heart and Stroke initiated a permit application for a walk at Englishman River Regional Park that includes vehicle access.

- Department of Fisheries and Ocean (DFO) submitted an eight-year review of Englishman River Regional Park side channel water quality monitoring carried out in association with Vancouver Island University. Overall, results are quite positive.
- DFO encountered troubles with the installation of its electronic smolt counter and will wait until June until trying again.
- Assisted RDN WaterSmart with planned guided walks at Englishman River Regional Park for SD69 Gr 4/5 kids.



Manager of Parks Services



General Manager Concurrence

TO: Tom Osborne
General Manager of Recreation & Parks

DATE: September 8, 2016

MEETING: Recreation Commissions, RPTSC, EASC,
POSACs

FROM: Wendy Marshall
Manager of Park Services

FILE:

SUBJECT: Monthly Update of Community Parks and Regional Parks and Trails Projects- June, July and August 2016

RECOMMENDATION

That the Parks Update Report for June, July and August 2016 be received as information.

Regional and Community Parks and Trails

During the summer staff have been involved with the following projects and issues.

Electoral Area Community Parks

Area A

Staff prepared revised construction cost estimates and design options for the Cedar Plaza Kiosks which were presented and discussed at the June 15 PRCC Meeting. A Development Variance permit application was submitted to RDN Planning and to the Province with approval received on July 28. Final engineer drawings were submitted for a building permit application on August 17 (with approval anticipated in September), and three construction bids from contractors were received on August 31. A contract will be awarded in early September and construction will be completed by December 31, 2016.

Staff provided parks comments regarding a Development Permit with variance application which involves a foreshore revetment in the unconstructed road right of way beside 1954 Shasta Road. Under condition of the approved permit there is a specific condition that “the applicant will construct a safe and appropriate public beach access along the portion of the revetment in the unconstructed road right-of-way...” The intention is that the new steps will be an enhancement to the existing step steps.

Survey work was completed and staff retained a structural engineer to prepare drawings and costing information for the proposed public access stairs at the Driftwood Rd water access.

Staff provided parks comments to Planning regarding a subdivision application on Shasta Rd in terms of potential trail / pedestrian circulation between Shasta Rd, Headland Rd and Pace Rd. Staff coordinated invasive plant removal and watering with contractors for a replanted section of the Morden Colliery Regional Trail at the Cedar Plaza.

A picnic table was installed at the Cedar Skatepark with funds donated by the Cedar Skatepark Committee.

At Nelson Road boat launch, improvements were done over the summer months, including a new toilet surround, safety line painting and brushing.

At Ivor Way Community Park, over a dozen large hazard trees were taken down, and an arborists report has been completed for the site. The report includes recommendations for both a monitoring program, and for some additional trees to be taken down in the fall or winter.

Area B

Staff reviewed the Gabriola Island Local Trust Committee referral request regarding the draft rezoning Bylaw Nos. 289 and 290 and prepared a Staff report to the Electoral Area 'B' Parks and Open Space committee identifying how the RDN's parks interests are affected by the proposed 136-hectare (336 acre) park land addition to the 707 Community Park as well as the potential additional 19.3 ha (47.7 acre) park land dedication which would result from future subdivision of the rezoned lands.

Staff submitted a grant application to Canada 150 Infrastructure Program for improvements to the Huxley Park tennis and sport courts. Grants will be awarded in October 2016.

A \$7,000 grant from the Nanaimo Foundation Community Fund for Canada's 150th for the Huxley Park playground installation project was awarded.

Parks received a request to install baby change tables in both the male and female washrooms at Rollo McClay Community Park. This has been added to the 2017 parks budget.

Staff provided follow-up correspondence to G. McCollum in regards to the 1520 McCollum Rd. subdivision application requirement to pay the 5% cash-in-lieu of parkland.

Staff received a request to realign the existing trail that connects Fawn Rd to the 707CP's North Rd trail. The existing trail alignment crosses private property.

At Rollo McClay Park, numerous instances of vandalism (graffiti) have required costly painting. Staff are working with the RCMP and the community towards a solution.

A contractor repaired a damaged and failed seal around the overflow pipe of the irrigation pond at Rollo McClay Park.

Following recent survey work staff directed a contractor to begin trail improvements to provide increased access and use of the Whalebone Area trails. Staff met with a trail neighbour regarding trespass issues, and attended to the removal of a large, downed hazard tree, and a large branch at another location. Trail improvements have commenced and are scheduled to be completed in September.

At Huxley Community Park a site visit for assessing a suitable toilet location was carried out, and numerous new park signs were installed at the tennis courts.

Following May's site development work, a toilet was added to the enclosure at Joyce Lockwood Community Park,

Park staff attended a Gabriola Fire meeting, and assisted with Oceans Day preparations.

Staff looked at existing beach access stairs towards replacements options, and provided budget input.

Staff reviewed the Field House facilities at Rollo McClay Park, and identified maintenance requirements and future improvements.

Area C – Extension

Staff met with a park contractor to discuss amendments to park maintenance at Extension Miners Park; a plan was prepared for a bench installation.

A new culvert and drainage pipes were installed at Extension Miner's Community Park.

Area C – East Wellington / Pleasant Valley

Staff contracted a landscape company to carry out biannual weeding and pruning at Anders and Dorrit's Community Park; a loop trail was mowed in the hay field by the mowing contractor in July.

Staff prepared and submitted a building permit application to RDN Building Inspections for a picnic shelter at Meadow Drive Community Park. The permit was received on July 14. Project construction began in late August and completion is anticipated in fall 2016.

At Meadow Drive Community Park, staff attended to vandalism of the new toilet on several occasions, with physical damage incurred to the roof, door, toilet fixture and dispensers. In addition the cleaning contractor was required for emergency cleanings on 5 occasions within a two week period. Staff repaired the damage and closely monitored the site for several weeks. Signs were temporarily posted notifying the community and stating the area would be under surveillance. Modifications to the building were made to prevent vandals from exiting through a gap in the roof structure, and deadbolts were installed to make the building more secure when and if required.

At Benson Meadows Community Path, reflectors were attached to the boulders for public safety at night, and Park staff conducted trail maintenance.

At Anders and Dorrit's Community Park, brushing was carried out adjacent the parking lot entrance way to improve sight lines for vehicles when entering or leaving the park. The park field was hayed over the summer months.

Staff met with a contractor carrying out restorative work to the river bank on the neighbouring property, and inspected the continuation of the bank on the park property. The bank within the park is more secure due to existing tree and vegetation rooting structure.

Area E

Staff worked with GIS Mapping Services on registering two new community parks Oak Leaf Drive and Davenham Road.

Staff coordinated and attended a site meeting at Oakleaf Community Park on June 20th with POSAC members to discuss park development. A subsequent meeting with the Land Governance Manager from Nanoose First Nation occurred in the park to review the proposed plans and seek input. The Phase 1 plans for the park improvements will be occurring over the fall. Phase 2 improvements (fencing and interpretive signage mostly), will be revisited again with the POSAC.

Parks staff received a request for a playground in the Beachcomber area and suggested the request be brought forward to the Area E POSAC, either by letter or as a delegation.

At Stone Lake Drive Community Park staff removed fallen trees from the retention ponds and cleared brush from the fence.

At Brickyard Community Park a new garbage can was installed.

At Park Place Community Park staff graded the trail.

Area F

Planning staff provided input on an amenity contribution and potential park connection to the Coombs to Parksville Rail Trail from the Springhill Road industrial development.

Staff provided ongoing feedback regarding the rezoning application on Springhill Rd. Staff attended the June 27th Public Information Meeting.

Staff walked the proposed Palmer Rd trail alignment with members of the POSAC trail sub-committee to determine project feasibility. Staff has received quotes for survey work and spoken with the Ministry of Transportation and Infrastructure as well as owner of the adjacent wood lot to determine future development plans for this portion of undeveloped road.

Vehicle barriers were installed at the Cranswick Rd trailhead (Matterson Rd end). Advice from a local medi-scooter user was used to ensure that there is universal access to the trail.

A donation of \$1,730 was given to Electoral Area 'F' Community Parks to install a bear-proof garbage can the northern trailhead of the Errington School Community Trail.

Park inspections and routine park maintenance was conducted throughout the area.

At Meadowood Community Park staff removed a vandalized picnic table from the park and dealt with a variety of vandalism issues over the summer. A concrete picnic table purchased by the community was assembled on a new concrete Base installed by contractor and park staff.

Staff also worked with event organizers and the Dashwood Fire Department to help ensure the successful provision of the 6th Annual Lighthouse Bluegrass Festival which was located at Meadowood Community Park this year. Road grading work was conducted.

At Arrowsmith Community Trail, staff completed work on the newly installed trailhead sign.

Area G

In June, Park staff advised Planning staff with regard to a proposed parklands dedication in conjunction with a subdivision application in Area G on Ganske Rd.

In August, Park staff advised Planning staff with regard to a proposed rezoning application of a property near Wembley Mall on the edge of the City of Parksville. No parkland dedication is required. Through an amenity contribution, there is the possibility of trail connections in the area around the development.

At Barclay Bridge, staff trimmed and cleared trail. Staff also met on site with a resident to follow up on a concern about the safety of numerous hazard trees adjacent to their property. The trees are on crown land and are not the responsibility of the RDN to remove. Staff corresponded several times with the Province to clarify the location and jurisdiction of the trees.

At Johnstone Road, staff removed, sanded and refinished a memorial bench.

At Top Bridge two cars were locked in due to them not reading the sign and not leaving the area by 9pm. In the morning when the security company came to open the gate they found that the lock was compromised. A new lock had to be made and installed.

Staff attended to complaints of illegal dumping presumed to be within the park boundary adjacent French Creek.

As per POSAC direction, plans to move forward with design and construction of Phase 1 of the Stanhope Trail are underway. Due to utilities in the corridor, staff prepared a request for proposals and an engineering firm has been retained to do the design work this fall. It is expected that construction of the first phase from Stanhope Road to the Wally's Way cul-de-sac will occur early in 2017. Phase 2 through the trees will happen at a later date.

Parks received suggestions for improvements to the Dashwood Community Park from an area resident and have contacted a playground inspector about the feasibility of using a play structure that was removed from a school ground. Any proposed changes to the park would be presented at a POSAC meeting.

Area H

A Picnic & Play event put on by RDN Recreation was held at Henry Morgan Community Park on July 8th. Approximately 15 adults and children attended.

RDN Parks worked with the BC Wildfire Service to complete a prescribed burn at Oakdown Community Park and the surrounding Crown lands on August 29th. This was a FireSmart Initiative and is a fuel management project.

Staff continued to assist GIS Mapping with the development of maps for non-RDN Crown land trails.

At Henry Morgan Community Park, the trail from Henry Morgan CP to Cordon Road was brushed and cleared of debris.

At Islewood Road Community Park, staff brushed and scrubbed out trail.

At Rose Community Park staff removed bike jumps from the park.

All Beach accesses were maintained. Some benches were refurbished over the summer months. Department of Fisheries and Oceans was contacted with regards getting new shelf awareness signs at the beach accesses.

A temporary portable toilet was delivered to Crane Road for the fishing season.

Park staff installed 2 garbage cans at the Lions Club ball fields and set up payment for collection. They were removed at the end of the ball season. They are currently stored at the Lions Club.

Community Works Projects

Area B

Staff prepared background report on past RDN Parks involvement on MoTI road allowance (development permits and licences for water accesses and undeveloped road allowance), in relation to dealings with the Ministry and the Village Way project.

Area E

Blueback

Further development occurred at Blueback including; a larger parking lot, a cedar toilet surround, change house, and a new trail.

Park Staff met with Arborist regarding hazard tree removal, delivered and spread gravel around toilet enclosure, removed silt fence, installed a bear proof refuse container and installed concrete wheel stops.

Oak Leaf

Park staff expanded the parking lot and installed wheel stops. A trail was roughed in starting at the parking lot leading to an existing trail. Trees and trails were pruned and brushed.

Regional Significant Gas Tax Project

Coombs to Parksville Rail Trail

Construction of the Rail Trail advanced at a good pace over the summer and is nearing the half-way complete mark. Weekly field inspection reports and photos provided by consulting engineer; monthly meetings held with engineer, contractor and sub-consultants. Work on construction and consulting engineer contracts concluded. Obtained revised Station Road crossing permit from MoTI. Continued to work with the City of Parksville concerning their handling of trail development within the City's Springwood Community Park. City staff unable carry out work as expected and main project contractor expected to take on the Springwood section. Met with Coldwater Strata owners to introduce the contractor and review development plans as concerns the SRW at the back of the Strata lots. Met with contractor, engineer and roadmasters from the Southern Vancouver Island Railway and the Alberni Pacific Railway to review safety procedures around the rail. Estimate for two pedestrian rail crossings to be installed by SVI received and materials ordered. Worked with residents, engineers and contractor to resolve a local drainage issue at the junction of rail trail and the private crossing serving the Coombs' property. Worked with the Manna Homeless Society and contractor on seeing some of the non-merchantable project wood delivered to the Society as donated firewood; contracted with firewood processor with work space kindly donated by B. Carpenter of Allsbrook Road. Environmental monitoring

reports received from consulting biologist; all findings good. Media interview and photographs for web site provided to Island Radio. Test surface gravel strips assessed. Liaised with equestrians and cyclists regarding trail use, access points and fixtures such as baffles. Liaised with Coombs business owners concerning the coming need for bike parking. Station crossing location returned to west side of junction further to consultation with Alberni Pacific Railway and adjusted trail path. Safety items examined including lighting at Station and Church crossings and some fencing (cedar split-rail) beside DBL pit and by large culvert installations. Allowances identified to accommodate potential crossing and link to a Springhill Rd community park.

Regional Parks and Trails

Arboretum

Staff Cleared blackberry on the bank and along the fence as well as brushed the trail open. Garbage was removed from site on numerous occasions.

Arrowsmith CPR Regional Trail

Staff liaised with the Conservation Officer and posted a notice on the RDN web site that the trail would be closed for a week to allow time for a stalking cougar to clear the area.

Benson Creek Falls Regional Park

Park staff installed numbered trail markers for emergency locating purposes for Search and Rescue and the Coastal Wildfire Centre.

Park staff also conducted annual bridge maintenance.

Staff reviewed community correspondence, the management plan and various options for improving parking access to Benson Creek Falls Regional Park, based on community input that the Creekside Place parking lot is problematic to the community and should be closed. Staff was directed to prepare a Board Report on the matter by the Regional Parks and Trails Select Committee, which will be reviewed by the Board in September.

Coats Marsh Regional Park

Staff reviewed the *Recovery Strategy for the Little Brown Myotis, Northern Myotis, and Tri-colored Bat in Canada* and provided a staff report regarding how Federal and Provincial Species at Risk legislation impacts bat conservation efforts in regards to RDN park management and development – specifically in terms of the planned demolition of the cabin at CMRP.

Descanso Bay Regional Park

Staff provided Public notice of a campfire ban on June 7th. This ban will remain in effect until advised to lift it by the local fire chief.

The annual Oceans Day event was held on June 5th. Staff provided posters and buttons as well as provided event advertising assistance.

Englishman River Regional Park

Long-time volunteer park warden Marlene Harm retired following the death of her dog and partner Kodiak.

Staff Liaised with Arrowsmith Search and Rescue on their GPS and mapping plans for the park; put them in touch with the GIS Mapping Coordinator.

Staff responded to maintenance issues identified by the Volunteer Park Warden including; garbage issues, ATV trespass, vandalism, graffiti and suspect hazardous trees.

Horne Lake Regional Park

Staff Liaised with the Horne Lake Strata on member efforts to get MoTI to improve Caves Road conditions. RDN Park's long-standing interest in seeing road improvements was restated.

Staff updated the park map and started on updating the kiosk signs at the park.

Horne Lake Regional Trail

Staff prepared briefing notes on the historic regional trail initiative which dates from 2001 and the rezoning of lands around Horne Lake.

Staff provided Public notice of a campfire ban on August 17th as well as a Notice advising of the lifting of the ban on August 30th.

Lighthouse Country Regional Trail

New wheel stops were installed at the Lioness parking lot.

Little Qualicum River Estuary Regional Conservation Area

A representative from the BC Conservation Foundation and the Qualicum Beach Streamkeepers met with Parks staff on site to review the current research and vegetation re-establishment project underway. Additional plantings are planned for this fall and will be monitored for survival with those that went in previously.

Little Qualicum River Regional Park

Staff received an updated proposal for structural engineering services for the replacement of the bridge, and are awaiting a report from a Geotechnical Engineer assessing the conditions of the existing bridge footings.

Park staff cleaned two culverts of beaver debris on a weekly basis over the summer months, to allow for proper water flow and avoid access road damage.

Garbage was constantly being cleaned up and removed during the weekly visits.

Ongoing vandalism and willful disregard of the bridge closure is a common occurrence. Staff spoke with welder to look to solve repeated vandalism to gate and locking pins.

Moorecroft Regional Park

Park staff installed three new picnic tables in the Meadow.

Park staff followed up with Bylaws Services and Animal Control following complaints of unleashed dogs within the park.

Staff met with members of the Nanoose Fire Department and walked the property. The Fire Department gained additional familiarity with the park, and provided parks with suggestions for areas of improvement for firefighting access. Parks supplied the fire department with updated property maps and gate keys.

Staff met with the park caretakers as part of the transition and elimination of the position.

Staff attended the site with an Environmental Consultant to review and update the hazmat reports for the Caretakers house and Kennedy Hall buildings scheduled for demolition.

An Archaeologist was contacted to review the demolition sites for Kennedy Hall, and confirmed that part of the building is located within a mapped archeological area. Evidence of a midden was found under part of Kennedy Hall and an application has been made for a Site Alteration Permit.

Building Permits for the upcoming demolitions have been applied for from the RDN Building Department.

Staff began considering options for toilets and a picnic shelter in the park. Plans to meet with the Area Director and the Nanoose First Nation in September are in motion regarding the concept of a Longhouse and to discuss how all proposed facilities planned for the park will work well together into the future.

Staff have begun to explore the option of formalizing the trail access into Moorecroft from the west side. This will involve a formal agreement with the Strata who own the land adjacent to the park.

Morden Colliery Regional Trail

Staff continued to work with project consultants, the Province and the Agricultural Land Commission on planning and design initiatives related to the bridge and trail development over the Nanaimo River.

Staff removed the bike jumps that were built in the park near the Thatcher Bridges.

Mount Benson Regional Park

Staff cleared woody debris from the logging road trail to allow access for Search and Rescue and maintenance vehicles and a turnaround was created as requested by search and rescue.

Staff investigated a report of unauthorized trail construction within the park; however a site visit confirmed the constructions was not within the park boundary.

Staff reviewed community correspondence and various options for improving parking access to Mount Benson Regional Park. The current parking lot at the Witchcraft Lake trailhead does not meet demand and a long-term solution is needed. A Board Report was prepared and will be reviewed by the Board in September.

Nanaimo River Regional Park

Park staff added river rock at the outlet of a perched culvert to prevent further erosion and potential sediment.

Staff met with Ron Stone (Volunteer Warden) regarding Culturally Modified Tree issue and checked barriers due to complaint from an area user. Staff spoke to Emcon regarding moving barrier to block access and confirmed Emcon would complete ASAP.

Staff provided updated GPS information to mapping for the locations of the Fire Department well located within the Park

Staff are monitoring a complaint of uncontrolled dogs within the park. Temporary signage has been posted at the Kiosks as part of an awareness campaign.

Interpretive signage planning is underway for the research forest at Nanaimo River Regional Park. Staff will collaborate with representatives/managers of the research forest and will work with a graphic designer to produce attractive and educational signage to display in the park.

Parksville Qualicum Beach Links

Top Bridge Regional Trail

Trans Canada Trail

Temporary closure of the Extension Ridge section of the TCT extended and then terminated, further to industrial activity in the area by landowner Island Timberlands.

Obtained updated licence offer from Island Timberlands for use of their private forest lands for the TCT. Prepared report to the RPTSC and Board (September meetings).

Staff installed new posts and signs along the Extension Ridge Trail.

Witchcraft Lake Regional Trail

In June and July, permission was obtained from the City of Nanaimo and the Ministry of Transportation and Infrastructure for a proposed parking expansion at Witchcraft Lake, the trailhead for Mt Benson Regional Park. Staff mailed letters and site plans to all Benson View Rd residents for information and feedback.

In August, staff reviewed community responses to the proposed parking expansion on Benson View Rd; due to substantial opposition, the parking issue was deferred to the Regional Parks and Trails Committee and residents were informed by letter that the RDN would not proceed with the proposed works. A Board Report was prepared on the subject (see Mount Benson Regional Park above).

Miscellaneous

Staff continued work on the following:

- Park inventory spreadsheet and effective registry of the park portfolio.
- Worked with GIS Mapping on the identification and civic numbering of community parks to be included in new ARC-GIS park finder.
- Attended SMS legal seminar on contracting.
- Participated in MIA webinar on insurance requirements for construction contracts.
- Provided interview to Business in Vancouver regarding non-BC Park campgrounds as a relatively unknown but great alternative to BC Parks.

- Met with the Mount Arrowsmith Biosphere Region and Oceanside Tourism on MABR's Amazing Places project. Reviewed process and approaches. Public input will be solicited through to the end of September, RDN Parks consulted as applicable, and first results expected to be viewable on the web by end of November.
- Liaised and met with the BC Marine Trail Network Association on their current project to create a Salish Sea Marine Trail as part of the Trans Canada Trail and in time for the TCT's 25th anniversary in 2017. Further to the Association's July presentation to the Regional Board, worked with the Association on a draft partnership agreement. Prepared a board report on the project for the September RPTSC and Board.
- Received and reviewed Tourism Vancouver Island's Phase II Hiking Experience report prepared by consultant Stantec.
- Received update from UBCM on Off-Road Vehicle legislation; conference call scheduled for mid-September to discuss interest in the Province's offer to local government to include their lands under the new legislation.
- Worked with Recreation staff to provide content and imagery for the Fall/Winter Active Living Guide.
- The new staff position of Superintendent of Parks Operations and Capital Projects was filled, and Mark Dobbs started in the early July.
- The new staff position of Parks Secretary has been posted and filled; Jenny Bannatyne has accepted the position and will start September 19th.
- Staff followed the improvements underway at Nanoose Place, including the preparation and construction of an expanded paved parking lot and new signage.
- Playground inspections were conducted throughout the region.
- Staff followed up on a request about "No Motors" signage at Spider Lake, conducted a site visit, and provided information obtained to RDN Planning Department.
- Parks Staff and Contractor provided regular watering's of unestablished trees and plantings throughout the district during the hot dry weather.

Park Use Permits and Events

Area A

Continued to work with the Nanaimo Skateboard Association on a permit for the September fundraiser in support of refurbishing Nanaimo's Hammond Bay skatepark. Site visit held with organizer to review issues arising from last year's event. Volunteer assistance with traffic management kindly being provided by JSK Traffic Services of Cedar.

Responded to a request to close the Nelson Road Boat Launch for several days in order to provide for construction access to a waterfront retaining wall site. Liaised with MFLNRO, MoTI, and Planning Services; provided brief for Area Director. Further to August 23rd Board resolution to deny closure of the Boat Launch for any significant time period, a set of conditions for Boat Launch use under a park use permit was issued to applicant.

Area B

Worked with non-profit Pacific Sport and the Gabriola Recreation Society on a park use permit for a three-day sports camp at Rollo McClay Community Park. In the end, the event was cancelled because of lack of enrollment.

Area C

Obtained confirmation that VIU/Mount Arrowsmith Biosphere Reserve will take ownership of the GLORIA high-alpine vegetation monitoring plots (part of an international global warming monitoring project) installed at four locations at Mount Arrowsmith Massif Regional Park prior to the Region's acquisition of the park. Park use permit issued to VIU to address the summer 2016 revisiting of the plots.

Worked with the Nanaimo & Area Land Trust on a park use permit to work with VIU on an update of vegetative plots identified in the 2006 Ursus review of then new Mount Benson Regional Park; permit approved.

Area E

Worked with Quality Foods on concluding the park use permit for their annual Teddy Bear Picnic at Jack Bagley Community Park; liaised with Corporate Services; permit issued.

Concluded work on a park use permit for use of Moorecroft Regional Park for an early August weekend wedding.

Continued to work with Chesapeake Shores film company and MoTI on use of Moorecroft Regional Park for parking of film vehicles. In the end, the firm identified a more appropriate arrangement for their vehicle parking and only one of four weeks' proposed use was made of the Regional Park.

Began work with Nanoose Elementary School Principal on start-up of 2016-17 outdoor classroom use of Moorecroft.

Area F

Continued to work with Bluegrass Festival organizers, Dashwood Volunteer Fire Department and Corporate Services on a park use permit for the July long weekend festival at Meadowood Community Park. Provided responses to concerns raised by residents in the neighbourhood. Engaged security firm for drive-by inspections of roads leading to the Festival over the holiday weekend; liaised with RCMP. Given plan approvals by all involved authorities and required insurance proof, park use permit for Festival approved. Event went off without issue, though at a financial loss for the organizers.

Received a park use permit application from the Corcan-Meadowood Residents' Association for a Canada Day Picnic at Meadowood Community Park; approved.

Worked with applicant on a park use permit for a wedding at Errington Community Park in October. Liaised with Errington Hall Board Association overseers of the Park regarding use of the Market's stage and power supply. Permit approved.

Worked with the BC Conservation Foundation regarding a permit to cover summer maintenance of their large woody debris (LWD) structures originally installed along Little Qualicum River Regional Park riverfront in 2003. BCCF obtained DFO and Provincial backing for structures over the long-term.

Area G

Concluded permit work and provided final assistance including gift bags to the Mid-Vancouver Island Habitat Enhancement Society (MVIHES) for their 7th annual June River Run event at Englishman River Regional Park (ERRP). Worked with MVIHES and RDN WaterSmart on a second park use permit, this for

installation of water flow data loggers along the ERRP waterfront at BC Conservation Foundation large woody debris sites; permit approved. Work with MVIHES in process on another permit for the staging of a Streamkeepers workshop along the side channel at ERRP in September.

Issued a park use permit to the Nanoose Walking Club for vehicular access and a walk and hatchery visit at Englishman River Regional Park.

Area H

Concluded a park use permit with the Silver Spur Riding Club regarding use of Wildwood Community Park and the Lighthouse Country Regional Trail (North Loop) as part of a weekend-long 17th Annual Vancouver Island Memorial Trail Ride in support of Oceanside Hospice. The event was staged out of the MFLNRO compound next door to Wildwood.



Per/ Manager of Parks Services



General Manager Concurrence

RDN Electoral Area 'B' Community Parks

5-Year Project Planning: 2016-2020

PLANNING WORKSHEET

March 2016

A suggested schedule for completion of each phase of the process is presented in the following chart.

This schedule is provided for planning purposes only and is subject to change to accommodate the needs of staff and funding constraints.

- current year project
- ✓ completed projects

	Park Code	Budget Notes	General Notes
Ongoing Projects			
Administrative support for Electoral Area 'B' POSAC			
High Priority Projects (2016-2017)			
Huxley Park: skate park concept design	B-32	\$12,000	2016 budgeted amount
✓ Huxley Park: grant writing (Coop community Spaces; Nanaimo Foundation-Canada 150)	B-32		staff time
Mudge Island Water Access - boundary identification (MI-21, MI-22, MI-26)		\$12,000	MI-27 changed to MI-23 at March 4, 2014 POSAC meeting - continuing by volunteers; funds carried over from unspent 2015 budget
Cox Community park - entrance sign & benches	B-21	\$5,000	as per GaALT request, June 2, 2015 POSAC meeting
Whalebone parks improvements - survey work, directional and regulatory signage	B-5	\$20,000	
707 CP: signage review	B-26		GaLTT to do (signs to Fisher + map and signs to South Rd from the Erratic trail; missing signs); staff time
707 CP: Old Centre Rd trail brushing	B-26	\$9,000	
Village Trail: construction		TBD	Community Works Funds
The Strand Boat Ramp (Bells landing): surfacing	GI-87	\$5,000	
Joyce Lockwood CP: toilet & surround	B-16	\$7,600	
Rollo-McClay CP: dog park planning & open house	B-14		staff time
2017 Mudge Island water access development			funds to be carried over from unspent 2016 budget
2017 Park Acquisition Review - IC			
2017 Huxley CP: Phase 1 redevelopment	B-32	\$40,000 - \$100,000	Conditional on grant success
2017 Wheelchair Accessible Water Access: Twin Beaches Prov. Park			RDN to liase with BC Parks; June 2, 2015 POSAC meeting
Medium Priority Projects (2018-2019)			
Huxley CP: Phase 2 redevelopment	B-32	\$20,000 - \$50,000	order of magnitude estimated cost; not based on official estimate (for planning purposes only)
Spring Beach Stairs: repair			trail and permanent solution to the stairs
Low Priority Projects (2020-2021)			
Huxley CP: Phase 3 redevelopment	B-32	\$20,000 - \$50,000	order of magnitude estimated cost; not based on official estimate (for planning purposes only)

Additional Project Suggestions				
Gabriola Water Access Development				
Shaw Rd Water Access: MoTI permit, stair construction, signage	GI-43		\$45,000	order of magnitude estimated cost; not based on official estimate (for planning purposes only)
Eastholme Rd. Water Access: MoTI permit, survey, bench, signage	B-27		\$5,000	order of magnitude estimated cost; not based on official estimate (for planning purposes only)
Rowan Rd. Water Access: MoTI permit, survey, trail development, signage	GI-52		\$5,000	order of magnitude estimated cost; not based on official estimate (for planning purposes only)
Ivory Way Water Access: benches, small pking area/turnaround, signage	n/a		staff time	
Sir Williams/Saint Catherine's Water Access: trail/bench	B-58			
Mudge Water Access Development				
MI-14 - trail access to shore, off-road parking, signage				Priority #2
MI-18 - trail access to shore, off-road parking, signage				Priority #3
Mudge Island Community Park improvements	B-17			Priority #4
MI-21, MI-22, MI-26, MI-27 viewpoint development (including bench, signage)				Priority #5
survey & sign remaining water accesses.				Priority #6
Trail Development				
De Courcy Dr. CP - trail construction to lookout, bench	B-24			POSAC Motion March 4, 2014
Support GaALT to develop mobility accessible loop trail				June 2, 2015 POSAC meeting
Park Development				
707 CP: parcel consolidation	B-26	staff time		
707 CP: develop parking area - North Rd.	B-26		\$20,000	order of magnitude estimated cost; not based on official estimate (for planning purposes only)
707 CP: invasive plant mapping & removal	B-26			
707 CP: develop parking area - Coats Dr.	B-26		\$20,000	order of magnitude estimated cost; not based on official estimate (for planning purposes only)
707 CP: conservation covenant	B-26	staff time		
707 CP: trail access agreements	B-26	staff time		
Maintenance Items				
QueeQueg CP (Whalebone Dr): repair drainage/flooded stairs	B-7		\$800	

Completed Projects	YEAR
Village Trail: construction	2015
Whalebone parks improvements - survey work, trail brushing	2015
Rollo McClay CP: parking lot improvements	2015
Rollo McClay CP: playground installation	2015
Joyce Lockwood CP: lease renewal	2015
Honeysuckle Trail - work with GaLTT & MoTI on trail permit & development	2015
Mudge Island Water Access Identification: MI-05, MI-18, MI-20, MI-23, MI-27, MI-15	2014-2015
Rollo McClay CP: Water Reservoir Upgrades	2014
Whalebone CP's: clean-up & reclaim entrances	2014
707 CP: gate installation (South Road)	2014
707 CP: bank stabilization at 880 Christine Close*	2014
Huxley CP: community consultation & park concept design	2013 - 2014

TO: Wendy Marshall
Manager of Park Services

DATE: August 30, 2016

FROM: Elaine McCulloch
Parks Planner

MEETING: Sept 19, 2016 EA 'B' Parks and Open Space
Advisory Committee

FILE:

SUBJECT: Bylaw Referral Park Implications – Gabriola Island Local Trust Committee Bylaw Nos. 289 & 290 (Density Transfer)

RECOMMENDATION

That the Gabriola Island Local Trust Committee of the Islands Trust be advised that the proposed 136-hectare park land addition to the 707 Community Park is acceptable and that further information and discussion is required prior to the park land dedication in conjunction with the subdivision of the 'receiver' parcels'.

PURPOSE

To consider the Gabriola Island Local Trust Committee referral request to review draft rezoning Bylaw Nos. 289 and 290 and indicate how the RDN's parks interests are affected by the proposed 136-hectare (336 acre) park land addition to the 707 Community Park as well as the potential additional 19.3 ha (47.7 acre) park land dedication which would result from future subdivision of the rezoned lands.

BACKGROUND

The Gabriola Island Local Trust Committee has received a rezoning application that proposes to transfer the densities of three properties which lie between Coats Marsh Regional Park and the 707 Community Park to an area near the Island's Village Core in exchange for the dedication of the donor properties to the 707 Community Park. As the community parks function on Gabriola is provided by the Regional District of Nanaimo (RDN), the Gabriola Island Local Trust Committee has provided the Regional District with an early referral request to review and provide comment on the draft rezoning Bylaw Nos. 289 and 290 in respect to park land implications. The referral response deadline is August 31st, 2016 however upon special request, this deadline has been extended to allow the Electoral Area 'B' Parks and Open Space Advisory Committee (POSAC) and the Regional Board time to review and provide comment on the associated RDN park land implications of this proposal.

The proposed density transfer rezoning would transfer 17 densities from the donor lands, which lie between Coats Marsh and the 707 Community Park (Attachment 1), to the receiving lands near the Gabriola Island Village Core (Attachment 2), in exchange for the dedication of 136 hectares (336 acres) of park land to the 707 Community Park.

This transfer of density would enable the development of 25 lots on the receiving lands. Future subdivision of the receiving lands will require a dedication of 5% of the area of land being subdivided (or

equivalent cash-in-lieu) as per Section 510 of the *Local Government Act (LGA)*. The total area of the receiving lands is 67.8 ha (167.5 acres) requiring a park land dedication of 3.4 ha (8.4 acres).

Donor lands

It is proposed that the three properties making up the 136-hectare (336 acre) addition to the 707 Community Park would be redesignated as Park. The properties are located within the Coastal Douglas-fir moist maritime subzone and are primarily undeveloped second-growth Douglas-fir forest that was clear-cut in the recent past. This rare ecotype represents less than 0.3% of the land area of the province. The donor lands also include sensitive wetland ecosystems that, in conjunction with the wetlands in 707 Community Park and Coats Marsh Regional Park, make up a significant portion of the upland watershed of Coats Marsh and Hoggan Lake. (Attachment 3) The proposed park lands have an existing unofficial trail network that locals currently use to connect between the 707 Community Park and Coats Marsh Regional Park.

The acquisition of park land which would connect the 707 Community Park and Coats Marsh Regional Park is highly desirable both for environmental protection and trail connectivity considerations. The addition of these lands would protect an expanded area of Coastal Douglas Fir regenerating forest and provide increased protection to the highly sensitive wetland ecosystem and watershed functions of the adjacent parks. The acquisition of the proposed donor lands would legitimize the community's use of property's existing trail system, providing a robust trail connection between the two parks; resolve the issue of the 707 CP's Old Centre Road Trail alignment that currently trespasses across the north-east corner of the donor lands; provide a direct, multi-use trail connection between North and South Roads (as identified in the 707 Community Park Management Plan); and provide a trail connection from Stanley Place into Coats Marsh Regional Park (as identified in the Coats Marsh Regional Park Management Plan). (Attachment 4)

If the dedication of community park lands were to be accepted by the Regional District on behalf of the residents of Electoral Area 'B', it would be under the condition they are dedicated as free hold lands that are cleared of any legal encumbrances.

Receiving lands

The proponent has provided a conceptual strata subdivision plan that shows a 25 lot subdivision with 19.3 hectares (47.7 acres) of community park land dedication, constituting 28% of the receiving lands. (Attachment 5) In addition to the proposed park land dedication, the conceptual subdivision layout also shows internal trail connections on strata common property from Lockinvar and Burnside Roads. The proposed park and trail layout will facilitate trail connection from Lockinvar, Burnside and Taylor Bay Roads to the Village core. Included in the proposed park land dedication are the Mallett Creek reservoir and its associated dam.

The receiving lands are located within the Coastal Douglas Fir moist marine subzone and have been selectively logged in the recent past. The proposed park dedication lands are primarily composed of two Sensitive Ecosystem Classes, the selectively logged Mallett Creek wetland and its associated riparian area setbacks (approx. 26 % of the park area) and a primary non-sensitive Douglas Fir / salal ecosystem (approx. 74 % of the park area). The bio-inventory also identifies an area of mature forest, a rare-ecosystem type, located on lots 6 and 7. The majority of this mature forest ecosystem is located outside of the proposed park land dedication area. (Attachment 6)

The location of the proposed park lands and trails provide suitable adjacency to Cox Community Park and good connections between Cox Community Park and the Village Core.

Further consideration will be required regarding whether to accept the Mallet Creek riparian area / trail and the reservoir as part of the Community Park system. The development of a trail along Mallett Creek from Taylor Bay Road to the reservoir is unadvisable given that the development of trails within riparian areas does not comply with current environmental best practices. A new trail and trailhead is not required given that a trail already exists 300 meters away at Cox Community Park that has a developed trailhead and off-road parking; furthermore, the proposed new trailhead location on Taylor Bay Road is unsuitable due to poor road visibility with limited space for off-road parking. Accepting the Mallett Creek reservoir and its accompanying dam and water conveyance infrastructure as part of the community park system involves the acceptance of an associated risk regarding dam safety as well as the ongoing costs and responsibilities of dam maintenance. If the RDN were to consider accepting the reservoir as park land, more information would be required regarding the obligations and potential future implications of maintaining the dam including what would be involved if it were to be decommissioned. It should be noted that water extraction from the reservoir is permitted in perpetuity under Provincial Water License to three downstream properties for irrigation use as well as to the fire hydrant on Taylor Bay Road for fire protection purposes.

Other opportunities to consider regarding park land dedication include the expansion of the park boundaries to incorporate more of the mature forest polygon to provide additional protection to this rare ecotype. Discussions with the Gabriola Land and Trail Trust (GaLTT) have also highlighted the opportunity to develop a trail connection between the new connector road and Horseshoe Road on the eastern side of the subject properties. As this trail route follows an existing riparian corridor, additional professional environmental assessment and trail route design would be required. (Attachment 7)

Further information and discussion with the applicant and the Islands Trust is required regarding the final layout of the park dedication and public access to the internal strata trail connections through the future subdivision process.

ALTERNATIVES

1. That the Gabriola Island Local Trust Committee of the Islands Trust be advised that the proposed 136-hectare park land addition to the 707 Community Park is acceptable and that further information and discussion is required prior to the park land dedication in conjunction with the subdivision of the 'receiver' parcels'.
2. That alternative recommendations be made in regard to the Gabriola Island Local Trust Committee referral request to review draft rezoning Bylaw Nos. 289 and 290 and related parkland dedication proposal.

FINANCIAL IMPLICATIONS

The financial implications of accepting the 'donor' parcels as community park land would include additional staff time and resources to manage the lands which continue to be stretched amongst the seven Electoral Area Community Park systems. Additional funds would be required for a legal review and Stage 1 Preliminary Site Investigation to determine whether there is potential for contamination in contravention of environmental regulations.

Operationally, this land will need to be managed for due diligence i.e. inspection, upkeep and potential decommissioning of trail, hazard tree monitoring, signage upgrades, fire suppression, and wetland monitoring.

The 707 Community Park Management Plan 2010 – 2020 establishes the management direction to guide the operations, development and stewardship of the Park. If additional lands are added to the Park, there will be increased costs to the scheduled 707 Community Park Management Plan 2020 update as a result of the expanded scope of the plan and in order to complete baseline studies of the additional park land.

STRATEGIC PLAN IMPLICATIONS

The Board Strategic Plan 2016-2020 identifies a strong focus on protecting and enhancing the environment, and through the addition of park lands connecting 707 Community Park and Coats Marsh Regional Park, the RDN will protect an expanded area of Coastal Douglas Fir regenerating forest and provide increased protection to the highly sensitive wetland ecosystem and watershed functions of the adjacent parks.

The Plan also addresses recreational amenities as a core service. Connecting the two parks would significantly expand the existing trail systems and satisfy the long-standing community goal to provide an east-west multi-use trail connection between North and South Roads.

SUMMARY/CONCLUSIONS

The Regional District of Nanaimo has received an early referral request from the Gabriola Island Local Trust Committee to review and provide comment on the associated RDN park land implications of the draft rezoning bylaws Nos. 289 and 290. The proposed density transfer rezoning would transfer 17 densities from the donor lands which lie between Coats Marsh and the 707 Community Park, to the receiving lands near the Gabriola Island Village Core, in exchange for the dedication of 136 hectares (336 acres) of park land to the 707 Community Park. The applicant has provided a conceptual subdivision layout plan of the receiving lands that shows a 19.3 hectare (47.7 acre) park land dedication constituting 28% of the receiving lands as well as additional public trail connections to the Village Core from Lockinvar and Burnside Roads.

The acquisition of the proposed donor lands would legitimize the community's use of the property's existing trail system and satisfy a number of long-term goals identified in both the 707 Community Park and Coats Marsh Regional Park Management Plans including providing public trail connections between the two parks; resolving the issue of the 707 CP's Old Centre Road Trail alignment that currently trespasses across the north-east corner of the donor lands; providing a direct, multi-use trail connection between North and South Roads; and providing a trail connection from Stanley Place into Coats Marsh Regional Park.

Further information and discussion with the applicant and the Islands Trust is required regarding the final layout of the park dedication and public access to the internal strata trail connections through the future subdivision process. The conceptual subdivision layout provides good connections between Cox Community Park and the Village Core however, further consideration is required regarding securing public access to the internal strata trail connections and the acceptance of the Mallett Creek riparian corridor and reservoir as community park land. Other opportunities regarding park land dedication can also be explored as part of the subdivision park land referral process including the expansion of the park boundaries to protect more of the mature forest area and potentially developing a trail connection to Horseshoe Road along the subject property's eastern property boundary.

The financial implications of accepting the 136 hectares of additional park land which would connect the 707 Community Park and Coats Community Park include the legal costs associated with property transfer; ongoing operational costs including signage upgrades, inspection and maintenance of the existing trail system; as well as increased costs to the scheduled 707 Community Park Management Plan 2020 update in order to complete baseline studies of the additional park land.



Report Writer



Per/ Manager Concurrence



General Manager Concurrence



C.A.O. Concurrence

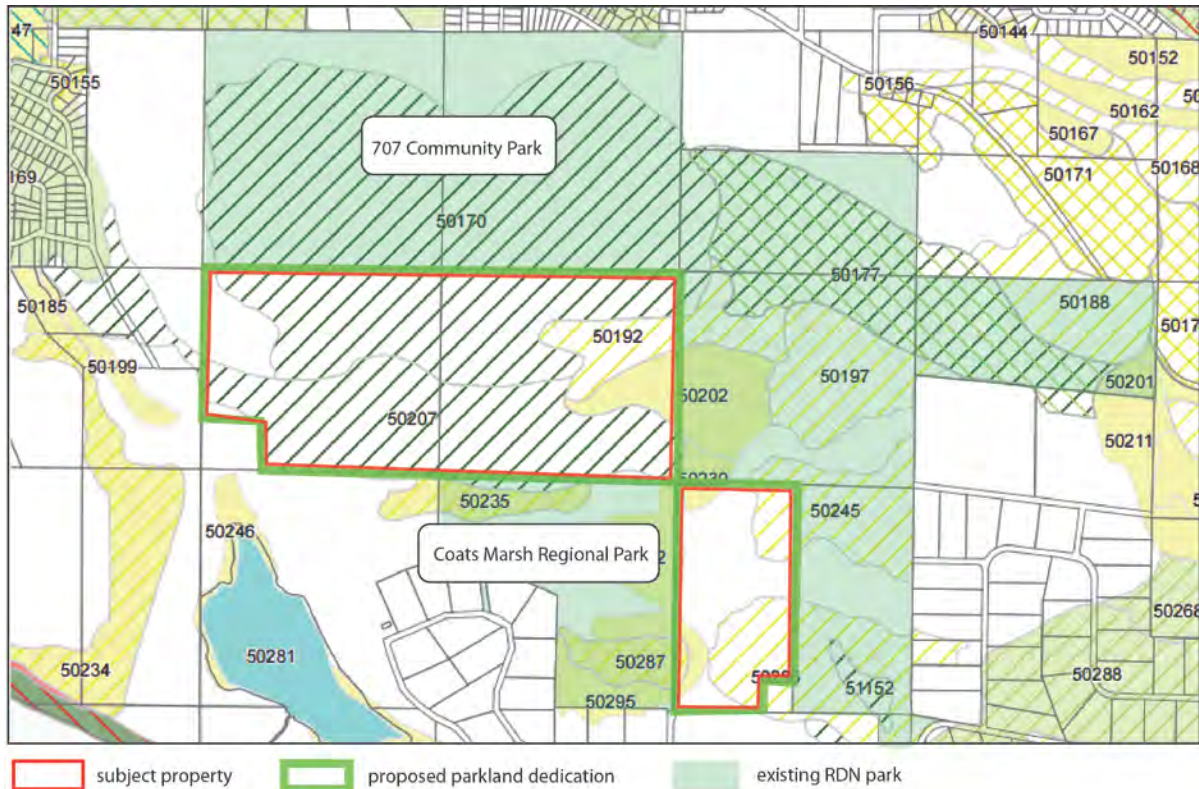
Attachment 1 Donor Lands



Attachment 2 Receiving Lands



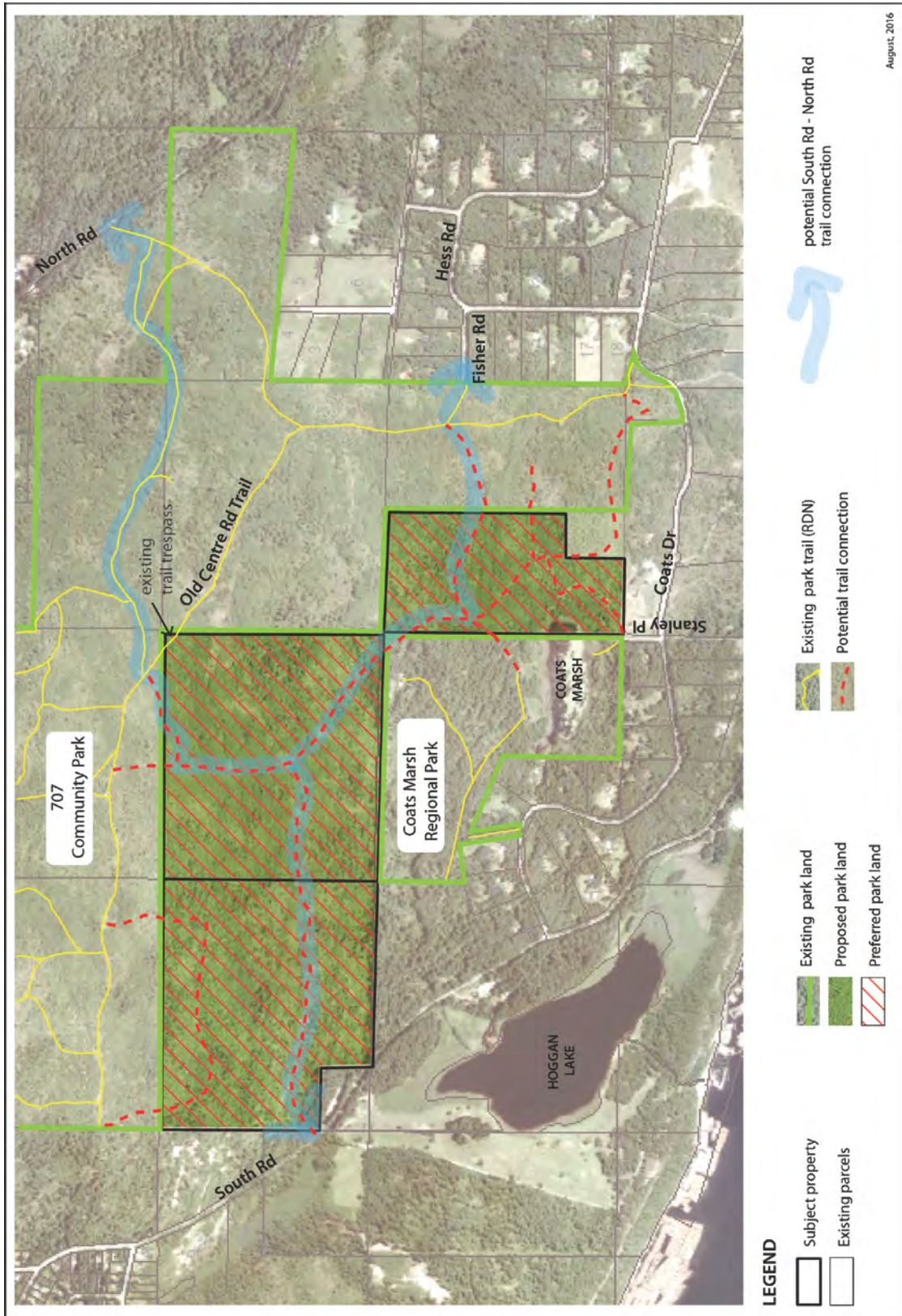
Attachment 3
Ecosystem Mapping coverage, donor property,
Gabriola Island Sensitive Ecosystem Mapping Airphoto - 2007



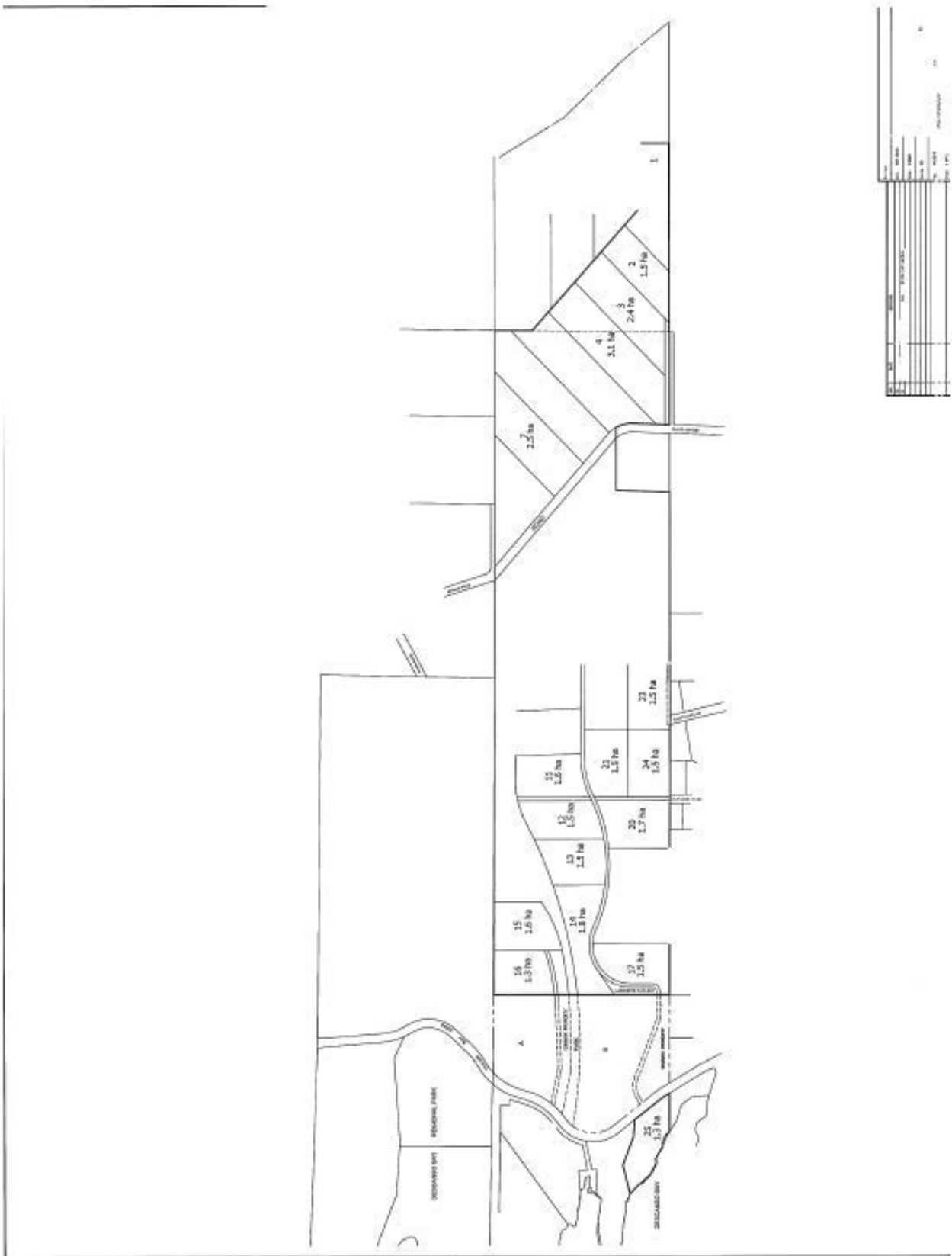
Identified Sensitive Ecosystem polygon features within proposed parkland dedication area from *Gabriola Sensitive Ecosystem Mapping - Airphoto 2007*

Primary Ecosystem						Secondary Ecosystem				
Polygon #	%	SE Class	SE subclass	Mapcode	Stage	%	SE Class	SE subclass	Mapcode	Stage
50170	60	Non-Sensitive	NA	Douglas-fir / salal	shrub / herb	30	woodland	conifer	Douglas-fir - shore pine -arbutus	shrub / herb
50192	90	Non-Sensitive	NA	Douglas-fir / salal	shrub / herb	10	wetland	swamp	Western redcedar - vanilla leaf	pole / sapling
50202	90	wetland	swamp	Western redcedar - vanilla leaf	pole / sapling	10	Non-Sensitive	NA	Douglas-fir / salal	shrub / herb
50207	80	Non-Sensitive	NA	Douglas-fir / salal	shrub / herb	10	wetland	swamp	Western redcedar - vanilla leaf	pole / sapling
50230	100	wetland	swamp	Western redcedar - Indian Plum	pole / sapling					
50245	50	Non-Sensitive	NA	Douglas-fir / salal	pole / sapling	50	wetland	swamp	Western redcedar - vanilla leaf	pole / sapling
50295	90	wetland	swamp	Western redcedar - Indian Plum	young forest	10	Non-Sensitive	NA	Rural residential	no structural stage
50296	90	Non-Sensitive	NA	Douglas-fir / salal	shrub / herb	10	wetland	swamp	Western redcedar - Indian Plum	pole / sapling

Attachment 4
Park and trail connections, donor property



Attachment 5
Conceptual Subdivision Layout, Receiving property

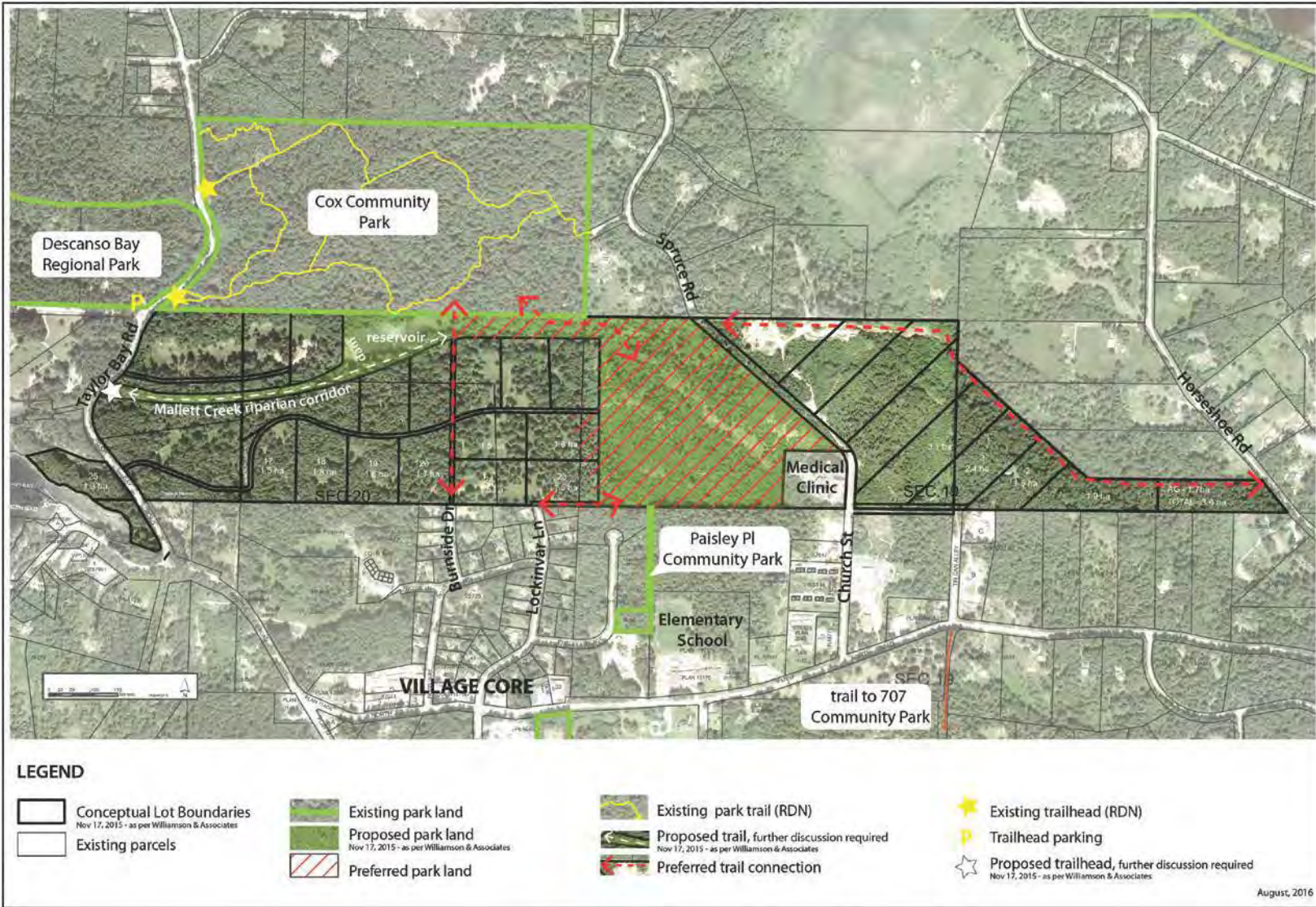


Attachment 6
Ecosystem Mapping coverage, receiving property,
Gabriola Island Sensitive Ecosystem Mapping Airphoto - 2007



Primary Ecosystem						Secondary Ecosystem				
Polygon #	%	SE Class	SE subclass	Mapcode	Stage	%	SE Class	SE subclass	Mapcode	Stage
50082	90	Wetland	swamp	Western redcedar / vanilla leaf	young forest	10	wetland	marsh	Sitka sedge - hemlock parsley marsh	herb
51154	10	Freshwater	lake	lake						
50094	80	Woodland	conifer	Douglas-fir - shore pine - arbutus	mature forest	20	mature forest	conifer	Douglas-fir / salal	mature forest
50085	80	Non-Sensitive	NA	Douglas-fir / salal	shrub / herb	20	woodland	conifer	Douglas-fir - shore pine - arbutus	shrub / herb
50076	100	Wetland	swamp	Douglas-fir / salal	young forest					

Attachment 7
Park and trail connections, receiving property





STAFF REPORT

Date: May 2, 2016

File Nos.: GB-RZ-2016.1

To: Gabriola Island Local Trust Committee
For the meeting of May 26

From: Rob Milne, Island Planner

CC: Ann Kjerulf, Regional Planning Manager

Re: **Application to Redesignate and Rezone Lands to Facilitate Density Transfer and Parkland Donation**

Donor Lands

Owners: Potlatch Properties Ltd & Pilot Bay Holdings Ltd.

Applicant: Williamson and Associates

Location: (1) The South East $\frac{1}{4}$ of Section 13, Gabriola Island, Nanaimo District Except The South West $\frac{1}{4}$ of the South West $\frac{1}{4}$ of The Said South East $\frac{1}{4}$;
(2) The South West $\frac{1}{4}$ of Section 14, Gabriola Island, Nanaimo District ; ;and
(3) The West $\frac{1}{2}$ of the North East $\frac{1}{4}$ of Section 10, Gabriola Island, Nanaimo District

Receiving Lands

Owners: Potlatch Properties Ltd

Applicant: Williamson and Associates

Location: (1) The South $\frac{1}{2}$ of the North West $\frac{1}{4}$ of Section 19, Gabriola Island, Nanaimo District Except Part in Plan EPP13396
(2) Lot 7, Section 20, Gabriola Island, Nanaimo District, Plan VIP86742; and
(3) Lot 6, Section 20, Gabriola Island, Nanaimo District, Plan VIP86742

Owners: Timothy and Viginia Wright

Applicant: Williamson and Associates

Location: Lot 1, Section 19, Gabriola Island, Nanaimo District, Plan 24354

THE PROPOSAL

The intent of this proposal is to facilitate the transfer of 17 densities from the donor lands, which lie between Coates Marsh Regional Park and the 707 Community Park, to the receiving lands near the Gabriola Island Village core, in exchange for the dedication of 136 hectares (ha) of parkland to the 707 Community Park. This transfer of density would enable the development of

25 lots and an additional 19.3 ha (47.7 acres) of community parkland on the receiving lands. The proposal would also facilitate:

- Roadway dedication and construction between Spruce Road and Church Road;
- Dedication and protection of the Mallett Creek riparian corridor; and
- Trail connections from Lockinvar, Burnside, Taylor Bay and Horseshoe Roads to the Village core, Cox Park and surrounding neighbourhoods;

BACKGROUND

An application has been received to facilitate the redesignation and rezoning of the donor lands (Attachment 1) and receiving lands (Attachment 2). Pursuant to OCP policy 5.2(i):

For every 8 hectares (19.76 acres) of land in the Forestry zone which an owner dedicates for wilderness recreation, the owner shall be entitled to transfer one residential density to land in the Resource zone which would be rezoned to Resource Residential.

Based upon the area to be dedicated for wilderness recreation (the donor lands), 17 residential densities would be created which could then be transferred to lands within the Resource Residential zone (the receiving lands).

Donor Lands

The donor lands are comprised of three parcels with a combined area of 139.5 ha (344.71 acres). The lands are adjacent to the northerly and easterly limits of Coates Marsh Regional Park and 707 Community Park. The donor lands have similar biophysical characteristics as lands within 707 Community Park in that they are sparsely covered with immature second growth forest with evidence of past logging activity. The parcels can be accessed from a short road which runs north from Coates Road and via South Road from a location just north of the golf course.

The donor lands are proposed to be redesignated from Forestry (F) to Park (P) and rezoned from Forestry (F) to Forestry/Wilderness Recreation 1 (FWR1), with the exception of 3.5 hectares in the southeasterly portion. Subdivision following the redesignation and rezoning process would yield the 136 ha area to be dedicated as parkland and a 3.5 ha parcel to be retained for future residential development (with one density unit).(Attachment 3).



Figure 1 Donor Lands

Receiving Lands

The receiving lands, shown in Figure 2, are more complex in nature and run east to west in a band extending from Descanso Bay on the west to Horseshoe Road on the east running along the northern edge of the “village” area up to, around, and past the medical clinic, Tin Can Alley and the GIRO recycling facility. Cox Community Park is also located along the northern boundary of the western portion of the receiving parcels. The properties vary in nature from mature forest characteristics on the west to a previously cleared central area with sparse second growth surrounding the medical clinic on Church Street, returning to a well forested parcel on the east.

A significant feature of the receiving area is the presence of Mallet Creek which runs in an east to west direction along the northwesterly border of the western portion of the receiving lands. This includes a dammed retention pond which feeds to a standpipe on Taylor Bay Road which is used by the fire department as a water supply. A significant portion of the previously cleared centre portion of the combined parcel area, as well as the retention pond and creek, are proposed to be dedicated as additional park lands which will provide a north-south connector to Cox Community Park from North Road. One other significant feature is a small escarpment in the northeasterly corner of the central parcel from which the medical clinic at the end of Church Street was previously subdivided.

The receiving lands are proposed to be redesignated from Forestry (F) and Resource (R) to Rural Residential 2 (RR2). Upon completion of redesignation and rezoning, the applicant intends to subdivide the receiving lands into 25 lots, as described previously (Attachment 4).



Figure 2 - Receiving Lands

CURRENT PLANNING STATUS OF SUBJECT LANDS:

Trust Council Strategic Plan

The Islands Trust Council Strategic Plan contains the following relevant policy:

- 1.5.2 Protect land with high biodiversity, through acquisition, donation, or conservation covenant.

Islands Trust Policy Statement:

The Islands Trust Policy Statement contains the following relevant Directive Policies:

- 3.1.3 Local trust committees and island municipalities shall, in their official community plans and regulatory bylaws, address the identification and protection of the environmentally sensitive areas and significant natural sites, features and landforms in their planning area.
- 3.1.4 Local trust committees and island municipalities shall, in their official community plans and regulatory bylaws, address the planning, establishment, and maintenance of a network of protected areas that preserve the representative ecosystems of their planning area and maintain their ecological integrity.
- 4.2.6 Local trust committees and island municipalities shall, in their official community plans and regulatory bylaws, address the need to protect the ecological integrity on a scale of forest stands and landscapes.
- 5.2.5 Local trust committees and island municipalities shall, in their official community and regulatory bylaws, address means for achieving efficient use of

the land base without exceeding any density limits defined in their official community plans.

Gabriola Island Official Community Plan, Bylaw No. 166:

Donor Lands

The donor lands are currently designated as Forestry (F). It is proposed to redesignate those properties to Park (P) with the exception of a 3.5 ha (8.6 acre) area, which would retain the Forestry designation.

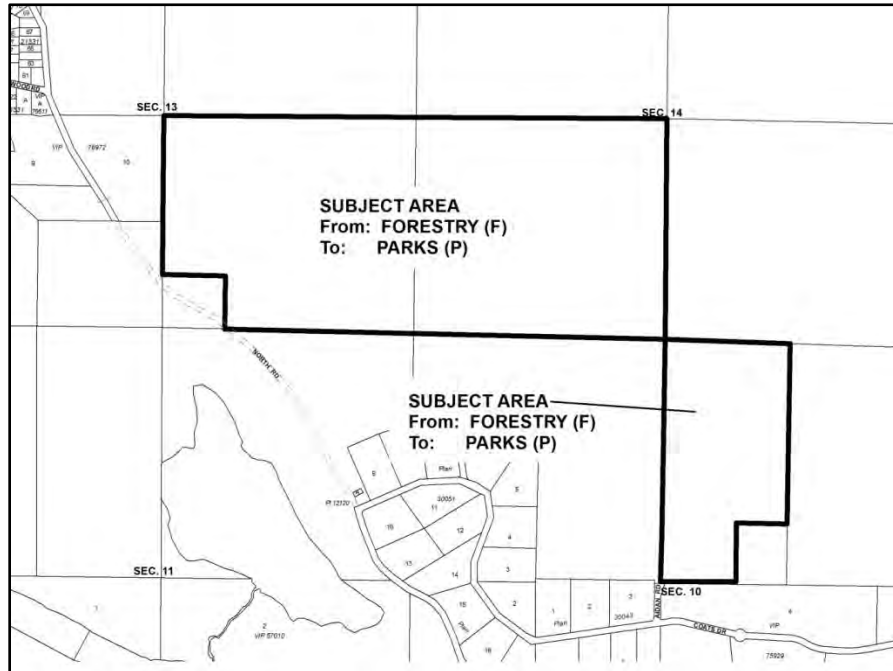


Figure 3 – Proposed Donor Land Rezoning

Receiving Lands

The receiving lands are currently designated a mix of Forestry (F) and Resource (R) by the OCP and are proposed to be redesignated to Small Rural Residential (SRR). Pursuant to OCP Policy 5.2(i), all of the receiving lands are required to be rezoned to Resource Residential. There follows below a listing of OCP goals, objectives and policies relevant to this application.

2.0 General Land Use Objectives

1. To support land uses that provide for a variety of lifestyles which are in keeping with Gabriola’s rural character;
2. To promote the preservation of land that has social, environmental and cultural significance;
3. To ensure development is undertaken in a manner which minimizes negative community and environmental impact; and
4. To limit development to a level that is compatible with the Community Plan and the object of the Islands Trust.

2.1 General Residential Objectives

1. To ensure that subdivision design is consistent with the rural character of Gabriola;

General Residential Policies

- d) Future residential subdivisions should be designed to consider the natural contours of the land, existing natural landscapes, trail access and the design of adjacent subdivisions in order to promote development in harmony with the land and/or seascape.

2.2 Small Rural Residential Policies

- a) The principal use shall be residential.
- b) One single-dwelling residential unit shall be permitted per parcel.
- c) The minimum parcel size in the Small Rural Residential designation shall be 0.5 hectares (1.235 acres) and the average parcel size shall be 2.0 hectares (4.94 acres).

4.2 Parks and Outdoor Recreational Use

Parks and Outdoor Recreation Objectives

5. To work in cooperation with the Regional District of Nanaimo in acquiring and managing community parks.

Parks and Outdoor Recreation Policies

- c) To the extent practical, at the time of park dedication or the acquisition of new park sites, effort shall be made to secure sites which exhibit good recreational capability and/or can be easily connected to existing parks or park sites on neighbouring properties as they undergo subdivision.
- d) There shall be no minimum or average parcel size for parks.
- e) A community trails network shall be encouraged to be established incorporating existing public trails. Effort should be made to maintain the contiguous nature of existing, established traditional trails. Such initiative is subject to the consent of the private property owners affected and the provision of appropriate signage being provided to indicate where a trail crosses private property.
- f) Where practical, the community's network of trails should endeavour to connect to public parks and to existing trails within parks.
- g) Trails may be acquired at the time of subdivision or as a condition of rezoning or through voluntary measures. Dedicated trails shall be registered by means of a right of way plan, easement or other means and registered on title of the lands affected in the Land Titles Office.

6.1 Environmentally Sensitive Areas

Environmentally Sensitive Area Objectives

1. To ensure the protection of environmentally sensitive areas on Gabriola;
2. To protect important habitat and water resources areas through vegetation retention and building setbacks;

Environmentally Sensitive Area Policies

- a) Development within environmentally sensitive areas may be regulated through the use of development permits.
- b) With respect to an area identified as being environmentally sensitive, the registration of a natural state or environmental covenant and/or the use of a development permit shall be required as a condition of rezoning so as to ensure the long term protection of environmental features.
- c) Voluntary covenants or easements to protect natural features and donation or sale of sensitive areas to a conservation agency shall be encouraged.
- d) In order to protect area watercourses, rezoning adjacent to a watercourse shall be conditional upon the establishment of a protective setback area. The Ministry of Environment - Federal Fisheries report titled: Stream Stewardship - A Guide for Planners & Developers and Land Development Guidelines for the Aquatic Habitat shall be used as a guideline in determining how land is to be developed adjacent a watercourse (including a lake and wetland).

Gabriola Island Land Use Bylaw No. 177

Donor Lands

The contributing properties are currently zoned Forestry (F) and would be rezoned to Forestry/Wilderness Recreation 1 (FWR1) pursuant to OCP Policy 5.2(i), with the exception of a 3.5 ha (8.6 acre) area, which would retain Forestry zoning.

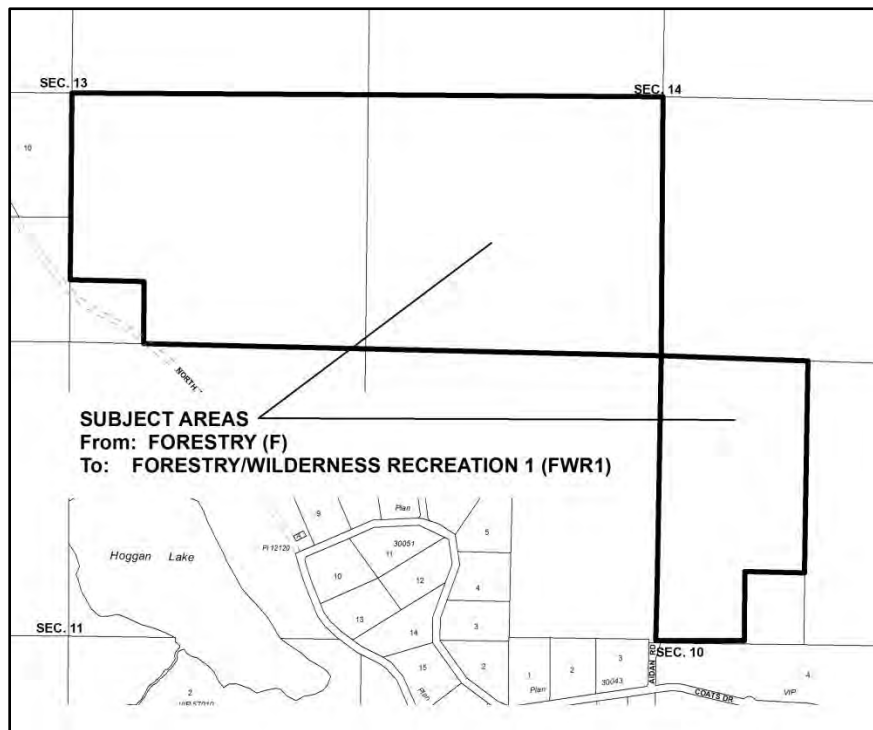


Figure 4 – Proposed Donor Land Rezoning

Receiving Lands

The receiving lands are zoned Resource (R) and Forestry (F). Pursuant to OCP Policy 5.2(i) those properties are required to be rezoned to Resource Residential.

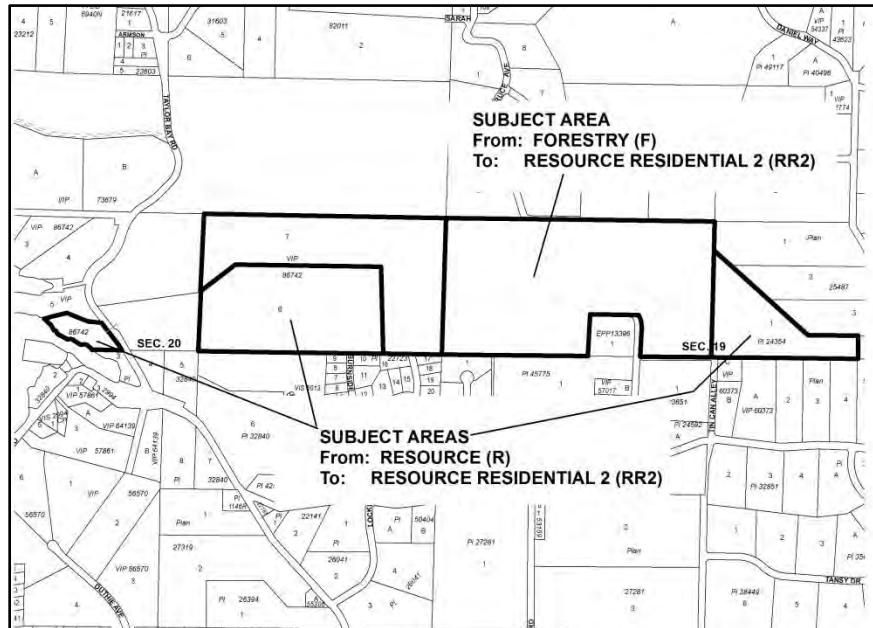


Figure 5 – Proposed Receiving Lands Rezoning

Sensitive Ecosystems and Hazard Areas:

Donor Lands

The northern contributing properties are in the Coastal Douglas Fir biogeoclimatic unit. Islands Trust sensitive ecosystem mapping (SEM) associates a secondary woodland ecosystem with these lands but does not identify any sensitivities. The smaller parcel of land to the east of Coates marsh is also within the Coastal Douglas Fir biogeoclimatic unit and is shown as having a secondary wetland ecosystem, but no sensitivities, on a portion of the parcel.

Receiving Lands

The Islands Trust SEM indicates the receiving lands represent a combination of woodland and mature forest characteristics as well as wetland features along the Mallet Creek corridor. The mapping corresponds with field observations of the property. As was noted earlier in this report there is a small escarpment in the northeasterly corner of the central parcel from which the medical clinic at the end of Church Street was subdivided off from.

A number of professional reports were submitted along with this application. These included a bio-inventory (Attachment 6) of the receiving lands including Mallet Creek and the retention pond. The report contains a number of recommendations including the delineation of areas planned for preservation during the development process. It should be noted that Mallet Creek and the retention pond are within the proposed 19.3 ha (47.7 acres) community parkland within the receiving lands. A RAR assessment of the creek (Attachment 7) was also conducted in 2014 and established setback distances of 15 m from the high water mark of the pond, extending to 30 m on the south side of the pond and 10 m from Mallet Creek.

In addition to the bio-inventory, a geotechnical hazard assessment report (Attachment 8) was also provided as part of the application package. This report addresses the escarpment and the suitability of the land on which it is located for the development of six single family residential lots as shown on the proposed subdivision plan for the receiving lands. It is the conclusion of the report that, “the land is considered safe for the use intended” and that, “the escarpment at the rear of proposed residential lots does not pose a significant risk of a landslip hazard”. The report includes recommendations for suitable setbacks from the escarpment which vary from 8 to 10 m relative to the slope.

Archaeological Sites:

An archaeological overview assessment report by Madrone Environmental Services (Attachment 9), completed in September, 2015, was submitted with the application materials. This comprehensive report evaluated the receiving property area. The purpose of the study is identified as: “1) to ascertain whether visible archaeological features on the subject property were present and to assess the potential for buried archaeological deposits on the property and 2) to provide the necessary recommendations for any future development should any archaeological potential be identified, including a cultural resource management plan for the development phase of the proposed subdivision project”. The assessment identified two areas of moderate potential and provided two recommendations with respect to those sites.

Covenants:

Donor Lands

There are no relevant covenants.

Receiving Lands

Lot 7, Section 20, Gabriola Island, Nanaimo District, Plan VIP86742

FA53237 Statutory Right of Way - BC Hydro and Power Authority

FA53238 Statutory Right of Way - Telus Communications

Lot 6, Section 20, Gabriola Island, Nanaimo District, Plan VIP86742

FA53237 Statutory Right of Way - BC Hydro and Power Authority

FA53238 Statutory Right of Way - Telus Communications

FB272973 Covenant – Regional District of Nanaimo (Floodproofing)

Lot 1, Section 19, Gabriola Island, Nanaimo District, Plan 24354

EK76060 Covenant – Regional District of Nanaimo (Siting Constraints)

COMMUNITY INFORMATION MEETING(S):

Conducting a CIM after first reading of the bylaws will assist in addressing any concerns or questions regarding the intent or content of the proposed bylaws.

ANALYSIS:

The intent of this application is to dedicate approximately 136 ha (336.1 acres) of land contained within three parcels (Figure 1) to the 707 Community Park and to transfer the resulting 17 densities created by to a receiving area located along the northern edge of the Gabriola Island Village area (Figure 2). These 17 densities, when added to the current permitted potential

density of the receiving area (eight units), would result in the potential for 25 lots with an average lot area of 1.9 ha (4.7 acres) within the receiving lands. 19.3 ha (47.7 acres) are also proposed to be dedicated as community parkland within the receiving lands, for a cumulative total of 155.3 ha (383.7 acres) of community parkland, which would be created through this proposal.

It should be emphasized that the applicant intends to transfer ownership of 136 ha of the donor lands to the Regional District of Nanaimo (RDN), as an addition to the adjacent 707 Community Park for community use.

With respect to the receiving lands, the applicants are not requesting additional density beyond what is permissible when the transferred densities (17 units) are combined with allowable density under the current zoning (8 units). In other words it is a “density neutral” transfer which will not create any new densities on Gabriola Island.

The proposed subdivision of the receiving lands to create the proposed 25 lots will generate the need for parkland dedication. Section 510 of the *Local Government Act* (LGA) requires a dedication of 5% of the area of land being subdivided (or equivalent cash-in-lieu). The total area of the receiving lands is 67.8 ha (167.5 acres) requiring a parkland dedication of 3.4 ha (8.4 acres). The applicants are offering a parkland dedication of 19.3 ha (47.7 acres), constituting 28% of the receiving lands, and resulting in a cumulative total parkland dedication of 155.3 ha (383.8 acres). Staff has confirmed, through Wendy Marshall, RDN Manager of Park Services, that the Regional District is interested in the opportunity to add lands to the Gabriola regional and community park system.

At present there exists only one resource residential zone in the Gabriola LUB, that being the Resource Residential 1 (RR1) zone. This zone provides the regulatory framework for the use of the property in that zone and sets an average lot area of 2.35 ha (5.8 acres) and a minimum parcel size of 1.0 ha (2.5 acres). The subdivision proposed for the receiving area represents an average lot area of 1.9 ha (4.7 acres) which is smaller than the minimum in the RR1 zone.

The reason for this difference is based upon the amount of land that is proposed to be dedicated as park land and the applicant’s intent to create a clustered development (where residential development is consolidated and larger areas of greenspace are retained). The applicants could easily achieve the 2.35 hectare minimum lot area by reducing the amount of proposed parkland dedication. Staff recommends introducing a new Resource Residential 2 (RR2) zone to permit the lot sizes proposed by the applicant thereby maximizing the amount of park land achieved through the rezoning process. The new zone would be the same as the Resource Residential 1 (RR1) zone in all other aspects.

Apart from the density transfer and parkland dedication components involved with these applications, the applicant is proposing:

- Roadway dedication and construction between Spruce Road and Church Road;
- Dedication and protection of the Mallett Creek riparian corridor; and
- Trail connections from Lockinvar, Burnside, Taylor Bay and Horseshoe Roads to the Village core, Cox Park and surrounding neighbourhoods;

Considerable community support for a connection between Spruce and Church Road was heard at the May 6, 2015 open house held by the applicant. Support was heard from a wide range of groups and organizations including the RCMP, School District 68, Gabriola Fire Department, Chamber of Commerce, Gabriola Ratepayers Association and Gertie. The support for the connection was largely based upon public health and safety issues, the potential for improved response times and the potential for an alternative vehicular access route to Berry Point Road.

Support was also heard at that meeting for the potential addition to community parks on Gabriola as well as the opportunity for improved trail connections.

The protection of riparian areas and watershed areas as well as the addition of new trails and trail connections are directly supported by current OCP objectives and policies as noted in the “Current Planning Analysis” provide earlier in this report.

Although the proposal will not create any new density on Gabriola Island concerns may arise as to potential impacts upon the ability of the receiving area to support the transferred density, such as water supply and onsite septic disposal. These aspects of development approval are addressed through the subdivision approval process administered by the Ministry of Transportation and Infrastructure (MOTI). Applicants are required to demonstrate adequate potable water supply and locations for a primary and reserve septic disposal field on each proposed parcel. The failure of any proposed lot to meet the required standard would result in a reduced density (fewer lots). As recommended by staff, the applicant has been doing the required due diligence to ensure that their proposal meets the subdivision standards required for MOTI approval.

STAFF COMMENTS

As noted in the analysis section of this report, there appears to be no substantive reason why this application should not proceed through the statutory consultation process. No issues arose at the May 6, 2015 public open house to suggest that the applications should not move forward at this time. Staff is, therefore, of the view that this application is ready to proceed forward to the bylaw phase and a community information meeting (CIM).

RECOMMENDATIONS:

1. That the Gabriola Island Local Trust Committee review the Directives Only Policies and confirm by resolution that Bylaw No. 289 cited as “Gabriola Island Official Community Plan (Gabriola Island) Bylaw No. 166, 1997, Amendment No. 1, 2016 is not contrary to or at variance with the Islands Trust Policy Statement;
2. That the Gabriola Island Local Trust Committee review the Directives Only Policies and confirm by resolution that Bylaw No. 290 cited as “Gabriola Island Land Use Bylaw No. 177, 1999, Amendment No. 1, 2016 is not contrary to or at variance with the Islands Trust Policy Statement;
3. That the Gabriola Island Local Trust Committee give first reading to Bylaw No. 289 cited as “Gabriola Island Official Community Plan (Gabriola Island) Bylaw No. 166, 1997, Amendment No. 1, 2016”;
4. That the Gabriola Island Local Trust Committee give first reading to Bylaw No. 290 cited as “Gabriola Island Land Use Bylaw No. 177, 1999, Amendment No. 1, 2016”;
5. That the Gabriola Island Local Trust Committee hold a Special Meeting as a Community Information Meeting in regards to proposed Bylaw Nos. 289 and 290.

Prepared and Submitted by:



May 2, 2016

Date

Concurred in by:

Ann Kjerulf

May 4, 2016

Date

Attachments:

1. Application package donating property
2. Application package receiving property
3. Proposed subdivision-donating property
4. Proposed subdivision-receiving property
5. Statement of Community Benefits and Development Concepts
6. Bio-inventory report
7. Geotechnical report
8. RAR QEP report
9. Archaeology Report
10. Draft OCP Bylaw No. 289
11. Draft LUB Bylaw No. 290
12. Policy Statement Checklist



Victoria Office
 200 - 1627 Fort Street
 Victoria, BC V8R 1H8
 Ph: (250) 405-5151
 Fax: (250) 405-5155
information@islandstrust.bc.ca

Salt Spring Office
 1 - 500 Lower Ganges Road
 Salt Spring Island, BC V8K 2N8
 Ph: (250) 537-9144
 Fax: (250) 537-9116
ssiinfo@islandstrust.bc.ca

Northern Office
 700 North Road
 Gabriola Island BC V0R 1X3
 Ph: (250) 247-2063
 Fax: (250) 247-7514
northinfo@islandstrust.bc.ca

North Pender, South Pender,
 Galiano, Mayne, Saturna, Executive

Salt Spring

Gambier, Lasqueti, Hornby,
 Denman, Gabriola, Thetis

Bylaw Amendment Application Form

For Official Community Plan, Land Use Bylaw, Zoning Bylaw, Subdivision Bylaw,
 Rural Land Use Bylaw and Land Use Contract Amendments.

Application Fee:	<u>\$4500⁰⁰</u>	OFFICE USE ONLY Receipt No:	<u>3052</u>	File No:	<u>GP-RZ-2016.1</u>
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SECTION 1: DESCRIPTION OF PROPERTY (AS INDICATED ON STATE OF TITLE CERTIFICATE)

Lot/Parcel _____ Plan _____ Block _____ District Lot/Section _____
 Range _____ Other Description _____
 Street Address or General Location _____
 Jurisdiction and Folio Number _____ (From Property Assessment/Tax Notice)
 Parcel Identifier (PID) _____ (From State of Title Certificate)



SECTION 2: OWNER INFORMATION (ADD ADDITIONAL PAGE IF MORE THAN TWO OWNERS)

(1) <u>Potlatch Properties</u> Name	(2) <u>Pilot Bay Holdings</u> Name
(1) <u>1885 MARTIN RD</u> Street Address	(2) <u>3088 BARONS RD</u> Street Address
<u>GABRIOLA BC</u> <u>Box 348 VORNO</u> Town/Prov. Postal Code	<u>NAWAMO BC</u> <u>V9T 4B5</u> Town/Prov. Postal Code
<u>250 247 9094</u> Telephone	<u>250 756 7723</u> Telephone
	<u>bhenning.waps@telus.net</u> Email

SECTION 3: APPLICANT INFORMATION (IF DIFFERENT FROM OWNER)

WILLIAMSON & ASSOC
 Name
 ATTN: B. HENNING
3088 BARONS RD.
 Street Address
NAWAMO
 Town/Prov.
V9T 4B5 250 756 7723
 Postal Code Telephone
bhenning.waps@telus.net
 Fax Email

Freedom of Information and Protection of Privacy
 Personal information contained on this form is collected under the *Local Government Act* for the purpose of responding to this application, or for purposes directly connected with this application. Information on your application form may be available to the public upon request under freedom of information legislation. Please contact a Deputy Secretary at one of the above noted offices if you have any questions regarding the collection of personal information on this form.

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Mail or deliver the completed application form, fee, plans and supporting material to the Islands Trust Office. The fee is payable to the Islands Trust. Contact Islands Trust staff for the current fee prior to submitting your application as fees may change annually.

SECTION 4: Plan Designation or Zone changes:

Official Community Plan amendment requested (if applicable and be specific):

Land Use Bylaw, Zoning, Subdivision or Rural Land Use Bylaw amendments requested (if applicable and be specific):

Land Use Contract amendments requested (if applicable and be specific):

SECTION 5: Site Plans (if applicable):

Submit one (1) full-size copy and three (3) reduced (11X 17) copies of a detailed Site Plan that shows all the natural and developed features of the property, and the distances between these features and the lot lines. Show the location of any proposed buildings, structures and land clearing showing accurate dimensions of their size and the distances between the proposed developments and existing features, including lot lines. You may be required to submit an elevation showing the side views of the proposed development.

SECTION 6: Describe the current uses of the land and buildings on the property.

see site plans

SECTION 7: Describe the proposed uses of the land and buildings and the proposed timing of the development or commencement of use.

park & subdivision into 3-5 acre parcels.

SECTION 8: Describe the current uses of land and buildings on adjacent properties. You may be required to submit a site plan showing existing features of adjacent properties.

see site plans.

SECTION 9: Describe the reasons in support of the bylaw amendment. Attach additional comments on a separate page. Submit any technical reports, studies or appraisals of the property and report on any community consultation you have undertaken.

SEE ATTACHED

SECTION 10: APPLICATION COMPLETION CHECKLIST:

- I have completed all sections of this application form
- I have included detailed site plans and elevation drawings as required in Section 5 of this application form
- I have included a recent State of Title Certificate (not more than 30 days old)
- I have included copies of all covenants registered against the title
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- I have included the correct fee (contact Staff for current fees)

IMPORTANT: Your application will not be considered complete unless it contains all of the information above.

A Note about Obtaining State of Title Certificate and Covenants: State of Title Certificate and covenants may be obtained from the Land Title Office or through your local government agent office for a fee.

SECTION 11: OWNER'S CONSENT AND AUTHORIZATION

(Signature of all registered owners is required.)

For additional owners, including Strata Corporations, attach a separate sheet)

In order to assist Islands Trust Planners in the review and evaluation of my application, by signing below, authorize the Planners assigned to this application to enter onto the land at reasonable times, after making reasonable efforts to arrange to schedule a convenient time for such a visit, to inspect the land. I acknowledge a right, if a convenient time can be scheduled, to accompany the Planner on the site visit.

By signing below, I authorize the Applicant named in Section 3 of this application to represent this application:

(1) _____
Consent and Authorization Signature

(2) _____
Consent and Authorization Signature

(1) _____
Date

(2) _____
Date

Contaminated Sites Regulation

Please note that pursuant to Section 4(4) of the Contaminated Sites Regulation, B.C.Reg. 375/96, a **site profile is not required and will not be accepted by the Islands Trust.** If you have any questions, please contact this office.



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Application Fee:	<u>74500⁰⁰</u>	OFFICE USE ONLY Receipt No:	<u>3052</u>	File No:	<u>GIP-RZ-2016.1</u>
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Date

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AUTHORIZATION AND APPOINTMENT OF AGENT

TO:

**Islands Trust, Gabriola Island;
Regional District of Nanaimo;
Ministry of Transportation and Infrastructure;
Vancouver Island Health Authority;**

This is to confirm that the Registered Owners,
Timothy Wright and Virginia Wright

hereby appoint:

Brian S. Henning, Williamson & Associates Professional Surveyors
3088 Barons Road, Nanaimo, B.C. V9T 4B5
Phone: 250 756 7723 Fax: 250 756 7724 Email: bhenning.waps@telus.net

as Agent for density transfer, rezoning, subdivision and all related development applications of
- Lot 1, Section 19, Gabriola Island, Nanaimo District, Plan 24354, PID 003-010-431

which is part of the larger density transfer application known as
Spruce to Church, Mallett Creek Density Transfer

The Agent is authorized to:

- Tender development applications for rezoning of the property for density transfer;
- tender the applications for Preliminary Layout Acceptance for subdivision;
- provide any information deemed necessary for review of the applications.

Signature(s):

DocuSigned by:


Timothy Wright

DocuSigned by:


Virginia Wright

AUTHORIZATION AND APPOINTMENT OF AGENT

TO:

**Islands Trust, Gabriola Island;
Regional District of Nanaimo;
Ministry of Transportation and Infrastructure;
Vancouver Island Health Authority;**

This is to confirm that the Registered Owners,
Potlatch Properties Ltd.
&
Pilot Bay Holdings Ltd.

hereby appoint:

Brian S. Henning, Williamson & Associates Professional Surveyors
3088 Barons Road, Nanaimo, B.C. V9T 4B5
Phone: 250 756 7723 Fax: 250 756 7724 Email: bhenning.waps@telus.net

as Agent for density transfer, rezoning, subdivision and all related development applications of all properties which are part of the density transfer application known as:

Spruce to Church, Mallett Creek Density Transfer

The Agent is authorized to:

- Tender development applications for rezoning of the property for density transfer;
- tender the applications for Preliminary Layout Acceptance for subdivision;
- provide any information deemed necessary for review of the applications.

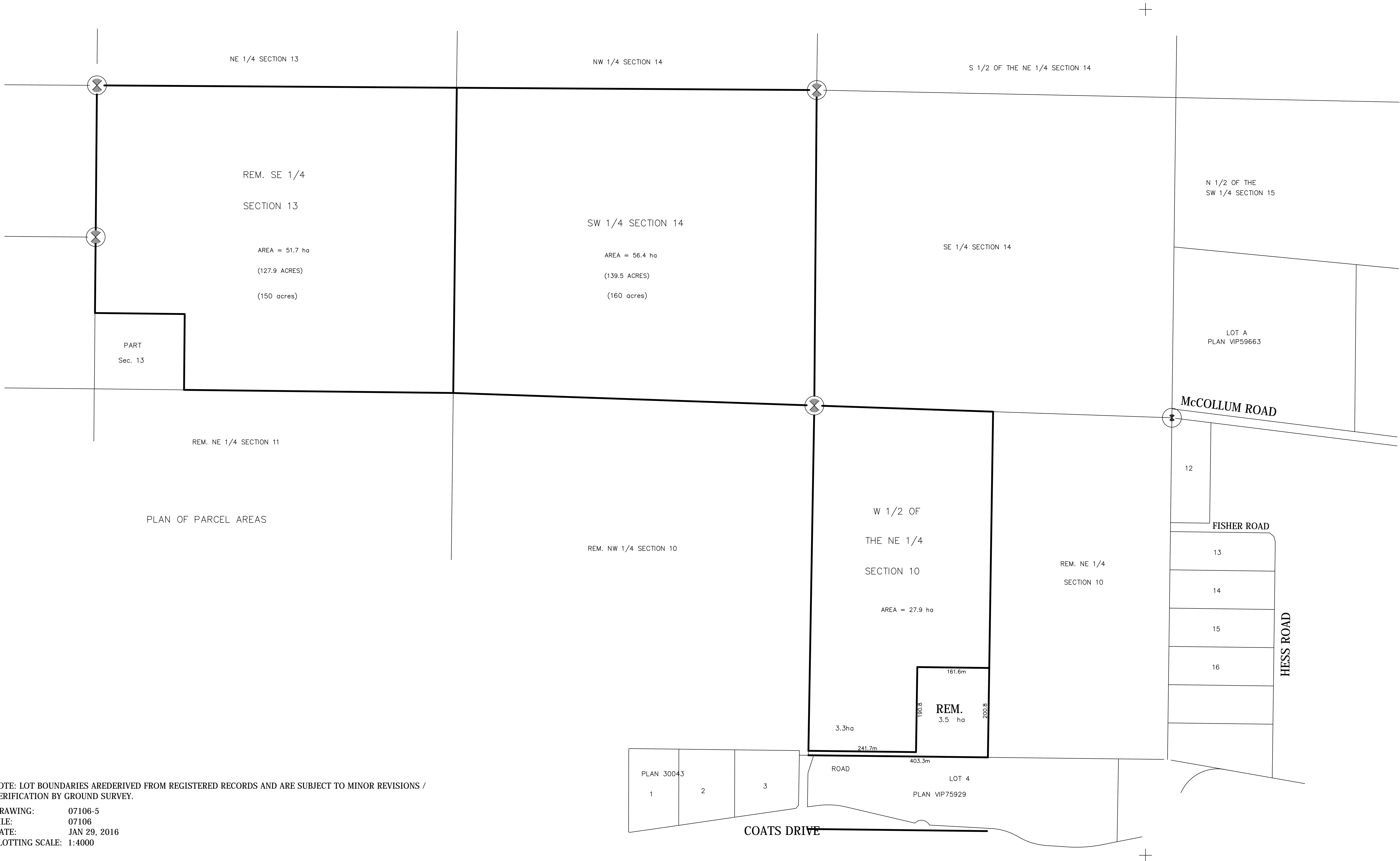
Signature(s):



Potlatch Properties Ltd.



Pilot Bay Holdings Ltd.



NOTE: LOT BOUNDARIES ARE DERIVED FROM REGISTERED RECORDS AND ARE SUBJECT TO MINOR REVISIONS / VERIFICATION BY GROUND SURVEY.

DRAWING: 07106-5
 FILE: 07106
 DATE: JAN 29, 2016
 PLOTTING SCALE: 1:4000

WILLIAMSON & ASSOCIATES
 PROFESSIONAL SURVEYORS
 3088 BARONS ROAD NANAIMO B.C. V9T 4B5
 PHONE: 250-756-7723 FAX: 250-756-7724
 EMAIL: WAPS@TELUS.NET



**WILLIAMSON & ASSOCIATES
PROFESSIONAL SURVEYORS**

3088 BARONS ROAD, NANAIMO B.C. V9T 4B5
PHONE: (250) 756-7723 FACSIMILE (250) 756-7724
email: waps@telus.net

February 16, 2016

Our File No.: 07312

**Spruce to Church, Mallett Creek Density Transfer
Community Benefits and Development Concepts**

Both the donor and receiver areas of this density transfer will provide a variety of benefits and improved public access for the community.

The donor area will create 336 acres of community park land, and will connect Coats Marsh Regional Park to the 707 Community Park. The donor area contains the easterly portion of the open water area of Coats Marsh as well as seasonal watercourses that replenish the marsh. The addition of this land will protect the entirety of this valuable watershed. Portions of many of the main road and trail connections through the 707 Park run through the donor area, and the addition of the donor lands will complete public access to a large network of already existing trails that encourage non-vehicular transportation, connect North and South Roads, and improve access for many neighborhoods. The new Community Park will be larger than Stanley Park in Vancouver, and preserve this land for both recreational and ecological purposes for generations to come.

The receiver area, which is 200 acres, will accept the 17 density units from the donor area that creates the 336 acres of park land. With the existing density contained in the receiver area a total of 25 lots are possible within the 200 acres. The receiver area contains Mallett Creek, and will create a continuous access corridor from Taylor Bay Road to Horseshoe Road.

The development concept is to cluster the development to create large areas of green-space and trails to encourage less reliance on vehicles. The specific concepts in the receiver area are to:

- Dedicate and construct the Spruce to Church Road connection, which will improve access for residents and response times for the emergency services;
- Dedicate and protect the Mallett Creek riparian corridor;
- Cluster the lots created on the east and westerly portions into two development areas, creating lots ranging from 2.5 to 5 acres in size and dedicating the 40 to 50 acres of remaining area for community park;
- Create trail connections from Lockinvar, Burnside, Taylor Bay and Horseshoe Roads to create linkages through to the Village core, Cox Park and surrounding neighbourhoods;
- Use a development approach of bare land strata lots on the westerly side to allow for narrower access corridors to reduce land clearing and to control vehicle access and parking through the site;
- Allow community access through the developments and entrench it by granting of access right of ways to the public over all the access road and trail corridors.



Yours truly,
Williamson & Associates Professional Land Surveyors

Brian S. Henning, B.C.L.S.

ec: Potlatch Properties Ltd.
Pilot Bay Holdings Ltd.



**Bio-inventory of parts of PID# 006-635-121,
027-939-791 and 027-939-804 located east of
Taylor Bay Road, Gabriola Island**



*Toth and Associates
Environmental Services*

**Bio-inventory of parts of PID# 006-635-121,
027-939-791 and 027-939-804 located east of
Taylor Bay Road, Gabriola Island**

Prepared for:

Potlatch Properties Ltd.

P.O. Box 348

Gabriola, B.C. V0R 1X0

Prepared by:

S.P. Toth, AScT, R.P.Bio.

Toth and Associates Environmental Services

6821 Harwood Drive

Lantzville, B.C. V0R 2H0

July 17, 2015



*Toth and Associates
Environmental Services*

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1.0 Introduction

Toth and Associates Environmental Services were retained by Potlatch Properties Ltd. to conduct a bio-inventory of the proposed density transfer and rezoning of approximately 72 hectares (178 acres) of forested land located east of Taylor Bay Road, Gabriola Island, B.C. Our prior experience with the subject property includes a *Riparian Areas Regulation* (RAR) Assessment of Mallet Creek conducted in June 2014. The objectives of the July 2015 bio-inventory included:

- Inventory and classification of wildlife habitats, significant features and plant communities on the property;
- Compilation of lists of plant and wildlife species and plant communities that occur or have the potential to occur on the property;
- Preparation of a report and study area map detailing the results of the study; and
- Provision of recommendations for retention, mitigation and compensation of significant features, for consideration in the final design.

The proposed density transfer rezoning includes the parcels indicated in Table 1, below.

Table 1. Parcels included in the proposed density transfer rezoning

PID	Acres	Hectares	Legal
006-635-121	75.92	30.44	The south ½ of the northwest ¼ of Section 19, Gabriola Island, Nanaimo District except part in Plan EPP13396
027-939-804	55.596	22.54	Lot 7, Section 20, Gabriola Island, Nanaimo District Plan VIP86742
027-939-791	46.454	18.84	Lot 6, Section 20, Gabriola Island, Nanaimo District Plan VIP86742

1.1 Study Area

The property consists of a fairly large tract of forested land with variable age and density of forest cover associated with a history of selective logging and prior land use. Lots 6 and 7 occupy approximately the western half of the subject property and are comprised primarily of mature stage Douglas-fir dominated forests. PID 006-635-121 in the east half of the subject property consists of selectively logged areas and young pole-sapling stage regenerative mixed species stands. Old road grades are prevalent throughout the subject property. Aspects are variable but primarily northwesterly. Topographic contrasts associated with ridgelines and rock escarpments are prevalent with topography ranging from approximately 110m in the southeast corner, east of Church Street to 16m in the Mallet Creek ravine at Taylor Bay Road. Mallet Creek runs east to west across the north side of the property and includes a large man-made pond feature. Douglas-fir, western redcedar and bigleaf maple are the dominant tree species with western hemlock, grand-fir, arbutus, red alder, cascara and occasional willow, western yew, Douglas-maple and bitter cherry. Forest cover age ranges from early pole-sapling to late mature forest. The subject property lies within the Coastal Douglas-fir moist maritime biogeoclimatic zone of the Strait of Georgia Ecosection.

2.0 Methods

Survey methods included those outlined in *Environmental Objectives, Best Management Practices and Requirements for Land Developments* (MELP 2001), *Develop With Care, 2012 Environmental Best Management Practices for Urban and Rural Land Development in British Columbia*, and the *Field Manual for Describing Terrestrial Ecosystems* (LMH #25 MELP, MOF 1998).

Habitat values were assessed throughout the survey of the property by recording forest cover characteristics at each distinct change in plant community type in an area representative of the surrounding forest cover polygon. Physiographic feature descriptions included estimates of:

- slope gradient (Abney level), aspect (GPS); slope position; slope shape (visual estimate); microtopography (visual estimate); and exposure.

Species of vascular plants and bryophytes occurring within each polygon were recorded and cover classes based on visual estimates were assigned to each species. Total cover for each stratum, as described in Land Management Handbook No. 25 (1998), were recorded (A - Trees; B - Shrubs; C - Herbs; D - Mosses/Seedlings). Additional features described for each site included: wind damage; evidence of fire and historic logging; susceptibility to fire/wind damage; geologic features; surface water features; and drainage patterns.

Forest community composition and structure was qualitatively assessed to determine the suitability in providing habitat features of value to known or potential wildlife species. Habitat features identified during the inventory included: wildlife trees, veteran trees (A₀ layer), horizontal and vertical structure, coarse woody debris, forage abundance and availability; and special features (nest sites, etc.).

3.0 Results

3.1 Background Review

A search of the B.C. Conservation Data Centre's (CDC) internet mapping framework did not indicate any known rare species occurrences on or nearby the subject property. Two masked element occurrences overlap the subject property. Masked element occurrences indicate the presence of rare species considered too sensitive to provide specific geographical or species information. Data requests to the CDC for these records on a previous bio-inventory (Sandwell Properties) indicated that both of the occurrences are for peregrine falcon (*Falco peregrinus anatum*). Neither of the occurrences are near the subject property.

A search of the CDC's BC Ecosystem Explorer database provided a list of potential rare ecological communities, plant and animal species for the property. The search was refined to include only the Coastal Douglas-fir moist maritime (CDFmm) biogeoclimatic zone within the South Island Forest District. The search provided a table of 85 potential rare animal species, 92 potential rare plant species, and 43 potential rare ecological community occurrences. The lists were refined to exclude those species and ecological communities with nil potential, or known not to occur on the property based on field surveys and known

distribution limits. The vast majority of the rare species listed as occurring within the South Island Forest District have distribution limits restricted to south of the Malahat Range or to Garry Oak Ecosystems. The refined list indicated 22 rare animal species (Table 1), 10 rare plant species (Table 2), and 11 rare ecological communities (Table 3) with *potential* to occur on the property.

Table 2. Potentially occurring rare animal species

Scientific Name	English Name	COSEWIC	BC List
<i>Anaxyrus boreas</i>	Western Toad	SC (Nov 2012)	Blue
<i>Aneides vagrans</i>	Wandering Salamander	SC (May 2014)	Blue
<i>Ardea herodias fannini</i>	Great Blue Heron, <i>fannini</i> subspecies	SC (Mar 2008)	Blue
<i>Carychium occidentale</i>	Western Thorn		Blue
<i>Chordeiles minor</i>	Common Nighthawk	T (Apr 2007)	Yellow
<i>Chrysemys picta</i> pop. 1	Painted Turtle - Pacific Coast Population	E (Apr 2006)	Red
<i>Contopus cooperi</i>	Olive-sided Flycatcher	T (Nov 2007)	Blue
<i>Corynorhinus townsendii</i>	Townsend's Big-eared Bat		Blue
<i>Danaus plexippus</i>	Monarch	SC (Apr 2010)	Blue
<i>Erythemis collocata</i>	Western Pondhawk		Blue
<i>Glaucidium gnoma swarthi</i>	Northern Pygmy-Owl, <i>swarthi</i> subspecies		Blue
<i>Hirundo rustica</i>	Barn Swallow	T (May 2011)	Blue
<i>Megascops kennicottii kennicottii</i>	Western Screech-Owl, <i>kennicottii</i> subspecies	T (May 2012)	Blue
<i>Monadenia fidelis</i>	Pacific Sideband		Blue
<i>Mustela erminea anguinae</i>	Ermine, <i>anguinae</i> subspecies		Blue
<i>Myotis keenii</i>	Keen's Myotis	DD (Nov 2003)	Blue
<i>Myotis lucifugus</i>	Little Brown Myotis	E (Nov 2013)	Yellow
<i>Omus audouini</i>	Audouin's Night-stalking Tiger Beetle	T (Nov 2013)	Red
<i>Oncorhynchus clarkii clarkii</i>	Cutthroat Trout, <i>clarkii</i> subspecies		Blue
<i>Oncorhynchus kisutch</i>	Coho Salmon	E (May 2002)	Yellow
<i>Patagioenas fasciata</i>	Band-tailed Pigeon	SC (Nov 2008)	Blue
<i>Rana aurora</i>	Northern Red-legged Frog	SC (May 2015)	Blue

Note: species in bold type were documented on the property

Table 3. Potential rare plant species

Scientific Name	English Name	COSEWIC	BC List	SARA
<i>Carex feta</i>	green-sheathed sedge		Red	
<i>Heterocodon rariflorum</i>	heterocodon		Blue	
<i>Isoetes nuttallii</i>	Nuttall's quillwort		Blue	
<i>Jaumea carnosa</i>	fleshy jaumea		Blue	
<i>Juniperus maritima</i>	seaside juniper		Blue	
<i>Limnanthes macounii</i>	Macoun's meadow-foam	T (Nov 2004)	Red	1
<i>Lotus pinnatus</i>	bog bird's-foot trefoil	E (May 2004)	Red	1

<i>Packera macounii</i>	Macoun's groundsel		Blue	
<i>Sidalcea hendersonii</i>	Henderson's checker-mallow		Blue	
<i>Toxicodendron diversilobum</i>	poison oak		Blue	

* Note: species in bold type have been documented as occurring on Gabriola Island.

Table 4. Potential rare ecological communities

Scientific Name	English Name	BC List	Biogeoclimatic Units
<i>Abies grandis</i> / <i>Mahonia nervosa</i>	grand fir / dull Oregon-grape	Red	CDFmm/04
<i>Abies grandis</i> / <i>Tiarella trifoliata</i>	grand fir / three-leaved foamflower	Red	CDFmm/06
<i>Alnus rubra</i> / <i>Lysichiton americanus</i>	red alder / skunk cabbage	Red	CDFmm/Ws52
<i>Alnus rubra</i> / <i>Rubus spectabilis</i> / <i>Equisetum arvense</i>	red alder / salmonberry / common horsetail	Blue	CDFmm/09;CD Fmm/F151
<i>Pseudotsuga menziesii</i> - <i>Arbutus menziesii</i>	Douglas-fir - arbutus	Red	CDFmm/02
<i>Pseudotsuga menziesii</i> / <i>Mahonia nervosa</i>	Douglas-fir / dull Oregon-grape	Red	CDFmm/01
<i>Pseudotsuga menziesii</i> / <i>Melica subulata</i>	Douglas-fir / Alaska oniongrass	Red	CDFmm/03
<i>Thuja plicata</i> / <i>Achlys triphylla</i>	western redcedar / vanilla-leaf	Red	CDFmm/12
<i>Thuja plicata</i> / <i>Oemleria cerasiformis</i>	western redcedar / Indian-plum	Red	CDFmm/13
<i>Thuja plicata</i> - <i>Pseudotsuga menziesii</i> / <i>Eurhynchium oregonum</i>	western redcedar - Douglas-fir / Oregon beaked-moss	Red	CDFmm/05
<i>Thuja plicata</i> / <i>Symphoricarpos albus</i>	western redcedar / common snowberry	Red	CDFmm/07

The Gabriola Island Official Community Plan (OCP, Bylaw No 166, 1997) Schedule B indicates that Lots 6 and 7 in the western half of the property have been designated as Resource lands, while PID 006-635-121 in the eastern half of the property is designated Forestry. Schedule C (Development Permit Areas) of the OCP was under revision at the time of report writing and was not available. The Islands Trust Land Use Bylaw (No. 177, 1999) provides requirements for setbacks from natural features, including:

B.2.1.1 Setbacks and Elevations from Watercourses and the Sea

- a. Despite all other siting references in this Bylaw, third party signs, fences, pump/utility houses, retaining walls, *structures* and *buildings*, excepting *boathouses*, must be sited a minimum of 7.5 metres (24.6 feet) from and 1.5 metres (4.9 feet) above the *natural boundary* of the sea and a minimum of 15 metres (49.2 feet) from and 1.5 metres (4.9 feet) above the *natural boundary* of any lake, stream, or wetland.
- b. A septic sewage disposal field must be sited a minimum of 30 metres (98.4 feet) from the *natural boundary* of the sea, lake, stream or wetland.

B.2.1.2 Additional Setbacks from Bluffs and Ridges

- a. No *building* may be sited less than 7.5 metres (24.6 feet) from the top edge of a *bluff* or *ridge* in "Development Permit Area No. 6: Escarpment Areas", as delineated in the Gabriola Island Official Community Plan (Gabriola Island) Bylaw No. 166, 1997.

B.2.1.3 Setbacks and Screening from Nesting Trees

- a. A protective screen of natural vegetation must be retained within a 7.5 metres (24.6 feet) radius of the trunk of a tree bearing nests of herons, eagles, ospreys, vultures, falcons, hawks and owls.

The Gabriola Island Ecosystem Mapping (Draft November, 2009) provided some baseline eco-typing information for the subject property. The boundaries of the ecosystem polygons did not match the boundaries of the forest cover typing we established from the combination of air photo interpretation and field survey results. The Gulf Islands Ecosystem Community Atlas (Canadian Parks and Wilderness Society, 2005) was reviewed.

Figure 1. Ecosystem Mapping coverage on the subject property



Table 5. Identified Sensitive Ecosystem polygon features

Polygon #	%	Primary Ecosystem				Stage	%	Secondary Ecosystem				Stage
		SE Class	SE Subclass	Mapcode				SE Class	SE Subclass	Mapcode		
50081	90	Mature Forest	Conifer	Douglas-fir / salal	Mature forest	10	Mature Forest	Conifer	Western Redcedar – Grand-fir / foamflower	Mature forest		
50077	90	Seasonally Flooded	Cultivated Field	NA	Herb	10	Mature Forest	Conifer	Douglas-fir / salal	Mature forest		
50091	80	Mature Forest	Conifer	Douglas-fir / salal	Mature forest	20	Woodland	Conifer	Douglas-fir – shore pine-arbutus	Mature forest		
50082	90	Wetland	Swamp	Western redcedar / vanilla leaf	Young forest	10	Wetland	Marsh	Sitka sedge – hemlock parsley marsh	Herb		
51154	10	Freshwater	Lake	Lake	NA							
50094	80	Woodland	Conifer	Douglas-fir – shore pine-arbutus	Mature forest	20	Mature forest	Conifer	Douglas-fir / salal	Mature forest		
50085	80	Non-sensitive	NA	Douglas-fir / salal	Shrub / herb	20	Woodland	Conifer	Douglas-fir – shore pine-arbutus	Shrub / herb		
50145	90	Mature Forest	Mixed	Douglas-fir / salal	Mature Forest	10	Non-sensitive	NA	Douglas-fir / salal	Shrub / herb		
50076	10	Wetland	Swamp	Western redcedar / Indian plum	Young forest							

3.2 Field Assessment

Field surveys were conducted on June 30 and July 3, 2015. Sample site locations and all features within the study area were identified using a Garmin Map60CSx Global Positioning System (GPS). The GPS was also used to continuously monitor the surveyor's location. The Sum Routes feature in OziExplorer© software indicated that 13.27 km of survey effort was conducted on the property. Forest cover polygons on the property are indicated on Figures 3 and 4.

Old road grades, clearings and ditch networks were widespread on the property, all indicating a past history of development disturbance. The forested sections of the property consisted of four broad ecotypes including:

1. Mature stage winter wet-summer moist / riparian areas
2. Mature Douglas-fir dominant
3. Mature mixed deciduous dominant
4. Selectively logged Young Forest / Early successional pole-sapling regenerative forest

3.2.1 Mature stage winter wet-summer moist / riparian areas

The Mature stage winter wet-summer moist / riparian areas ecotype primarily represents the Mallet Creek corridor and incised draws that lead to Mallet Creek (Photographs 1-3). This ecotype also includes areas where selective logging has resulted in moist north-slope openings dominated by bigleaf maple. Accurate determination of site series is not possible due to the level of disturbance.

Dominant tree cover within the riparian polygon was western redcedar, with red alder, bigleaf maple, Douglas-fir, grand-fir and western hemlock with relatively open canopies of 50 – 65 % crown closure. The shrub layer included very low densities of salal, salmonberry, trailing blackberry, red elderberry, thimbleberry, and common snowberry. The herb layer included low to high densities of sword fern and skunk cabbage, with bracken fern, small-flowered bulrush, slough sedge, stinging nettle, lady fern and grasses. Coarse woody debris (CWD) on the forest floor was rare. Snags were rare and consisted of medium diameter red alder.



Photograph 1. View of riparian corridor / Mallet Creek downstream of pond.



Photograph 2. View of pond from earthen dam.

Figure 2. Proposed Subdivision Plan (brown shade) and Parklands (green shade) overlaid on airphoto

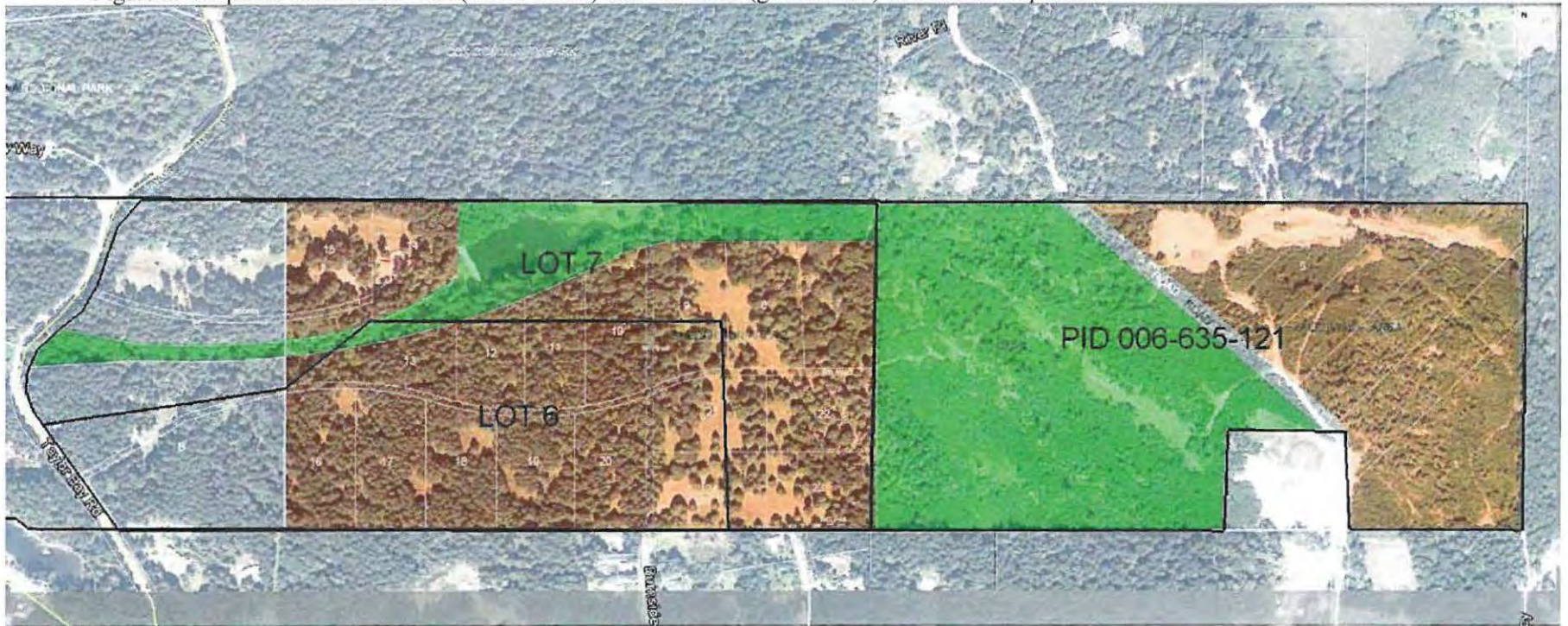


Figure 3. Forest cover polygons on Lots 6 and 7

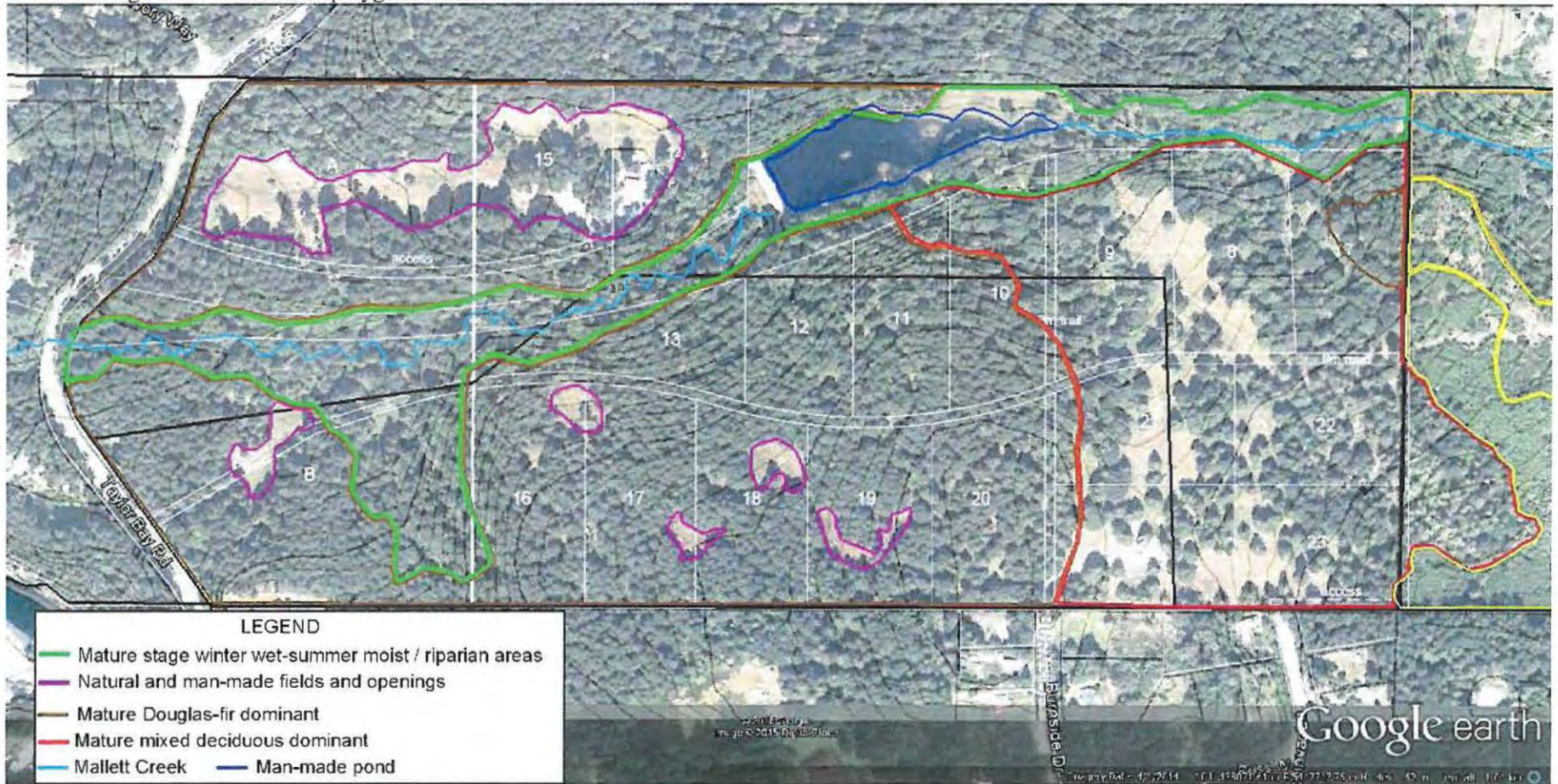
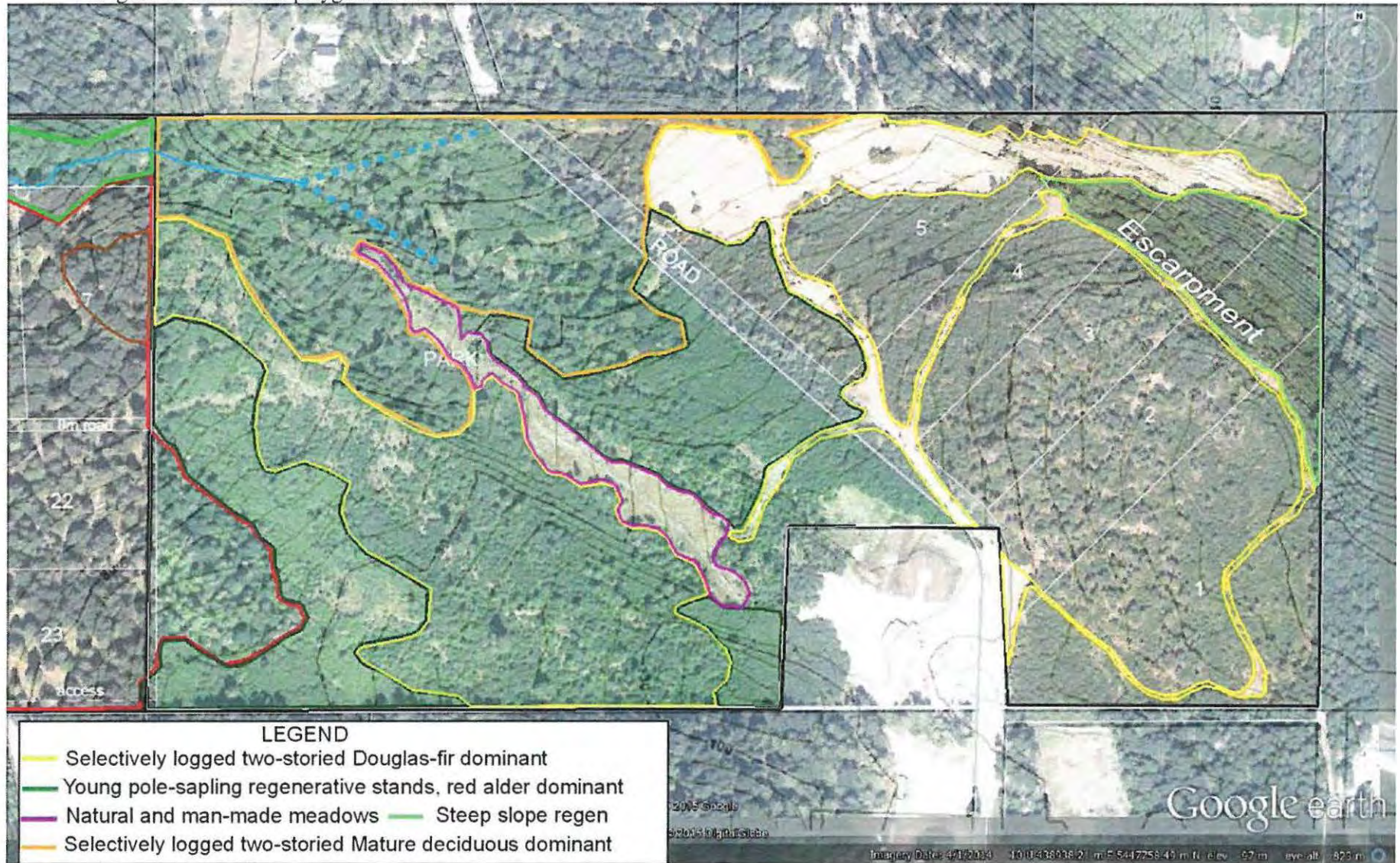


Figure 4. Forest cover polygons on PID 006-635-121





Photograph 3. View of riparian vegetation upstream of the pond.

3.2.2 Mature Douglas-fir dominant

The Mature stage Douglas-fir dominated ecotype occurs on the upper elevational portions of Lots 6 and 7 outside the influence of the riparian areas. The ecological community likely represents the zonal site series CDFmm/01 (Douglas-fir / dull Oregon-grape). The tree canopy was dominated by Douglas-fir and western redcedar, with western hemlock, grand-fir, bigleaf maple, red alder and occasional western yew on north slopes, and arbutus on south slopes and ridge tops (Photograph 4). Crown closure was variable but generally between 40-60%. The shrub layer consisted of low densities of salal, ocean spray, red huckleberry, baldhip rose and dull Oregon-grape. The herb layer was comprised primarily of low densities of sword fern, with vanilla leaf, yerba-buena, twinflower, rattlesnake plantain, wall lettuce, grasses and bedstraw. Moss coverage was high and included step moss and Oregon beaked moss. Coarse woody debris and snags were rare. Small openings created by natural rock outcrops and selective logging are scattered throughout the polygon (Photograph 5).



Photograph 4. View of Mature Douglas-fir dominated forest cover.



Photograph 5. View of natural opening in Douglas-fir created by rock outcrop.

3.2.3 Mature mixed deciduous dominant

The Mature stage mixed deciduous dominated area is located on Lots 6 and 7 and represents selectively harvested areas where primarily bigleaf maple, red alder and western redcedar have been retained in open grassy meadow settings (Photographs 6 and 7). The shrub layer included very low densities of spurge laurel, dull Oregon-grape and trailing blackberry. The herb layer was well developed with grasses, sword fern, vanilla leaf, and stinging nettle. Coarse woody debris and snags were rare.



Photograph 6. View of open canopied meadow.

3.2.4 Selectively logged Young Forest / Early successional pole-sapling regenerative forest

The selectively logged and regenerative pole-sapling stage stands cover the eastern half of the property (Photographs 8 and 9). They include a mixed-bag of forest cover ranging from previously logged non-restocked stands of pure pole-sapling stage red alder to selectively logged two-storied Douglas-fir / arbutus stands and selectively logged mature mixed forest. The understory is well developed in most areas and includes dense shrub cover of evergreen huckleberry, salal, dull Oregon-grape, hairy honeysuckle, baldhip rose, red huckleberry, Saskatoon, trailing blackberry, Himalayan blackberry, thimbleberry, and scotch broom. The herb layer is well developed and consists of sword fern, bracken fern, broad-leaved star flower, common weeds and grasses. Coarse woody debris is abundant and small to medium diameter snags are common.



Photograph 7. View of meadow area.



Photograph 8. View of two-storied selectively logged regenerative forest.



Photograph 9. View of even age pole-sapling stage regenerative forest.

3.2.5 Wildlife

The surveyor recorded all wildlife utilization evidence including direct observations, vocalizations, tracks, game trails, scat, browsed and grazed vegetation, bones, feathers, nests, nest cavities and woodpecker holes. Utilization of forest types and special habitat features by wildlife was deduced from an analysis of habitat features, and observations and evidence of utilization.

Evidence of raptor use of the property included observations of turkey vulture, bald eagle, and red-tailed hawk (Photograph 10). No heron or raptor nests were found on the property during the surveys. The turkey vultures and bald eagles had congregated to feed on the remains of an adult beaver on the shore of the man-made pond on Mallet Creek.

Evidence of woodpecker use of the property was found commonly on snags and within the mature forest areas on the property. One pileated woodpecker was heard on the property. Many of the larger diameter western redcedar trees on the property had evidence of woodpecker forage holes. Northern flicker, red-breasted sapsucker, and downy woodpeckers were documented during the survey.

Songbirds documented during the field surveys included chestnut-backed chickadee, red crossbill, western flycatcher, golden-crowned kinglet, spotted towhee, Bewick's wren, black-headed grosbeak, hermit thrush, Swainson's thrush, winter wren, American robin, red-breasted nuthatch, brown creeper, western flycatcher, Anna's hummingbird, and dark-eyed junco with most sightings occurring in the densely forested eastern half of the

property. Canada geese were observed in the pond. A hen turkey with three chicks (Photograph 11) was observed, and the remains of another adult turkey were found. Two band-tail pigeons were noted on the escarpment on the east side of the property.

There is high use of the property by black-tail deer. High use of the western half of the property by deer has impacted the normal development of understory vegetation such that the shrub layer and seedling trees are practically non-existent. The eastern half of the property has much higher levels of potential browse, but evidence of deer use for some reason was considerably lower than the western half of the property. Trails, tracks, pellet groups, beds, skeletal remains (Photograph 12) and evidence of forage were widespread throughout the property.

No evidence of black bear use of the property was found. Cougar, wolf and pine marten sign was not expected or found during the surveys.

Evidence of small mammal use on the property included red squirrel, raccoon and eastern cottontail. Beaver activity was noted on the pond. Introduced grey squirrels and European rabbits were not documented on the property.

Red-legged frogs were observed along Mallet Creek and in the pond.

Introduced pumpkinseeds (sunfish) were noted in the pond and downstream of the pond in Mallet Creek.

3.2.6 Environmentally Sensitive Areas Setbacks

The proposed subdivision of the property will involve identification of setback areas associated with Mallet Creek and potentially the steep slope area at the east end of the property. The RAR assessment conducted in 2014 determined watercourse setbacks distances for Mallet Creek and the man-made pond. The setbacks associated with the fresh water pond will be 15m from high water mark, extending to 30 m on the south side of the pond, while Mallet Creek will receive 10 m setbacks. The proposed area of parklands includes the majority of the watercourse setback areas on the property.



Photograph 10. View of juvenile red-tailed hawk over the east end of the property.



Photograph 11. View of hen turkey and chick.



Photograph 12. Remains of a two-point blacktail deer.

4.0 Discussion

Lots 6 and 7 in the west half of the property contain the majority of the higher value environmental attributes on the property including the aquatic and riparian areas of Mallet Creek, large diameter trees / mature mixed forest and open meadows / edge habitats. However, the field surveys indicated that species diversity and numbers were higher in the logged over previously disturbed areas of the eastern half of the property. This is primarily attributable to the almost total lack of coarse woody debris, standing snags, and shrub and herb layer development in the west half of the property.

A number of wildlife species observed or potentially occurring on the property are dependent on snags to fulfill their critical life history functions. Species include chestnut-backed chickadee, red-breasted nuthatch, brown creeper, pileated woodpecker, northern flicker, hairy woodpecker, red-breasted sapsucker, wandering salamander, and several species of bats. Snags that were present had abundant evidence of use by woodpecker species. Secondary cavity nesters (i.e. chestnut-backed chickadee) take advantage of holes and cavities excavated by the primary cavity excavators for nesting and rearing young. The maintenance of wildlife trees during development of the property would contribute to the continued use of the study area by wildlife tree dependent species.

Coarse woody debris (CWD) and large decomposing stumps support insects that are fed on by woodpeckers and other insectivorous birds including chestnut-backed chickadee, red-breasted nuthatch, brown creeper, wrens, thrushes, vireos, warblers and sparrows.

The presence of CWD enhances the horizontal structure of the forest floor, providing cover and foraging opportunities for deer mice. The increased capacity of downed woody debris to retain moisture creates favorable micro-habitats for salamanders and frogs. Some amphibians, such as the western red-backed salamander, lay their eggs under CWD.

Dense patchy shrub cover provides critical forest attributes including thermal and escape cover, nesting, bedding and breeding habitat, and as many of the shrub species are fruit / berry producers (e.g. salal, red huckleberry, evergreen huckleberry, salmonberry, blackcap, red elderberry, Saskatoon, thimbleberry, Indian plum) they also provide critical source of forage for many wildlife species.

Conifer seeds, especially Douglas-fir, provide an important food source for small mammals such as deer mice and red squirrels and for bird species including pine siskin, golden and ruby-crowned kinglet, chestnut-backed chickadee, pine grosbeak and dark-eyed junco. The preservation of large diameter mature conifers on the property will ensure continued forage sources for these species.

Raptor or heron nests were not found on the property. Based on the mosaic of habitat types present on the property there is good potential for use of the property by western screech-owl, barred-owl, sharp-shinned hawk, merlin, bald eagle and other raptors for foraging, roosting and potentially nesting. Potential nest sites for raptor species, herons, woodpeckers and cavity dependent species are limited to those areas of the property with mature forests with trees of suitable diameter and limb size to provide wildlife trees. There is reasonable potential for use of the property by band-tail pigeons for foraging and nesting.

The proposed development of the property includes dedication of approximately 21.5 ha of parkland that includes the Mallet Creek riparian corridor and pond.

5.0 Recommendations

Any future physical development occurring on the property involving land clearing activities should only be undertaken outside of the April 1 – August 1 general breeding season for most wildlife species.

Parklands development should include appropriate public facilities such as toilets, garbage cans and signage stating park rules. Pets should be kept on a leash to avoid conflicts with wildlife.

Any trail networks will need to be designed and located such that they do not create undue stress or disturbance to wildlife. Trails should avoid areas of dense bush to allow use of these areas by wildlife for security, thermal, or nesting cover.

Planning and design of roads, driveways, servicing and clearing for houses should avoid removal of mature trees where possible. Where feasible, and where no hazards are

assessed based on an evaluation by a Certified Arborist, preservation of mature trees on the property is recommended.

Design plans should include delineation of areas planned for preservation. The RAR requires that watercourse setback boundaries be marked on the ground prior to land clearing.

6.0 References

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0858317 BC Ltd., c/o B. Henning, Williamson & Associates.
3088 Barons Road
Nanaimo, BC, V9T 4B5

File: F2628.01
July 14, 2015

Attn: Mr. Brian Henning

PROJECT: 695 CHURCH STREET, GABRIOLA ISLAND, B.C.

SUBJECT: GEOTECHNICAL HAZARD ASSESSMENT

Dear Mr. Henning:

1. INTRODUCTION

As requested by Mr. Brian Henning of 0858317 BC Ltd., Lewkowich Engineering Associates Ltd. (LEA) has carried out a geotechnical hazard assessment of “The South ½ of the North West ¼ of Section 19, Gabriola Island, Nanaimo District, Except Part in Plan EPP13396”. This report provides a summary of our findings and recommendations. Specifically, our evaluations have taken into account those natural hazards, which may affect the safe development of the land.

2. BACKGROUND

Lewkowich understands the proposed development consists of six new single family residential lots. We also understand the site contains a steep slope (escarpment) with concerns regarding slope stability.

3. ASSESSMENT OBJECTIVES

The assessment, as summarized within this report, is intended to meet the following objectives:

- i. Determine whether the land is considered safe for the use intended (defined for the purposes of this report as a residential subdivision), with the probability of a geotechnical failure resulting in property damage of less than 10 percent (10%) in 50 years, with the exception of geohazards due to a design seismic event, which are to be based on a 2 percent (2%) probability of exceedance in 50 years, provided the recommendations in this report are followed;

Client: 0858317 BC Ltd., c/o Brian Henning
Project: 695 Church Street, Gabriola Island, BC
File #: F2628.01
Date: July 14, 2015
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- ii. Prescribe the geotechnical works and any changes in the standards of the design and construction of the development that are required to ensure the land, buildings, and works and services are developed and maintained safely for the use intended; and
 - iii. Acknowledge that Approving and/or Building Inspection Officers may rely on this report when making a decision on applications for the development of the land.

4. ASSESSMENT METHODOLOGY

- a. For this assessment, we collected and reviewed relevant background information and conducted a site visit to visually assess current slope conditions and determine preliminary setback distances for any potential residences. We then compared the results of our assessment with a level of safety to provide a safe setback distance from the crest of the steep slope.
- b. This assessment follows the “Guidelines for Legislated Landslide Assessments for Residential Development in BC” (APEGBC, 2010).

5. SITE CONDITIONS

5.1 General

- a. The subject property is located in the east central region of Gabriola Island, at the end of Church Road. The property is accessed from Church Road.
- b. The terrain of the subject property is gently undulating except for the north west corner, which drops off steeply enough to be classified as an escarpment. The escarpment is up to approximately 60m high in the vicinity of the subject property, and is vegetated with an immature, third growth forest. Near the east side of the north property line is an area that appears to have been used as a sandstone quarry. An access road is partially incised into and traverses down the face of the escarpment. There are some cliff faces up to approximately 7m high associated with the sandstone quarry and access road. Sandstone bedrock is exposed on the cliff face, and in various locations in proximity to the crest of the

escarpment.

- c. The gently undulating portion of the property has a gentle, overall declination away from the escarpment. It is generally vegetated with a moderate to dense cover of third growth forest comprised of immature to mature coniferous and deciduous trees, including a moderate amount of tall grasses, vines, and miscellaneous ground cover. Localized areas of clearing, likely to accommodate the assumed sandstone quarry were observed.
- d. The property is currently developed with trails and a dirt road.

5.2 Soil Conditions

- a. A subsurface investigation was not included as part of this hazard assessment. Visual reconnaissance of the site allowed for observations of minor soil exposures within the property.
- b. Generally, subsurface soil conditions, as observed during our field review and as encountered by this office in similar investigations in the area, consist of a layer of topsoil, underlain by compact to dense, naturally deposited sand and gravel, underlain by sandstone bedrock.
- c. Based on the existing topography of the subject property and the surrounding properties, we expect that negligible fill materials are present within the subject property. We do not anticipate that the presence of fill materials will have a significant impact on the proposed subdivision.

5.3 Groundwater and Surface Water

- a. There was no observed standing/ponded water, nor were there any water courses observed within the subject property near the proposed building lots. This may have been due to the recent very dry weather, because a report prepared by Toth and Associates Environmental Services, titled "Bio-inventory of parts of PID# 006-635-121, 027-939-791 and 027-939-804 located east of Taylor Bay Road, Gabriola Island" indicates that the Mallett Creek head

waters are located in the north west corner of proposed Lot 6, as a drainage ravine or draw. Drainage is to the east, away from the proposed lot. If it's classified as a seasonal watercourse, a setback may be applied by others.

- b. Groundwater flows can be expected to fluctuate seasonally with cycles of precipitation. Groundwater conditions at other times and locations can differ from those observed within the time of our investigation.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 General

From a geotechnical point of view, the land is considered safe for the use intended (defined for the purposes of this report as a residential subdivision), with the probability of a geotechnical failure resulting in property damage of less than 10 percent (10%) in 50 years, with the exception of geohazards due to a design seismic event, which are to be based on a 2 percent (2%) probability of exceedance in 50 years, provided the recommendations in this report are followed.

6.4 Steep Slopes

- a. The subject property is bordered by an established escarpment at the north east corner of the property. The escarpment has a total height of approximately 60m. A review of the natural soil geology in the sloping area indicates a thin layer of compact soils over sandstone bedrock.
- b. The slope is considered to be in a stable condition with very little continued erosion due in part to the established vegetation, and the presence of shallow bedrock.
- c. There were no visual signs of potential global (full slope height) instability (i.e. tension cracks, toe heave, or ponded water) observed on the subject property. Therefore, slope movement would likely be confined to surficial sloughing and/or erosion of non-vegetated localized areas steeper than 2H:1V.

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-
- d. We recommend that setbacks from steep slope crests be provided for proposed structures and roadways as a precautionary measure against slope degradation due to erosion from extreme storm events or from seismic action. In general, since this site has portions that consist of a steeply inclined escarpment, slopes that require setbacks are considered to have an inclination exceeding 30 degrees from horizontal. Based on an examination of slopes within the subject property, we conclude that there are natural slopes within the property that require setbacks from slope crests. Where buildings and roadways are set above slopes with an inclination greater than 45 degrees a minimum setback of 10m is recommended. Where buildings and roadways are to be set above slope with an inclination of 30 - 45 degrees the set back should be 8m.
- e. Landslides can also occur due to human activity or by failure of infrastructure (septic tanks, drainage and deposit fields, irrigation or water systems, stormwater disposal, etc.). The concentrated discharge of collected stormwater can lead to erosion, earth movement, or slope failure. However, since the subject property consists of near surface bedrock, global stability would not be affected by failure of any infrastructure. Additionally, the majority of any such infrastructure would be “away” from the escarpment, where water would flow “away” from the escarpment.
- f. Therefore, we conclude that the escarpment at the rear of proposed residential lots does not pose a significant risk of a landslip hazard, as defined by guidelines established by the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC), provided our recommendations are followed.

6.5 Seismic Issues

- a. No compressible or liquefiable soils were encountered during our site specific assessment.
- b. Based on the 2012 British Columbia Building Code, Division B, Part 4, Table 4.1.8.4.A, “Site Classification for Seismic Site Response,” the soils and strata encountered would be “Site Class C” (Very dense soil and soft rock).

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6.8 Vegetation

- a. Due to the near surface bedrock, vegetation removal near the crest of the escarpment would not affect global stability. Areas of bare soil should be re-vegetated as soon as practical to reduce erosion potential.
- b. Historical logging activity had no affect on the slope. Therefore, subdivision will have no bearing on slope stability with respect to vegetation, as there would be less disturbance to vegetation by subdivision when compared to logging.

7. GEOTECHNICAL ASSURANCE AND QUALITY ASSURANCE

The 2012 British Columbia Building Code requires that a Geotechnical Engineer be retained to provide Geotechnical Assurance services for the proposed development works.

Geotechnical Assurance services include review of the geotechnical components of the plans and supporting documents, and responsibility for field reviews of these components during construction.

8. ACKNOWLEDGEMENTS

Lewkowich Engineering Associates Ltd. acknowledges that this report may be requested by the Building Inspector (or equivalent) of the Regional District of Nanaimo. It is acknowledged that the Approving Officers and Building Officials may rely on this report when making a decision on application for development of the land. We acknowledge that this report has been prepared solely for, and at the expense of 0858317 BC Ltd. We have not acted for or as an agent of the Regional District of Nanaimo in the preparation of this report.

9. LIMITATIONS

The conclusions and recommendations submitted in this report are based upon the information available at the time of this assessment. The recommendations given are based on the anticipated subsurface soil conditions, current construction techniques, and generally

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accepted engineering practices. No other warrantee, expressed or implied, is made. If unanticipated conditions become known during construction or other information pertinent to the structure becomes available, the recommendations may be altered or modified in writing by the undersigned.

10. CLOSURE

Lewkowich Engineering Associates Ltd. appreciates the opportunity to be of service on this project. If you have any comments, or additional requirements at this time, please contact us at your convenience.

Respectfully Submitted,
Lewkowich Engineering Associates Ltd.



Chris Hudec, M.A.Sc., P.Eng.
Senior Project Engineer

FORM 1

Riparian Areas Regulation - Qualified Environmental Professional - Assessment Report

Riparian Areas Regulation: Assessment Report

Please refer to submission instructions and assessment report guidelines when completing this report.

Date July 7, 2014

I. Primary QEP Information

First Name	Steve	Middle Name	
Last Name	Toth		
Designation	R.P.Bio	Company	Toth and Associates Environmental Services
Registration #	1788	Email	stoth@shaw.ca
Address	6821 Harwood Drive		
City	Lantzville	Postal/Zip	V0R 2H0
Prov/state	BC	Country	Canada
		Phone #	250-390-7602

III. Developer Information

First Name	Robert	Middle Name	
Last Name	Rooks		
Company	Potlatch Properties Ltd.		
Phone #	250-247-9094	Email	RooksDVM@aol.com
Address	PO Box 348		
City	Gabriola Island	Postal/Zip	V0R 1X0
Prov/state	BC	Country	Canada

IV. Development Information

Development Type	Subdivision		
Area of Development (ha)	52.2	Riparian Length (m)	1470
Lot Area (ha)	52.2	Nature of Development	Redevelopment
Proposed Start Date	2014-08-01	Proposed End Date	2015-12-31

V. Location of Proposed Development

Street Address (or nearest town)	LOTS 1 – 7, SECTION 20, GABRIOLA ISLAND, NANAIMO DISTRICT, PLAN VIP86742						
Local Government	Regional District of Nanaimo			City	Electoral Area B		
Stream Name	Mallet Creek						
Legal Description (PID)	027939774 (LOT 4), 027939782 (LOT 5), 027939791 (LOT 6), 027939804 (LOT 7)			Region	Vancouver Island		
Stream/River Type	Stream			DFO Area	South Coast		
Watershed Code	NA						
Latitude	49	10	48	Longitude	123	51	06

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Section 1. Riparian Areas Regulation Detailed Assessment of Mallet Creek, Gabriola Island.

I, Steve Toth, R.P.Bio. (Toth and Associates Environmental Services) conducted a detailed *Riparian Areas Regulation* (RAR) assessment of Mallet Creek on Lots 4 – 7, Section 20, Gabriola Island, Nanaimo District, Plan VIP86742, running west and east of Taylor Bay Road, Gabriola Island on June 17, 2014. The properties are located in the Gabriola Island Local Trust Area of the Islands Trust. The objective of the assessment was to determine the extent of watercourse setbacks associated with Mallet Creek on the property according to the Provincial *Riparian Areas Regulation* (RAR) for informational and future planning purposes associated with proposed subdivision of Lots 1 - 7.

No information was found for Mallet Creek from searches of online government websites (FISS, EcoCat, Silver Mapster). According to the Gabriola Land and Trails Trust website the Gabriola Streamkeepers have documented coho salmon (*Oncorhynchus kisutch*) alevins and introduced pumpkinseed (*Lepomis gibbosus*) recently in Mallet Creek. Apparently the previous property owner (Mike Peacock) had conducted some habitat enhancement works in an attempt to establish salmon runs and may have stocked the pond on the property with rainbow trout. It is believed that the trout died-out a few years ago (Dr. Bob Rooks, *pers. comm*). Fish were not observed in the pond during the survey.

Mallet Creek was divided into three reaches based on the field survey results including: a lower reach commencing from the downstream side of the dam at the pond and running to the high tide mark of the ocean, the pond, and the upper each running from the upper end of the pond to the east end of Lot 7 (Figure 1).

Reach 1

The lower reach of Mallet Creek consists primarily of a frequently entrenched stream channel with many meanders and occasional braided sections running within a wide bottomed ravine (Photograph 1). Forest cover consists of mature mixed forest comprised of well spaced western redcedar, red alder, Douglas-fir, bigleaf maple and western hemlock. The understorey is dominated by sword fern, with salmonberry, skunk cabbage, spiny wood fern, deer fern, wall lettuce and other common herbaceous species.

The stream channel downstream of Taylor Bay Road is dominated by rounded boulders and angular bedrock / sandstone with sparse gravels, pools or cover habitat. Upstream of Taylor Bay Road the stream channel is mostly entrenched within high, nearly vertical banks. There are some areas of suitable gravel spawning substrates, but substrates through most of the stream's length in Reach 1 are dominated by fines / organics. Large rearing / holding pools are rare. Braided channel sections with wide mud and skunk cabbage dominated floodplains were noted at waypoints 489 and 484. Stream gradient changes at waypoint 484, with stream gradient downstream to Taylor Bay Road approximately 4%, while upstream to the dam is approximately 1%.

From the intertidal boundary at approximately waypoint 498 (Photograph 2), Mallet Creek flows over a fairly steep gradient (~12%) section of boulder and bedrock dominated entrenched channel between the intertidal boundary and the culvert at Taylor Bay Road. A 1.5m high cascade formed by bedrock was documented at waypoint 497 and forms at least a seasonal barrier to upstream fish passage (Photograph 3). The outlet of the culvert at Taylor Bay Road also appears to represent at least a seasonal barrier to upstream fish passage (Photograph 4). An old log cradle bridge crossing was noted a short distance upstream of Taylor Bay Road at waypoint 494. An old culvert crossing with a drop of 1.4m to a plunge

pool at the outlet appears to form an impassable barrier to upstream fish passage at waypoint 491. A drop of 1.5m over hard-pan with no plunge pool at waypoint 490 (Photograph 5) also appears to form an impassable barrier to upstream fish passage. The creek was observed to go sub-surface for 4-5m through a debris jam / bedload at waypoint 487. Seasonal barriers to upstream fish passage formed by 1m drops over sill logs were noted at waypoints 482 and 480 (Photograph 6). Surface flows started at waypoint 474 as apparent seepage from the dam. There is no possible upstream fish access to the dam due to elevated overflow culverts.

Fish Presence

Despite the apparent barriers to upstream fish passage, juvenile salmonids appearing to be coho salmon were documented during the survey of Reach 1 at waypoints 494 (~5 fish), 488 (~12 fish), and 486 (2 fish). The observations of fish at waypoints 488 and 486 is especially puzzling, as these sites are located upstream of the two major barriers located at waypoints 490 and 491 (Figure 2) which based on our observations appear to represent impassable barriers to upstream fish passage.

It has been our experience that apparent barriers on small streams often have fish access via small high water side-channels that provide fish access over-land around the barrier during brief windows of opportunity at flood flow levels. There were no apparent high flow side-channels around the barriers documented at waypoints 490 and 491. Therefore, the remaining fish access scenario would likely involve back-flooding of the pools below these barriers during flood flows to a point that would allow adult coho to navigate the barriers. Often, masses of leaf matter accumulating on woody debris form these temporary dams which cause back-flooding and pool creation upstream.

Reach 2

Reach 2 consists of the man-made pond. The pond (Photographs 7 and 8) is approximately 0.84 ha in area and has two small vegetated islands. The pond is utilized by many species of wildlife as a source of drinking water and feeding / rearing area. No fish were observed in the pond.

The pond has two overflow culverts at the dam that only carry flows once the pond reaches full pool stage. Flows downstream in Mallet Creek when the pond is not discharging via the overflow culverts are provided apparently by seepage from the dam. While the exact source of surface flows was not verified on site, surface flows could be heard under the rip-rap overflow channel commencing at waypoint 474.

Reach 3

Reach 3 consists of the headwaters of Mallet Creek from the east end of the pond a waypoint 463 to the east end of the property at waypoint 472. The stream channel downstream of waypoint 470 consists of a grass, sedge, rush and skunk cabbage dominated channel (Photograph 10), with defined banks and organic substrates. Channels widths are on average <2m, with wetted widths of 0.2- 0.4m. The channel was dry upstream of waypoint 468.

Upstream of waypoint 470 the gradient increases and the channel consists of a poorly defined storm channel (Photograph 10) that appears to flow periodically during flood events. There was no defined channel upstream of waypoint 472.

Fish were not observed in Reach 3.

Form 3 Detailed Assessment Form
Riparian Areas Regulation - Qualified Environmental Professional - Assessment Report

The Streamside Protection and Enhancement Area (SPEA) setback requirements for Mallet Creek are provided in Table 1. The SPEA setbacks for Reaches 1 (Figure 3) and 3 of Mallet Creek are 10.0m from high water mark. Reach 2 (the pond) receives a 15m SPEA setback from the high water mark on the east, north and west sides. The SPEA setback on the south side of the pond will vary from 15m – 30m, due to the RARs requirements for preservation of the Zone of Sensitivity (ZOS) for shade (Figure 4).

Reach	Avg. Channel Width (m)	Avg. gradient %	SPVT	Channel Type	Shade ZOS (m)	LWD ZOS (m)	Insect ZOS (m)	SPEA Setback (m)
1	2.0	2.5	TR	RP	10.0	10.0	10.0	10.0
2	Not applicable	Not applicable	Not applicable	Not applicable	30.0 (south side only)	15.0	15.0	15.0 – 30.0
3	1.0	7.0	TR	RP	3	10.0	10.0	10.0

The RAR allows limited disturbance of native vegetation within designated SPEAs. Permitted activities include hazard tree removal (as determined by a certified arborist) and hand removal of introduced invasive species.

Section 2. Results of Detailed Riparian Assessment

Refer to Chapter 3 of Assessment Methodology

Date: July 14, 2014

Description of Water bodies involved (number, type)

Mallet Creek

Stream

X

Number of reaches

3

Reach #

1

Channel width and slope and Channel Type

Channel Width(m) Gradient (%)

Starting point	1.4	12
	1.8	4
	1.0	4
	4.0	1
	2.1	1
	2.9	1
	1.9	1
	2.3	1
	2.7	1
	1.7	1
	1.5	1
Total:	18.3	NA
minus high /low		
Mean	2.0	2.5
	R/P	C/P S/P
Channel Type	X	

I, Steve Toth (*name of qualified environmental professional*), hereby certify that:
a) I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the *Fish Protection Act*;
b) I am qualified to carry out this part of the assessment of the development proposal made by the developer Potlatch Properties Ltd. (*name of developer*);
c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and
d) In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation.

Site Potential Vegetation Type (SPVT)

Yes No

SPVT Polygons Tick yes only if multiple polygons, if No then fill in one set of SPVT data boxes

I, Steve Toth, hereby certify that:

a) I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the *Fish Protection Act*;
b) I am qualified to carry out this part of the assessment of the development proposal made by the developer Potlatch Properties Ltd.;
c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and
d) In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation.

Polygon No: 1

Method employed if other than TR

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SPVT Type	LC	SH	TR
			X

Zone of Sensitivity (ZOS) and resultant SPEA

Segment No:	1	If two sides of a stream involved, each side is a separate segment. For all water bodies multiple segments occur where there are multiple SPVT polygons				
LWD, Bank and Channel Stability ZOS (m)	10					
Litter fall and insect drop ZOS (m)	10					
Shade ZOS (m) max	NA	South bank	Yes		No	X
SPEA maximum	10	(For ditch use table3-7)				

Zone of Sensitivity (ZOS) and resultant SPEA

Segment No:	2	If two sides of a stream involved, each side is a separate segment. For all water bodies multiple segments occur where there are multiple SPVT polygons				
LWD, Bank and Channel Stability ZOS (m)	10					
Litter fall and insect drop ZOS (m)	10					
Shade ZOS (m) max	6	South bank	Yes	X	No	
SPEA maximum	10	(For ditch use table3-7)				

I, Steve Toth, hereby certify that:

a) I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the *Fish Protection Act*;

b) I am qualified to carry out this part of the assessment of the development proposal made by the developer Potlatch Properties Ltd.;

c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and

d) In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation.

Description of Water bodies involved (number, type) **Mallet Creek**

Pond

Number of reaches **3**

Reach # **2**

Site Potential Vegetation Type (SPVT)

	Yes	No	
SPVT Polygons	<input type="checkbox"/>	X	Tick yes only if multiple polygons, if No then fill in one set of SPVT data boxes

I, Steve Toth, hereby certify that:

e) I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the *Fish Protection Act*;

f) I am qualified to carry out this part of the assessment of the development proposal made by the developer Potlatch Properties Ltd.;

g) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and

h) In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation.

Polygon No:	1	Method employed if other than TR
SPVT Type	LC SH TR	
		X

Zone of Sensitivity (ZOS) and resultant SPEA

Segment No:	1	If two sides of a stream involved, each side is a separate segment. For all water bodies multiple segments occur where there are multiple SPVT polygons				
LWD, Bank and Channel Stability ZOS (m)	15					
Litter fall and insect drop ZOS (m)	15					
Shade ZOS (m) max	30	South bank	Yes	X	No	

Form 3 Detailed Assessment Form
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SPEA maximum (For ditch use table3-7)

I, Steve Toth, hereby certify that:
 e) I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the *Fish Protection Act*;
 f) I am qualified to carry out this part of the assessment of the development proposal made by the developer Potlatch Properties Ltd.;
 g) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and
 h) In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation.

Description of Water bodies involved (number, type)

Stream

Number of reaches

Reach #

Channel width and slope and Channel Type

	Channel Width(m)	Gradient (%)	
Starting point	1.4	1	
	1.8		
	1.0	1	
	1.0		
	1.4	1	
	0.8		
	0.8	2	
	0.6		
	1.0	5	
	1.5		
	0.6	11	
	Total: minus high /low	9.5	NA
	Mean	1.0	7.0
	R/P	C/P S/P	
Channel Type	X		

I, Steve Toth (*name of qualified environmental professional*), hereby certify that:
 e) I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the *Fish Protection Act*;
 f) I am qualified to carry out this part of the assessment of the development proposal made by the Potlatch Properties Ltd. (*name of developer*);
 g) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and
 h) In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation.

Site Potential Vegetation Type (SPVT)

Yes No
 SPVT Polygons Tick yes only if multiple polygons, if No then fill in one set of SPVT data boxes

I, Steve Toth, hereby certify that:
 i) I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the *Fish Protection Act*;
 j) I am qualified to carry out this part of the assessment of the development proposal made by the developer Potlatch Properties Ltd.;
 k) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and
 l) In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation.

Polygon No: Method employed if other than TR
 LC SH TR
 SPVT Type

Zone of Sensitivity (ZOS) and resultant SPEA

Segment If two sides of a stream involved, each side is a separate segment. For all water bodies
 No: multiple segments occur where there are multiple SPVT polygons

LWD, Bank and Channel Stability ZOS (m)
 Litter fall and insect drop ZOS (m)
 Shade ZOS (m) max South bank Yes No

SPEA maximum (For ditch use table3-7)

Zone of Sensitivity (ZOS) and resultant SPEA

Segment If two sides of a stream involved, each side is a separate segment. For all water bodies

Form 3 Detailed Assessment Form
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No:	multiple segments occur where there are multiple SPVT polygons					
LWD, Bank and Channel Stability ZOS (m)	10					
Litter fall and insect drop ZOS (m)	10					
Shade ZOS (m) max	3	South bank	Yes	X	No	
SPEA maximum	10	(For ditch use table3-7)				

I, Steve Toth, hereby certify that:

- i) I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the *Fish Protection Act*;
- j) I am qualified to carry out this part of the assessment of the development proposal made by the developer Pottlatch Properties Ltd.;
- k) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and
- l) In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation.

Figure 1. Mallet Creek streamline and reaches



Figure 2. Reach 1 features and fish observation locations

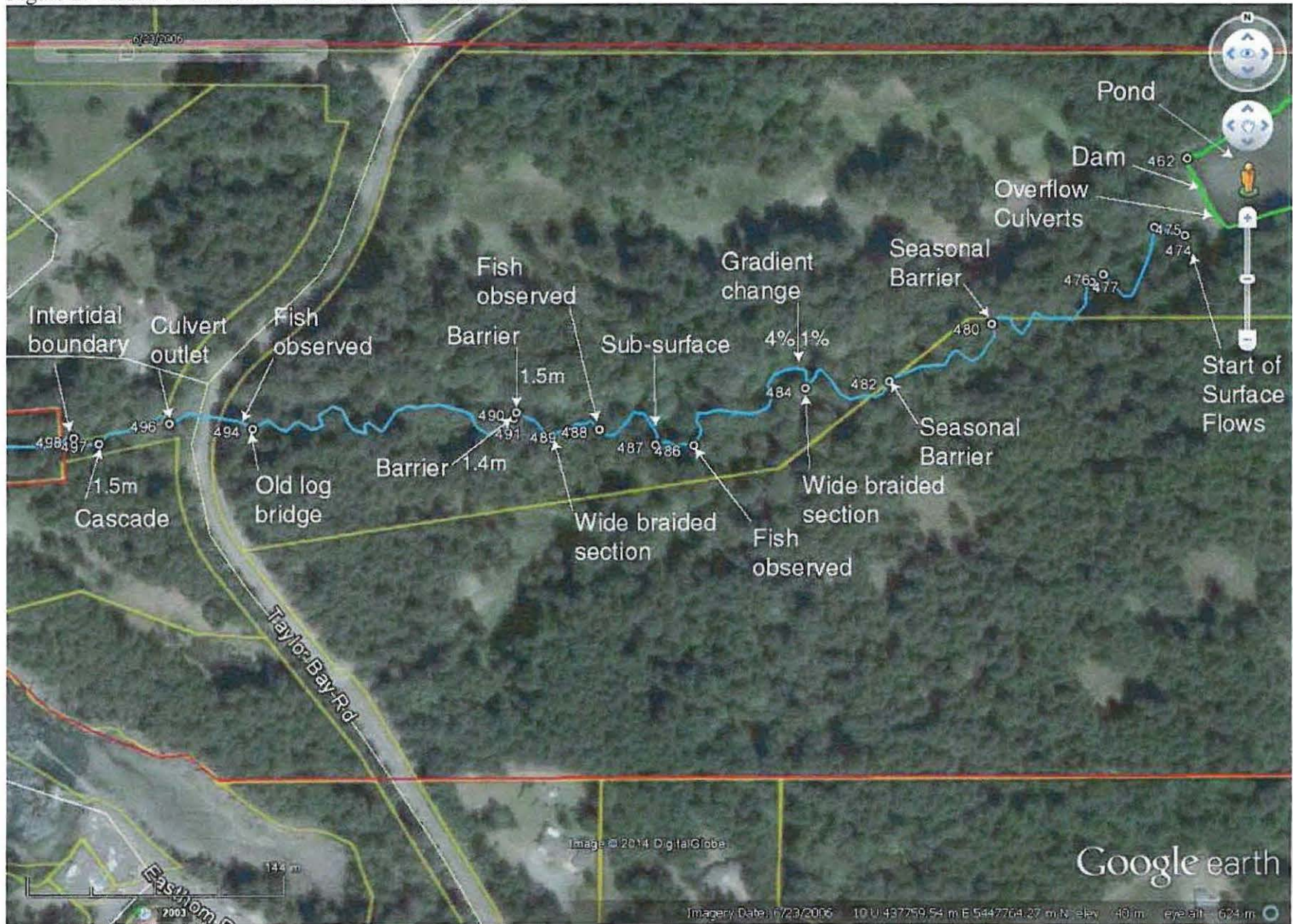


Figure 3. Mallet Creek Reach 1 SPEA setbacks

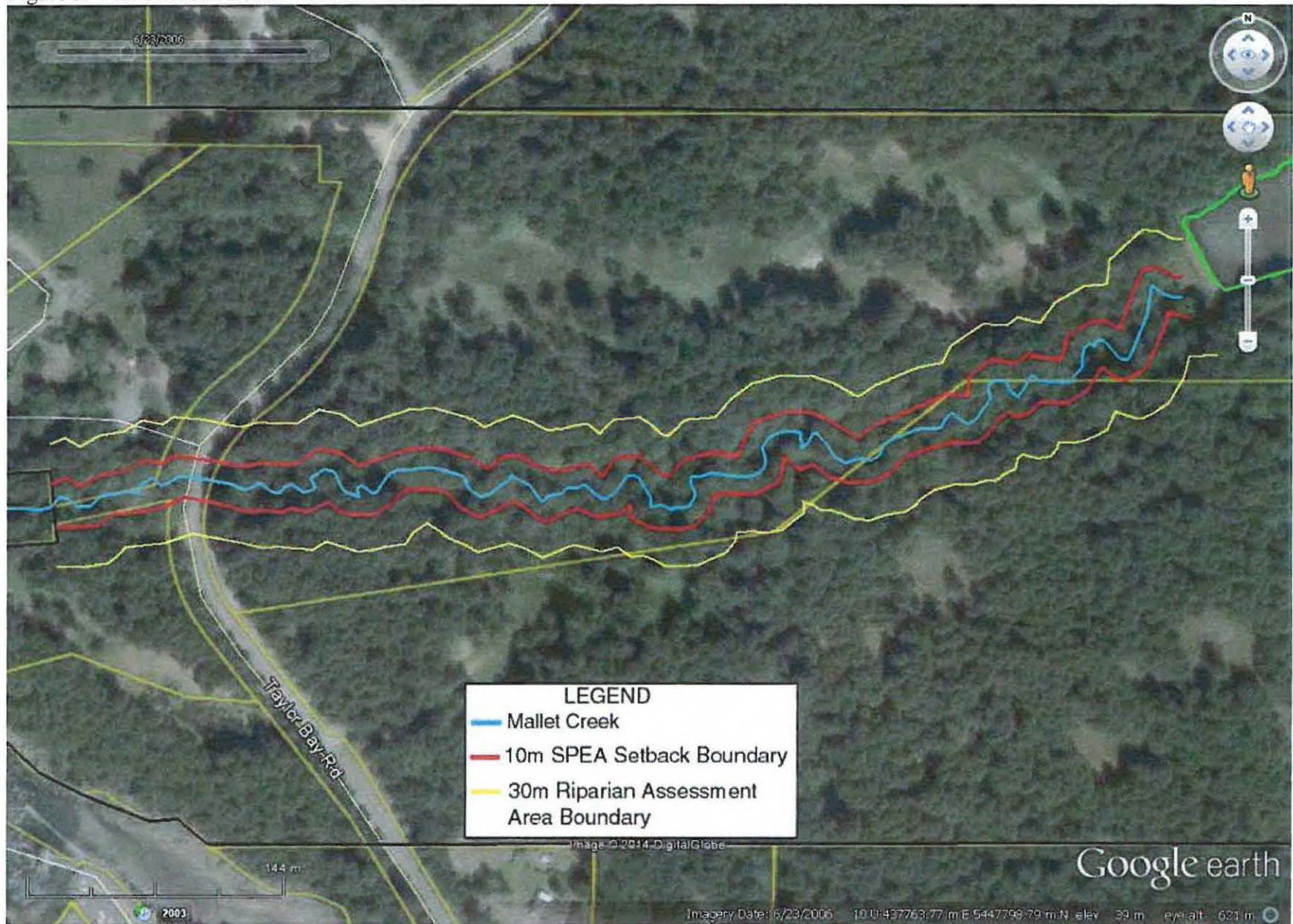
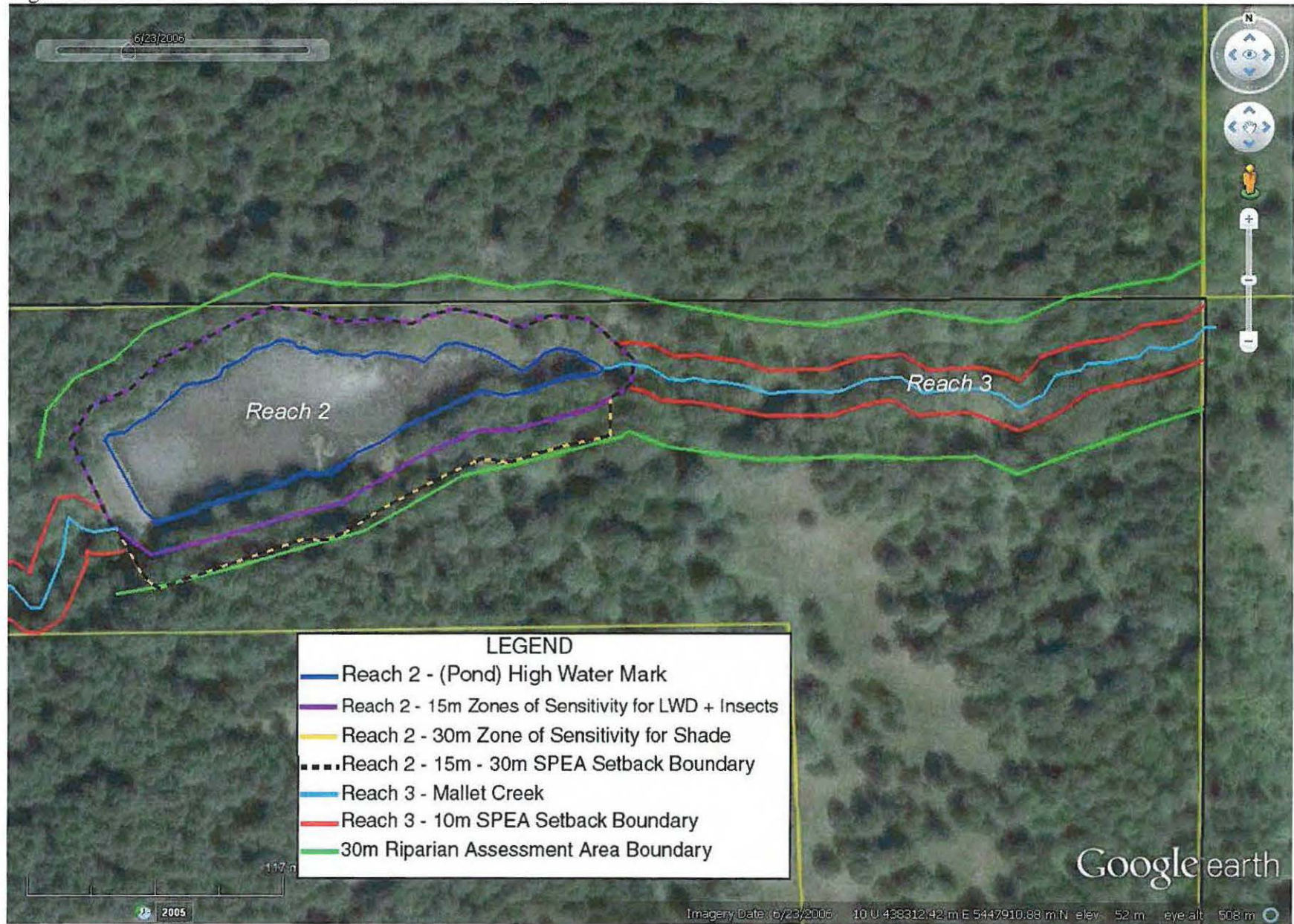


Figure 4. Mallet Creek Reach 2 and 3 SPEA Setbacks



Section 4. Measures to Protect and Maintain the SPEA

1. Danger Trees	No obvious danger trees were noted within the riparian assessment area. The RAR allows removal of danger trees, as designated by an inspection conducted by a certified hazard tree assessor, from within the SPEA. To be considered a danger tree, the tree must be within reach of a target (home, outbuilding, etc.).
<p>I, <u>Steve Toth</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Potlatch Properties Ltd.</u>;</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
2. Windthrow	There was no evidence of significant windthrow noted on the property.
<p>I, <u>Steve Toth</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Potlatch Properties Ltd.</u>;</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
3. Slope Stability	There was no evidence of unstable slopes noted within the riparian assessment area.
<p>I, <u>Steve Toth</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Potlatch Properties Ltd.</u>;</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
4. Protection of Trees	The RAR requires that the SPEA boundaries be marked on the ground prior to any physical development occurring within the riparian assessment area adjacent to the SPEA. Care should be taken to ensure that any physical development occurring along the SPEA boundary avoid the cutting or damaging of root networks of trees located within the SPEA.
<p>I, <u>Steve Toth</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Potlatch Properties Ltd.</u>;</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
5. Encroachment	The RAR requires that the SPEA boundaries be marked on the ground prior to any physical development occurring within the riparian assessment area adjacent to the SPEA. We recommend that hi-vis fencing be installed prior to commencement of any future construction within the riparian assessment area and that low split-rail type fencing be installed as a means of permanently marking the SPEA boundary.
<p>I, <u>Steve Toth</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Potlatch Properties Ltd.</u>;</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
6. Sediment and Erosion Control	Any future physical development occurring within the riparian assessment area on a slope leading to Mallet Creek should require the installation of silt fencing along the SPEA boundary to ensure that no run-off enters Mallet Creek.
<p>I, <u>Steve Toth</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p> <p>b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Potlatch Properties Ltd.</u>;</p> <p>c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation</p>	
7. Stormwater Management	All hard surface derived run-off should be directed to infiltration fields or rock chambers. No untreated hard-surface derived run-off should be permitted to flow to Mallet Creek.
<p>I, <u>Steve Toth</u>, hereby certify that:</p> <p>a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i>;</p>	

Form 3 Detailed Assessment Form

Riparian Areas Regulation - Qualified Environmental Professional - Assessment Report

b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Potlatch Properties Ltd.</u> ;	
c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation	
8. Floodplain Concerns (highly mobile channel)	There was no evidence of channel instability noted during the field survey.
I, <u>Steve Toth</u> , hereby certify that:	
a. I am a qualified environmental professional, as defined in the Riparian Areas Regulation made under the <i>Fish Protection Act</i> ;	
b. I am qualified to carry out this part of the assessment of the development proposal made by the developer <u>Potlatch Properties Ltd.</u> ;	
c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and In carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation	

Section 5. Environmental Monitoring

There is currently no physical development proposed within the riparian assessment area of Mallet Creek. As there is little potential for the redevelopment of the property to impact upon fish habitat we do not see a need for environmental monitoring during any future construction as long as the SPEA boundary is adequately marked on the ground prior to construction, and provided with run-off mitigation measures as discussed above under “Encroachment” and “Sediment and Erosion Control”. The province requires that a post-development assessment be conducted to assess whether physical development has negatively impacted upon, or intruded within the SPEA setbacks and that a post-development report be submitted within 60 days of project completion as an addendum to this report.

Section 6. Photos



Photograph 1. June 2014. View upstream on Reach 1 of Mallet Creek to dam at pond.



Photograph 2. June 2014. View downstream on Reach 1 of Mallet Creek from waypoint 498 to intertidal zone at stream mouth.



Photograph 3. June 2014. View downstream on Mallet Creek below Taylor Bay Road to cascade.



Photograph 4. June 2014. View of the outlet of the culvert at Taylor Bay Road.



Photograph 5. June 2014. View upstream on Mallet Creek to barrier to upstream fish passage at waypoint 490.



Photograph 6. June 2014. View upstream to drop over sill log at waypoint 480.

Form 3 Detailed Assessment Form
Riparian Areas Regulation - Qualified Environmental Professional - Assessment Report



Photograph 7. View east from the dam to the upper end of the pond.



Photograph 8. View west from the south side of the pond to the dam.



Photograph 9. View of Reach 3 of Mallet Creek at waypoint 466.



Photograph 10. View upstream from waypoint 470.

Section 7. Professional Opinion

Assessment Report Professional Opinion on the Development Proposal's riparian area.

Date

1. I/We Steve Toth

Please list name(s) of qualified environmental professional(s) and their professional designation that are involved in assessment.)

hereby certify that:

- a) I am/We are qualified environmental professional(s), as defined in the Riparian Areas Regulation made under the *Fish Protection Act*;
- b) I am/We are qualified to carry out the assessment of the proposal made by the developer Potlatch Properties Ltd.; which proposal is described in section 3 of this Assessment Report (the "development proposal");
- c) I have/We have carried out an assessment of the development proposal and my/our assessment is set out in this Assessment Report; and
- d) In carrying out my/our assessment of the development proposal, I have/We have followed the assessment methods set out in the Schedule to the Riparian Areas Regulation; AND

2. As qualified environmental professional(s), I/we hereby provide my/our professional opinion that:

- a) if the development is implemented as proposed by the development proposal there will be no harmful alteration, disruption or destruction of natural features, functions and conditions that support fish life processes in the riparian assessment area in which the development is proposed, **OR**
- b) if the streamside protection and enhancement areas identified in this Assessment Report are protected from the development proposed by the development proposal and the measures identified in this Assessment Report as necessary to protect the integrity of those areas from the effects of the development are implemented by the developer, there will be no harmful alteration, disruption or destruction of natural features, functions and conditions that support fish life processes in the riparian assessment area in which the development is proposed.



ARCHAEOLOGICAL OVERVIEW ASSESSMENT

Proposed 180 Acre Rezoning of Residential Development North of North Road and East of Taylor Bay Road, Gabriola Island, BC

for:

0858317 BC

c/o

**Mr. Brian Henning, B.C.L.S.
Williamson & Associates Professional Surveyors
3088 Baron Road, Nanaimo, BC, V9T 4B5**

by:

**Madrone Environmental Services Ltd.
1081 Canada Avenue, Duncan, BC, V9L 1V2**

February 12, 2016

MADRONE ENVIRONMENTAL SERVICES LTD.
1081 CANADA AVENUE • DUNCAN • BC • V9L 1V2
TEL 250.746.5545 • FAX 250.746.5850 • WWW.MADRONE.CA

DOSSIER: 14.0283

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Executed this 12 day of February, 2016 by

A handwritten signature in black ink that reads "Kristina Bowie". The signature is written in a cursive style with a large, prominent initial 'K'.

Kristina Bowie, B.A.
Madrone Environmental Services Ltd.

Credits

Project Manager/Field Director/Author

Kristina Bowie, B.A.

Report Graphics

Johnathan Mack, B.Sc

Report Production

Lisa Hooge

Acknowledgements

Madrone Environmental Services Ltd. would like to thank Mr. Brian Henning of Williamson & Associates Professional Surveyors for supporting this archaeological study and for Mr. Henning's assistance at the property. Snuneymuwx First Nation was contacted on several occasions, however field support could not be arranged.

The professional opinions expressed in this report are those of Madrone Environmental Services Ltd. and not those of any outside individuals or groups that were involved in the study. Madrone alone takes responsibility for the content of this report, including any errors or omissions.

Management Summary

NOTE: This is a preliminary report with results incorporating the additional eastern parcel, currently outside of the scope of the AOA, to be produced at a later date.

Madrone Environmental Services Ltd. was engaged by Mr. Brian Henning of Williamson & Associates Professional Surveyors to conduct an Archaeological Overview Assessment for a proposed subdivision of 180 acres (72.84 ha) in the southwest portion of Gabriola Island, east of Descanso Bay. The proposed lands are situated along the north side of North Road, east of Taylor Bay Road, east of Descanso Bay Provincial Park. Legal description of the properties: PID 006-635-121 for the easterly 80 acres, PID 027-939-791, Lot 6, Plan VIP86742 and PID 027-939-804, Lot 7, Plan VIP86742 which combine to comprise the westerly 100 acres, immediately east of Taylor Bay Road. A third area of potential future development east of the properties discussed in this assessment, comprise PID 003-010-431, Lot 1, Section 19, Gabriola Island, Nanaimo District. At the time of writing this area had not been surveyed or assessed.

On January 10 and 11, 2015, Madrone archaeologist Kristina Bowie conducted a pre-field reconnaissance survey (PFR) of the 180 acres. Potential for buried archaeological deposits was assessed as low, with two small areas identified as having moderate archaeological potential. Two recent culturally modified trees were identified in the northwestern corner of the property.

Prior to the PFR, no archaeological sites had been recorded on the development property. A small inland shell midden site, DhRx-56 is recorded approximately 100 meters west of the southwest corner of the subject property. Additionally, eight other recorded archaeological sites are situated within approximately 1 km of the western portion of the subject property. These sites include pre-contact human burials, surface and subsurface stone tool sites, shoreline and inland shell midden sites. Due to the location of the subject property east of Descanso Bay, the property has several areas highlighted for AOA (Archaeological Overview Assessment) potential within the RAAD (Remote Access to Archaeological Data) system maintained by the Archaeology Branch of British Columbia.

This study was initiated in order to: 1) ascertain whether visible archaeological features on the subject property were present and to assess the potential for buried archaeological deposits on the property, and 2) to provide the necessary recommendations for any future development should any archaeological potential be identified, including a cultural resource management plan for the development phase of the proposed subdivision project.

The archaeological overview included a review of any ethnographic, archaeological, and historical data pertinent to the project area as well as any information pertaining to the past and present physical environment. The preliminary field reconnaissance of the property was also undertaken as part of the overview.

Results produced through the reconnaissance survey of the property have identified two small areas deemed to have moderate archaeological site potential, however no new sites were confirmed. These two areas of moderate archaeological potential include:

- Area #1, a raised level inland terrace on the south side of Mallet Creek,
- Area #2, a level terraced landform on the north side of the open meadow near the northwest portion of the property. Two historic culturally modified trees (CMTs) were identified in proximity to this area during the reconnaissance survey.

Our recommendations are as follows:

- 1** It is recommended that the two areas with moderate archeological potential, Areas #1 and #2, should be left intact and undisturbed and that no subsurface activity should take place in their vicinity. If any immediate or future land altering activities take place close to the identified areas of archaeological potential, that an AIA (archaeological impact assessment) is conducted for these two areas, or a chance find protocol is designed and implemented.
- 2** In the event that unrecorded cultural resources are found during the course of development, it is recommended that all work in the area of discovery cease and the Archaeology Branch of British Columbia and the Snuneymeux First Nation be notified immediately. We recommend that an archaeologist be engaged to assess the resource and that the resource be managed as per the direction of Snuneymeux First Nation.

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ARCHAEOLOGICAL OVERVIEW ASSESSMENT

Proposed 180 Acre Rezoning of Residential Development North of North Road and East of Taylor Bay Road, Gabriola Island, BC

1 Introduction

NOTE: This is a preliminary report with results incorporating the additional eastern parcel, currently outside of the scope of the AOA, to be produced at a later date.

Madrone Environmental Services Ltd. was contracted by Brian Henning of Williamson and Associates to conduct an Archaeological Overview Assessment (AOA) ahead of 180 acres (72.84 ha) proposed to be rezoned for residential development located north of North Road and east of Taylor Bay Road, immediately southeast of Descanso Bay and Descanso Bay Provincial Park on the westerly portion of Gabriola Island, BC. (Figures 1 and 2). The legal description of the property is divided into three sections, each in Gabriola Island, Nanaimo District: 1) for the easterly 80 acres: PID 006-635-121, and 2) PID 027-939-791, Lot 6, Plan VIP86742 and PID 027-939-804, Lot 7, Plan VIP86742 which combine to comprise the westerly 100 acres, immediately east of Taylor Bay Road. For the purposes of this report, the property will be discussed as the eastern 80 acres and western 100 acres.

A third area of potential future development east of the properties discussed in this assessment, comprise PID 003-010-431, Lot 1, Section 19, Gabriola Island, Nanaimo District. At the time of writing this area had not been surveyed or assessed.



Plate 1. Looking west toward Mallet Pond from western end of Mallet Creek.



Plate 2. Looking west toward old growth Western red cedar stumps with historic springboard notches, immediately south of Mallet Creek, NW corner of western 100 acres.

The property is undeveloped, though the majority of the eastern 80 acres of the property has been previously logged and approximately 60 percent of the western 100 acres previously logged. The proposed rezoning is to divide the entire property into approximately 24, 2.5 to 5.0 acre residential lots or parcels. The property measures 1.8 km east to west and 375-400 m north to south.

As a component of this AOA, a Preliminary Field Reconnaissance survey (PFR) was conducted in order to identify and assess potential impacts to archaeological resources as a result of the property development. On January 10 and 11, 2015, Madrone archaeologist Kristina Bowie conducted the PFR. Kristina was accompanied by Brian Henning the morning of January 10. This report describes the results of the AOA including PFR and provides recommendations for future archaeological work in advance of the proposed development.

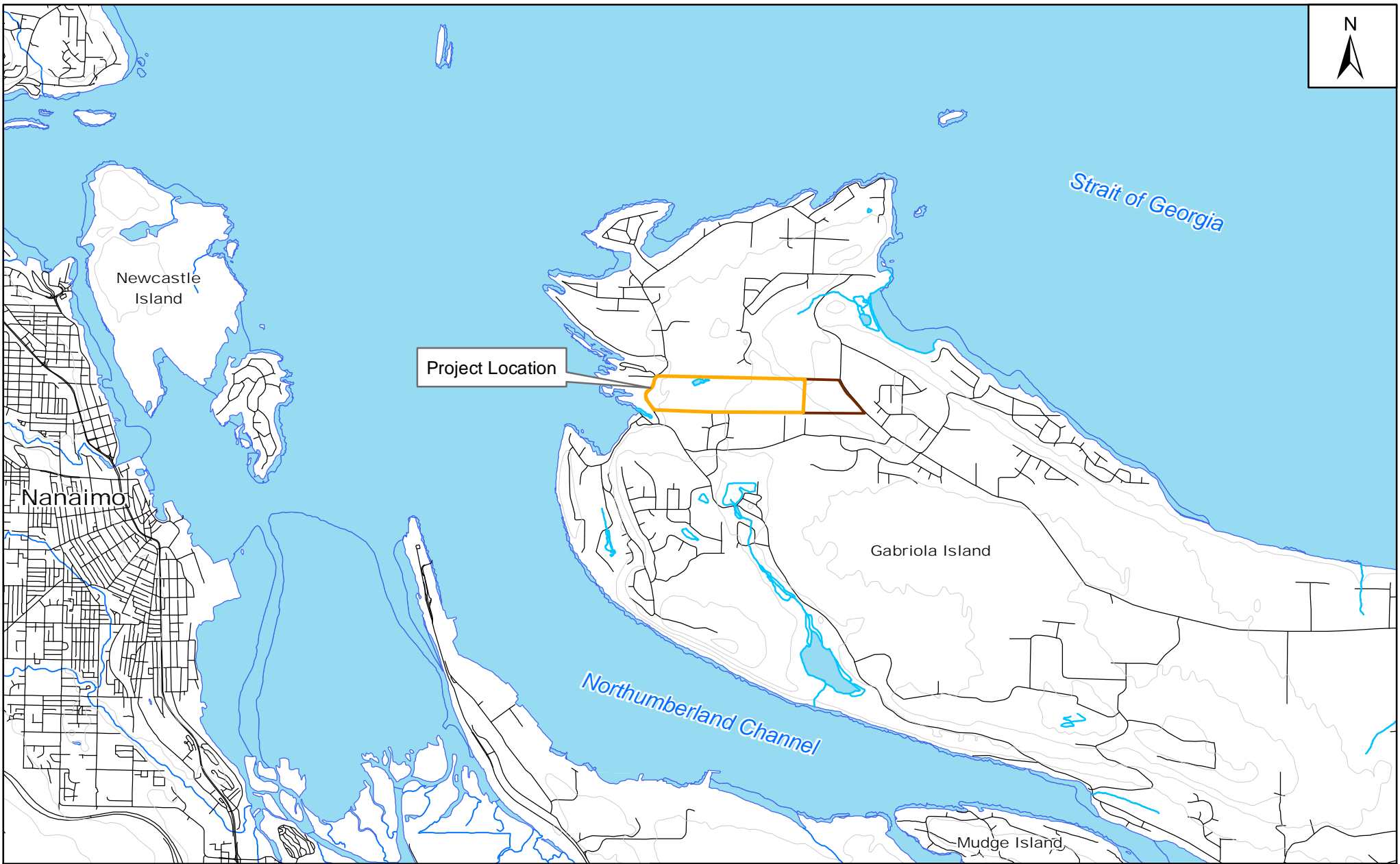
This assessment does not address any potential impacts to traditional and contemporary use sites within or near to the study area. This report is provided without prejudice toward Aboriginal Rights and Title that affected First Nation groups may have. It should not be used to fulfill consultation requirements with said groups.



Plate 3. Looking west toward old roadways from northeastern corner of property, eastern 80 acres, north east of high bluff.




Plate 4. Looking west toward old growth Western red cedar stumps with historic springboard notches, immediately south of Mallet Creek, NW corner of western 100 acres.

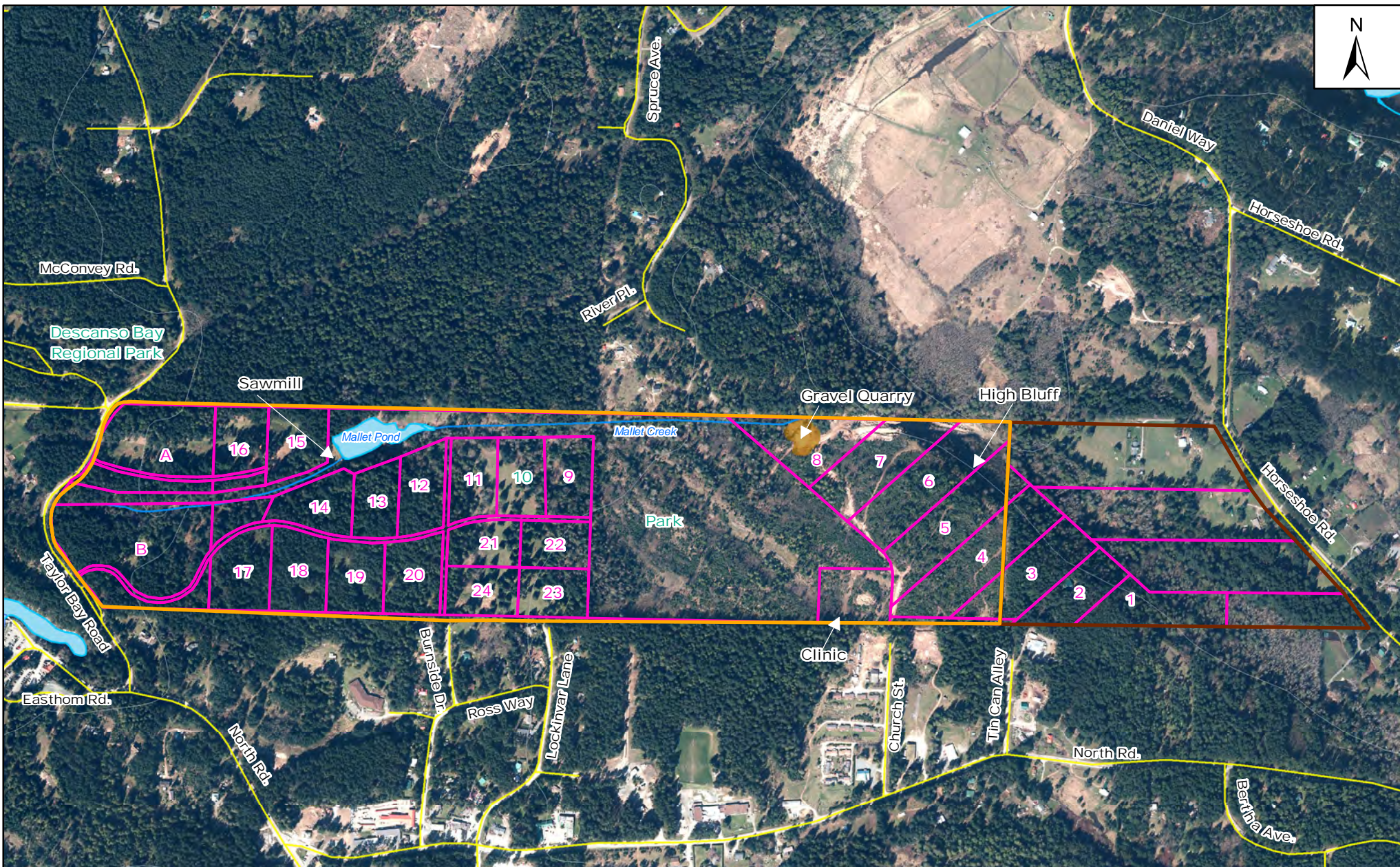


- Approximate Property Boundary
- Potential Future Area of Development
- Waterbody
- Road
- Contour
- Drainage

Service Layer Credits: Sources: ESRI, DLorme, NAVTEQ, TomTom, Intermap, IncrementP Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster, NL, Ordnance Survey, ESRI Japan, METI, ESRI CHINA (Hong Kong), and the GIS User Community

FIGURE 1: Project Location		MAP DATE: 09/08/2015	 1: 60,000
LOCATION: Gabriola Island, BC	HCA PERMIT: Non-Permit		
NTS MAP: 092G/11	DATUM: NAD 83	PROJECTION: UTM Zone 10	DRAWN BY: Johnathan Mack
CLIENT: Williamson and Associates Profesional Surveyors			DOSSIER: 14.0283





- Approximate Property Boundary
- Lot Subdivision
- Potential Future Area of Development
- Waterbody
- Road
- Contour
- Drainage

Service Layer Credits: Sources: ESRI, DLorme, NAVTEQ, TomTom, Intermap, IncrementP Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster, NL, Ordnance Survey, ESRI Japan, METI, ESRI CHINA (Hong Kong), and the GIS User Community

FIGURE 2: General Location Map

LOCATION:
Gabriola Island, BC

HCA PERMIT:
Non-Permit

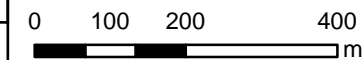
NTS MAP:
092G/11

DATUM:
NAD 83

PROJECTION:
UTM Zone 10

CLIENT: Williamson and Associates
Professional Surveyors

MAP DATE:
09/08/2015



1: 10,000

DRAWN BY:
Johnathan Mack

DOSSIER:
14.0283



1.1 Archaeological Overview Assessment Objectives

Archaeological remains in the Province of British Columbia are protected from any form of disturbance, intentional or accidental, by the *Heritage Conservation Act* (RSBC 1996 Chap 187). To assist with the evaluation and management of archaeological sites within the province, the Archaeology Branch has published the *British Columbia Archaeological Impact Assessment Guidelines* (1998). The objectives of the AOA in accordance with the *Guidelines* are as follows:

- i. Identify any previously recorded archaeological sites that fall within the current study area;
- ii. Assess the overall archaeological site potential for the study area utilizing available ethnographic, cultural heritage and historic data;
- iii. Confirm or refute the presence of archaeological sites or archaeological potential within the study area by conducting a PFR (pre-field reconnaissance survey);
- iv. Assess the age, significance, density and distribution of archaeological sites, if present; and
- v. Determine the most appropriate survey methods or techniques to be utilized should an archaeological impact assessment (AIA) be deemed necessary.

Please note that this assessment does not address potential impacts to traditional and contemporary use sites within or near the study area. This report is provided without prejudice toward Aboriginal Rights and Title that any affected First Nation groups may have and should not be used to fulfill consultation requirements with said groups.

2 Proposed Project

Development plans have not been finalized for the 180 acre property, however the proposed project is expected to include:

- Approximately twenty-four 2.5 to 5.0 acre residential lots. The eastern 80 acres to be divided into eight lots with the majority of the area designated as park and the western 100 acres to be divided into approximately nineteen lots.
- To dedicate approximately 20.5 hectares, 50 acres, for Forest Wilderness Park, which will include Mallet Creek and Mallet Pond riparian area and a streamside protection enhancement area (SPIE). The Park area will include walking trails from Descanso Park into the western 100 acres, with riparian areas defined as a 10 m

buffer around Mallet Creek, a 15 m buffer along the north side of Mallet Pond, and 30 m buffer on the sound side of Mallet Pond.

- Twenty meter (20 m) wide access road at east end of the property to extend north from Church Street to connect with Spruce Road near the medical clinic and provide increased access for the fire hall.
- Potential land clearing for the proposed residential lots.
- Infrastructure upgrades and installations where necessary.

2.1 Project Area

2.1.1 Environment

The current project is situated on Gabriola Island encompassed within the broader geological region termed the *Nanaimo Lowlands*, which extend from Campbell River to Victoria on the east side of Vancouver Island and includes most of the Gulf Islands. The physiographic setting of this region is identified by the presence of gently rolling hills that reach elevations of 200 m with flatter plains that border most of the Gulf of Georgia (Yorath and Nasmith 1995).

Similarly to other regions of Vancouver Island, the past physical landscape of the study area has been subjected to constant change as a result of glaciation, earthquakes and erosional processes. Those areas located along the coastal shorelines have received the most extensive impact due to continual wave action and sea level change resulting in the erosion of archaeological sites.



Plate 5. Looking north toward of regenerated forested areas in western 100 acres.

2.1.2 Paleoenvironment and Sea Level History

Paleoenvironmental studies of Vancouver Island have identified three major periods of glaciation with features left behind from the last period, the Fraser Glaciation, being the most widespread and exposed today. Beginning approximately 29,000 years ago, the Fraser Glaciation period witnessed an accumulation of ice on the mountains of Vancouver Island forming vast alpine glaciers that expanded to create valley glaciers. These valley glaciers created significant shifts in the vegetation with areas of temperate forest disappearing and being replaced by alpine and tundra vegetation.

After the climax of the Fraser Glaciation, around 15,000 years before present (BP), the climate changed significantly and increasingly warmer temperatures melted valley glaciers (Yorath and Nasmith 1995: 33-34). As the climate continued to change, the vegetation shifted from an alpine and tundra environment back to a temperate landscape. After 6,600 BP, the climate on Vancouver Island became increasingly cool and wet resulting in the development of the modern temperate coastal forest. This temperate forest was increasingly dominated by Douglas fir and Western Hemlock. There was also a significant increase in the presence of red cedar (Pellatt *et. al.*, 2001). By between 4,500 and 3,000

years BP, the environment of Vancouver Island mirrored that of the present (Mathewes 1976, 1985). These shifts in climate and vegetation would have affected the early peoples who occupied Vancouver Island. Specifically, changes in forest resources may have had an effect on subsistence and settlement patterns.

Sea level history along coastal British Columbia is varied and dependent on the distance from the main concentrations of ice accumulation and the specific timing of glacier retreat. During de-glaciation, there were substantial fluctuations in sea levels as a result of eustatic, isostatic, and tectonic activities (Muller 1980). On the mainland, relict shorelines are located up to 200 m above the present sea level while, on the west coast of Vancouver Island, these relict shorelines occur at less than 50 m elevation.

In Haida Gwaii (the Queen Charlotte Islands), the situation is reversed and the oldest relict shorelines are now submerged under the ocean (Clague 1983). During late Pleistocene de-glaciation, sea levels ranged from 75 m to 175 m above present day levels (Clague 1981). At this time, the current study area would have been fully submerged. As glacial ice melted, sea levels fell several meters below the present. Archaeological sites occupied during the late Pleistocene are found on elevated shoreline areas and sites dating to the rebound period (ca. 9,000 BP) are expected to be located below the present day tide levels.

After this drop in sea levels during the early Holocene, the ocean began rising until approximately 5,000 years ago when the tide line reached its present extent again (Yorath and Nasmith 1995:34-35). Therefore, any evidence of early human occupation or land use extending back farther than 5,000 BP along the Strait of Georgia¹ may potentially be submerged under the ocean. Subsequently, archaeological survey and investigations on Vancouver Island and other regions of British Columbia must account for the specific sea level history in any given study area.

In the Strait of Georgia¹, the only archaeology site that has been tentatively associated with early Holocene sea levels is the Montague Harbour site on Galiano Island which has intertidal and sub-tidal components (Easton 1991, 1992). A deeply buried organic layer from the site was dated to 6000 BP and a bone tool from the same layer was dated to 3,500 BP however, the association between these two elements is not yet understood

¹ The Strait of Georgia is now encompassed within the broader name the *Salish Sea* which also includes the Straits of Juan de Fuca and Puget Sound. The name change is meant to honour the Coast Salish people who have used these waters for thousands of years. For the purposes of this report, the study area will still be referred to as the Strait of Georgia in order to maintain consistency with the previously defined culture history for the area.

(Reinhardt *et al.*, 1996; Fedje *et al.*, 2009). Recent archaeological work being conducted in the Gulf Island Park Reserve by Parks Canada archaeologists has found several archaeological sites with intertidal components that have the potential to produce cultural deposits dating to the early Holocene (Fedje *et al.*, 2009).

2.1.3 Biogeoclimatic Environment

The project area is situated within the Coastal Douglas Fir (CDF) biogeoclimatic zone. This zone is limited to only a small area of south eastern Vancouver Island, several Gulf Islands and a portion of the adjacent BC mainland (Nuszdorfer *et al.*, 1991:82). The climate within the CDF zone is relatively dry with mild annual temperatures and the vegetation is diverse with species that occupy rock outcrops, seaside, aquatic and forest habitats.

The CDF is characterized by the predominance of Douglas fir (*Pseudotsuga menziesii*), with an understorey of salal (*Gaultheria shallon*), and/or Oregon grape (*Mahonia aqua folium*). Other tree species commonly occurring in this zone include western red cedar (*Thuja plicata*), grand fir (*Abies grandis*), Red alder (*Alnus rubra*) and, in drier areas, arbutus (*Arbutus menziesii*) and Garry Oak (*Quercus garryana*). Other less-common species include Sitka spruce (*Picea sitchensis*), western hemlock (*Tsuga heterophylla*), shore pine (*Pinus contorta*), bitter cherry (*Prunus emarginata*), bigleaf maple (*Acer macrophyllum*), western flowering dogwood (*Cornus nuttallii*), black cottonwood (*Populus trichocarpa*), and trembling aspen (*Populus tremuloides*) (Nuszdorfer *et al.*, 1991:82).

Native wildlife commonly found within the Coastal Douglas Fir zone, and within the study area in particular, includes black-tailed deer (*Odocoileus hemionus*), black bear (*Ursus americanus*), and various other small land mammals. Birds and waterfowl known to be found in this zone include the pileated woodpecker (*Dryocopus pileatus*), blue grouse (*Dendragapus obscurus*), Stellar's jay (*Cyanocitta stelleri*), great blue heron (*Ardea herodias*), raven (*Corvus corax*), hooded merganser (*Lophodytes cucullatus*), mallard (*Anas platyrhynchos*), Canada goose (*Branta canadensis*) and glaucous gull (*Larus hyperboreus*) (Nuszdorfer *et al.*, 1991:88-90).

Sea mammals known to occupy the waters near to the current study area include harbour seal (*Phoca vitulina richardi*), northern sea lion (*Eumetopias jubata*), California sea lion (*Zalophus californianus*), killer whale (*Grampus rectipinna*) and harbour porpoise (*Phocoena vomerina*). Many types of fish are also commonly found in the area, each occupying a specific local habitat such as a rocky shoreline or sandy beach. Fish species include dogfish (*Squalus suckleyi*), skate (*Raja binoculata*), Pacific herring (*Clupea harengus*), rockfish

(*Sebastes* spp.), flounder (*Atheresthes stomias*), halibut (*Hippoglossus stenolepis*), sole (numerous species), ling cod (*Ophiodon elongates*) and several species of sea perch (Mitchell 1971). Five species of salmon also reside in the ocean and rivers surrounding the study area depending on the season which include Chinook (*Onocorhynchus tshawytscha*), chum (*O. keta*), Coho (*O. kisutch*), pink (*O. gorbuscha*) and sockeye (*O. nerka*).

Various types of shellfish can be found in specific local habitats in the Gulf of Georgia region. Species of shellfish include, but are not limited to, butter clam (*Saxidomus giganteus*), littleneck clam (*Protothaca staminea*), horse clam (*Schizothaerus nuttalli*), basket cockle (*Clinocardium nuttalli*), mussel (*Mytilus edulis*), native oyster (*Ostrea lurida*), whelk (*Nucella* sp.), wrinkle purple (*Nucella lamellose*), periwinkle (*Littorina* sp.), limpet (*Lottidae*), and acorn barnacle (*Balanus nubilis*).

2.2 Ethnographic Review

The current study area falls into the Gulf of Georgia region (now known as part of the Salish Sea), an area that has been traditionally occupied by several local groups often generally described as the Central Coast Salish (Suttles 1990). The Central Coast Salish encompasses five distinct language groups known as the Halkomelem, Squamish, Nooksack, Northern Straits and Clallam (Suttles 1990). Hul'qumi'num speakers are found from Harrison Lake and the Fraser Canyon to the mouth of the Fraser River, across the Gulf Islands and along eastern Vancouver Island (Suttles 1990:453). Three different dialects of the Halkomelem language have been distinguished, separating the group further into the Island Halkomelem, the Upriver Halkomelem and the Downriver Halkomelem. The Island Halkomelem are known to have traditionally occupied winter villages on eastern Vancouver Island (Suttles 1990).

Local groups residing in the Gulf of Georgia region, and more specifically along eastern Vancouver Island, have been subject to extensive ethnographic study by researchers such as Barnett (1939, 1955), Duff (1952), Kroeber (1963), and Suttles (1951, 1960). Ethnographic information gathered by these individuals among others has led to the establishment of a defined cultural area known as the Gulf of Georgia. The Gulf of Georgia region is characterized by several locally distinct characteristics that tend to separate the groups in the area from neighbouring groups. Based on ethnographic accounts for Gulf of Georgia groups (See Barnett 1939, 1955; Duff 1952; Suttles 1951, 1960), three regional features of the culture type are listed by Mitchell (1971 26-27). These features are: **(1)** An extensive range of food procuring technologies for a variety of conditions (*i.e.*, specialized types of nets, many forms of harpoons, hooks and lures), **(2)** A set annual round of movements from one resource location to another depending on the specific season, and

(3) an effective means of food preservation and storage. Additional features restricted or closely identified with groups in the Gulf of Georgia region include: (1) some form of a class structured society that distinguishes between high, low and a slave class, (2) a winter dancing complex, (3) the raising of a specific breed of white dog for its wool, (4) reef-net technology and associated social and ritual aspects of its use, (5) *swaixwe* dance and costume, and (6) myth of origin (Suttles 1960; Mitchell 1971:26). The presence of these features with any one group in the Gulf of Georgia region does, of course, vary and this list of specific features exists to set the Gulf of Georgia cultures apart from the Northwest Coast culture type (Mitchell 1971:26).

2.2.1 Ethnographic Settlement and Subsistence – The Snuneymuxw

While several First Nation groups claim territory on Gabriola Island, the closest, the Snuneymuxw, are discussed in more detail below.

The ethnographic literature for the region notes that there were five or six associated local groups living in the Nanaimo area (Barnett 1935-1936, 1955:22-23), including the *kwelsiwlh*, the *teytexen*, the *yeshexen*, the *enwines*, the *xwsol'exwel*, and the *tleltxw*. Although they are often referred to by their anglicized name, the “Nanaimo”, today the groups are collectively known as the Snuneymuxw. These local groups consisted of the household (established kin group) along with several dependant households or kin groups.

During the winter (December through March), these groups inhabited villages at Departure Bay, Nanaimo Harbour, and False Narrows between Gabriola and Mudge Island (Suttles 1990:463; Barnett 1955:22; Bouchard 1992:10). Departure Bay, known as *Stl'ilep*, was described by early Snuneymuxw informants as the “main home” of the people and is one of the sites associated with the origins of the local groups (Bouchard 1992:17). Departure Bay was the largest of the winter villages where all but the *xwsol'exwel* (who lived at Nanaimo Harbour and joined the other groups in the spring) resided (Barnett 1935-36; 1955:22-23). The site of False Narrows on Gabriola Island was a large and important village called *Tle:ltxw* meaning “rich place” or “expensive dwellings” by the Snuneymuxw. *Tle:ltxw* was also known to be a burial place and regarded as a sacred site (Littlefield 2000:2-4).

Local Snuneymuxw groups made use of a variety of food resources throughout their territory, travelling throughout the area and further afield on a seasonal basis. In March, the herring came to the Nanaimo area with many early sources indicating that the waters of the Nanaimo area were thick with herring during this season. Herring, which were sometimes traded for other items such as blankets (Bouchard 1992:11), were caught and

cured at Departure Bay. Other methods of catching fish included using rock barriers or woven traps (Barnett 1955:13), and, most commonly, fishing by canoe with the aid of nets, gorges, gaffs and leisters. Fish implements used by local Snuneymuxw groups included basketry traps, 2-pronged fish harpoons with fixed fore shafts, 2-pronged and 3-pronged spears, wooden halibut hooks, herring rakes constructed of a wooden shaft with small bone or wooden “teeth” inserted at one end, salmon gaffs with detachable heads, fish clubs, fish nets made of bark or nettle, and weirs consisting of several upright stakes (Barnett 1939: 229-231, 279-280).

Although the focus of ethnographic studies has often served to highlight the importance of fishing activities for groups living on the east coast of Vancouver Island, the importance of the gathering of both sea and land-based resources should not be underestimated. The gathering of shellfish for food as well as for other purposes is documented both ethnographically as well as archaeologically. A variety of shellfish species were collected in baskets, primarily by women, along the many productive shorelines of the east coast of Vancouver Island and adjacent islands. Species gathered included butter and horse clams, native oysters, whelk, blue mussel, barnacle, crab, chiton, sea cucumber and sea urchin (Barnett 1955:63). These shellfish were most often steamed, boiled or dried with large pits for steaming dug along the shoreline (Littlefield 2000:5). Gathering activities also focused on land-based resources such as roots, bulbs, berries, and tree bark, to name only a few of the many items collected. Plant resources were used for a variety of purposes including but not limited to food, clothing, medicine, basketry, and spiritual practices.

In the spring, Snuneymuxw groups travelled to the False Narrows area and other sites on Gabriola Island to collect camas, with each family having their own camas bed located along the bluffs of the island. Camas bulbs, usually slowly roasted in earthen pits filled with hot stones and dry foliage, were a staple food for people in the region, providing a substantial amount of carbohydrates and families usually owned and tended specific camas plots (Turner 1995). Early reports also noted that the False Narrows area was also rich in clam beds (Bouchard 1992:11) and that the local groups visited Gabriola Island to obtain clams, a variety of fish species, eggs, vegetable foods, seal and sea lions. The importance of the False Narrows area as a clam digging location was also emphasized in recollections made by Snuneymuxw elders (Littlefield 2000:3-4). The waters of False Narrows and Gabriola Passage were also known to be rich in salmon and cod and local groups often trolled in the vicinity of the shallow waters of False Narrows (Littlefield 2000:5). In the summer, some groups left the Gulf Islands and travelled to the mouth of the Fraser River where groups had their own camps and devoted their time to taking advantage of the salmon run, collecting various seeds, berries and roots, and occasionally hunting deer, elk and mountain goat alongside groups from Vancouver Island, the Mainland and from

Washington. In late summer some people travelled farther up the Fraser River for continued fishing but began coming back down the river in the early fall and returning to their homes on eastern Vancouver Island (Barnett 1955:21-22; Duff 1952:25-26).

In addition to fishing and gathering food sources, hunting was also very important to local groups. Various species of waterfowl were retrieved from the local bays and river mouths using spears, nets and by bow and arrow (Suttles 1990). Hunting of land mammals involved the use of stake drives, water drives, snares, pit drives and bow and arrow (Suttles 1990). Local groups utilized a variety of implements and methods including duck nets attached to poles, snares for birds and deer, the use of dogs to drive game, nets for deer and elk, dead falls and pit falls, seal/porpoise harpoons, and duck spears (Barnett 1939:231-233, 280-281). Groups focused on hunting deer, elk, bear, sea-lions and seals although other small land and sea mammals were also procured.

From September until late December, local groups occupied cedar plank houses with gabled roofs on portions of the Nanaimo River where groups harvested chum salmon (Barnett 1955). One salmon fish weir, controlled solely by the *xwsó'lexwel* and used as recently as 1887, was located near to the mouth of the Nanaimo River (Bouchard 1992:12). Snuneymuxw fish weirs were known to have wooden "runways" that provided a standing platform for fishing (Barnett 1955:79-83).

2.2.2 Social Organization

Social organization for Gulf of Georgia groups during the contact period has been defined as a bilateral kinship system that includes four residential units: **(1)** the family, **(2)** the household, **(3)** the local group, and **(4)** the winter village (Suttles 1990:463). Each family, composed of a husband, wife and their offspring, lived in a section of a shed-roofed plank house with their own hearth and often ate meals with other household members.

The household, important units for political, social and economic activities where families held rights to assets shared by their household, was comprised of a set of kin-related nuclear families that occupied one or more plank houses. These rights could include property, access to resource locations, *i.e.*, fishing sites, shellfish or camas beds, ancestral names or titles, family stories and songs, and knowledge regarding ritual procedures (Suttles 1990: 464). Some households had more internal stratification than others. A local group consisted of a household shared by a kin group and associated dependant households. One or more local groups occupied a village, sharing a common sense of identity and a common origin myth. The sizes of these local groups could vary considerably. Some local groups occupied their own village while others shared a village with other local groups (Suttles 1990:464).

2.2.3 Historical Background

The earliest recorded contact between First Nation groups (such as the Snuneymuxw) and non-native peoples occurred when the Spanish navy made visits to Gabriola in 1791 and 1792. Most likely there were other earlier encounters with the maritime fur traders who were known to annually visit the coast of Vancouver Island at and prior to this time (Littlefield 2000: 1). It was during a visit from the Spanish navy that Descanso Bay received its name. Spanish ships under Galiano and Valdes stopped at Descanso Bay in 1792 to repair their ships and give the sailors a rest (Wikipedia.com). It was not until the 1820s and the establishment of Hudson Bay Company posts that regular contact between First Nations groups on Gabriola Island and white settlers became common. Early maps from this time show two First Nation villages on Gabriola; one at False Narrows and one at Degnen Bay.

First Nation population numbers on Gabriola Island in 1775 are estimated at 5,000 Snuneymuxw inhabitants. A Hudson Bay census recorded in 1839 recorded the Snuneymuxw population as reduced to 1,000 inhabitants, and in 1876 the population recorded by the Indian Reserve Commission was reduced to only 238 Snuneymuxw people. The drastic decline in population is a direct result of introduced infectious disease to which the indigenous population had no natural immunities (Littlefield 2000:7).

In 1876, two small reserves were laid out on Gabriola Island by the Indian Reserve Commissioner for the Snuneymuxw First Nation: one reserve at the tip of Indian Point and the other a small burial island within Degnan Bay (Littlefield 2000:7-8). There were some discussions in the 1930s of allotting the False Narrows lands (once the village site) as reserve lands by the Department of Indian Affairs, but this was never carried through (Littlefield 2000:8).

The pre-emption of land on Gabriola Island began as early as the 1860s and extended into the mid-1880s (Littlefield 2000:7). There were many reasons that Euro-Canadian settlers were drawn to Gabriola Island and the surrounding lands on Vancouver Island including the fur trade, gold rush and the discovery of coal in Nanaimo. Many settlers who arrived on Gabriola turned their hand to farming and Gabriola became a garden community serving the Nanaimo area. In 1887 a sandstone quarry was established near Descanso Bay which supplied architectural blocks to Victoria and Vancouver and millstones to locations up and down the Northwest Coast (<http://gulfislands.com/history/gabriola-island-history>).

2.2.3.1 Subject property

The western 100 acres was previously the location of Cox family farm, and currently accommodates a small scale sawmill (Plate 7) operated by the current property owners. Mallet Pond is fish-bearing, however it is man-made, created by the construction of a berm along the western side of a field resulting in flooding in approximately 1981 (Plate 6). The berm also provided vehicle access to the southeast portions of the property from the western area. This portion of the property exhibits resource procurement in the form of logging, previous road construction and skid trails. The perimeter of this portion of the property is fenced and cattle previously roamed.



Plate 6. Looking west toward Mallet Pond and berm along west side with a roadway.



Plate 7. Looking north toward small scale sawmill operated by property owners.

A portion of the eastern 80 acres previously accommodated a gravel quarry (Plate 8), and similarly to the western 100 acres, exhibits extensive recent resource procurement in the form of logging, road construction and skid trails. Logging procurement claimed one hundred percent of all timber in the eastern 80 acres, and approximately 60 percent in the western 100 acres with cut stumps observed across the property.



Plate 8. Looking west toward old gravel quarry and regenerating forest in centre of eastern 80 acres.

2.3 Archaeological Review

The current project area is situated within a defined cultural region known as the Gulf of Georgia, encompassing the Strait of Georgia as well as the Lower Fraser River and northern Puget Sound. The Gulf of Georgia region has been described as an area unique both in its natural physiography and its sequence of regional cultural development (Mitchell 1971). Archaeologically, the Gulf of Georgia region has been divided into several time periods based on the continuities and change in cultural practice and behaviour through time. The framework for this cultural historical sequence is a synthesis of the work of researchers such as Borden (1968), Burley (1980), Carlson (1990), Fladmark (1982), Matson and Coupland (1994), and Mitchell (1971, 1990) among others. The basis for most of the information on the cultural historical sequence comes primarily from archaeological investigations and ethnographic accounts, which in turn has been used to create a sequence of distinct culture types that reflect such cultural markers as technologies, subsistence and economic activity, social organization, and artifact characteristics (Mitchell 1990).

Five “Phases” or “Cultural Types”, each relating to a different time period, have been identified for the geographic area and include: **(1)** the Old Cordilleran/Pebble Tool Tradition, **(2)** the Charles, **(3)** the Locarno Beach, **(4)** the Marpole, and **(5)** the Gulf of Georgia Culture Type. The cultural sequence proposed for the Strait of Georgia region is summarized in Table 1 below.

Table 1. Culture History Sequence for the Gulf of Georgia Region

Time Period (years BP)	Cultural Type
Present - 200	Contact/Historic Period
1,400/1,100 - 200	Gulf of Georgia
2,400 - 1,400/1,100	Marpole
3,300-2,400	Locarno Beach
4,500 - 3,300	Charles Culture
10,000 - 4,500	Old Cordilleran/ Pebble Tool Tradition

2.4 Archaeological Record of the Study Area

Madrone conducted a review of previous archaeological work for the study area using the Remote Access to Archaeological Data (RAAD) system maintained by the Archaeology Branch of British Columbia, which provides detailed geographical information for recorded archaeological sites in British Columbia. This review identified nine archaeological sites recorded within 1 km radius of the current study area (Table 2) and several others located on other portions of western Gabriola Island, with no previously recorded archaeological sites within the proposed development footprint.

The lands encompassing Mudge Island, Newcastle Island and the adjacent Nanaimo area also have a significant number of recorded archaeological sites, a testament to the long term and intensive use of the region by Coast Salish groups, such as the Snuneymuxw. Many of these archaeological sites were first documented during early surveys that focused on identifying and recording the general locations and approximate extent of cultural deposits and/or features (Acheson *et al.*, 1975; Cassidy and Cranny 1974). Although many of the sites were noted to be extensive and under threat due to increasing development and natural shoreline erosion, very little archaeological testing occurred and as a result, minimal information is available to date. Much of the recent archaeological investigations have resulted from cultural resource management with excavations and testing due to ongoing threats of development to these sites.

Table 2. Recorded Archaeological Sites in Vicinity of Study Area

Site	General Location	Site Type	References
DhRx-26	NE shore of Descanso Bay, ~380 m west of W edge of subject property	Shell midden, surface and subsurface lithics	Cassidy & Cranny 1974; Henning 2010; Mitchell & Simonsen 2009; Somogyi-Csizmazia & Simonsen 2007
DhRx-28	N shore of Descanso Bay, ~950 m NE of NW corner of subject property	Human remains, burial	Cassidy & Cranny 1974
DhRx-38	Small bay S of Capilano Gallery, ~410 m NW of NW corner of subject property	Subsurface shell midden	Cassidy & Cranny 1974
DhRx-39	Second point S of Malaspina Point, ~560 m NW of NW corner of subject property	Shell midden, human remains/burial	Cassidy & Cranny 1974
DhRx-40	Head of second small bay S of Capilano Gallery, ~540 m west of W edge of subject property	Subsurface shell midden	Cassidy & Cranny 1974
DhRx-41	Third small bay S of Capilano Gallery, ~530 m west of W edge of subject property.	Subsurface shell midden	Cassidy & Cranny 1974
DhRx-42	SW corner of Descanso Bay, ~880 m SW of SW corner of subject property	Subsurface shell midden	Cassidy & Cranny 1974
DhRx-56	Small cove in SE corner of Descanso Bay, ~100m W of SW corner of subject property	Subsurface shell midden	Brolly & Duff 1978; Mitchell & Simonsen 2009; Csizami-Somogyi & Simonsen 2007
DhRx-103	W side of Gabriola Island, N of Descanso Bay, ~550 m west of W edge of subject property	Subsurface shell midden, FMR	Mitchell and Simonsen 2009; Somogyi-Csizmazia & Simonsen 2007

2.5 Expected Archaeological Site Types in the Study Area

Common site types in the region include culturally modified trees (CMTs), human burials, lithic scatters, rock art, and subsurface and surface shell midden sites.

2.5.1 Culturally Modified Trees

In the most basic sense, a culturally modified tree (CMT) is any tree with evidence of human modification. In terms of archaeological and traditional use sites, CMTs are trees that have been modified by aboriginal people for traditional purposes. Tree species commonly used by First Nations in the province include pine trees (in the interior region where they harvested cambium as a food source), and cedars, both yellow and more commonly Western red cedars in the coastal region. On the northwest coast, traditional practices for cedars include: stripping the tree of bark for basket making, weaving or matting; removing planks from a tree for building materials; and falling a tree for carving or making a canoe or structure.

2.5.2 Human Burials

Burials are defined as the material remains or features associated with mortuary practices. Often unmarked, burials in the study area can include burial cairns or mounds, crevice burials, tree or platform burials, burial caves, and burials in shell midden.

2.5.3 Lithic Scatters

Lithic scatters are classified as “resource procurement/extraction sites”, where specialized activity occurs, such as the procurement of raw material for making stone tools. Lithic scatters consist of stone tools and/or flakes, the result of lithic raw materials processing and tool production through material reduction, and tool maintenance. Isolated lithic finds, often marking hunting or other nomadic events, are also included in this category.

2.5.4 Rock Art

There are two basic types of rock art: pictographs and petroglyphs. Pictographs are painted images, and generally comprised of red ochre. These are typically placed at highly visible locations, such as near water, close to village sites or along trade routes. Petroglyphs are images pecked or ground into the surfaces of rocks. They are often located in intertidal zones, along rivers, on rocky outcrops near village sites, and are sometimes hidden by high water. Petroglyphs are the more common rock art type in the study area.

2.5.5 Shell Midden

Shell midden sites can be indicative of large-scale village sites or short-term resource procurement camps, and therefore they are sometimes be classified as habitation sites. Prehistoric shell midden sites are most commonly located along shore lines, but have also been identified inland. Shell midden sites are identified by the presence of crushed shell in a dark brown to black soil matrix, often with a “greasy” texture. Shell midden may be observed in natural exposures, if present. As shell midden is not always visible on the surface, subsurface testing is often required to determine the presence of buried deposits. Shell middens are associated with habitation and camp sites. As they are frequently concurrent with other site types such as house platforms, CMTs, human burials, lithic scatters and rock art, they are important for the study of past life ways, and usually have a high heritage significance.

3 Methodology

The objectives of the AOA were to (1) assess the archaeological site potential of the 180 acre property, and (2) to provide the necessary recommendations for any future development should any archaeological potential be identified. The assessment included a background review and a program of preliminary field survey of the development lands at the subject property.

3.1 Background Research

Prior to conducting the assessment, a search for previously recorded archaeological sites was conducted using the Remote Access to Archaeological Data (RAAD) system maintained by the Archaeology Branch. RAAD provides detailed geographical information for previously recorded archaeological sites in British Columbia. In addition to the RAAD search all relevant archaeological assessment reports were obtained and reviewed. A review of published and unpublished sources concerning local and regional history and ethnography was also conducted prior to commencement of field work.

3.2 Preliminary Field Survey (PFR)

On January 10 and 11, 2015 a Preliminary Field Reconnaissance (PFR) of the subject property was conducted by archaeologist Kristina Bowie, in order to assess the subject property for both visible surface and buried cultural resource potential, and to identify the need for and appropriate scope of further field studies, if applicable. During the PFR, the pedestrian survey focused on inspection of the subject properties focusing on 1) surveying all areas within the vicinity of Mallet Creek and Mallet Pond as it flows east to west through the entire property footprint, 2) the easternmost area with the high bluff, 3) the south boundary of the entire property adjacent to residential properties, 4) the higher elevation areas, and 5) the western boundary with the closest proximity to other previously recorded archaeological sites. These areas also captured the areas highlighted for archaeological overview potential data retrieved from the Archaeology Branch.

During the PFR, surface exposures were examined for cultural deposits, artifacts and/or features and any other evidence of past human land use. In general, survey focused on identifying any micro-environmental features (e.g. breaks in slope, terraces and small rises in topography including knolls and elevated level areas adjacent to water sources) that tend to be associated with the presence of cultural remains. These micro-environmental features were ideal locations for past use as short-term and long-term occupation or camp sites, as well as lookouts or view points, among numerous other possible uses.

Other factors taken into consideration during the survey include 1) aspect, (2) food resource values (e.g. estuarine plants, fish), and (3) the level of disturbance in a given area of the property. In addition, the PFR focused on survey of areas believed to contain potential for rock shelters and/or caves. Based on a review of topographic maps, the PFR included survey of the northern most area of the property, along all water sources, the areas of the highest elevation, as well as along the base of the steep slope situated in the central portion of the western 100 acres of the subject property.

Prior to the survey, the high bluff along the eastern border of the subject property and the perimeter of Mallet Creek and Pond were assessed as having high archaeological potential. During the PFR, the subject property was given a thorough visual examination, as most areas provided long-range visibility. Survey transects were spaced between 100-200 m apart, and up to 300 m apart in areas of excellent visibility.

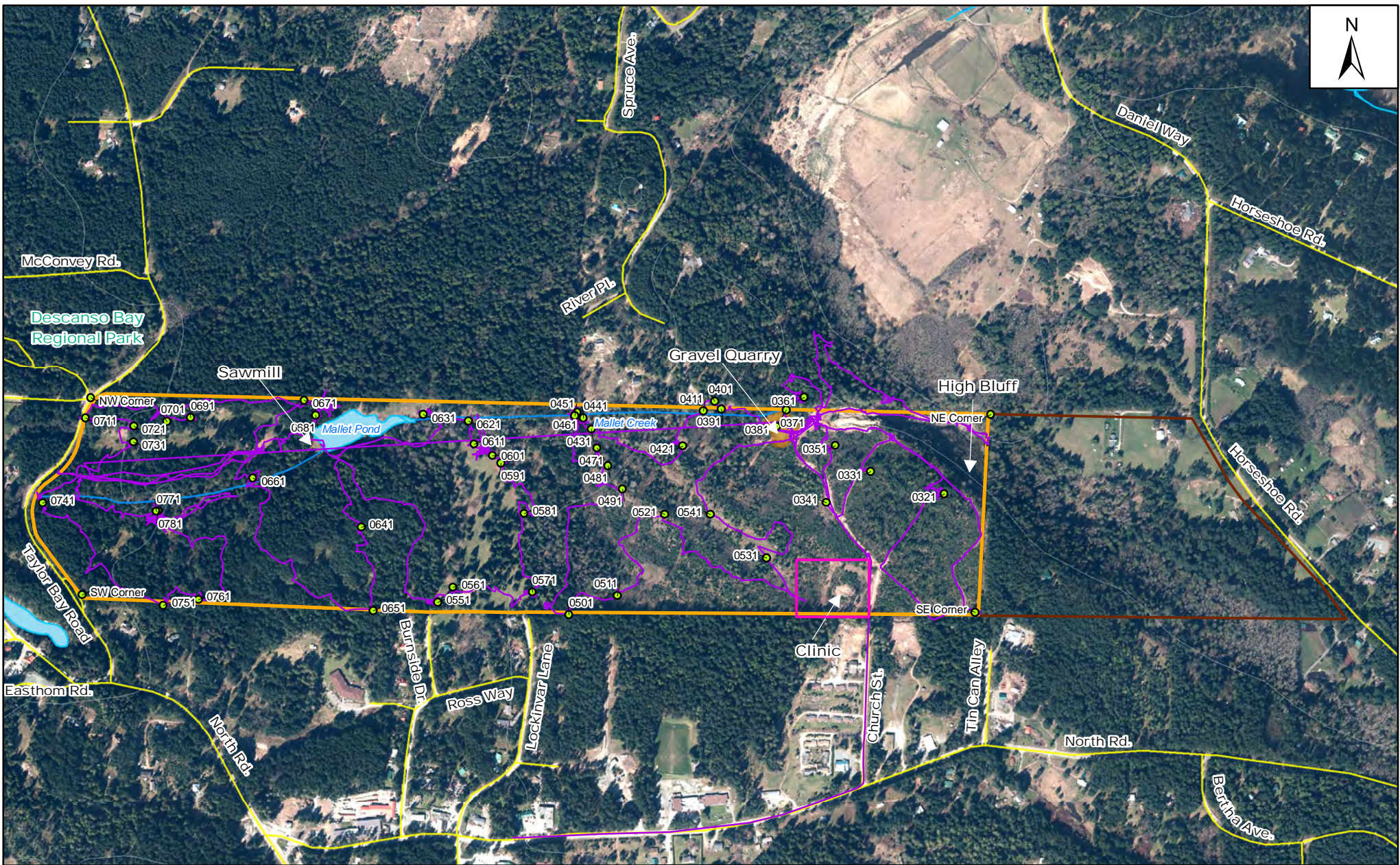
4 Survey Results

The PFR was completed on January 10 and 11, 2015 and the 180 acre property was visually inspected. During the visual examination of the properties, two areas of moderate archaeological site potential were observed and recorded, as well as two historic culturally modified trees (CMTs).

4.1 Property Description

The 180 acre (72.84 ha) property will be discussed as the eastern 80 acres and the western 100 acres. Review Figure 3 for GPS labels referring to areas of the property described in the following text.

In general, with the exception of the clinic along the south boundary of the eastern 80 acres and the sawmill near Mallet Pond in the western 100 acres, the property is undeveloped and exhibits areas of low lying level terrain, moderately undulating terrain, and moderate to steeply sloping terrain. A distinct moderate to steep slope continues along the southern half of the western 100 acres, and a steep high bluff designates the eastern boundary of the eastern 80 acres. Terrain slopes to the north and south towards Mallet Creek and Mallet Pond on both the eastern and western portions of the property, and a level low lying field or meadow is present in the western half of the western 100 acres. The entire property exhibits old roadway and logging skid trails, with access roadways off adjacent paved public roadways. The properties have numerous walking trails, and demonstrate evidence of past logging resource extraction. A historic gravel quarry site is situated along the northern boundary of the eastern 80 acres, a small historic sawmill is positioned immediately west of the western boundary of Mallet Pond, and a clinic has been constructed along the southern boundary of the eastern 80 acres.



- Approximate Property Boundary
- Potential Future Area of Development
- Clinic Site
- Waterbody
- GPS Waypoint
- Road
- Contour
- Drainage
- Survey Transect

Service Layer Credits: Sources: ESRI, DLorme, NAVTEQ, TomTom, Intermap, IncrementP Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster, NL, Ordnance Survey, ESRI Japan, METI, ESRI CHINA (Hong Kong), and the GIS User Community

FIGURE 3: AOA Survey Results			 0 100 200 400 m	
LOCATION: Gabriola Island, BC		HCA PERMIT: Non-Permit		
NTS MAP: 092G/11	DATUM: NAD 83	PROJECTION: UTM Zone 10		
CLIENT: Williamson and Associates Professional Surveyors		MAP DATE: 09/08/2015	DRAWN BY: Johnathan Mack	
		DOSSIER: 14.0283	 MADRONE environmental services	

1: 10,000



Plate 9. Looking southwest upslope towards high bluff at eastern boundary.



Plate 10. Looking northeast from eastern edge of high bluff along eastern boundary of property.

The property is due to be subdivided into approximately twenty-four, 2.5 to 5.0 acre lots. Once the additional most easterly parcel has been included, PID 003-010-431, Lot 1, Section 19, Gabriola Island, Nanaimo District, Plan 24354, a total of seven lots (Lot 1 to 7) are to be situated along the top of the high bluff (Plate 9, 10) in the eastern boundary of the eastern 80 acres, and approximately nineteen lots to be situated across the western 100 acres (Lot 9-24 and potentially Lot A and B). Refer to Figure 2.

4.1.1 Eastern 80 Acre Portion of Subject Property

The eastern 80 acres (32.37 ha) is accessed from the north end of Church Road and is moderately to steeply sloped (approximately 60%) from the northeastern most property boundary towards the southern portion of the property, with lower lying level terrain along the northwest portion near Mallet Creek. A 100-150 m steep rocky bluff (area 0321) dominates the eastern boundary of the property, with views to the north east (Plate 9, 10), and with a steep descent to lower lying terrain to the north and along the eastern boundary (area NE Corner). From the bluff, terrain gradually descends to the west into the centre of the eastern portion of the property. No terraces or benches were visible on the eastern face of the high bluff. Terrain is uneven and hummocky, with very thin soil development with sandstone bedrock visible along the edge of the bluff and across the majority of the higher elevations in this portion of the property (Plate 11).



Plate 11. Looking east toward regenerating forest and typical understory along north boundary of eastern 80 acre portion of property.

Established walking paths traverse the terrain, as well as old roads and skid trails. An unnamed small brook flows north to south approximately 20 m east of the eastern property boundary, in lower lying terrain. A fence delineates the south and north property boundaries.

Very little soil development was observed throughout the property (Plate 12). Soil exposures reveal medium brown silty sand with 0-80% subangular and angular sandstone up to approximately 20 cm below surface, underlain by glacial till continuing to unknown depth.



Plate 12. Shallow soil development typical of eastern portion of subject property.

Previous logging has removed one hundred percent of all old/mature timber, however young regenerating forest is visible across the majority of this portion of the property, with large cut stumps with a diameter of 1 m+ observed of both Douglas fir and Western red cedar observed throughout the property, and concentrated in the northwestern corner, on the south side of Mallet Creek. Currently, overstory generally consists of an open canopy consisting of young arbutus, Douglas fir, Western red cedar, big-leaf maple and hemlock with an understory consisting of salal, ferns, blueberry, wild rose, ocean spray, grasses, mosses, blackberry and thimbleberry observed near the roadways through the property. The Western red cedar stumps with 1 m and large diameters also exhibit

springboard platform notches and small test holes. All larger and older Western red cedar and Douglas fir were inspected for cultural modifications (areas 0361, 0371).

A gravel quarry pit was observed (area 0381) along the centre of the north boundary in this eastern portion of the property (Plate 13). The pit measures approximately 35 m north-south by 50 m east-west and is no longer in use. The area is low lying uneven ground and rises gradually to the south and west, with a small drainage traveling east to west along the north boundary.



Plate 13. Looking west toward gravel quarry no longer in use, near north property boundary.

A low lying waterlogged area was observed (area 0411), beginning along the centre of the north property boundary, with increasing depth of water heading west towards Mallet Creek. This area is considered to be part of the Creek, however flowing water was not visible. The area is dominated by long grasses and sedges and ferns, young Western red cedar, alder, maple and hemlock. Terrain gradually increases to the south and west (0421), and slopes up to the north beyond the northern property boundary, with no landforms suitable for subsurface testing or archaeological potential.

Mallet Creek is visible in the north westernmost corner of the eastern 80 acres (area 0431), with water flowing east to west, in low lying rough and uneven saturated terrain with a gradual upslope to the south and north. Regenerating forest consisting of Western

red cedar, hemlock, maple, alder and with highly degraded short and tall Western red cedar stumps up to 2 m diameter (area 0441, 0451, 0461) with springboard platform notches and evidence of historic burning. No fencing visible along the north property boundary in this area (Plate 14).



Plate 14. Looking east toward area of Mallet Creek with large WRC stumps along north and south boundaries of Creek; NW corner of eastern 80 acres.

The southern boundary of the eastern 80 acres is comprised of uneven undulating terrain with a gradual downslope to the north towards Mallet Creek (area 0491). The area exhibits very shallow soil development with sandstone slab and boulder exposures, with no defined landforms.

Terrain gradually increases in elevation moving north to south away from Mallet Creek, and corresponds with decreasing age of the regenerating forest. Vegetation is predominantly alder (area 0511) in the southeastern area and southern boundary of the eastern 80 acres (Plate 15), with an understory of salal, blackberry, mosses, grasses and ferns (80% of the understory) with regenerating spruce observed in the central western portion (area 0521).



Plate 15. Looking east toward regenerating forest in the SW area of the eastern 80 acres.

The central southern portion exhibits rolling and undulating terrain to the north (area 0541) with large areas of exposed sandstone bedrock with little soil development and vegetation (Plate 16), with a gradual downslope to the southwest.



Plate 16. Looking north toward sandstone bedrock exposures in centre of eastern 80 acres.

A fence (Plate 17) divides the eastern and western portions of the property (area 0451 and 0501). At this boundary the easterly portion is characterized by dense regenerating forest. However, the westerly portion exhibits more open landscape with little understory and increased visibility, likely resulting from former free run cattle roaming this portion of the property.



Plate 17. View south of fence dividing eastern 80 acres from western 100 acres; note open terrain of western portion

4.1.2 Western 100 Acre Portion of Subject Property

The western 100 acres (40.47 ha) is located east of Taylor Bay Road, and bound to the south and north by private properties.

This half of the property can be described as including a variety of natural zones from a steep, rocky and forested hillside to the low-lying field or meadow and continuing into the riparian area surrounding Mallet Pond and Mallet Creek.

A single lane roadway traveling east from the western boundary of the subject property, Taylor Bay Road, follows a flat top elevated ridge feature above Mallet Creek, varying 20-40 m wide, and terminates at the sawmill approximately 400 m east of the entrance (Plate 18). This route travels along the north boundary of Mallet Creek and the south boundary

of the low lying field in the western portion of the property. This feature had potential as a travel corridor or trail, however the roadway disturbance has obscured any potential evidence that may have occurred. The route was visually examined through two return traverses by pedestrian survey. Very shallow soil development was visible, and no cultural features or materials were observed or collected.



Plate 18. Looking southeast from south edge of road access off Taylor Bay Road, steep downslope to area of Mallet Creek.

From the access off Taylor Bay Road, the terrain slopes steeply southward to Mallet Creek (Plate 18), a culvert visible several meters under Taylor Bay Road, with a small decommissioned bridge providing pedestrian access across the creek on the property (area 0741). The south boundary of Mallet Creek, west of Mallet Pond, has been modified by the previous construction of an old roadway or wide skid trail, and any potential level landforms have been buried and significantly modified (area 0771) and no archaeological potential was observed.

The northern boundary and the southeastern boundary of the western 100 acres can be characterized as steep to moderately steep and rocky terrain continuing to Mallet Pond and Mallet Creek and the area of low lying previously cultivated lands, currently a field or meadow. A series of forestry roads and skid trails are present predominantly on the southern portion of the property (Plate 19). Survey focused on examination of the base of slopes, all soil exposures, raised landforms situated above the low-lying cultivated fields,

all older trees, and all elevated areas on the north and south sides of Mallet Creek. Mallet Creek flows east to west through the central area of the western 100 acres. Mallet Pond was created by construction of a berm along the south boundary of an existing field which then flooded in 1981. As previously mentioned, the south boundary of Mallet Creek appears to have been modified due to construction of a forestry road along this boundary (Plate 20).



Plate 19. Looking north along typical forestry road in regenerating forest, southern elevation, gradual descent to the north and Mallet Creek.



Plate 20. Looking west along old forestry road along south boundary of Mallet Creek (Creek below slope to the right of road).

The southwest corner and southern boundary of the western 100 acres is characterized by young regenerating forest of Western red cedar and hemlock with an understory of salal, grasses, ferns and mosses, and large cut Western red cedar and hemlock stumps (Plate 21) up to nearly 2 m in diameter (areas 0561, 0571).



Plate 21. Looking north toward regenerating forest and cut stumps in uneven terrain.

The eastern portion of the western 100 acres is predominantly open undulating grassland terrain (Plate 22) with older standing hemlock and Western red cedar (0581). The lack of understory in this area is likely due to the practice of allowing free-range cattle to graze in previous years. The grasslands terminate along the south boundary of Mallet Creek. Mallet Creek is situated along the northern boundary of the property in this area, and several large Western red cedar stumps with evidence of springboard platform notches were observed. The largest living Western red cedar was observed with a diameter of 175 cm (area 0781) and the largest of Western red cedar stump observed with a diameter of 150 cm (area 0591).

Vegetation on both sides of Mallet Creek is mostly fern, with salal, mosses, and grasses with young trees including those of alder, hemlock, spruce, Western red cedar and maple (area 0621). From Mallet Creek in the northwestern corner, terrain steeply slopes up to the north and to the south, with gradual downslope to the west (Plate 23). Terrain is predominantly undulating and uneven hummocky ground with little soil development. Beaver sign was observed at the east end of Mallet Pond (area 0631).



Plate 22. Looking west toward open grassed area near southeast portion of western 100 acres.



Plate 23. Looking north downslope toward Mallet Creek.

Soil exposures observed at Mallet Creek and Mallet Pond consist of a medium grey-brown clay loam with 5-50% sandstone pieces and 20-30% small to large subrounded and subangular pebbles and gravels, with sandstone boulders and outcrops visible at the Creek edges (Plate 24) (area 0761).



Plate 24. Looking west towards Mallet Pond, berm on far side.

Along the north boundary of the property in the northwestern portion, an elevated ridge of rough and hummocky terrain (Plate 25) is situated above a low-lying grassland or meadow (Plate 26) in which a small unnamed drainage flows east to west. Along the north boundary is an old road access with a 20 m wide rough, rocky and hummocky ridge feature running along its south side, with a steep 70% slope to the field below (areas 0711, 0721, 0731). Approximately 150 m south across the field terrain rises up to another small ridge which accommodates the single lane road access off Taylor Bay road.



Plate 25. Looking east and downslope from top of uneven ridge feature along SW boundary.



Plate 26. Looking south from north boundary across grassy field or meadow.

4.2 Areas of Archaeological Site Potential

Archaeological potential was highlighted in AOA boundaries defined by the Resource Access to Archaeological Data Application (RAAD) system maintained by the Archaeology Branch of BC. Small areas of potential were highlighted in the northeastern corner of the eastern 80 acres, as well as the areas immediately surrounding Mallet Pond, and the large low-lying field in the centre of the westernmost portion of the western 100 acres.

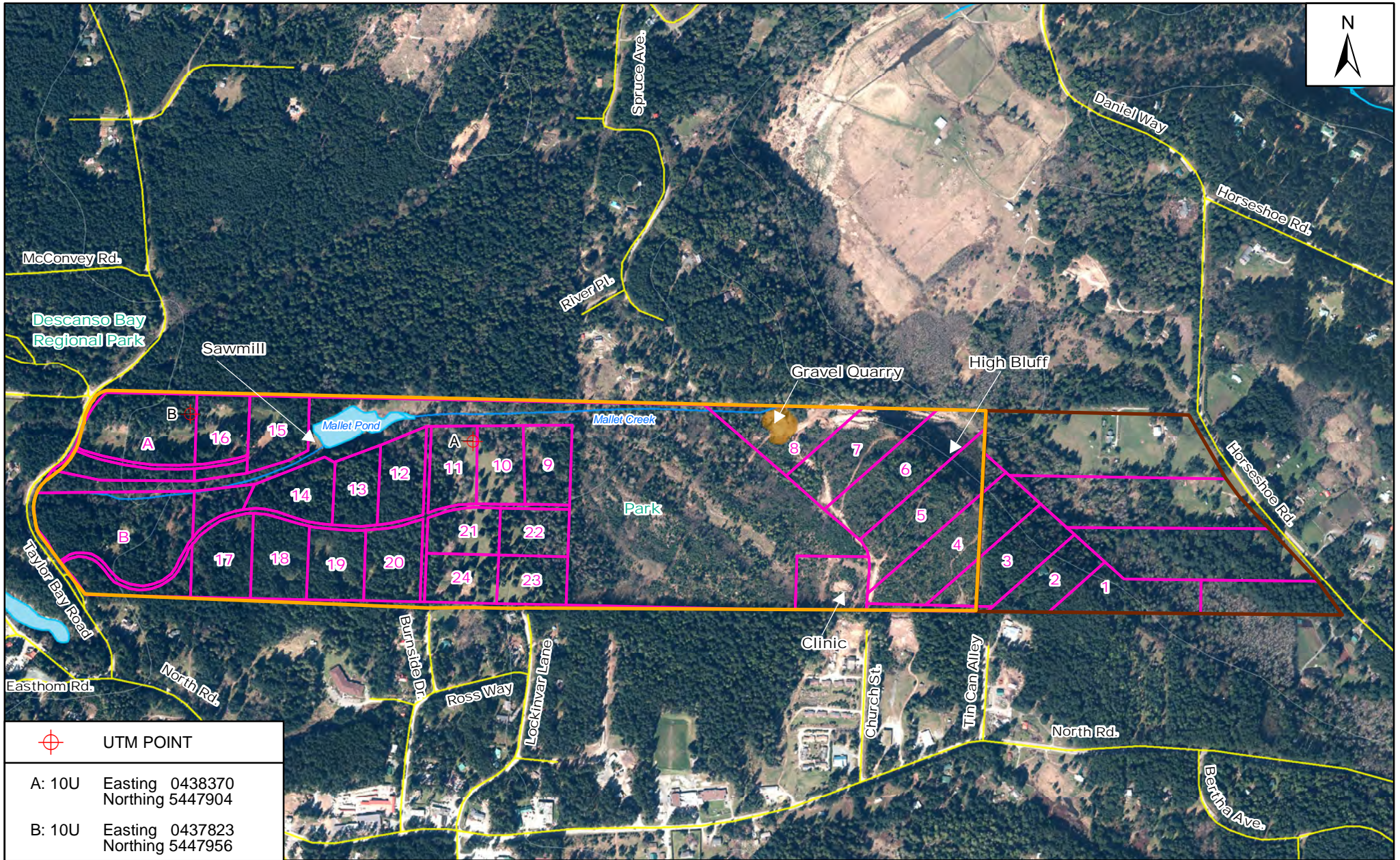
During the pedestrian survey, the property was examined for cultural materials and features. All soil exposures, rocky outcrops and larger older trees encountered were examined, with negative results for cultural materials. However, areas of archaeological potential for buried cultural deposits were identified.

Results produced through the reconnaissance survey of the property have identified two small areas deemed to have moderate archaeological site potential (Figure 4). Areas of archaeological potential include:

- Area #1, (area 0601) a raised level inland terrace on the south side of Mallet Creek (UTM 10 U 438406 5447883 to 10 U 438370 5447904)
- Area #2, (area 0691) a level terraced landform on the north side of the open meadow near the northwest portion of the property. Two historic culturally modified trees (CMTs) were identified in proximity to this area during the reconnaissance survey (UTM 10U 0437823 5447956)

4.2.1 Area #1

The topography of Area #1 consists of a relatively flat grassed inland terrace feature that overlooks Mallet Creek, situated approximately 50 m south and 50 m above the creek. Mallet Creek itself is approximately 2 m wide in this area of potential. Mallet Creek is accessible by descending a 60% slope to low lying saturated ground surrounding the Creek. This first area of potential is one of several northeast facing benches along the south boundary of Mallet Creek, and exhibits the most level terrain and highest potential of all benches present. The area of potential measures approximately 10-15 m north-south and approximately 30 m east-west, situated along the break in slope at the edge of the terraced landform (Plate 27, 28).



	UTM POINT
A: 10U	Easting 0438370 Northing 5447904
B: 10U	Easting 0437823 Northing 5447956

	Approximate Property Boundary		Road
	Lot Subdivision		Contour
	Potential Future Area of Development		Drainage
	Waterbody	Service Layer Credits: Sources: ESRI, DLorme, NAVTEQ, TomTom, Intermap, IncrementP Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster, NL, Ordnance Survey, ESRI Japan, METI, ESRI CHINA (Hong Kong), and the GIS User Community	
	Areas of Moderate Archaeological Potential		

FIGURE 4: AOA Archaeological Potential Map			0 100 200 400 m	
LOCATION: Gabriola Island, BC		HCA PERMIT: Non-Permit		
NTS MAP: 092G/11		DATUM: NAD 83	PROJECTION: UTM Zone 10	
CLIENT: Williamson and Associates Professional Surveyors		MAP DATE: 09/08/2015	DRAWN BY: Johnathan Mack	
		DOSSIER: 14.0283		



Plate 27. Looking northeast toward Area 1, terrace on south side of and above Mallet Creek.



Plate 28. Looking southeast toward Area 1, terrace on south side of and above Mallet Creek.

Vegetation within this first area of potential consists of grasses, mosses, Douglas fir, and Western red cedar.

4.2.2 Area #2

This area is situated in a transitional zone between the grassy meadowlands to the south and the forested elevated terrain to the north. As the area has been cleared of some trees, and an old roadway passes east-west along the north side of the area of potential, the area may have been modified or levelled in the past. The landform has a moderately rocky and hummocky appearance, however it is level and is located on a raised terrace above the field or meadow. A small narrow unnamed drainage flowing east to west travels through the meadow grasses. Given the level terrain, southern exposure, proximity to both a fresh waterway and the coastline at Descansco Bay, the location was recorded as having moderate archaeological potential. This area of potential measures approximately 30 m north-south and 40 m east-west. Vegetation within this area of potential consists of young to moderately aged Douglas fir, Western red cedar, ferns, grasses and mosses (Plate 29, 30).



Plate 29. Looking south toward Area 2, terrace above low-lying field.



Plate 30. Looking south toward Area 2, wide terrace near north boundary above low-lying field.

Two Historic culturally modified trees (CMTs) were observed and recorded in the northwestern corner of the subject property (area 0701). Culturally modified trees were an anticipated cultural resource and indicate recent traditional use in the area (Plate 31). As the trees are not protected by Heritage Conservation legislation they were not flagged in the field. Their attributes are included in Table 3.

Table 3. Historic Culturally Modified Trees*

CMT No.	DBH	Scar length	Scar shape	Window	R. lobe thickness	HAG	Side	UTM
CMT 1	41	300	Triangular taper	7	11	7	NNE	10 U 437777 5447949
CMT 2	38	350	Triangular taper	4	12	0	NNE	10 U 437778 5447950

**all measurements in cm.*



Plate 31. Looking south toward historic CMTs 1 and 2 at top of uneven break in slope along the northern boundary of the western 100 acres and above low-lying field.

5 Evaluation and Discussion

Results produced from a preliminary survey of the proposed subdivision property located in the western portion of Gabriola Island, east of Descanso Bay are presented below.

- Two specific areas of moderate archaeological potential were identified during the pre-field reconnaissance (PFR), Areas # 1 and 2.
 - The first area of potential, Area #1, is located in the northeast area of potential property Lot 11, in the northeastern area of the western 100 acres of the property
 - The second area of potential, Area #2, is located in the northeaster corner of potential property Lot A, also located in the northwestern corner of the western 100 acres, is associated with two historic culturally modified trees.

Both areas of potential are outside of the AOA boundaries defined by the Resource Access to Archaeological Data Application (RAAD) system maintained by the Archaeology Branch of BC.

6 Conclusion and Recommendations

The purpose of this Archaeological Overview Assessment (AOA) including pre-field reconnaissance (PFR) survey was to ascertain whether visible archaeological features are present on the subject property, to assess the potential for buried archaeological deposits on the property, and to provide a cultural resource management plan for the development phase of the current proposed project.

Two areas of moderate cultural potential were identified within the western 100 acres of the proposed footprint.

Based on observations made during the PFR survey, the potential for buried archaeological deposits, such as shell midden and/or lithic remains (stone tools), is assessed as low, outside of the two areas of moderate potential.

Results produced through the reconnaissance survey of the property have identified two small areas deemed to have moderate archaeological site potential. These areas include:

- Area #1, a raised level terrace landform on the south side of Mallet Creek,
- Area #2, a level landform on the north side of the open meadow near the northwest portion of the property. Two historic culturally modified trees (CMTs) were identified near this area during reconnaissance.

Our recommendations are as follows:

- It is recommended that the two areas with moderate archeological potential, Areas #1 and #2, should be left intact and undisturbed and that no subsurface activity, including vehicular movements, should take place in the vicinity. If any immediate or future land altering activities take place close to the identified areas of archaeological potential, that an AIA (Archaeological Impact Assessment) is conducted for these two areas, or a chance find protocol is designed and implemented. An AIA is not recommended should these areas of potential be avoided.
- An AIA would be conducted under Section 14 of the Heritage Conservation Act so that the areas of archaeological potential are subjected to a program of subsurface testing under a HCA (*Heritage Conservation Act*) Section 14 permit, in order to confirm the presence or absence of an archaeological site on the property. The objectives of conducting an Archaeological Impact Assessment on the subject property would be as follows: (1) to identify and evaluate any archaeological resources that may be located

within the development area, (2) to assess any possible impacts to any identified archaeological resources that may be present, (3) to provide recommendations regarding the need and appropriate scope for further archaeological studies, and (4) to recommend viable alternatives for the management of any identified impacts to these archaeological resources. Should an AIA be conducted and no cultural remains identified, no further archaeological work is recommended.

- In the event that unrecorded cultural resources are found during the course of development, at any location within the subject property boundaries, it is recommended that all work in the area of discovery cease and the Archaeology Branch of British Columbia and the Snuneymeux First Nation be notified immediately. We recommend that an archaeologist be engaged to assess the resource and that the resource be managed as per the direction of Snuneymeux First Nation.

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DRAFT

Gabriola Island Local Trust Committee

BYLAW NO. 289

A BYLAW TO AMEND THE GABRIOLA ISLAND OFFICIAL COMMUNITY PLAN, NO. 166

1. Citation

This bylaw may be cited as “Gabriola Official Community Plan (Gabriola) Bylaw 166, 1997, Amendment No. 1, 2016”

2. The Gabriola Island Local Trust Committee, being the Trust Committee having jurisdiction in respect of the Gabriola Island Local Trust Area under *the Islands Trust Act* enacts as follows:

2.1 Bylaw No 166, cited as “Gabriola Official Community Plan (Gabriola) Bylaw No. 166, 1997” is amended as shown on Schedule 1, attached to and forming part of this bylaw.

READ A FIRST TIME THIS DAY OF , 2016

READ A SECOND TIME THIS DAY OF , 2016

PUBLIC HEARING HELD THIS DAY OF , 2016

READ A THIRD TIME THIS DAY OF , 2016

APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST

THIS DAY OF , 2016

APPROVED BY THE MINISTER OF COMMUNITY, SPORT AND CULTURAL DEVELOPMENT

THIS DAY OF , 2016_

ADOPTED THIS DAY OF , 2016_

SECRETARY

CHAIRPERSON

Gabriola Island Local Trust Committee

Bylaw No.

Schedule 1

The Gabriola Official Community Plan Bylaw No. 166 cited as “Gabriola Official Community Plan (Gabriola) Bylaw No. 166, 1997”, is amended as follows:

1. Schedule B –Land Use Designations – North Sheet is amended as follows:

a. On those lands described as :

- i. The South East $\frac{1}{4}$ of Section 13, Gabriola Island, Nanaimo District Except The South West $\frac{1}{4}$ of the South West $\frac{1}{4}$ of The Said South East $\frac{1}{4}$;
- ii. The South West $\frac{1}{4}$ of Section 14, Gabriola Island, Nanaimo District; and
- iii. The West $\frac{1}{2}$ of the North East $\frac{1}{4}$ of Section 10, Gabriola Island, Nanaimo District;

the land use designation is changed:

from “Forestry” to “Parks”;

as shown on Plan No. 1 attached to and forming part of this bylaw.

b. On those lands described as :

- i. The South $\frac{1}{2}$ of the North West $\frac{1}{4}$ of Section 19, Gabriola Island, Nanaimo District Except Part in Plan EPP13396;

the land use designation is changed:

from “Forestry” to “Small Rural Residential”;

as shown on Plan No. 2 attached to and forming part of this bylaw.

c. On a portion of those lands described as :

- i. Lot 7, Section 20, Gabriola Island, Nanaimo District, Plan VIP86742

the land use designation is changed:

from “Resource” to “Small Rural Residential”;

as shown on Plan No. 3 attached to and forming part of this bylaw.

d. On a portion of those lands described as :

- i. Lot 6, Section 20, Gabriola Island, Nanaimo District, Plan VIP86742;

the land use designation is changed:

from “Resource” to “Small Rural Residential”;

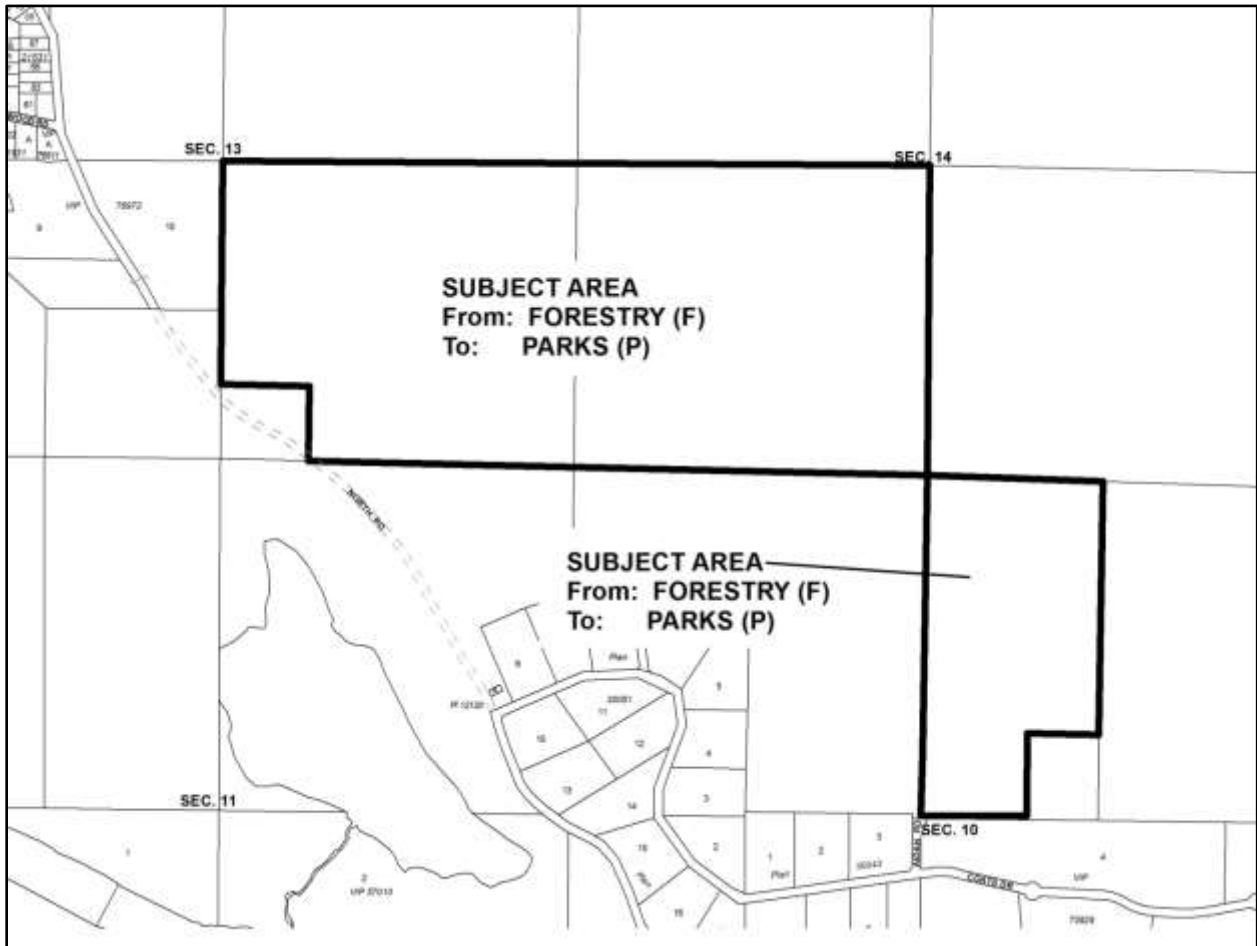
as shown on Plan No. 4 attached to and forming part of this bylaw.

- e. On a portion of those lands described as :
 - i. Lot 1, Section 19, Gabriola Island, Nanaimo District, Plan 24354;
the land use designation is changed:
 - from “Resource” to “Small Rural Residential”; and
 - as shown on Plan No. 5 attached to and forming part of this bylaw.

GABRIOLA ISLAND LOCAL TRUST COMMITTEE

BYLAW NO. 289

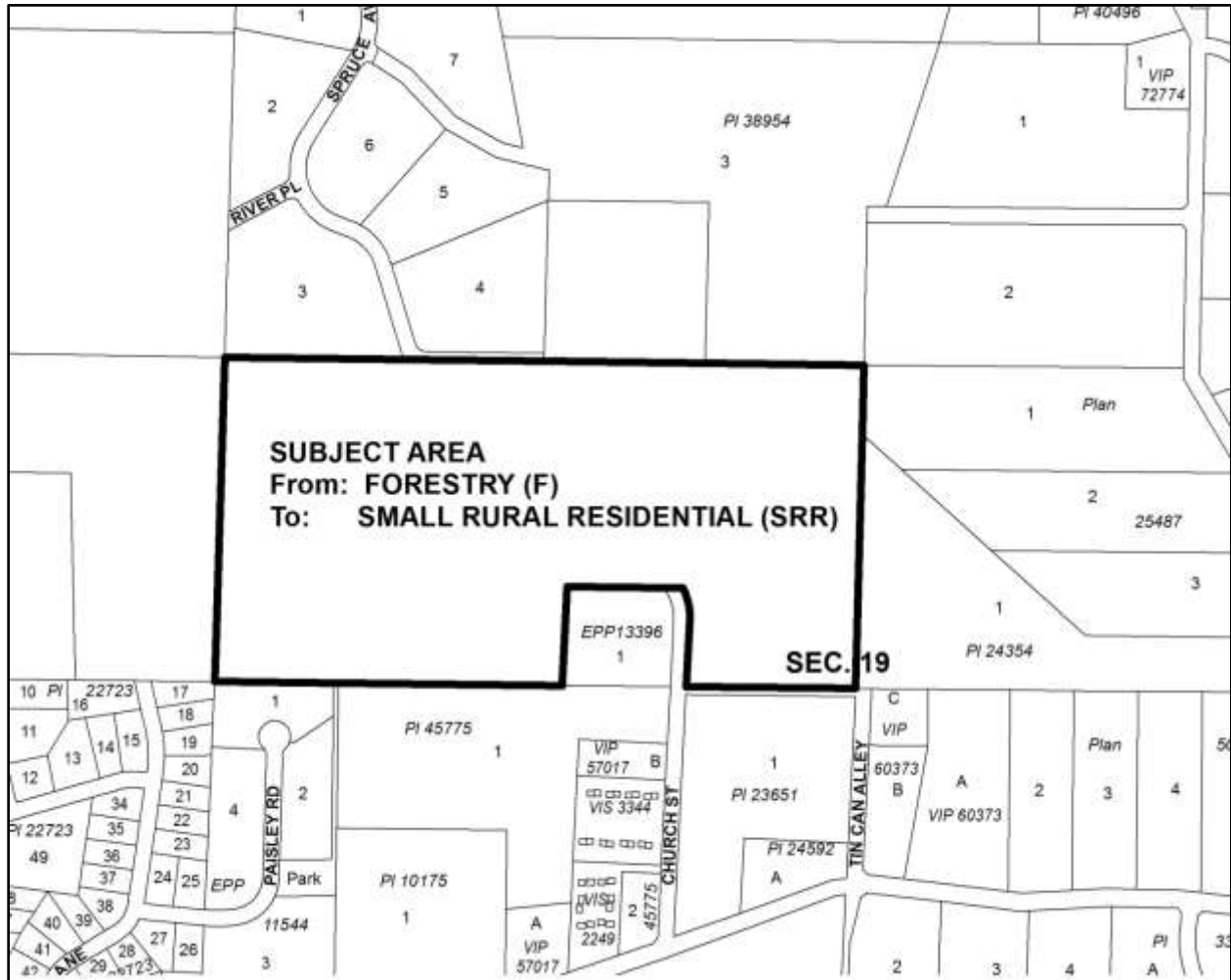
PLAN NO. 1



GABRIOLA ISLAND LOCAL TRUST COMMITTEE

BYLAW NO. 289

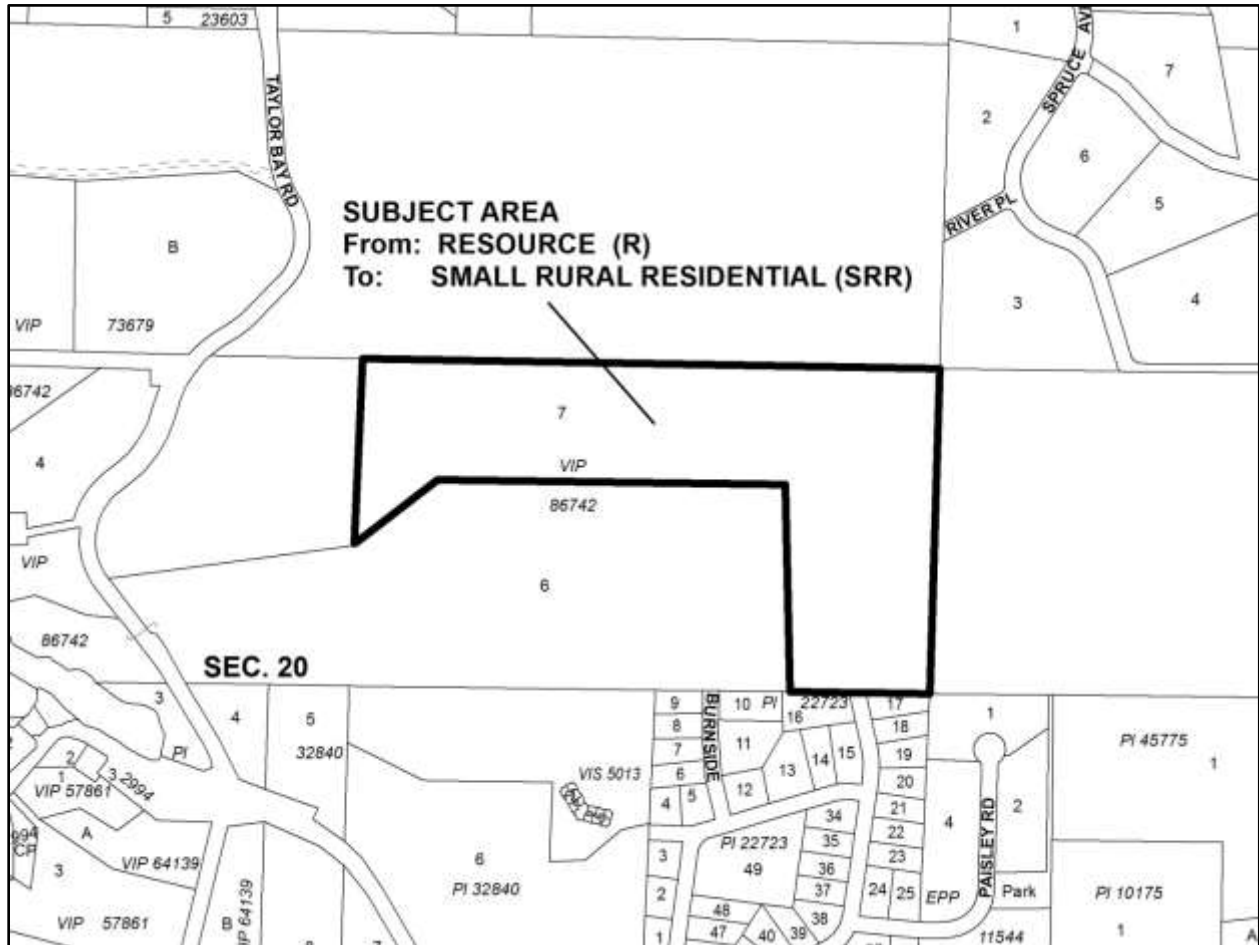
PLAN NO. 2



GABRIOLA ISLAND LOCAL TRUST COMMITTEE

BYLAW NO. 289

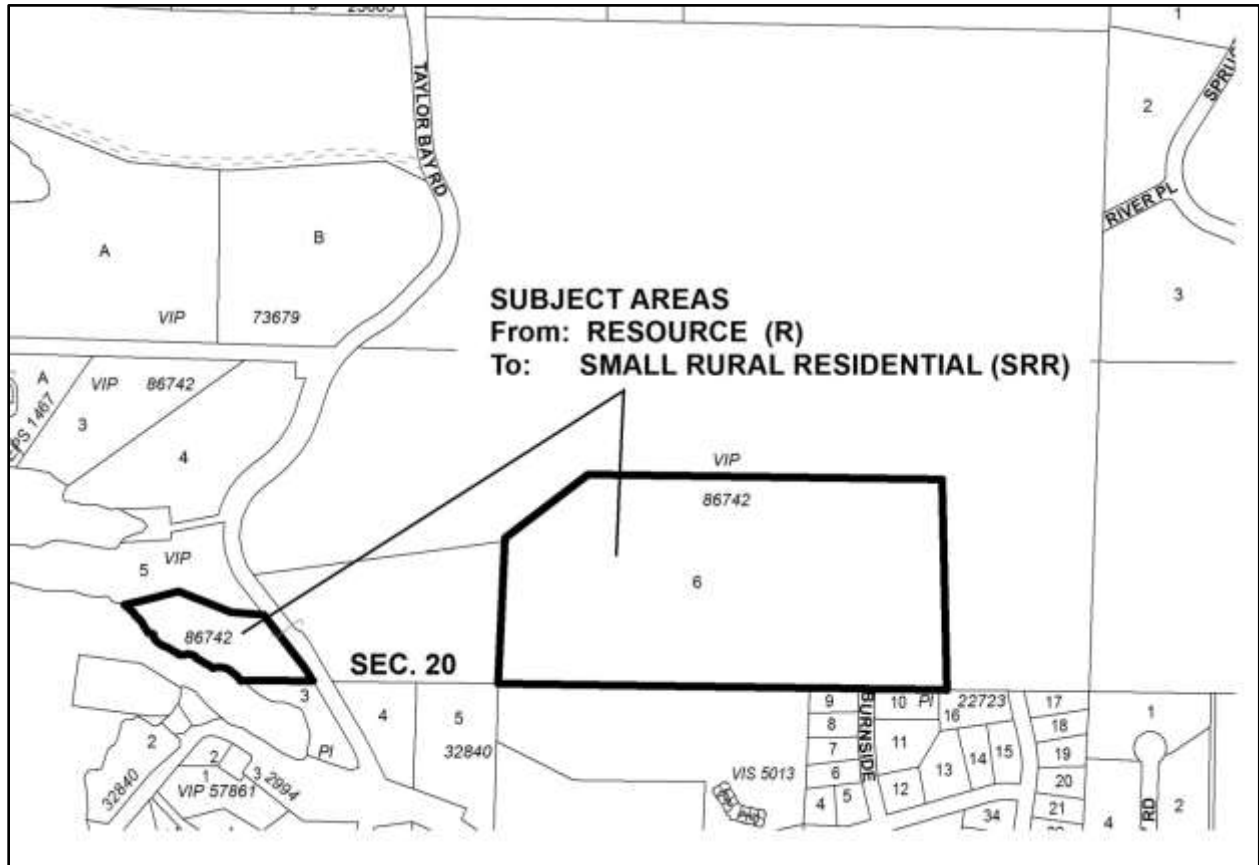
PLAN NO. 3



GABRIOLA ISLAND LOCAL TRUST COMMITTEE

BYLAW NO. 289

PLAN NO. 4



DRAFT

**Gabriola Island Local Trust Committee
BYLAW NO. 290**

A BYLAW TO AMEND THE GABRIOLA ISLAND LAND USE BYLAW, NO. 177

The Gabriola Island Local Trust Committee, being the Trust Committee having jurisdiction in respect of the Gabriola Island Local Trust Area under *the Islands Trust Act*, enacts as follows:

1. Bylaw No. 177, cited as “Gabriola Land Use Bylaw No. 177, 1999” is amended as shown on Schedule 1, attached to and forming part of this bylaw.
2. This bylaw may be cited as “Gabriola Land Use Bylaw 177, 1999, Amendment No. 1, 2016”

READ A FIRST TIME THIS	DAY OF	, 2016
READ A SECOND TIME THIS	DAY OF	, 2016
PUBLIC HEARING HELD THIS	DAY OF	, 2016
READ A THIRD TIME THIS	DAY OF	, 2016
APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST THIS	DAY OF	, 2016
ADOPTED THIS	DAY OF	, 2016

SECRETARY

CHAIRPERSON

Gabriola Island Local Trust Committee

Bylaw No.

Schedule 1

Schedule "A" of Gabriola Island Land Use Bylaw No. 177 cited as "Gabriola Island Land Use Bylaw No. 177, 1999", is amended as follows:

1. The insertion of a new zone D.2.6 (A) "Resource Residential 2 (RR2)" after Section D.2.6 Resource Residential 1 (RR1) as shown on Appendix 1 attached to and forming part of this bylaw.
2. Schedule "B" Zoning North Sheet is amended by changing the zoning classifications as follows:
 - a. On those lands described as :
 - i. The South East $\frac{1}{4}$ of Section 13, Gabriola Island, Nanaimo District Except The South West $\frac{1}{4}$ of the South West $\frac{1}{4}$ of The Said South East $\frac{1}{4}$;
 - ii. The South West $\frac{1}{4}$ of Section 14, Gabriola Island, Nanaimo District; and
 - iii. The West $\frac{1}{2}$ of the North East $\frac{1}{4}$ of Section 10, Gabriola Island, Nanaimo District;the land use zoning is changed:

from "Forestry" to "Forestry/Wilderness Recreation";

as shown on Plan No. 1 attached to and forming part of this bylaw.
 - b. On those lands described as :
 - i. The South $\frac{1}{2}$ of the North West $\frac{1}{4}$ of Section 19, Gabriola Island, Nanaimo District Except Part in Plan EPP13396;the land use designation is changed:

from "Forestry" to "Resource Residential 2";

as shown on Plan No. 2 attached to and forming part of this bylaw.
 - c. On a portion of those lands described as :
 - i. Lot 7, Section 20, Gabriola Island, Nanaimo District, Plan VIP86742the land use zoning is changed:

from "Resource" to "Resource Residential 2";

as shown on Plan No. 3 attached to and forming part of this bylaw.
 - d. On a portion of those lands described as :
 - i. Lot 6, Section 20, Gabriola Island, Nanaimo District, Plan VIP86742;

the land use zoning is changed:

from “Resource” to “Resource Residential 2”;

as shown on Plan No. 4 attached to and forming part of this bylaw.

e. On apportion of those lands described as :

i. Lot 1, Section 19, Gabriola Island, Nanaimo District, Plan 24354;

the land use designation is changed:

from “Resource” to “Resource Residential 2”;

as shown on Plan No. 5 attached to and forming part of this bylaw.

GABRIOLA ISLAND LOCAL TRUST COMMITTEE

BYLAW 290

APPENDIX 1

D.2.6 (A) Resource Residential 2 (RR 2)

D. 2.6(A).1 Permitted Uses

In addition to the uses permitted in Article B.1.1.1, the following uses and no others are permitted in the Resource Residential 2 (RR2) zone:

a. Permitted Principal Uses

- i. single family residential
- ii. agriculture
- iii. horticulture

b. Permitted Accessory Uses

- i. *home occupation, subject to Section B.3*
- ii. *cottage residential on lands shown on Schedule C, Map 14*
- iii. processing and sale of agricultural products, limited to those grown or raised on the lot
- iv. agri-tourism

c. Buildings and Structures

The buildings and structures permitted in Article B.1.1.2, plus the following buildings and structures and no others are permitted in the Resource Residential 2 (RR2) zone:

d. Permitted Buildings and Structures

- i. Maximum of:
 - one single family dwelling per lot;
 - three buildings per lot that exclude a cottage, pump/utility house and woodshed, and that are accessory to all dwellings;
 - one produce stand per lot, not exceeding 20.0 square metres (215.3 square feet) in floor area, accessory to an agricultural use; and,
 - one accessory cottage dwelling per lot, not exceeding 65.0 square metres (699.7 square feet), provided that the lot is 2.0 hectares (4.94 acres) or larger, the accessory cottage is located within the area shown on Schedule C, Map 14, and that the area of the lot within Schedule C, Map 14 is 2.0 hectares (4.94 acres) or larger.
- ii. Other non-residential buildings and structures to accommodate:
 - agriculture and horticulture.

D.2.6(A).2 Regulations

The general regulations in Part B, plus the following regulations apply in the Resource Residential 1 (RR1) zone:

a. Buildings and Structures Siting Requirements

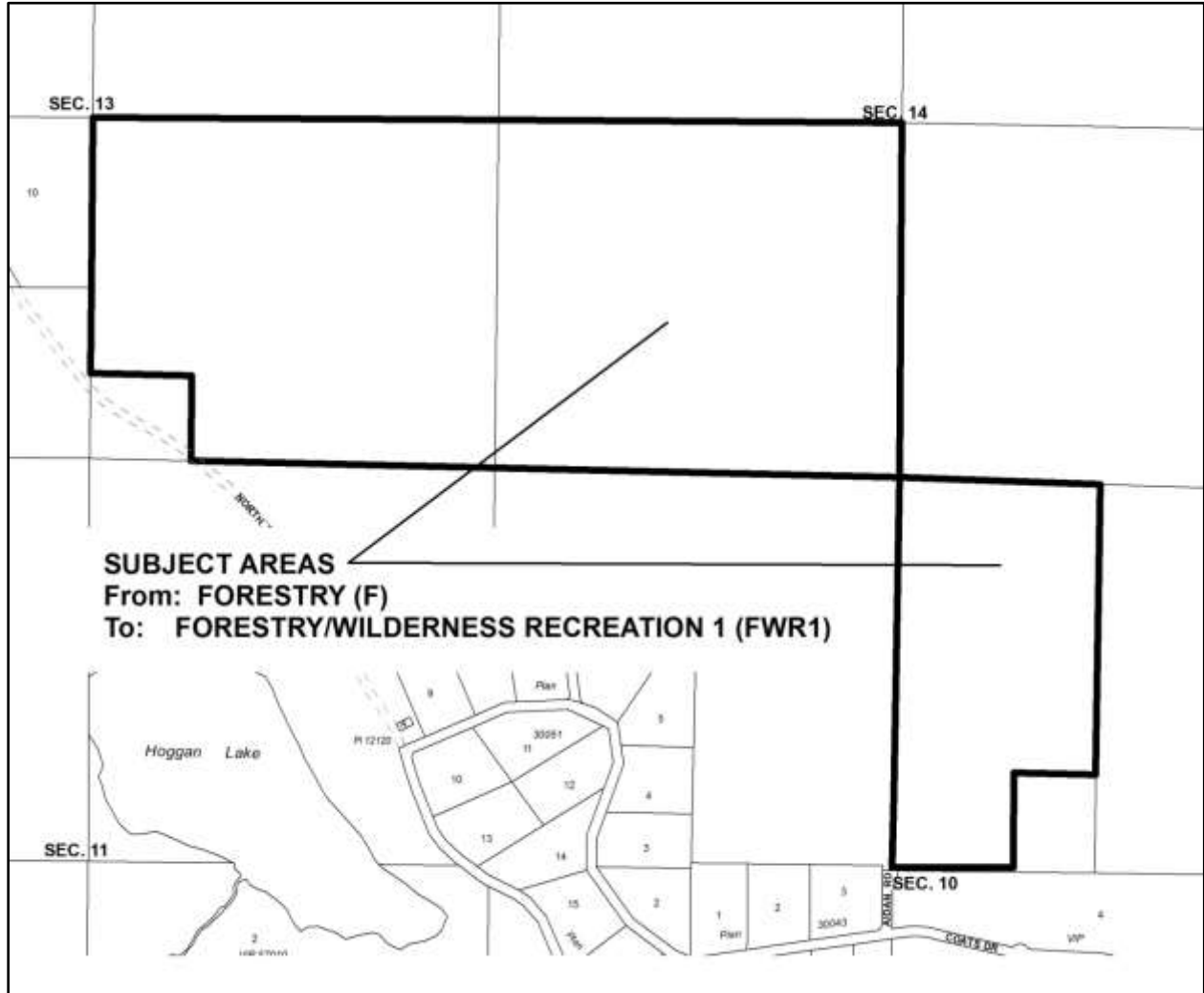
- i. On lots less than 2.0 hectare (4.94 acres), except for a sign, fence, or pump/utility house, the minimum setback for buildings or structures is:

- 6.0 metres (19.7 feet) from all lot lines.
 - ii. On lots 2.0 hectare (4.94 acres) or larger, except for a sign, fence, or pump/utility house, the minimum setback for buildings or structures is:
 - 10.0 metres (32.8 feet) from any lot line, except the minimum setback for greenhouses is 7.5 metres (24.6 feet) from any lot line.
 - iii. the minimum setback for an agricultural produce stand in the Resource Residential 2 (RR2) zone is 4.5 metres (14.7 feet) from the front lot line.
- b. Lot Coverage Limitations**
- i. The maximum combined lot coverage by buildings and structures is 10 percent of the lot area.
- c. Lot Area Requirements for Subdivision**
- i. The minimum average lot area is 1.9 hectares (4.7 acres), and for calculation purposes the minimum average includes roads within this zone.
 - ii. The minimum lot area shall be 1 hectare (2.47 acres).

GABRIOLA ISLAND LOCAL TRUST COMMITTEE

BYLAW 290

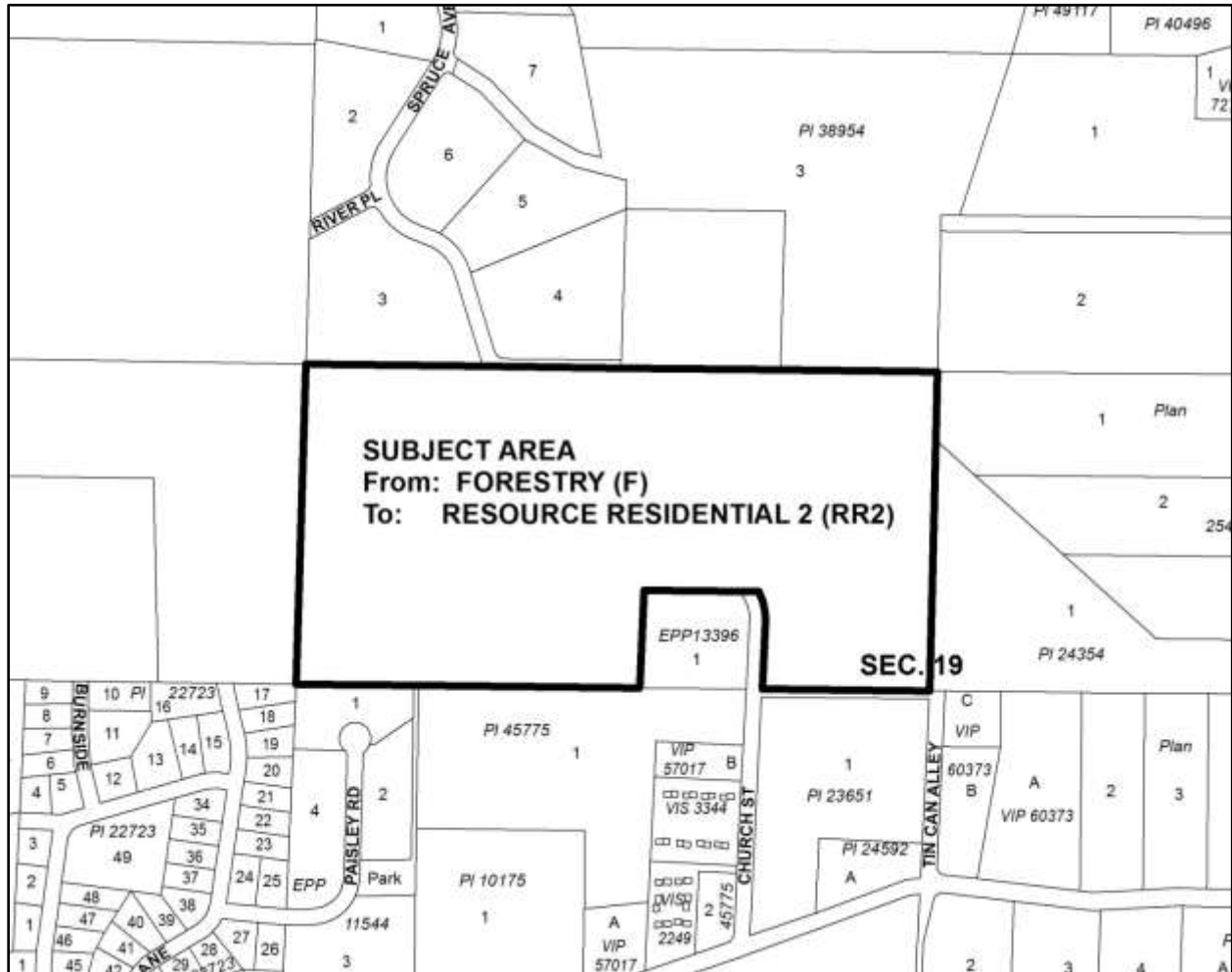
PLAN No. 1



GABRIOLA ISLAND LOCAL TRUST COMMITTEE

BYLAW 290

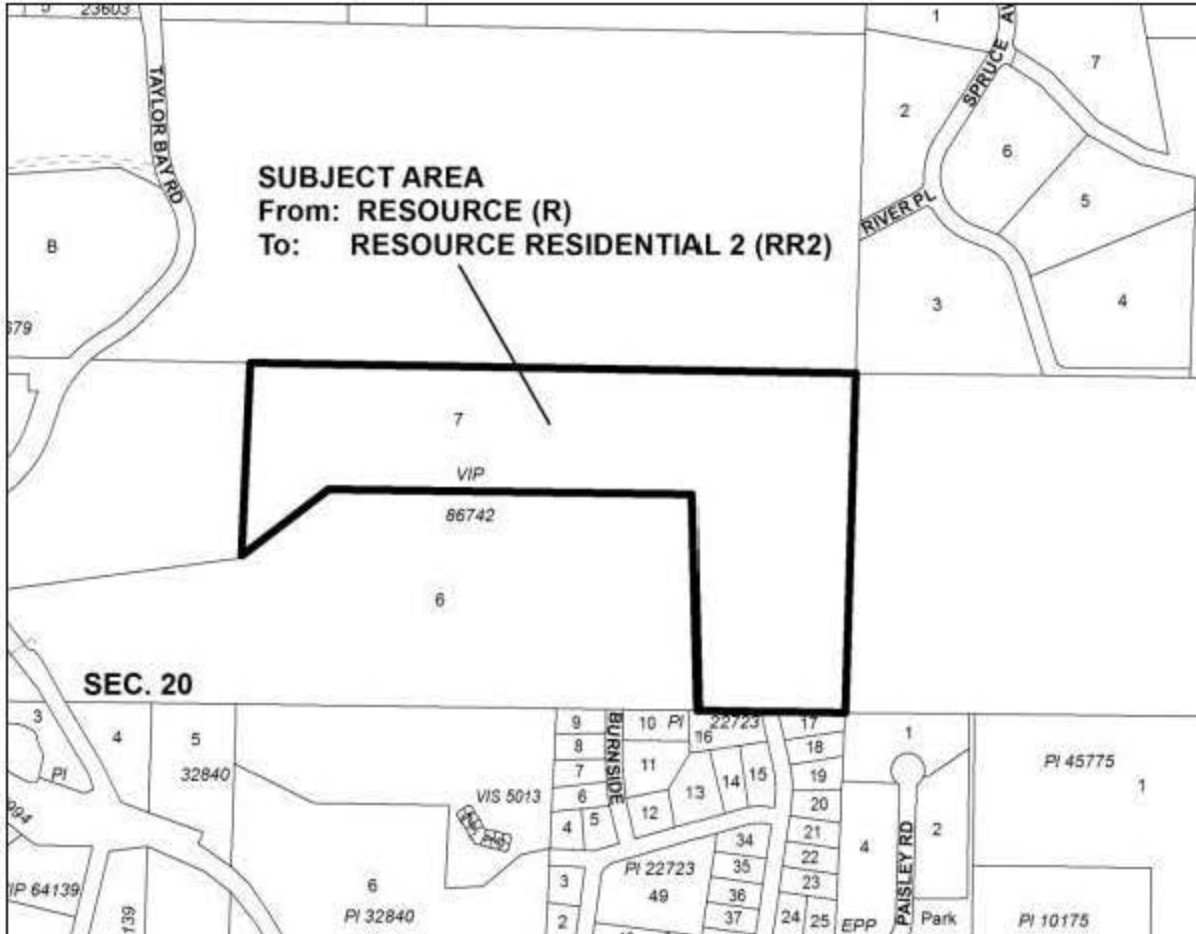
PLAN No. 2



GABRIOLA ISLAND LOCAL TRUST COMMITTEE

BYLAW 290

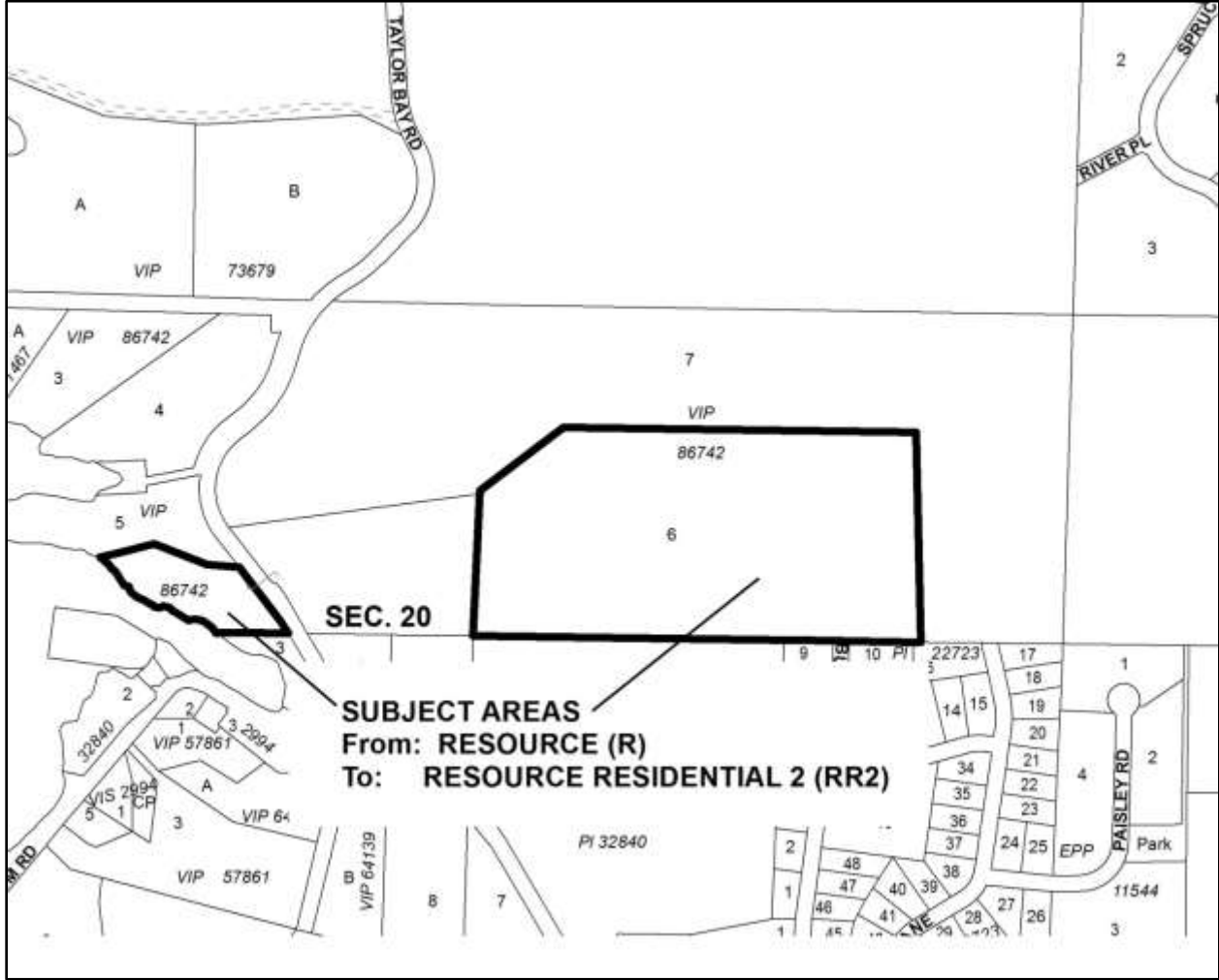
PLAN No. 3



GABRIOLA ISLAND LOCAL TRUST COMMITTEE

BYLAW 290

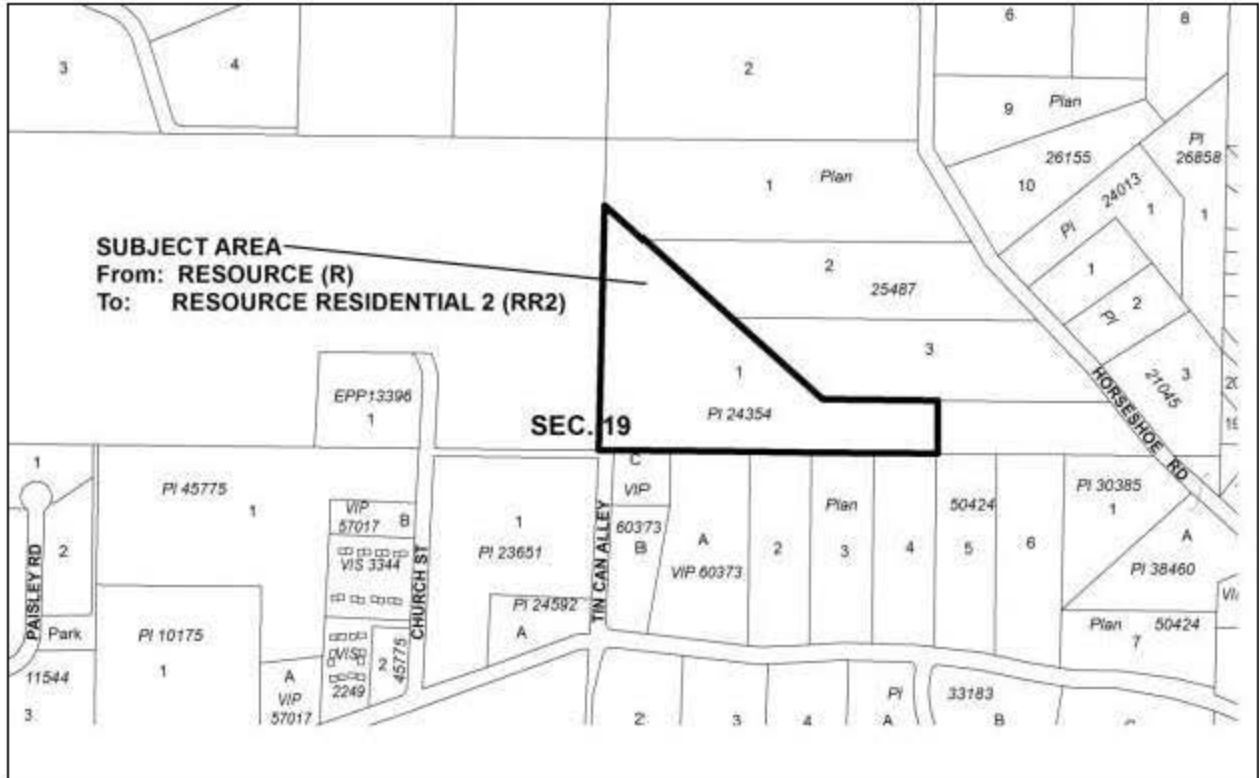
PLAN No. 4



GABRIOLA ISLAND LOCAL TRUST COMMITTEE

BYLAW 290

PLAN No. 5





Islands Trust

POLICY STATEMENT DIRECTIVES ONLY CHECK LIST

Bylaw and File Nos: 219 & 220 (GB-RZ-2016.1)

The following symbols in the table indicate:

- ✓ the bylaw is consistent with the policy from the Policy Statement, or
- ✗ **the bylaw is inconsistent (contrary or at variance) with a policy from the Policy Statement, or**
- N/A the policy is not applicable.

Explanatory notes are added in bold and italics text

Part III Policies for Ecosystem Preservation and Protection

CONSISTENT	NO.	DIRECTIVE POLICY
	3.1	Ecosystems
✓	3.1.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification and protection of the environmentally sensitive areas and significant natural sites, features and landforms in their planning area.
N/A	3.1.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the planning, establishment, and maintenance of a network of protected areas that preserve the representative ecosystems of their planning area and maintain their ecological integrity.
N/A	3.1.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the regulation of land use and development to restrict emissions to land, air and water to levels not harmful to humans or other species.
	3.2	Forest Ecosystems
✓	3.2.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of unfragmented forest ecosystems within their local planning areas from potentially adverse impacts of growth, development, and land-use.
	3.3	Freshwater and Wetland Ecosystems and Riparian Zones
✓	3.3.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address means to prevent further loss or degradation of freshwater bodies or watercourses, wetlands and riparian zones and to protect aquatic wildlife.

	3.4	Coastal and Marine Ecosystems
N/A	3.4.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of sensitive coastal areas
N/A	3.4.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the planning for and regulation of development in coastal regions to protect natural coastal processes

PART IV: Policies for the Stewardship of Resources

CONSISTENT	NO.	DIRECTIVE POLICY
	4.1	Agricultural Land
N/A	4.1.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification and preservation of agricultural land for current and future use.
N/A	4.1.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the preservation, protection, and encouragement of farming, the sustainability of farming, and the relationship of farming to other land uses.
N/A	4.1.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the use of adjacent properties to minimize any adverse affects on agricultural land.
CONSISTENT	NO.	DIRECTIVE POLICY
N/A	4.1.7	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the design of road systems and servicing corridors to avoid agricultural lands unless the need for roads outweighs agricultural considerations, in which case appropriate mitigation measures shall be required to derive a net benefit to agriculture
N/A	4.1.8	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address land uses and activities that support the economic viability of farms without compromising the agriculture capability of agricultural land.
N/A	4.1.9	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the use of Crown lands for agricultural leases.
	4.2	Forests
N/A	4.2.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the need to protect the ecological integrity on a scale of forest stands and landscapes.
N/A	4.2.7	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the retention of large land holdings and parcel sizes for sustainable forestry use, and the location and construction of roads, and utility and communication corridors to minimize the fragmentation of forests.
N/A	4.2.8	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the designation of forest ecosystem reserves where no extraction will take place to ensure the preservation of native biological diversity.
	4.3	Wildlife and Vegetation

	4.4	Freshwater Resources
N/A	4.4.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address measures that ensure neither the density nor intensity of land use is increased in areas which are known to have a problem with the quality or quantity of the supply of freshwater, water quality is maintained, and existing, anticipated and seasonal demands for water are considered and allowed for.
N/A	4.4.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address measures that ensure water use is not to the detriment of in-stream uses
	4.5	Coastal Areas and Marine Shorelands
N/A	4.5.8	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the needs and locations for marine dependent land uses
N/A	4.5.9	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the compatibility of the location, size and nature of marinas with the ecosystems and character of their local planning areas.
N/A	4.5.10	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the location of buildings and structures so as to protect public access to, from and along the marine shoreline and minimize impacts on sensitive coastal environments
N/A	4.5.11	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address opportunities for the sharing of facilities such as docks, wharves, floats, jetties, boat houses, board walks and causeways.
	4.6	Soils and Other Resources
N/A	4.6.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of productive soils.

PART V: Policies for Sustainable Communities

CONSISTENT	NO.	DIRECTIVE POLICY
	5.1	Aesthetic Qualities
N/A	5.1.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of views, scenic areas and distinctive features contributing to the overall visual quality and scenic value of the Trust Area.
	5.2	Growth and Development
✓	5.2.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address policies related to the aesthetic, environmental and social impacts of development.
✓	5.2.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address any potential growth rate and strategies for growth management that ensure that land use is compatible with preservation and protection of the environment, natural amenities, resources and community character.
✓	5.2.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address means for achieving efficient use of the land base without exceeding any density limits defined in their official community plans.
N/A	5.2.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification of areas hazardous to development, including areas subject to flooding, erosion or slope instability, and strategies to direct development away from such hazards.

	5.3	Transportation and Utilities
N/A	5.3.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the development of a classification system of rural roadways, including scenic or heritage road designations, in recognition of the object of the Islands Trust.
N/A	5.3.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the impacts of road location, design, construction and systems.
N/A	5.3.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the designation of areas for the landing of emergency helicopters.
N/A	5.3.7	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the development of land use patterns that encourage establishment of bicycle paths and other local and inter-community transportation systems that reduce dependency on private automobile use.
	5.4	Disposal of Waste
N/A	5.4.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification of acceptable locations for the disposal of solid waste.

CONSISTENT	NO.	DIRECTIVE POLICY
	5.5	Recreation
N/A	5.5.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the prohibition of destination gaming facilities such as casinos and commercial bingo halls.
N/A	5.5.4	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the location and type of recreational facilities so as not to degrade environmentally sensitive areas, and the designation of locations for marinas, boat launches, docks and anchorages so as not to degrade sensitive marine or coastal areas.
N/A	5.5.5	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification of sites providing safe public access to beaches, the identification and designation of areas of recreational significance, and the designation of locations for community and public boat launches, docks and anchorages.
N/A	5.5.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification and designation of areas for low impact recreational activities and discourage facilities and opportunities for high impact recreational activities.
N/A	5.5.7	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the planning for bicycle, pedestrian and equestrian trail systems.
	5.6	Cultural and Natural Heritage
N/A	5.6.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification, protection, preservation and enhancement of local heritage.
N/A	5.6.3	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the preservation and protection of the heritage value and character of historic coastal settlement patterns and remains.
	5.7	Economic Opportunities

N/A	5.7.2	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address economic opportunities that are compatible with conservation of resources and protection of community character.
	5.8	Health and Well-being
N/A	5.8.6	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address their community's current and projected housing requirements and the long-term needs for educational, institutional, community and health-related facilities and services, as well as the cultural and recreational facilities and services
POLICY STATEMENT COMPLIANCE		
✓	COMPLIANCE WITH TRUST POLICY	
	NOT IN COMPLIANCE WITH TRUST POLICY for the following reasons:	