REGIONAL DISTRICT OF NANAIMO

REGIONAL DISTRICT OF NANAIMO
ELECTORAL AREA SERVICES COMMITTEE
AGENDA

Tuesday, April 10, 2018

1:30 P.M.

RDN Board Chambers

This meeting will be recorded

Pages

1. CALL TO ORDER

2. APPROVAL OF THE AGENDA

3. ADOPTION OF MINUTES

3.1 Electoral Area Services Committee Meeting - March 13, 2018 4

That the minutes of the Electoral Area Services Committee meeting held March 13, 2018, be adopted.

4. DELEGATIONS

5. CORRESPONDENCE

6. UNFINISHED BUSINESS

7. COMMITTEE MINUTES

That the following minutes be received for information:

7.1 Electoral Area 'H' Parks and Open Space Advisory Committee - February 28, 2018 9

7.2 Electoral Area 'A' Parks, Recreation and Culture Commission - February 21, 2018 12

8. COMMITTEE RECOMMENDATIONS

8.1 Electoral Area 'H' Parks and Open Space Advisory Committee

8.1.1 Signage Strategy for Community Parks and Trails 15

That the pilot park for new signage within Electoral Area H be the Wildwood Community Park.

8.2 Electoral Area 'A' Parks, Recreation and Culture Commission

8.2.1 Glynneath Road Community Park - Tree Root Rot 18

That Glynneath Road Community Park be kept in a natural state and invasive plants be managed as needed.

9. PLANNING

9.1 Zoning Amendment

9.1.1 Zoning Amendment Application No. PL2017-130 - 575 Horne Lake Road, Electoral Area 'H' - Amendment Bylaw 500.416, 2018 - First and Second Reading 48

1. That the Board receive the Summary of the Public Information Meeting held on December 5, 2017.

2. That "Regional District of Nanaimo Land Use and Subdivision Amendment Bylaw No, 500.416, 2018" be introduced and read two times.

3. That the Public Hearing on "Regional District of Nanaimo Land Use and Subdivision Amendment Bylaw No. 500.416, 2018", be chaired by Director Veenhof or his alternate.

4. That the conditions set out in Attachment 2 of the staff report be completed prior to Amendment Bylaw 500.416, 2018 being considered for adoption.

10. COMMUNITY PARKS

10.1 Dunsmuir Community Park Phase 1 Construction 64

1. That the Preferred Conceptual Plan for Dunsmuir Community Park be approved.

2. That up to $100,000 be allocated from the Electoral Area 'H' Community Works Funds for the Dunsmuir Community Park Phase 1 Development.

3. That staff proceed with tendering Phase 1 of Dunsmuir Community Park.

10.2 Electoral Area 'A' – Driftwood Road Beach Access Improvements 68

1. That staff proceed with the final design, permitting and construction of the Driftwood Road beach access trail improvements in 2018.

2. That up to three parking spaces be designed and constructed in 2019 with $15,000 allocated in the 2019 Electoral Area 'A' Community Parks budget.

11. EMERGENCY PREPAREDNESS

11.1 Neighbourhood Emergency Preparedness Program Update 74

That the Neighbourhood Emergency Preparedness Program Update Report be received for information.

12. BUSINESS ARISING FROM DELEGATIONS

13. NEW BUSINESS

13.1 Directors' Forum

13.1.1 Planning

13.1.2 Community Parks

13.1.3 Emergency Preparedness

13.1.4 Fire Protection

13.1.5 Bylaw Enforcement

13.1.6 Building Inspection

13.1.7 Other Electoral Area Matters

14. ADJOURNMENT

REGIONAL DISTRICT OF NANAIMO

REGIONAL DISTRICT OF NANAIMO

MINUTES OF THE ELECTORAL AREA SERVICES COMMITTEE MEETING

Tuesday, March 13, 2018
1:30 P.M.
RDN Board Chambers

In Attendance:	Director B. Rogers	Chair
	Director A. McPherson	Electoral Area A
	Director H. Houle	Electoral Area B
	Director M. Young	Electoral Area C
	Director J. Fell	Electoral Area F
	Director J. Stanhope	Electoral Area G
	Director W. Veenhof	Electoral Area H
Also in Attendance:	P. Carlyle	Chief Administrative Officer
	R. Alexander	Gen. Mgr. Regional & Community Utilities
	G. Garbutt	Gen. Mgr. Strategic & Community Development
	T. Osborne	Gen. Mgr. Recreation & Parks
	D. Wells	Gen. Mgr. Corporate Services
	W. Idema	Director of Finance
	D. Pearce	Director of Transportation & Emergency Services
	T. Armet	Mgr. Building & Bylaw Services
	J. Hill	Mgr. Administrative Services
	J. Holm	Mgr. Current Planning
	P. Thompson	Mgr. Long Range Planning
	B. Ritter	Recording Secretary

CALL TO ORDER

The Chair called the meeting to order and respectfully acknowledged the Coast Salish Nations on whose traditional territory the meeting took place.

APPROVAL OF THE AGENDA

It was moved and seconded that the agenda be approved as presented.

CARRIED UNANIMOUSLY

ADOPTION OF MINUTES

Electoral Area Services Committee Meeting - February 13, 2018

It was moved and seconded that the minutes of the Electoral Area Services Committee meeting held February 13, 2018, be adopted.

CARRIED UNANIMOUSLY

COMMITTEE MINUTES

Nanoose Bay Parks and Open Space Advisory Committee

It was moved and seconded that the minutes of the Nanoose Bay Parks and Open Space Advisory Committee meeting held February 7, 2018, be received for information.

CARRIED UNANIMOUSLY

East Wellington / Pleasant Valley Parks and Open Space Advisory Committee

It was moved and seconded that the minutes of the East Wellington / Pleasant Valley Parks and Open Space Advisory Committee meeting held January 29, 2018, be received for information.

CARRIED UNANIMOUSLY

COMMITTEE RECOMMENDATIONS

Nanoose Bay Parks and Open Space Advisory Committee

Bonnington - Coventry Trail

It was moved and seconded that staff provide a preliminary 'high level' report on the costs and process involved with tree removal and stair construction in the park land corridor between Bonnington Drive and Coventry Place.

CARRIED UNANIMOUSLY

Brickyard Community Park – Conceptual Planning and Neighbourhood Meeting

It was moved and seconded that the Regional District of Nanaimo not move forward with the provision of toilets or off road parking at Brickyard Community Park at this time.

CARRIED UNANIMOUSLY

Stone Lake Drive Community Park - Natural Playground Project Planning

It was moved and seconded that a community focus group be set up to facilitate the design of the playground at Stone Lake Drive Community Park.

CARRIED UNANIMOUSLY

Jack Bagley Community Park

It was moved and seconded that a preliminary investigation be conducted of Jack Bagley Community Park for the potential siting of a tennis/pickle ball hard-surface court.

CARRIED UNANIMOUSLY

PLANNING

Development Variance Permit

Development Variance Permit Application No. PL2018-010 - 1646 Brunt Road, Electoral Area 'E'

It was moved and seconded that the Board approve Development Variance Permit No. PL2018-010 to increase the maximum height allowance of an accessory building from 6.0 m to 6.85 m subject to the conditions outlined in Attachments 2 to 4.

CARRIED UNANIMOUSLY

It was moved and seconded that the Board direct staff to complete the required notification for Development Variance Permit No. PL2018-010.

CARRIED UNANIMOUSLY

Development Variance Permit Application No. PL2018-015 - 2668 East Side Road, Electoral Area 'H'

It was moved and seconded that the Board approve Development Variance Permit No. PL2018-015 to increase the maximum allowable floor area for one accessory building, to reduce the allowable floor area for two accessory buildings and to vary the setbacks of two interior side lot lines for the siting of an accessory building subject to the terms and conditions outlined in Attachments 2 to 4.

CARRIED UNANIMOUSLY

It was moved and seconded that the Board direct staff to complete the required notification for Development Variance Permit No. PL2018-015.

CARRIED UNANIMOUSLY

Zoning Amendment

Gathering for an Event in the Agricultural Land Reserve – Proposed Zoning Amendments to Bylaw 500 and Bylaw 1285

It was moved and seconded that the Board receive the Gathering for an Event in the Agricultural Land Reserve – Proposed Zoning Amendments to Bylaw 500 and Bylaw 1285 report for information.

CARRIED UNANIMOUSLY

It was moved and seconded that "Regional District of Nanaimo Land Use and Subdivision Amendment Bylaw No. 500.413, 2018", be introduced and read two times.

CARRIED UNANIMOUSLY

It was moved and seconded that the Public Hearing on "Regional District of Nanaimo Land Use and Subdivision Amendment Bylaw No. 500.413, 2018", be chaired by Chairperson Veenhof or his alternate.

CARRIED UNANIMOUSLY

It was moved and seconded that the "Regional District of Nanaimo Electoral Area 'F' Zoning and Subdivision Amendment Bylaw No. 1285.29, 2018", be introduced and read two times.

CARRIED UNANIMOUSLY

It was moved and seconded that the Public Hearing on "Regional District of Nanaimo Electoral Area 'F' Zoning and Subdivision Amendment Bylaw No. 1285.29, 2018", be chaired by Director Fell or his alternate.

CARRIED UNANIMOUSLY

It was moved and seconded that the use of a permitting system for gathering for an event in the Agricultural Land Reserve be investigated.

CARRIED UNANIMOUSLY

Other

Non-medical Cannabis Retail Licence and Cannabis Production Related Planning Fees

It was moved and seconded that "Regional District of Nanaimo Planning Services Fees and Charges Amendment Bylaw No. 1259.12, 2018" be introduced and read three times.

Opposed (1): Director Fell

CARRIED

It was moved and seconded that "Regional District of Nanaimo Planning Services Fees and Charges Amendment Bylaw No. 1259.12, 2018" be adopted.

Opposed (1): Director Fell

CARRIED

EMERGENCY PREPAREDNESS

Reception Centre License of Use Agreement Renewals

It was moved and seconded that the Regional District of Nanaimo renew agreements for Emergency Reception Centre License of Use Agreements for a five year term commencing April 1, 2018 and ending March 31, 2023, with:

a. the Cedar Community Association
b. the Cranberry Fire Protection District
c. the Gabriola Senior Citizens Association
d. the Nanoose Bay Activity & Recreation Society
e. the Arrowsmith Agricultural Association
f. the Lighthouse Community Centre Society; and
g. the Bowser and District Branch (211) of the Royal Canadian Legion.

CARRIED UNANIMOUSLY

FIRE PROTECTION

Cranberry Fire Service Agreement

It was moved and seconded that the Cranberry Fire Service Agreement be approved for renewal for continued provision of fire protection services covering the Cassidy Waterloo Fire Services area within Electoral Area 'A', for a term ending March 31, 2020 with two additional one year terms upon the mutual agreement of both parties, ending on March 31, 2022.

CARRIED UNANIMOUSLY

BUILDING INSPECTION

Building Permit Activity - 2017

It was moved and seconded that the report Building Permit Activity - 2017 be received for information.

CARRIED UNANIMOUSLY

NEW BUSINESS

Directors' Forum

The Directors' Forum included discussions related to Electoral Area matters.

IN CAMERA

It was moved and seconded that pursuant to Sections 90 (1) (i) and (j) of the *Community Charter* the Committee proceed to an In Camera meeting for discussions related to solicitor-client privilege and third party business interests.

CARRIED UNANIMOUSLY

TIME: 2:21 PM

ADJOURNMENT

It was moved and seconded that the meeting be adjourned.

CARRIED UNANIMOUSLY

TIME: 2:30 PM

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CHAIR CORPORATE OFFICER

REGIONAL DISTRICT OF NANAIMO

REGIONAL DISTRICT OF NANAIMO

MINUTES OF THE ELECTORAL AREA 'H' PARKS AND OPEN SPACE ADVISORY COMMITTEE MEETING

Wednesday, February 28, 2018
7:00 P.M.
Lighthouse Community Centre

In Attendance:	Director B. Veenhof	Chair
	N. Robertson	Member at Large
	V. Howard	Member at Large
	J. Chesley	Member at Large
Regrets:	V. Weismiller	Member at Large
Also in Attendance:	E. McCulloch	RDN Park Planner

CALL TO ORDER

The Chair called the meeting to order.

INTRODUCTION OF NEW MEMBER

New member, J. Chesley was welcomed by the Chair.

ELECTION OF SECRETARY

V. Howard volunteered to be secretary for the committee. With no other nominations, V. Howard was declared secretary.

APPROVAL OF THE AGENDA

It was moved and seconded that the agenda be approved as presented.

CARRIED UNANIMOUSLY

ADOPTION OF MINUTES

Electoral Area 'H' Parks and Open Space Advisory Committee Meeting - June 8, 2017

It was moved and seconded that the minutes of the Electoral Area 'H' Parks and Open Space Advisory Committee meeting held June 8, 2017, be adopted.

CARRIED UNANIMOUSLY

Notes of the Electoral Area 'H' Parks and Open Space Advisory Committee Meeting - November 30, 2017

It was moved and seconded that the Notes of the Electoral Area 'H' Parks and Open Space Advisory Committee Meeting - November 30, 2017, be received for information.

CARRIED UNANIMOUSLY

CORRESPONDENCE

It was moved and seconded that the following correspondence be received for information:

E. McCulloch, Parks Planner to T. Silbernagel, Ministry of Transportation and Infrastructure, re: McColl Road Water Access

E. McCulloch, Parks Planner, to A. Millcor, re: Noonday Road Water Access for Hwy 19A

E. McCulloch, Parks Planner, re: Dunsmuir Community Park Development – Project Scope

CARRIED UNANIMOUSLY

Noonday Road Water Access for Hwy 19A

It was moved and seconded that committee members convene at 6:00 PM on the day of the next meeting in order to view the proposed Noonday Road water access site together.

CARRIED UNANIMOUSLY

Dunsmuir Community Park Development

It was moved and seconded that the preferred concept plan for the construction of Dunsmuir Community Park is to include a new sports court, off-road parking, concrete paths, a shade structure, public art wood carvings, and play equipment.

CARRIED UNANIMOUSLY

It was moved and seconded that the construction of Dunsmuir Community Park be completed in two phases - Phase 1 to include the sports court and parking lot and Phase 2 to include the playground and remaining park elements.

CARRIED UNANIMOUSLY

REPORTS

Parks Update Report - Spring and Summer 2017

It was moved and seconded that the Parks Update Report - Spring and Summer 2017 be received for information.

CARRIED UNANIMOUSLY

Parks Update Report – Fall 2017

It was moved and seconded that the Parks Update Report - Fall 2017 be received for information.

CARRIED UNANIMOUSLY

NEW BUSINESS

Signage Strategy for Community Parks and Trails

It was moved and seconded that the presented Signage Strategy for Community Parks and Trails be received.

CARRIED UNANIMOUSLY

It was moved and seconded that the pilot park for new signage within Electoral Area H be the Wildwood Community Park.

CARRIED UNANIMOUSLY

ADJOURNMENT

It was moved and seconded that the meeting be adjourned.

CARRIED UNANIMOUSLY

TIME: 8:48 PM

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CHAIR

REGIONAL DISTRICT OF NANAIMO

REGIONAL DISTRICT OF NANAIMO

MINUTES OF ELECTORAL AREA 'A' PARKS, RECREATION AND CULTURE COMMISSION MEETING

Wednesday, February 21, 2018
7:00 P.M.
Cedar Heritage Centre

In Attendance:	Director A. McPherson	Chair
	Commissioner A. Thornton	Member at Large
	Commissioner J. Fiddick	Member at Large
	Commissioner B. White	Member at Large
	Commissioner K. Wilson	Member at Large
	Commissioner L. Bury	Member at Large
	Commissioner L. Mann	Member at Large
	Commissioner M. Cawthorne	Member at Large
Regrets:	Commissioner G. Gidden	Member at Large
Also in Attendance:	H. King	Superintendent, Recreation Services
	K. Cramer	Park Planner
	A. Harvey	Recording Secretary

CALL TO ORDER

The Chair called the meeting to order.

APPROVAL OF THE AGENDA

It was moved and seconded that the agenda be approved as amended, to include moving the Approval of the Agenda to after the Call to Order and the addition of Introduction of New Members.

CARRIED UNANIMOUSLY

INTRODUCTION OF NEW MEMBERS

All of the Commissioners introduced themselves and welcomed new members Commissioners Bury, Mann and Cawthorne.

ELECTION OF DEPUTY CHAIR

Commissioner White nominated Commissioner Fiddick to be Deputy Chair of the EA 'A' Parks, Recreation and Culture Commission. He accepted the nomination. With no other nominations Commissioner Fiddick was declared Deputy Chair.

ELECTION OF GRANTS SUB-COMMITTEE

Commissioner White and Commissioner Bury volunteered to sit on the Grants Sub-Committee. With no other nominations or volunteers, it was decided to ask Commissioner Gidden, who was not at the meeting, if he would continue to sit on the Grant Sub-Committee.

ADOPTION OF MINUTES

Electoral Area 'A' Parks, Recreation and Culture Commission Meeting - September 20, 2017

It was moved and seconded that the minutes of the Electoral Area 'A' Parks, Recreation and Culture Commission meeting held September 20, 2017, be adopted.

CARRIED UNANIMOUSLY

CORRESPONDENCE

It was moved and seconded that the following correspondence be received for information:

R. Simpson, DBL Services, re: Cedar Skate Park

K. Cramer, Parks Planner, re: Toilet Vandalism & High Water Table

K. Cramer, Parks Planner, re: Cedar Plaza Irrigation

K. Cramer, Parks Planner, re: Driftwood Rd. Beach Access Neighbor Feedback

K. Cramer, Parks Planner, re: Glynneath Rd. Community Park - Tree Root Rot

CARRIED UNANIMOUSLY

K. Cramer, Parks Planner, re: Driftwood Rd. Beach Access Neighbor Feedback

The Commissioners discussed the information provided by K. Cramer.

It was moved and seconded that staff proceed with the Driftwood Road beach access improvements with the addition of ensuring that up to 3 parking spaces are available.

CARRIED UNANIMOUSLY

K. Cramer, Parks Planner, re: Glynneath Rd. Community Park - Tree Root Rot

The Commission discussed the information and options provided by K. Cramer**.**

It was moved and seconded that Glynneath Road Community Park be kept in a natural state and invasive plants be managed as needed.

CARRIED UNANIMOUSLY

REPORTS

Parks Update Report – Fall 2017

K. Cramer answered questions from Commissioners about the report.

It was moved and seconded that the Parks Update Report - Fall 2017 be received for information.

CARRIED UNANIMOUSLY

Electoral Area 'A' Recreation Services Update - November 2017

H. King gave an update to the report and answered questions from the Commissioners.

It was moved and seconded that the Electoral Area 'A' Recreation Services Update be received for information.

CARRIED UNANIMOUSLY

NEW BUSINESS

BCRPA Symposium - April 30 - May 2

Commissioners were asked to provide to A. Harvey by February 23, 2018, their availability and interest in attending the 2018 BC Recreation & Parks Association Symposium being held April 30, 2018 to May 2, 2018.

ROUNDTABLE

Commissioners provided community updates to the Committee.

There was a request about the possibility of starting meetings earlier, maybe 6:30 PM. Most agreed with this idea and that A. Harvey would email the Commission to find a time that works for all.

ADJOURNMENT

It was moved and seconded that the meeting be adjourned.

CARRIED UNANIMOUSLY

TIME: 9:15 PM

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CHAIR

The Signage Strategy was presented to the EASC on February 13, 2018.

Through the development of the Community Parks and Trails Strategy, signage was identified as the most requested park improvement feature by the public for existing community parks.

We received direction from the Board to replace current Community Park signs with new welcoming signs. Research into signage for parks and trails in other jurisdictions was completed to better understand the graphic direction the Signage Strategy could take. The variety in design options currently provided for many communities is vast – there were many precedent ideas that could work for RDN Parks. Staff focused efforts on the cost effective qualities of signage while maintaining clear wayfinding options and branding opportunities. Staff met with RDN team members in Building & Bylaw Services, Corporate Services, and within Parks Services to better understand their signage needs. All were presented with an overview of the Signage Strategy and their feedback was considered and integrated into the sign design.

Staff examined the current Sign Manual for Community and Regional Parks & Trails, 2001 as reference for the proposed Signage Strategy for Community Parks and Trails. The new signs will reflect an updated graphic style and the RDN Graphic Design Standards. The corporate branding for the RDN uses a specific font type and colour palette; the new sign design integrates these branding components. An updated RDN logo will be provided on the new signs as well.

The signage classifications are as follows:

Identification Signage

Identification Signage is intended to mark the location of the park or trail at the earliest approach point to the park or trail itself. It is intended primarily to be visible from a distance by visitors traveling by vehicle at higher speeds but also useful to visitors arriving by bicycle or on foot. A wood sign would be placed adjacent the main road into the park or adjacent the parking area, where possible. It would be used at parks with larger entrances.

Kiosk Signage

A kiosk would be placed where it could be accessed safely by a pedestrian or cyclist. It would provide information such as mapping, background information, safety information, as well as park etiquette. Larger kiosk could provide broader information about RDN Parks.

Entrance Signage

Entrance Signage is intended to mark the main entrance to a park or trail. It should be to pedestrian scale, visible from a distance, and legible upon approach. A combination of Entrance and Welcome Signage would highlight the main entrance.

Welcome Signage

The welcome sign would provide historic and current information about the park or trail, provide a park map or trail system (or both), identify park or trail amenities, identify park or trail regulations, and provide contact information for RDN Parks.

Trail Head Signage

Trail Head Signage is intended to mark the beginning of a trail. It would provide the trail name, the trail condition (easy, moderate, difficult), the length of the trail, identify trail use (hiking vs walking), and provide a trail system map with "You are here" identified.

Directional Signage

Directional Signage is intended to be placed where required in a park or along a trail. The purpose is to direct park and trail users to areas of interest. Directional Signage would be a wayfinding tool for park and trail users not referencing maps. Where necessary, park or trail system diagrams with a location identified will be provided to enhance the wayfinding experience.

Regulatory Signage

Regulatory Signage is intended to reinforce Bylaw 1399 and to clearly identify uses permitted/not permitted in RDN Parks and along RDN Trails. It would provide universally understood icons to highlight uses permitted/not permitted and provide contact information for RDN Parks. Regulatory Signage would be customizable to reflect the individual park or trail in which the sign would be placed.

Interpretive Signage

Interpretive Signage is intended to provide historical, environmental, and/or educational information for park and trail users. Interpretive Signage would be used in parks in areas of significance or along trails to highlight points of interest.

Safety Signage

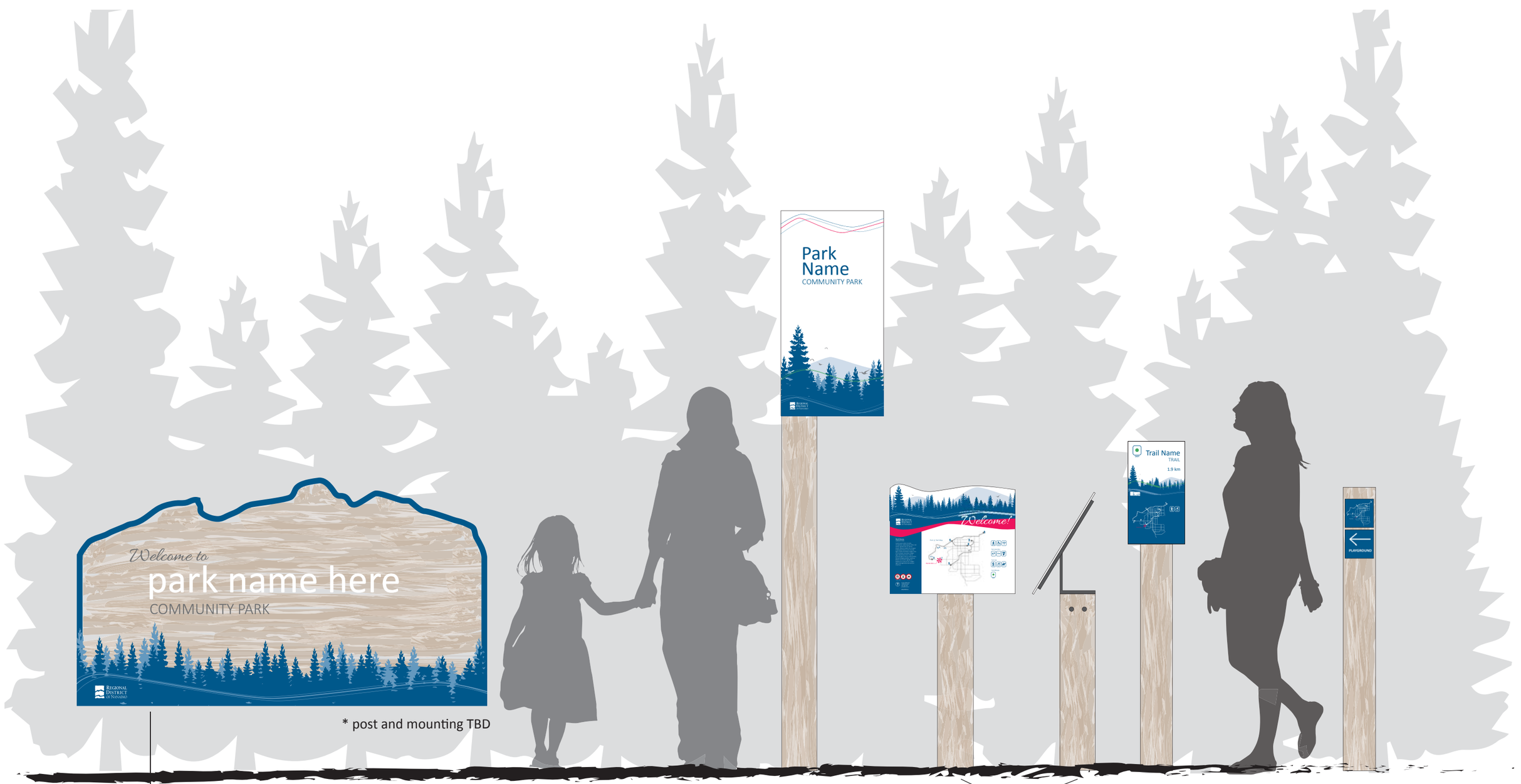
Safety Signage is intended to alert park and trail users of possible dangerous conditions or unusual activities. Their placement is key to ensure the safety of the public. The established use of yellow for 'Caution' and red for 'Danger' would be maintained.

Goal and Next Steps

For the POSAC meeting the goal is for the members to receive the information regarding the Signage Strategy for Community Parks and Trails, provide comment and feedback if they so desire, and to discuss which park and/or trail would be best suited to be the pilot site for new signage. Staff will ultimately assess the success of the signage for the park or trail, compare how it functions to the other pilot sites in the EAs, and determine potential changes required to improve on the signage prior setting it as the standard for RDN Parks.

Please set a date a time for the pilot site to be selected, giving the POSAC members adequate time to reflect on their recommendation.

Thank you!



* post and mounting TBD

IDENTIFICATION sign
cedar wood product and dimensions
to remain

ENTRANCE sign
size: 18x36”
height to
top of sign: 8’

WELCOME sign
size: 18x22”
height to top of sign: 4’
*panel tilt 30° back

INTERPRETIVE sign
size: 18x22”
height to top of sign: 4’
*panel tilt 30° back

TRAIL HEAD sign
size: 10x18”
height of top of sign: 4’-8”

DIRECTIONAL sign
size: 5x5”
height to top of sign: 4’

SIGNAGE CLASSIFICATION FOR THE SIGNAGE STRATEGY FOR COMMUNITY PARKS AND TRAILS
EASC Meeting February 13th, 2018

REGIONAL DISTRICT OF NANAIMO

MEMORANDUM

TO: Electoral Area 'A' Parks, Recreation & Culture Commission

DATE: Feb 21, 2018

FROM: Kelsey Cramer, Parks Planner

FILE: n/a

SUBJECT: Glynneath Road Community Park – Tree Root Rot

Glynneath Road Community Park is located at 2931 Glynneath Rd at the corner of Ivor and Glynneath Roads in Electoral Area 'A'. The park is bordered on two sides by road and on two sides by residential properties, and has remained in its natural, undeveloped state since acquisition. Over the past several years, the park has experienced tree failures and wind throws due to prevalent root rot infection at the site. In August 2016, an arborist assessed the site and felled 19 trees from the southwest corner of the park, while flagging an additional 8 trees for later removal. This number was increased to 24 trees in early 2017.

To better understand the site conditions and tree risk, a Registered Professional Forester was retained to clarify the extent and severity of the root rot, as well as to determine a plan of action for monitoring the site (report attached). The study states that 55 trees are identified for removal or treatment (e.g. topping/pruning).

Given the number of trees that will require removal from the site (in addition to those already felled), a second assessment was undertaken to determine the value of the wood and whether there was any opportunity to offset the cost of tree removal with merchantable timber. As per the Harvesting Cost/Timber Valuation Assessment (attached), the wood is deemed most suitable for firewood, with little timber value and the report recommends donating the fire wood locally.

Staff will consider the Electoral Area 'A' Community Park budget to address tree management at Glynneath Road Community Park, as detailed in the Root Rot Assessment report. Given the disturbance to the site that will result, the Electoral Area 'A' Parks, Recreation & Culture Commission, may wish to discuss whether the site should be restored with suitable species and remain a natural, undeveloped site, or whether there is interest in pursuing a site planning process for additional recreational amenities in the park.

K. Cramer, Parks Planner

STRATEGIC

December 10, 2017

Tree Risk / Root Rot Assessment Report – Glynneath Community Park

Walter Ernst, RPF (#4071), ISA Certified Arborist (PN-7288A),
Certified Tree Risk Assessor

PROFESSIONALLY RESOURCEFUL

Table of Contents

1.0 Introduction and Background

A tree risk and root rot assessment was completed on behalf of the Regional District of Nanaimo (RDN) for Glynneath Community Park (GCP) on November 15, 2017 by Walter Ernst (R.P.F. / Cert. Arb. / Urban Tree Risk Assessor) of Strategic Natural Resource Consultants Inc. (SNRC).

GCP is approximately 0.5 hectares in size and is located at the junction of Glynneath Road and Ivor Road just to the south of Nanaimo. The park is confined between the above two roads and adjacent private property. Refer to Figure 1 for a locator map of the Glynneath Community Park area.

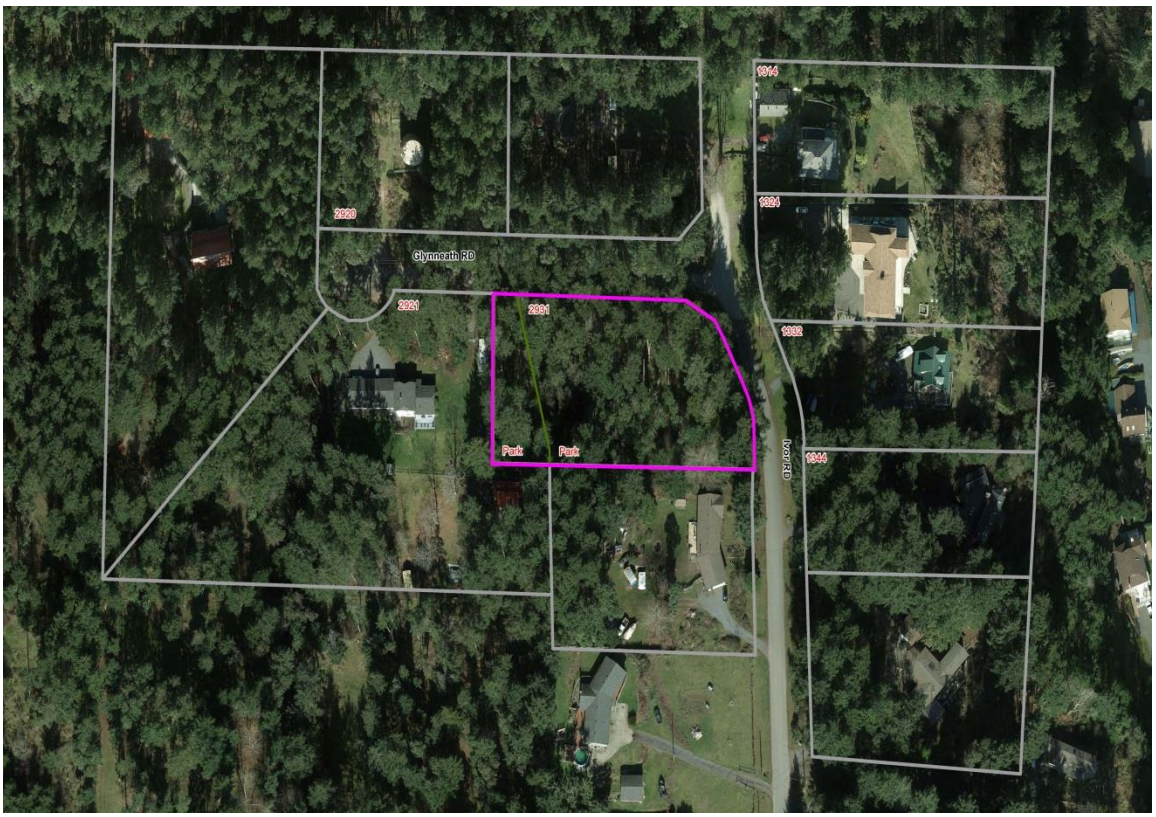


Figure 1: Glynneath Community Park Locator map.

Shapefiles for the park area (in order to create a georeferenced map) as well as other pertinent documents were provided by the RDN which were utilized to conduct the assessment.

Previous correspondence between Walter Ernst of SNRC and Mark Dobbs of the RDN, and onsite correspondence with Chris van Ossenbruggen of the RDN outlined the following objectives for the tree risk / root rot assessment and provided the basis for the methodologies used in the field and within this report.

2.0 Objectives

The objectives of the tree risk / root rot assessment include the following:

1) Define root rot and describe the specific type of root disease that exists within the park.

2) Indicate the severity or issue the root rot presents within the park.

3) Identify trees which pose an imminent risk (to the public, buildings, street vehicles, fence-lines, and other infrastructure) and require removal.

4) Provide an action plan to safely and effectively mitigate the root rot concerns in the park, including a timeline.

5) Provide recommendations for site remediation and the costs associated to complete the work (e.g. planting alternate species, annual monitoring).

6) Provide costs associated with harvesting monitoring and site remediation work.

This report will provide information to the RDN Parks Department to help guide and manage the root rot issue and associated risk within the park and to the Recreation Commission for consideration on whether they would like the site to either remain forested or to be modified in the future into a more developed park space. Additionally, the Recreation Commission has expressed interest in having the value of the wood returned to the community where possible, rather than left to deteriorate on-site.

3.0 Site Description

GCP consists of a second growth stand consisting predominantly of Douglas-fir and grand fir with secondary components of Arbutus. Minor amounts of bigleaf maple and bitter cherry were also noted on the site. Very light scattered grand fir saplings exist in the understory. Tree heights ranged from 5 to 30m (avg. 15.8m) and diameters ranged from 5 to 43cm (avg. 23.2cm). The Biogeoclimatic Ecosystem Classification subzone and site series is Coastal Douglas-fir moist maritime (CDFmm) subzone with zonal (01) site series. Soil moisture is moderately dry and soil productivity is medium overall. The ground is flat to gently sloping with slopes ranging from 0-15%. Scattered sections of shallow soils over bedrock exist within the area. Understory vegetation consists of predominantly salal, dull Oregon grape, red huckleberry, trailing blackberry, and ocean spray with minor components of sword fern. The invasive species spurge laurel was quite prevalent as well. Soil rooting depth varies from 30-80cm, with soils being well drained. Soil texture ranges from a silty loam to a loam, coarse fragment content ranges from 30-50%, and the humus form is a moder-mor. Soil hazard ratings are: Compaction = High, Displacement = Moderate and Erosion = Moderate. The park does have some health concerns. Laminated root rot (*Phellinus weirii*) is having a substantial impact on Douglas-fir and grand fir trees within the park with signs and symptoms observed on both standing or previously windthrown trees (from overturned root wads). Additionally, a significant number of Arbutus within the park have recently died or are rapidly declining as a result of stem / branch canker (*Nattrassia mangiferae*), Madrone branch

dieback (*Fusicoccum aesculi*) or a combination of the two diseases (*Forest Pest Leaflet, Common Pests of Arbutus in British Columbia, December 2000* and *Diseases and Insect Pests of Pacific Madrone Forest Health Fact Sheet, May 2008*).

Refer to Figure 2 for a photo showing the stand type and understory vegetation within Glynneath Community Park.

Figure2: Photo showing the stand type and understory vegetation within Glynneath Community Park.

4.0 Methodology

During the tree risk assessment trees were assessed for their health, any significant defects, the potential for failure, and the risk posed to the general public, buildings or other structures. Additionally, eradication of root rot infected trees was also considered in the assessment with the goal of enhancing the future health of the stand. Where tree work was prescribed the work was classed as either a 'Tree Removal' or 'Modification' treatment. Modification treatments include pruning and wildlife tree creation (topping). For each removal or modification tree, standard tree data (species, height, diameter at breast height, rot level) was collected using an iPad, laser, mallet, and diameter tape. Diameter of trees was measured at diameter at breast height (DBH - 1.3m). All hazard trees were marked with a spray painted blue dot and tree number at the base of the stems (refer to Figure 3). All trees identified were inventoried and mapped. Numerous photos were taken of trees assessed in the park; however, only a select few were utilized for this report. Additional photos are available upon request.

Figure3: Photo showing marking standard used for hazard trees.

5.0 Results / Discussion / Recommendations

Objective 1 – Define root rot and describe the specific root disease that exists within the park:

Root diseases (or pathogens), with the presence of susceptible host trees, can cause significant breakdown and weakening of the root systems, leading to a decline in health and eventual mortality of infected trees. With a decline in health and stresses imposed on the trees, infected trees will become more prone to secondary pathogens or insects (such as wood boring beetles). Additionally with the root system being weakened, the tree is more susceptible to root breakage and subsequent toppling over due to dominant winds within an area. Root diseases infect trees and subsequently spread from tree to tree via three methods:

- Root contacts or grafts,
- Spores, and /or
- Rhizomorphs (a root-like structure of certain fungi).

Root disease inoculum (or bacteria) can remain infectious within roots and stumps for up to 35-80 years depending on the fungal species and inoculum size. This means that regenerating susceptible host trees in the understory have a high risk of becoming infected.

There are five common types of root disease prevalent across British Columbia (BC): Armillaria (*Arimillaria ostoyae*), Laminated (*Phellinus weirii*), Tomentosus (*Inonotus tomentosus*), Blackstain (*Leptographium wageneri*), and Annosus (*Heterobasidion annosum*). The above root diseases have some similarities and differences with their geographic distribution across BC, their modes of infection and spread as well as with their preferred host trees.

Specific to Glynneath Park, it was determined that Laminated root rot (*Phellinus weirii*) is the primary root disease affecting the health of Douglas-fir and grand fir trees in the area. Laminated root rot (LRR) is the most prominent root disease of Douglas-fir in coastal BC forests. The primary mode of infection and spread for this root disease is through root contact. Highly susceptible hosts for this root rot are Douglas-fir, grand fir, amabilis fir, and mountain hemlock. Moderately susceptible hosts are Western hemlock, Sitka spruce, Englemann spruce, and Western larch. Tree species tolerant and immune to this disease include lodgepole pine, Western white pine, Western red cedar, yellow cedar, various deciduous species, and ponderosa pine.

LRR primarily occurs in smaller pockets with symptomatic standing dead and toppled trees being present (refer to Figure 7). Disease centres can range from a few trees to several hectares, largely depending on the number of susceptible host tree species being present. Symptoms of this disease include reduced height growth, thin chlorotic (yellowing) foliage, needle loss, thinning crown (refer to Figure 6), and a distress cone crop. On freshly cut stumps, a reddish brown stain is sometimes associated with the early stages of decay. The most prominent feature of this disease is that during advance decay, the decayed wood separates into layers along the annual growth rings of the roots (refer to Figure 4). On windthrown trees, most often the decayed major structural roots have been broken off leaving a smaller root ball (refer to Figure 5). Decay does not usually extend more than 1m up the tree stem. Fruiting bodies associated with this disease are infrequently produced and are not a reliable indicator of root rot infection.

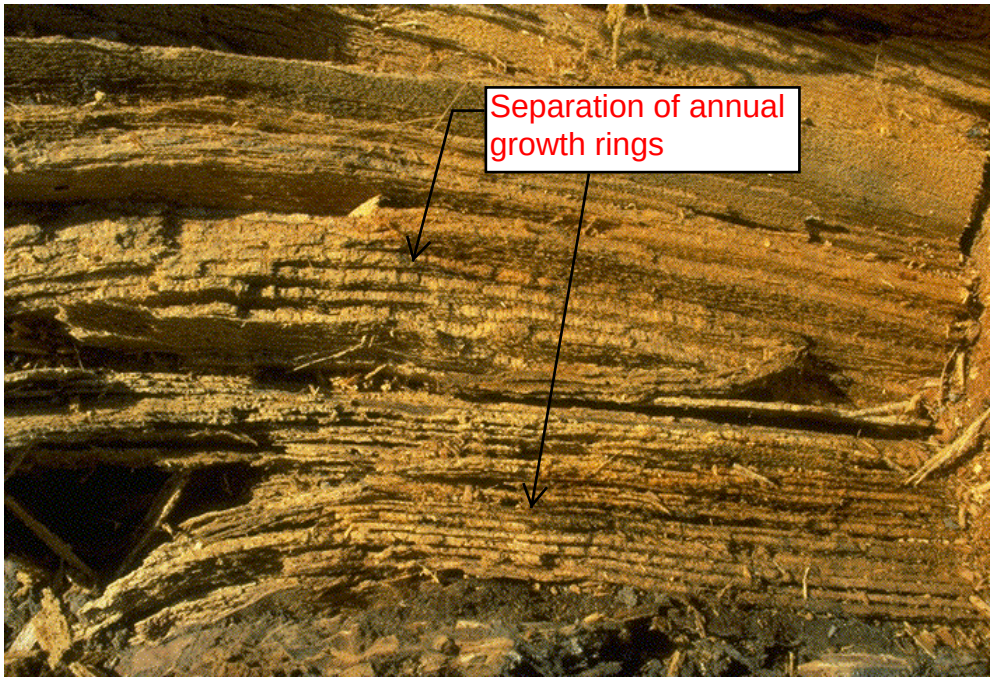


Figure 4: Photo showing the separation of annual growth rings caused by laminated root rot.

Figure 5: Photo showing a windthrown root rot infected Douglas-fir tree with a broken off root wad.

Figure 6: Photo showing a Douglas-fir tree with a thinning crown.

Figure 6: Photo showing a recently dead root rot infected grand fir tree.

Information on laminated root rot was obtained from the following three sources:

Root Disease Management Forest Practices Code Guidebook, 1995

Extension Note: BC Journal of Ecosystems and Management, British Columbia's Coastal Forests – Laminated Root Rot Forest Health Stand Establishment Decision Aid, Volume 7, No. 3, Article 5, Rona Sturrock, Stefan Zeglen, and Jennifer Turner, 2006

Common Tree Diseases of British Columbia, E.A Allen, D.J. Morrison, and G.W. Wells, natural Resources Canada, 1996

Objective 2 – Severity of laminated root disease within Glynneath Community Park:

During the field assessment, two main root rot centres were identified, totaling 0.1 ha. The larger root rot centre located along the west side of the park (0.07ha) had been previously cleared in 2016 with only a few spindly Douglas-fir stems remaining within the area and along the immediate edges (refer to Figure 8). The logs from the removal trees were bucked to lengths and left on-site for the time being. Some of the edge trees

(Douglas and grand fir) showed some symptoms of root rot infection, primarily heavy crown thinning. The root rot centre located at the eastern side of the park (0.04ha) is currently still timbered and consists of approximately 16 trees (Douglas-fir and grand fir) that have either succumbed to the root rot or are in rapid decline (with heavy crown thinning, poor stem form and loss of foliage). Other live trees located within and directly adjacent the root rot centre seemed to show mild or negligible signs / symptoms of root rot; however, some of these trees may be in the earlier stages of infection. Based on the root rot centres encountered it is estimated that 20% of the park has a significant amount of root rot infection. Refer to Figure 8 for a photo of the eastern root rot centre.

Figure 7: Photo showing Western root rot centre (previously cleared 2016).

Figure 8: Photo showing Eastern root rot centre (timbered).

Windthrown trees with severely broken off root wads were noted within both root rot centres (refer to Figure 9). Breaking off the roots by hand, and prying the wood apart it was very evident that the wood was separating at the annual rings (characteristic of laminated root rot).

Figure 9: Photo showing windthrow of root rot infected trees.

Outside of the two root rot centres (0.4ha), scattered root rot exists at approximately 2-5% incidence. Eleven grand fir / Douglas-fir stems showed more advanced signs and symptoms of root rot infection. The stand edges directly adjacent Ivor Road and Glynneath Road (for a 15-20m width) seemed to be fairly healthy with very minimal signs of laminated root rot.

Objectives 3 – Trees identified that pose an imminent risk (to the public, buildings and other infrastructure) and require removal:

Based on the tree risk assessment, a total of 55 trees were identified for either immediate or future treatment, including 22 Douglas-firs, 19 grand firs, and 14 Arbutus. Of these trees, 11 were prescribed for a modification treatment (topping / pruning) including 10 dead or severely declining Arbutus and 1 dead grand fir. Forty-three trees were prescribed for full removal including, 23 Douglas-fir, 16 grand fir, and 4 Arbutus. One Douglas-fir tree (#53) will eventually require removal of a smaller fork (22cm diameter) with the main stem remaining intact. This tree is not infected with root rot; however, it has a weak fork attachment which could break off in time. If removing the fork, ensure that the fork is pruned to ISA Arboriculture Best Management Practices. Arbutus trees prescribed for removal or modifications had either succumbed to the stem / branch canker (*Nattrassia mangiferae)* and/ or Madrone branch dieback (*Fusicoccum aesculi*) or were rapidly declining due to these diseases. Refer to the section titled 'Additional Note Regarding Arbutus Health' for specific details on the impacts to Arbutus trees due to the above mentioned diseases and for management recommendations within the park.

The diameters of these trees averaged 23.2cm, and the heights averaged 15.8m. These trees were prescribed for removal or modification based on the severity of root rot infection, the probability that these trees could fail and topple over within the next 1-2 years, and the probability of striking a person, building, vehicle (parked or driving) or other structure of value. Given the park is in close proximity of to the ocean and has significant exposure to the dominant southeast winds during the storm season, trees with already weakened root systems due to root disease will be more prone to blowing over. Additionally, as the objective is to restore the park to a healthier state (with lower root rot occurrence), root rot infected trees of low to moderate risk were also prescribed for removal. As root rot is also a natural part of ecosystem processes, the objective would not be to eradicate all the root rot but to minimize the occurrences.

The tree removal work is recommended to be conducted in two phases:

Immediate tree removal and modification treatments (within 1-2 years):
Overall, 41 trees require immediate removal over a span of 1-2 years. This includes Tree #s 1 to 20, 28 to 29, 33, and 34 to 49. The bulk of these trees are located within the root rot centre areas, with a few located Ivor and Glynneath Roads and private properties directly to the south. Some moderate and low risk trees do occur within the root rot centres; however, these are recommended to be removed along with the higher risk trees while the harvesting equipment is on-site, and in order to properly eradicate the root rot centres of diseased stems.

Future tree removal and modification treatments (2-5 years into the future):
Overall, 14 trees require monitoring and potential removal (10 trees) / modification (4 trees) treatments into 2-5 years into the future. This includes Tree #s 21 to 27, 30 to 32, and 50 to 53. These trees are located more centrally within Glynneath Community Park and are not an imminent risk to building infrastructure, vehicles, or the general public.

Two grand fir snags (approximately 10m tall) with significant rot are located within the centre of the park (refer to Figure 10). These two trees due to their location and shorter height pose a lower risk to the general public, vehicles, houses and other infrastructure. Furthermore, there is some wildlife tree potential in these two trees. Additionally one live Douglas-fir (25-30m tall) may have some crown thinning; however, as this tree is heavily exposed to the dominant southeasterly winds and the crown thinning could be a result of wind battering. It is recommended that all three of these trees be retained and monitored over the next 5 year period.

Figure 10: Photo showing standing grand fir snag with rot.

Refer to Appendix I for the Tree Risk Assessment Map and Appendix II for Tree Risk Assessment Data and Recommended Work.

Objective 4 – Action plan to safely and effectively mitigate the root rot concerns within the park (including a timeline) and Objective 5 – Recommendations for site remediation:

The following action items (refer to Table 1) and timelines are recommended to effectively mitigate the root rot concerns within the park and at the same time create a healthier stand type which doesn't have the severity of root rot as observed within this assessment (estimate 20% of the park has higher incidence of root rot infection). Ideally <5% root rot incidence (with monitoring) would be preferred over the whole area in the long run.

Action Item 1 – Salvage Harvesting the Identified hazard Trees (applicable to immediate tree removals only) and Previously Felled Wood:

- Trees will either be salvaged for commercial timber products, for firewood, or a combination of these. For trees requiring entire removal, it was recommended to directionlly piece down or hand fall the trees in order to minimize damage to adjacent trees and their root zones. However, it will be up to the faller to determine the safest and most practicable way to remove the trees without damaging adjacent trees. Additionally for the 11 modification (topping) trees, if not safe to do, the full trees may be removed.

- Based on the soil types, slope, and harvesting opening sizes within the park it is estimated that horse logging or hoe forwarding methods would be suitable for within the park. If utilizing a hoe forwarder it is recommended that designated trails are used and that puncheon (layer of non merchantable logs), plywood sheets or other geo-textile material be spread along the trails in order to minimize soil compaction and displacement as well as to protect the root zones of adjacent retained trees. If practicable and safe to do so, lighter, lower impact machinery is recommended.

- Prior to harvesting it is understood from the RDN Parks Department that timber valuation and harvesting cost assessments will be undertaken to determine the best use of the wood and how to efficiently harvest the trees (while minimizing site degradation or tree damage) at minimal cost.

- For trees prescribed for modification (topping) treatments, if safe and practicable, piecing down of the stem sections will be required. If deemed unsafe to top, the trees may be removed.

- As debris from root rot infected wood can spread to adjacent healthier trees, it is recommended that debris not come into contact with retained trees and that all are removed from the site.

- Additionally, through discussions with Chris van Ossenbruggen of the RDN Parks Department and on-site observations it was determined that is was not practicable to undertake stumping (overturning and removing infected stumps with roots).

Stumping would likely cause significant damage to structural and fine roots on retention trees due to the underground disturbance when removing the roots wads.

- Ensure that a qualified professional (ISA Arborist / RPF) is on-site to monitor the harvesting operations. This is to ensure that damage to retained trees and their root systems are minimized. The approximate cost for monitoring work at this stage would range from $4,500 to $5,500.

Timeline: December 2017 to September 2018 (preferably during drier soil conditions).

Refer to Appendix I for the Tree Risk Assessment Map and Appendix II for Tree Risk Assessment Data and Recommended Work.

Action Item 2 – Planting the Root Rot Openings with Tree Species Tolerant and/or Immune to Laminated Root Rot (specific to immediate tree removal areas):

Tree species selection and silvics characteristics are based partially off the Tree Species Compendium website (www.for.gov.bc.ca/hfp/silviculture/compendium/index.htm) and the 1994 LMH28 Vancouver Region Guidebook. Western red cedar (Cw), Western white pine (Pw) and various deciduous species such as bigleaf maple (Mb), red alder (Dr), bitter cherry (Vb), Arbutus (Ra), and cascara (Kc) are either immune or tolerant to the laminated root rot. Cw is very shade tolerant, and is ecologically suited within the CDFmm biogeoclimatic subzone, even though not present on the park site. This species should be utilized as a low to moderate component of the seedling stock and targeted within partial to closed canopy and moisture receiving depression sites given the drier conditions within the CDFmm subzone. Mb, Dr, Vb, and Kc are recommended given these are faster growing pioneer species which would establish quicker than conifers. Additionally, Dr is a primary nitrogen fixer which would benefit other establishing seedling stock with increased nitrogen levels. Dr, Ra, and Mb have low shade tolerance; however, Ra has a higher shade tolerance at the seedling stage. Vb and Kc have moderate shade tolerance. Pw is a suitable alternative, and if utilized, it should be utilized as a minor component given its susceptibility to white pine blister rust (*Cronartium ribicola*). No more than 20% of Pw seedling stock should be used and white pine blister rust resistant trees can be obtained from the nursery. This species is also moderately shade tolerant so it is recommended to plant this Pw within either partial canopy cover sites or within openings. Lodgepole pine (Plc), also tolerant to the root rot, could be utilized as an alternative; however, this species is generally only utilized on very poor to poor nutrient sites and this site has medium productivity at the minimum. Below are the planting prescriptions for the western and the eastern root rot centres as well as individual tree removal sites with small openings. These prescriptions may be altered based on stock availability or to utilize other desirable species.

Western Root Rot Centre (previously cleared area):

- Recommended species: 60% red alder (*Alnus rubra*), 30% bigleaf maple (*Acer macrophyllum*), and 10% western red cedar (*Thuja plicata*).

- Tree density and spacing: Plant at 1200 stems per hectare. Target inter-tree spacing should be 3.1m. Minimum allowable inter-tree spacing is 2.0m. Space trees off existing healthy naturals and mature stems.

- Total # trees required: 84 trees including 50 red alder, 26 bigleaf maple, 8 Western red cedar.

- Planting instructions: Target raised microsites (natural mounds). Target Cw within partial to closed canopy and moisture receiving depression sites. Target Dr and Mb within opening and stand edges. Additional advice on proper planting procedures should be obtained from the nursery supplying the stock.

- Alternative Species that could be utilized: Western white pine (*Pinus monticola*), bitter cherry (*Prunus emarginata*), Arbutus (*Arbutus menziesii*), or cascara (*Rhamnus purshiana*).

Eastern Root Rot Centre (currently timbered area):

- Recommended species: 30% bitter cherry (*Prunus emarginata*), 30% red alder (*Alnus rubra*), 20% cascara (*Rhamnus purshiana*), and 20% western red cedar (*Thuja plicata*).

- Tree density and spacing: Plant at 1200 stems per hectare. Target inter-tree spacing should be 3.1m. Minimum allowable inter-tree spacing is 2.0m. Space trees off existing healthy naturals and mature stems.

- Total # trees required: 48 trees including 15 bitter cherry, 15 red alder, 9 cascara, and 9 Western red cedar.

- Planting instructions: Target raised microsites (natural mounds). Target Cw within partial to closed canopy and moisture receiving depression sites. Target Dr within small openings and Kc and Vb within small openings and partial canopy sites. Additional advice on proper planting procedures should be obtained from the nursery supplying the stock.

- Alternative Species that could be utilized: Western white pine (*Pinus monticola*) or Arbutus (*Arbutus menziesii*).

Individual Tree Removal Sites:

- 7 individual trees outside of the root rot centres are prescribed for immediate removal (Trees 1 to 2, 19 to 20, and 37 to 39). A 2:1 replacement tree ratio is recommended (2 trees planted for each tree removed).

- Recommended species: 100% western red cedar (*Thuja plicata*) given lower light levels with individual tree removals.

- Tree spacing: Target inter-tree spacing should be 3.1m. Minimum allowable inter-tree spacing is 2.0m. Space trees off existing healthy naturals and mature stems.

- Total # trees required: 14 Western red cedar trees.

- Planting instructions: These trees should be planted in the near vicinity of the above removal trees. Target raised microsites (natural mounds). Additional advice on proper planting procedures should be obtained from the nursery supplying the stock.

- Alternative Species that could be utilized: bitter cherry (*Prunus emarginata*), or cascara (*Rhamnus purshiana*).

General Planting Recommendations for all Sites:

- Stock availability may determine species selection. Recommendations here are based on ecologically suitable species within the CDFmm subzone. All tree and shrub species are to be of guaranteed nursery stock. Tree stock should be a minimum of 412A or 412B plug size (4 equates to the girth of the plug, 12 equates to the length of the plug, and the associated letters indicate the spacing between the seedlings within stryro block containers where grown at the nursery). Seedling cost estimates were obtained from Sylvan Vale Nursery:

  Sylvan Vale Nursery Ltd. Black Creek, BC
  (250) 337-8487
  www.svnltd.com

- The botanical name should be used when ordering stock to ensure that the desired tree species is being purchased.

Timeline: Spring or summer / early fall (February to September) following harvesting activities. Plant seedlings within 1 year post-harvest.

Refer to Table 1 for costs associated with planting the seedling stock.

Action Item 3 – Monitoring Stand Health / Tree Risk and Establishment of Planted Trees within the Park:

- Monitoring stand health / tree risk – Mature trees within the park (including the 13 trees prescribed for future treatment) should be monitored once annually over the next 5 year period to ensure the laminated root rot has not spread further and to assesses whether additional trees pose a risk and require removal or modification (topping). Additionally, Arbutus tree health should also be assessed during these times. If required additional planting may be required in the future where trees are removed. If after the 5 year period, root rot incidence is reduced to more acceptable levels, and then monitoring frequency may possibly be reduced at that point.

- Monitoring establishment of planted trees – To ensure the success of the planting program the survival and health of planted trees should be monitored once annually over the next 5 years. No noticeable deer browse or sign was noted within the park; however, this should also be closely monitored over this time period.

Refer to Table 2 for costs associated with the 5 year monitoring.

Objective 6 – Costs associated with harvesting monitoring and completion of remediation work:

Tables 1 to 2 indicate the costs associated with the following 2 phases: 1) planting root rot infected sites, and 2) annual monitoring over a 5 year period. The total cost the above 2 phases is **$11,049.50 + taxes**

Table 1: Cost associated with planting stock and labour.

Tree Species	Units	Size (container / plug)	Cost per unit	Tree cost	Lab. cost / tree	Lab. cost	Total cost
Western red cedar (*Thuja plicata*)	31	412A/B plug	$2.00	$62.00	$1.25	$38.75	**$100.75**
Red alder (*Alnus rubra*)	65	412A/B plug	$2.00	$130.00	$1.25	$81.25	**$211.25**
Bigleaf maple (*Acer macrophyllum*)	26	412A/B plug	$2.00	$52.00	$1.25	$32.50	**$84.50**
Bitter cherry (*Prunus emarginata*)	15	412A/B plug	$2.00	$30.00	$1.25	$18.75	**$48.75**
Cascara (*Rhamnus purshiana*)	9	412A/B plug	$2.00	$18.00	$1.25	$11.25	**$29.25**
						Shipping Cost (incl. fuel):	**$250.00**
						Total:	**$724.50**

If the 10 trees prescribed for future removal are harvested then an additional 20 trees are recommended for planting which would equate to an additional $65-$80 (incl. trees plus labour) plus shipping costs and taxes.

Table 2: Cost associated with annual monitoring over a 5 year period assessing stand health / tree risk and establishment of planted trees within Glynneath Community Park. QP = Qualified professional.

Phase:	QP rate per hour	QP hours (5 site visits)	QP cost	Truck day rate	Truck cost	Total Cost
Fieldwork	$80/hr	40	$3,200.00	$145	$725.00	$3,925.00
Monitoring Reports	$80/hr	80	$6,400.00	N/A	N/A	$6,400.00
					Total:	**$10,325.00**

****Any additional days required would be at the QP and truck rate indicated above.**

Additional Note Regarding Arbutus Health:

As mentioned under Objective 3, fourteen Arbutus trees have recently died or are rapidly declining as a result of the stem / branch canker (*Nattrassia mangiferae)* and/ or Madrone branch dieback (*Fusicoccum aesculi*). Additional Arbutus trees may also be declining. Refer to Figure 11 for a photo showing dead and declining Arbutus trees. Literature indicates that Arbutus growing closer to the ocean and that are exposed to higher levels of sunlight, and other environmental stresses seem to be more prone to the above mentioned diseases. Additionally, the canker spores from infected trees can travel to other trees through wind and rain.

Figure 11: Photo showing a dead standing Arbutus tree and a second declining one.

Additional assessments of the Arbutus trees by a Qualified Professional (RPF and/or ISA Arborist) is recommended over the 5 year monitoring period in order to determine the best course of action with the stem / branch canker and/ or Madrone branch dieback epidemic within the park. As part of this assessment, all mature Arbutus should be field

reviewed to determine the degree of the infection, recommended actions for sanitation treatments (including tree removal, topping, or pruning), and recommendations to prevent or minimize further spread of the pathogen within the stand.

For infected Arbutus trees that are moderately healthy literature indicates that pruning of dead / infected branches or limbs can have beneficial impacts minimizing the spread of the cankers. Pruning should be conducted in the late winter to early spring for better results. As sudden exposure of Arbutus to the sun can cause sunscald (which may facilitate infection by the canker fungus), when removing other trees, minimize opening size adjacent healthy Arbutus (*Forest Pest Leaflet, Common Pests of Arbutus in British Columbia, December 2000*). Inadequate information was available to determine if debris removal would effectively aid in sanitation of the stand. It is recommended that debris from Arbutus do not come in direct contact with other mature or immature Arbutus trees in order to minimize spread of these diseases.

6.0 Limitations

The tree assessment was completed under the site conditions (weather, natural / unnatural disturbances etc.) and tree conditions (visible defects) present at the time of the assessment and with the tools available (laser, iPad, mallet, D-tape).

Root rot centres were mapped to the best ability (with the tools available) based on what was observed on and above the ground. Given that trees possess many unseen parts below the ground, it is difficult to determine the root rot centre boundaries with 100% accuracy. As indicated within the recommendations, monitoring of the stand over the next 5 years will be required in order to assess for future hazard trees and to adjust the root rot centre boundaries where required.

7.0 Signature and Professional Seal

Field work and report completed by: Walter Ernst, RPF (#4071), ISA Certified Arborist (PN-7288A), Certified Tree Risk Assessor.

Signature and Seal

10/12/17
Date (dd/mm/yy)

Appendix I – Tree Risk & Root Rot Assessment Map

Glynneath Community Park - Tree Risk and Root Rot Assessment Map

N

Glynneath RD

Only Small Fork to be Removed on this Tree

Two Dead Grand Fir Snags. Retain for Wildlife Habitat

19 and 20

23 to 24

Previously cleared Root Rot Site (2016)

25 to 27

21 to 22

49

50

51

30

53

18

17

15 and 16

47 to 48

29

28

52

31

32

10A

11 and 12

10

12A

13 and 14

44

46

34 to 36

9

8

7

3 and 4

1 to 2

5 and 6

33

38

Douglas Fir to Retain and Monitor

43 and 45

42

37 and 39

40 to 41

Ivor RD

Document Path: N:\Strategic_Group\Projects\17-0981-02 Glynneath Community Park Tree Risk Assessment\Phase\MXD\IvorRd.mxd

Trees Recommended for Modification Treatment (Topping)

Trees Recomended for Removal

Retain and Monitor Trees Comment

Park

Community Lots

Laminated Root Rot Centers

STRATEGIC NATURAL RESOURCE CONSULTANTS
Campbell River
321-1180 Ironwood St.
p: 250.287.2246

Projection: NAD 1983 UTM Zone 10N
Scale: 1:250
Date: 11/29/2017
Produced By: Richards

Appendix II – Tree Risk & Root Rot Assessment Data and Recommended Work

Appendix III – Tree Risk Assessment Data / Recommended Tree Work

Location: Glynneath Community Park Tree Risk Assessment
Completed By: Walter Ernst, RPF, Cert Arb., PMP
Date: November 15, 2017

Tree #	Spp.	DBH (cm)	Ht (m)	Risk	Tree Condition	Treatment Recommendations	Timeline for Tree Removal or Modification Treatment (Urgent, or Monitor / Future Treatment)
1	Fdc	38.0	12.0	M	Tree with thinning crown and has flaky and loose bark along portions of stem base. Some rot suspected. No immediate root rot signs along forest floor. Adjacent Ivor Rd. Larger fir trees adjacent seem healthy enough at this point.	Piece down. Minimize damage to adjacent trees.	Urgent
2	Fdc	27.0	15.0	M	Tree with thinning crown and has flaky and loose bark along portions of stem base. Some rot suspected. No immediate root rot signs along forest floor. Adjacent Ivor Rd. Larger fir trees adjacent seem healthy enough at this point.	Piece down. Minimize damage to adjacent trees.	Urgent
3	Bg	22.0	22.0	M	Sickly, tall spindly tree on way out. Not much live crown left. May blow over during next storms.	Piece down. Minimize damage to adjacent trees.	Urgent
4	Bg	11.0	17.0	**H**	Sickly, tall spindly tree with very flaky bark and has very stunted and patchy foliage. Rot suspected. May blow over during next storms. Potential root rot.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
5	Bg	18.0	17.0	**H**	Close to dead tree. Very spindly top.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
6	Bg	18.0	17.0	**H**	Dead standing spindly tree. Recent mortality.	Directionally hand fall or piece down. Minimize damage to adjacent trees.	Urgent
7	Bg	40.0	30.0	M	Dead standing larger tree. Bore holes noted in bottom of tree. Beetle killed.	Top to 8-10m or piece down entirely. Minimize damage to adjacent trees.	Urgent
8	Fdc	42.0	30.0	M	Tree with very spindly crown. On way out.	Piece down. Minimize damage to adjacent trees.	Urgent
9	Fdc	21.0	12.0	**H**	Dead standing tree. Some loose flaky bark at base.	Piece down or directionally hand fall. Minimize damage to adjacent trees.	Urgent
10	Bg	18.0	14.0	**H**	Dead tree with lean. Rot at base and roots look to be comprimised.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
10A	Bg	24.0	14.0	**H**	Dead tree. Root gave out due to laminated root rot. Leaning on other trees.	Piece down or directionally hand fall. Minimize damage to adjacent trees.	Urgent
11	Bg	19.0	9.0	**H**	Recently dead tree. Red foliage.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
12	Bg	16.0	13.0	**H**	Recently dead tree. Red foliage.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
12A	Bg	7.0	5.0	L	Spindly declining whip. Significant stem deformities.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
13	Bg	7.0	6.0	L	Small dead tree. Remove only to eradicate.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
14	Bg	5.0	7.0	L	Small almost dead tree. Remove only to eradicate.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
15	Bg	17.0	13.0	H	Recently dead tree. Red foliage.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
16	Bg	17.0	14.0	M	Tree with very spindly crown. Chopped into at base previously. Remove mainly as could snap off.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
17	Bg	17.0	18.0	H	Tree on way out. Red needles at top of crown.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
18	Bg	16.0	13.0	H	Dead standing tree with significant rot.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
19	Arbutus	33.0	17.0	M	Significantly declining arbutus. Canker / blight. Small amount of leaves at top. Leans into park from Glynneath Rd.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
20	Arbutus	24.0	17.0	M	Significantly declining arbutus. Canker / blight. Small amount of leaves at top. Leans into park from Glynneath Rd.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
21	Fdc	24.0	23.0	M	Spindly crown. Some looser bark at base.	Directionally hand fall or piece down. Minimize damage to adjacent trees.	Monitor / Future
22	Fdc	20.0	18.0	**H**	Dying Fdc tree with very spindly crown.	Directionally hand fall. Minimize damage to adjacent trees.	Monitor / Future
23	Fdc	16.0	14.0	**H**	Dead standing tree with spindly stem.	Directionally hand fall or piece down. Minimize damage to adjacent trees.	Monitor / Future
24	Fdc	43.0	28.0	**H**	Tree almost dead with very few needles left.	Piece down. Minimize damage to adjacent trees.	Monitor / Future
25	Fdc	20.0	6.0	M	Short tree with broken top. Eradicate.	Directionally hand fall. Minimize damage to adjacent trees.	Monitor / Future
26	Arbutus	27.0	12.0	**H**	Dead decadent arbutus with heavy lean on adjacent arbutus. Significant crack at base. Canker / blight.	Directionally hand fall. Minimize damage to adjacent trees.	Monitor / Future
27	Fdc	16.0	17.0	**H**	Edge of root rot opening. Spindly thinning top.	Directionally hand fall. Minimize damage to adjacent trees.	Monitor / Future
28	Fdc	37.0	12.0	M	Ugly tree at edge of root rot opening. Has fork with weak attachment. Rot likely in stem. Eradicate.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
29	Arbutus	27.0	13.0	**H**	Dead decadent arbutus with heavy lean on adjacent arbutus. Canker / blight.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
30	Arbutus	35.0	15.0	**H**	Dead standing arbutus. Canker / blight.	If safe to do so top at 8-10m. If not piece down or directionally hand fall.	Monitor / Future
31	Fdc	23.0	6.0	L	Dying tree on way out. Not much foliage. Eradicate.	Directionally hand fall. Minimize damage to adjacent trees.	Monitor / Future
32	Arbutus	36.0	24.0	M	Dead standing arbutus. Canker / blight.	If safe to do so top at 8-10m. If not piece down or directionally hand fall.	Monitor / Future
33	Arbutus	30.0	21.0	M	Dead standing arbutus with lean towards neighbouring property. Canker / blight.	If safe to do so top at 8-10m. If not piece down or directionally hand fall.	Urgent
34	Arbutus	30.0	24.0	M	Close to dead arbutus. Very few leaves left up top. Lean towards neighbouring property. Canker / blight.	If safe to do so top at 8-10m. If not piece down or directionally hand fall.	Urgent
35	Arbutus	27.0	21.0	M	Dead standing arbutus. Canker / blight.	If safe to do so top at 8-10m. If not piece down or directionally hand fall.	Urgent
36	Arbutus	32.0	18.0	M	Close to dead arbutus. Very few leaves left up top. Lean towards neighbouring property. Canker / blight.	If safe to do so top at 8-10m. If not piece down or directionally hand fall.	Urgent
37	Bg	31.0	15.0	**H**	Dead standing fir. Decadent with flaking bark and rot evident. Next to neighbours yard / trailer.	Piece down or directionally hand fall. Minimize damage to adjacent trees.	Urgent
38	Fdc	10.0	15.0	**H**	Dead standing spindly fir. Next to neighbours yard and trailer.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
39	Fdc	30.0	28.0	**H**	Dead standing fir. Next to neighbours yard / trailer.	Piece down or directionally hand fall. Min damage to adjacent trees.	Urgent
40	Fdc	26.0	25.0	M	Spindly tree with significant crown thinning. Within root rot centre. Eradicate.	Piece down or directionally hand fall. Minimize damage to adjacent trees.	Urgent
41	Fdc	9.0	18.0	M	Spindly tree with significant crown thinning. Within root rot centre. Eradicate.	Piece down or directionally hand fall. Minimize damage to adjacent trees.	Urgent
42	Arbutus	37.0	18.0	M	Declining tree. One fork is dead. Leaning against Trees 40 to 41. May have to remove or top when removing two adjacent trees.	Top to 8-10m or piece down entirely. Minimize damage to adjacent trees.	Urgent
43	Fdc	18.0	13.0	**H**	Dead spindly tree with heavy lean to neighbouring property. Roots likely compromised.	Piece down or directionally hand fall. Minimize damage to adjacent trees.	Urgent
44	Fdc	21.0	10.0	M	Spindly tree with significant crown thinning. Within root rot centre. Eradicate.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
45	Fdc	18.0	12.0	L-M	Spindly tree with significant crown thinning. Within root rot centre. Eradicate.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
46	Fdc	10.0	6.0	L	Small, spindly dead tree. Eradicate.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
47	Fdc	19.0	10.0	L	Small, spindly dead tree. Eradicate.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
48	Fdc	15.0	10.0	L	Small, spindly dead tree. Eradicate.	Directionally hand fall. Minimize damage to adjacent trees.	Urgent
49	Arbutus	28.0	15.0	M	Dead standing arbutus. Canker / blight.	If safe to do so top at 8-10m. If not piece down or directionally hand fall.	Urgent
50	Fdc	23.0	16.0	M	Tree with spindly crown. Edge of root rot centre. Eradicate.	Directionally hand fall. Minimize damage to adjacent trees.	Monitor / Future
51	Arbutus	26.0	11.0	M	Dead arbutus with heavy arch. Canker / blight.	If safe to do so top at 5-6m. If not piece down or directionally hand fall.	Monitor / Future
52	Arbutus	34.0	24.0	M	Dead standing arbutus. Canker / blight.	If safe to do so top at 8-10m. If not piece down or directionally hand fall.	Monitor / Future
53	Fdc	22.0	17.0	M	Tree with weak fork attachment. Potential to split off.	**Remove only small fork.** Use proper ISA Arboriculture limbing cuts. Piece down.	Monitor / Future
AVG:		**23.2**	**15.8**				

Tree Risk Summary:

Spp.	#	%
Arbutus	14	26
Fdc	22	42
Bg	17	32
Total	**53**	**100**

****All priority removal or modification (topping) trees were painted with a blue dot at the base of the stem with the tree number spray painted.**

11 (or 21%) of the trees are prescribed for topping if safe to do so (the bulk at Arbutus).
42 (or 79%) of the trees are prescribed for full removal.

Integrated Operations Group Inc.
#321-1180 Ironwood St.
Campbell River, BC
V9W 5P7
WorkSafe BC # - 928690

January 31, 2018

Attention: Chris van Ossenbruggen
Via email: cvanossenbruggen@rdn.bc.ca

Dear Chris,

RE: Glynneath Community Park – Harvesting Cost/Timber Valuation Assessment

INTRODUCTION AND OVERVIEW

Integrated Operations Group Inc. (IOG) was retained on behalf of Strategic Natural Resource Consultants Inc. (SNRC) to complete an analysis of operational costs and timber value for proposed works at Glynneath Community Park (the Park). The original scope of work was commissioned by the Regional District of Nanaimo (RDN) with the intent to better understand the cost implications and potential options for managing a number of trees recently affected with root-rot within the park.

The field review was completed by Shawn Mandula, RPF, ISA Certified Arborist on January 25th, 2018. The SNRC report titled "Tree Risk/Root Rot Assessment Report – Glynneath Community Park" and dated December 10th, 2017, was used to provide necessary background information and guide the assessment.

OBJECTIVES

The objectives for this assessment were as follows:

- Field assess trees proposed for immediate and future tree work (as well as previously felled and bucked trees lying on the ground) to determine harvesting options / costs and timber value.

OBSERVATIONS

The assessment confirmed many of the findings of the SNRC report, notably the varied health of the stand and root rot incidence. Due to the proximity to existing structures adjacent to the park, some of the trees identified for removal have the potential to strike public and private property and, therefore, pose a risk to the community.

Harvesting Options / Costs

Due to the fact that the project area is surrounded by roads, hydro lines, fences, structures and private property, most of the larger trees requiring removal will need to be pieced down manually by climbers. The majority of smaller diameter trees can be felled from the ground. From a cost perspective, it is recommended that all trees (those recommended for immediate removal, as well as those recommended for monitoring/future removal) are removed at the same time, in order to avoid additional costs of secondary mob/demob of equipment and resources.

Debris management will be the most significant component of the project. The proposed work will generate a significant amount of debris which will need to be managed in order to reduce fire fuel loading, as well as for aesthetics and pathogen control. IOG recommends constructing small temporary skid trails to allow access for a rubber-tracked compact excavator (e.g. Hitachi ZX50U or equivalent) in order to move logs and wood debris. The use of a small, rubber-tracked machine will minimize the potential for root and stem damages to residual trees. Logs can be skidded with the excavator and bucked into firewood at roadside, or bucked in the block and transported to roadside using a small rubber-tracked dumper unit. A smaller 6” chipper could be towed into the site to reduce the distance fine debris needs to be transported and minimize site disturbance. The chips would then be blown back into the site and evenly distributed. Over time, the chips will decompose into the soil acting as a slow-release fertilizer. If the RDN desires the chips to be removed, fine debris will first be forwarded to roadside by the compact excavator and/or using manual labour, and then chipped into a truck for disposal. An arborist or RDN representative could advise on the level of course woody debris that is left within the park, if any, as wildlife habitat and for aesthetics.

A possible value-added development opportunity would be to convert the temporary skid trail into a permanent walking path through the park which could be done with fairly minimal grubbing and grading with existing site equipment (compact excavator and dumper) and by laying acceptable trail capping (e.g. road crush gravel/blue-chip). Trees harvested on site could be milled/used for landscape or trail features (e.g. small benches).

IOG offers the following project scenario summary for the RDN's consideration:

- Piece down/fall all trees identified for immediate and/or future removal.
- Create a skid trail for access with compact excavator; if planning to further develop into permanent walking path, select skid trail location in conjunction with RDN rep and/or project arborist.
- Forward logs to roadside for processing into firewood, buck and stack logs into firewood for community pickup.
- Chip and blow fine debris back onto the site, evenly disperse.
- Complete final grubbing of trail.
- Complete trail construction (Place filter cloth, road crush, blue chip capping); target a finished trail width of 3m wide and close to existing grade.
- Complete any trail features as desired by the RDN (e.g. benches, railings, trail borders, etc.).
- An arborist should be on site intermittently through the project to advise on opportunities to mitigate impact to residual trees.

It is estimated the above scenario as described, including monitoring and trail construction could be completed for $24,000 - $29,000. Without trail construction, we estimate the work can be completed for $18,000 - $23,000. **Integrated Operations Group is willing to provide the services as described above to the RDN and for the pricing ranges shown.**

Salvage Potential / Log Value

IOG noted a number of Douglas-fir trees that were previously felled/pieced down for health reasons in addition to a number of other trees (mostly Douglas-fir as well) that had fallen naturally due to root rot/structural deficiencies. While a portion of these downed trees may be salvageable for lumber, the majority have been on the ground long enough that sap rot and/or insects have significantly degraded the log quality to the point where market value is significantly reduced. Douglas-fir logs in particular, once downed, are almost certain to be affected by the Ambrosia Beetle when left on the ground for over a year or through the flight window in the spring. Affected logs can be downgraded in market value by up to 30% or more from our experience. Sap rot only worsens the reduction in value.

The majority of the standing wood recommended for immediate and future removal is of poor log quality as well. Many of the trees identified have poor form, small piece size, broken tops, forked tops, excessive limb structure, rot and/or other qualities that significantly reduce market value. The majority of trees will likely be restricted to waste, pulp or chip and saw market sorts ($0 - $50/cubic meter), with a small percentage making gang, peeler and sawlog ($50 - $90/cubic meter). With the relatively low volume of salvageable wood available on site, and assuming the logs will be in random lengths (not bucked specifically to desirable market specs) we estimate the market value of the logs to be no more than $1200. However, when factoring in the extra time to handle the logs and haul the logs to a sort, the net profit will be almost negligible.

An alternative to trying to salvage logs for sale to market may be to process them into firewood. It is estimated that there could be 7-11 cords of salvageable firewood at the site (once trees have been taken down). At a sales value of approximately $250 per cord, the wood could bring $1750 - $2750 of value. However, acknowledging that the RDN will incur some costs to administer the sale of this wood,

the most attractive option may simply be to have the wood bucked as firewood and stacked at roadside for the community to take for free. The latter may realistically be the most cost effective option for the RDN.

SUMMARY

- Manual climbing/hand falling required for tree removal.
- Recommend removing all trees requiring immediate removal as well as future removal at the same time to reduce costs.
- Specialized, compact equipment should be used to reduce potential for damages to residual trees.
- The RDN is to decide what level of debris removal is acceptable (e.g. chips left on site, or full removal, coarse woody debris levels, etc.).
- There may be the opportunity to construct a small trail and/or benches/trail features concurrent with tree removal which would great improve park function and aesthetics.
- Trees to be removed have marginal quality and value for sale as logs. A better use may be to sell as firewood or give away for free to the community to save on transportation/delivery costs.
- Estimated pricing breakdown as follows:

Tree/Debris Removal	**($18000 - $23000)**
Trail Construction/Upgrade	**($6000)**
Wood Value (Firewood)*	**$1750 - $2750**
Total Cost	**($21,250 – $27250)**

***Additional costs apply if attempting to sell firewood (administration, etc.). Recommend just giving away to community or using internally for trail/park upgrades.**

LIMITATIONS

The quality and accuracy of this report are subject to the conditions and information present and/or available at the time of assessment, as well as the time expended by IOG to collect and produce this information. All of the information found within this document has been prepared for the Regional District of Nanaimo and is not intended for further distribution.

Feel free to contact us if you have any questions regarding the content of this report and/or to put our team to work. We can be reached at 250-914-8050 (office) or at smandula@iogl.ca.

Yours Truly,

Shawn Mandula, RPF, ISA Certified Arborist
IOG Operations Manager
Integrated Operations Group Inc.

Proposal Attachments:

- ☐ Terms of Engagement
- ☐ Fee Schedule
- ☐ General Services Brochure
- ☐ Proof of Liability Insurance
- ☐ Additional Information

REGIONAL DISTRICT OF NANAIMO

STAFF REPORT

TO:	Electoral Area Services Committee	**MEETING:**	April 10, 2018
FROM:	Stephen Boogaards Planner	**FILE:**	PL2017-130

SUBJECT: **Zoning Amendment Application No. PL2017-130**
575 Horne Lake Road – Electoral Area 'H'
Amendment Bylaw 500.416, 2018 Introduced – First and Second Reading
Lot 8, DD 51006N, District Lot 90, Newcastle District, Plan 1874, Except Part in Plan VIP63298

RECOMMENDATIONS

1. That the Board receive the Summary of the Public Information Meeting held on December 5, 2017.
2. That "Regional District of Nanaimo Land Use and Subdivision Amendment Bylaw No, 500.416, 2018" be introduced and read two times.
3. That the Public Hearing on "Regional District of Nanaimo Land Use and Subdivision Amendment Bylaw No. 500.416, 2018", be chaired by Director Veenhof or his alternate.
4. That the conditions set out in Attachment 2 of the staff report be completed prior to Amendment Bylaw 500.416, 2018 being considered for adoption.

SUMMARY

The applicant proposes to rezone a portion of the property from Agriculture 1 (AG1), Subdivision District 'B', to Rural 6 (RU6), Subdivision District 'D', to allow for the subdivision of a new lot from the parent parcel. The proposal is consistent with applicable Official Community Plan policies. It is recommended that the Board consider first and second readings of draft Amendment Bylaw 500.416, and forward the bylaw to Public Hearing. It is also recommended that the conditions outlined in Attachment 2 be completed prior to the Board's consideration of adoption of Amendment Bylaw 500.416.

BACKGROUND

The Regional District of Nanaimo has received an application from Island Pallet Solutions to rezone a portion of the subject property from Agriculture 1, Subdivision District 'B' to Rural 6, Subdivision District 'D' in order to allow for the subdivision of a lot of approximately 2.01 hectare along with an 8.93 hectare remainder parcel. The subject property is approximately 10.94 hectares in area and is partly within the Agricultural Land Reserve (ALR) (see Attachment 3 – Proposed Subdivision Plan). The property is located

east of Horne Lake Road, adjacent to properties in the ALR to the south, east and west, and adjacent to rural residential parcels to the north (see Attachment 1 – Subject Property Map).

Proposed Development

The applicant proposes to rezone a portion of the subject property from Agriculture 1 Zone, Subdivision District 'B' to Rural 6 Zone, Subdivision District 'D' to allow the creation of a new lot fronting on Horne Lake Road (see Attachment 3 – Proposed Subdivision Plan). The new lot boundary will be adjacent to the ALR boundary and within a hydro and gas utility right-of-way that crosses the property. The development is proposed to be serviced by well and on-site septic disposal.

The property is subject to the Environmentally Sensitive Area for Aquifer Protection Development Permit Area, and a development permit application will be required prior to the subdivision of the subject property.

Official Community Plan Implications

The subject property is partially within the Rural designation and partially within the Resource Lands designation pursuant to the "Regional District of Nanaimo Electoral Area 'H' Official Community Plan Bylaw No. 1335, 2017" (OCP). The proposed new lot is within the Rural designation, which supports a minimum parcel size of 2.0 hectares where a proposal meets the following criteria:

a) One dwelling unit per parcel
b) Bare land strata subdivision shall not be permitted
c) No frontage relaxation required
d) No further road dedication to accommodate parcel frontage or additional parcels
e) A comprehensive plan for subdivision of the area being rezoned is provided with a report from a recognized professional with a geotechnical and hydrogeological experience indicating an assessment of the environmental suitability of the subdivision.

To comply with the above criteria, the new lot is proposed to be rezoned to RU6, which will limit the number of dwellings units permitted on the proposed new lot to one. A Section 219 covenant is recommended to be registered on the title prohibiting Bare Land Strata subdivision as per the Strata Property Act and to ensure that the new lot is consistent with the proposed plan of subdivision (see Attachment 2 – Conditions of Approval).

The proposed remainder parcel is split designated within the Rural and Resource designation. The Resource designation allows for an 8.0 hectare minimum parcel size and applies to the portion of the proposed remainder parcel within the ALR. The proposed 8.93 hectare remainder on the balance of the Rural and Resource designated portions of the property is consistent with OCP policies.

OCP policies also include direction that zoning amendments should generally be requested to include some public amenity as part of the completed project, in recognition of the increased value conferred on land in the course of rezoning. The applicant is proposing $1,000 towards an electric vehicle charging station in Electoral Area 'H', which is a supported community amenity contribution in the OCP.

Land Use Implications

The existing AG1 Zone allows farm uses and permitted accessory farm uses on the ALR portions, and agriculture on non-ALR portions of the subject property. The proposed RU6 Zone on the new lot would support rural uses and restrict the residential use of the property to one dwelling unit as consistent with OCP policy (see Attachment 6 – Proposed Amendment Bylaw 500.416, 2018).

The applicant has submitted a proposed plan of subdivision to show the potential parcel shape and dimensions (see Attachment 3 – Proposed Plan of Subdivision). Proposed Lot A, the new lot, meets the frontage requirements of the *Local Government Act*, however, proposed Lot B will require a frontage relaxation.

While the proposed rezoning to facilitate subdivision is consistent with the OCP, there are currently RDN regulatory enforcement actions and investigations underway regarding certain activities on the property. These include ongoing enforcement under "Unsightly Premises Regulatory Bylaw No. 1073, 1996" (Unsightly Premises Bylaw) in relation to the accumulation of wooden pallets and other wood waste, several derelict vehicles, and other discarded and disused material on the property. The property is also currently the subject of an investigation into possible land use bylaw contraventions regarding commercial use unrelated to a principle permitted use, and is also the subject of a "Regional District of Nanaimo Waste Stream Management Licensing Bylaw No. 1386, 2004" compliance investigation into the possible disposal of municipal solid waste or recyclable material on the property. These regulatory matters are appropriately being addressed through investigation and enforcement of applicable regulations.

Proposed Amendment Bylaw 500.416, if adopted, would allow the land to be subdivided. While bylaw compliance investigation and any necessary enforcement will proceed separately from this zoning amendment application, confirmation of bylaw compliance would not be issued for the future subdivision of the land if the property is not in compliance with applicable RDN bylaws at that time.

In response to concerns raised regarding drainage from the property onto a neighbouring property, the applicant has provided a drainage report prepared by JE Anderson and Associates, dated March 9, 2018 to address drainage concerns. The report notes that the recently disturbed area adjacent to a private roadside ditch on the property is very small compared to the total drainage area and that the disturbance would not lead to any significant measurable increase in drainage flows. The report notes that water in the ditch ends up flowing through downstream properties, though most of the water in the ditch comes from upstream of the property. A BC Hydro roadside ditch in the right-of-way also contributes to the flows in the private roadside ditch on the subject property. In consideration of the future use of the property, and to ensure drainage from the property is addressed through development of the property, it is recommended that the applicant register a Section 219 covenant to require a stormwater management and drainage plan to be completed and implemented on the property prior to development or subdivision approval (see Attachment 2 – Conditions of Approval).

Concerns were also raised that nail accumulation through burning of pallets on the property could result in site contamination, and could preclude the keeping of livestock as a future agricultural use on the property. The issue was referred to Land Remediation Section of the Ministry of Environment and Climate Change Strategy. The Ministry responded that the activity does not constitute an industrial / commercial use under the Contaminated Sites Regulation and is not a concern with regard to site

contamination under its regulations. The issue was also referred to the Ministry of Agriculture, and the Ministry identified that burning of pallets and nail accumulation were not concerns under its authority. The Ministry further advised that nails could be screened by the property owner prior to keeping livestock, and that permanent crops would not likely be affected by the nails.

Environmental Implications

The proposed zoning amendment is required to demonstrate compliance with "Board Policy B1.21 Groundwater – Application Requirements for Rezoning Un-Serviced Lands" and OCP policy for the environmental suitability of the subdivision. The applicant has provided a Groundwater Potential and Aquifer Impact Review report prepared by Bayne Hydrogeologic Consulting and dated June 5, 2014 which provides a groundwater potential review and hydrological impact assessment of potential negative impacts to local aquifers in relation to subdivision of the property. The report anticipates that a well on each proposed lot could sustain the required water supply of 3.5 m^3 per day. The report also identifies the potential interference of the new wells and the Horne Lake – Qualicum Bay Waterworks District supply wells and recommends that hydrogeologic testing and analysis be completed at the time of well drilling to assess the cumulative interference with the community wells. The report also recommends conditions for on-site septic maintenance, rainwater infiltration to the ground, and limiting hazardous chemical storage as may be associated with agriculture or home based business.

Prior to the Board's consideration of adoption of the amendment bylaw, it is recommended that the applicant be required to register the Groundwater Potential and Aquifer Impact Review report as a Section 219 covenant with a clause requiring wells to be constructed and tested at subdivision stage, consistent with Board Policy B1.21. Given the potential impacts to the Horne Lake – Qualicum Bay Waterworks District supply wells, additional well tests are recommended as identified in the report (see Attachment 2 – Conditions of Approval). A Covenant will also implement the recommendations of the report, including compliance with recommendations for: wastewater disposal; rainwater management such as infiltration of rainwater to the ground and application of best practices to minimize potential erosion impacts by surface runoff; and restricting hazardous chemical storage and handling on the property. Since a portion of the parent property is within the ALR, approval of the covenant will be required by the Agricultural Land Commission.

Intergovernmental Implications

The application was referred to the Qualicum Bay – Horne Lake Waterworks District, as the subject property is situated within the well capture zone and well protection area for the community water supply well. Due to potential risks to groundwater supply from potential land uses, the Waterworks District recommends that the applicant complete a comprehensive hydrological study, which would include recommendations to address potential activities that could impact groundwater supply (see Attachment 5 - Qualicum Bay – Horne Lake Waterworks District Letter). The Section 219 covenant, recommended to be registered prior to the Board's consideration of bylaw adoption, will require a report to assess whether the cumulative interference between the any new wells for the subdivision and the community water supply well will be acceptable to the RDN and Qualicum Bay – Horne Lake Waterworks District. This assessment must also consider future activities on the lots, and measures to mitigate potential impacts.

With regard to the site contamination concerns identified during the PIM, the site profile for the property was submitted to the Land Remediation Section of the Ministry of Environment and Climate Change Strategy. The provincial *Contaminated Sites Regulation* under the *Environmental Management Act* requires a site profile as an initial screening tool for identifying sites that might be contaminated where sites have been used for industrial or commercial activities listed in Schedule 2 of the Regulation. The Land Remediation Section identified that, as the use of the property does not constitute an industrial / commercial use as per Schedule 2 of the Regulation, the Ministry's regulatory requirements are satisfied.

The application was also referred to the ALC for comment, given that a portion of the remainder is within the ALR. The ALC recommended the installation of buffering adjacent to the ALR boundary consistent with the Ministry of Agriculture's Guide to Edge Planning: Promoting Compatibility Along Agricultural – Urban Edges. However, given that the existing BC Hydro and Terasen Gas rights-of-way extends 42.5 metres into the proposed parcel from the ALR boundary and vegetation is managed within the right-of-way to mitigate impacts on utilities, no buffering is recommended.

Public Consultation Implications

A PIM was held on December 5, 2017, and 14 members of the public attended the PIM (see Attachment 4 – Summary of Minutes of the Public Information Meeting). The public in attendance identified concerns regarding the unsightly condition of the subject property, further subdivision, impact on the ALR, potential impact to the Horne Lake - Qualicum Bay community water wells, drainage concerns, potential site contamination and concerns regarding the potential for nails from burned pallets to impact livestock. In response to concerns raised at the PIM, the applicant has provided a drainage report from a professional engineer. Also in response to concerns raised, the Ministry of Environment and Climate Change Strategy and the Ministry of Agriculture were referred the application, and have advised that they are not concerned with the use of the property under their respective regulatory authorities regarding contaminated sites and agriculture. The recommended conditions of approval, outlined on Attachment 2, are intended to address the potential impacts of the proposed subdivision on groundwater and will also address drainage from the site.

A public hearing will be scheduled, subject to the direction of the Board, if the bylaw is given first and second reading. Consistent with Section 466 of the *Local Government Act*, the RDN will notify tenants within 50 metres of the subject property and property owners within 200 metres of the subject property, and a notice of the meeting will be placed in two consecutive editions of the Parksville Qualicum Beach News.

ALTERNATIVES

1. To proceed with Zoning Amendment Application No. PL2017-130, consider first and second reading of the Amendment Bylaw and proceed to public hearing.
2. To not proceed with the Amendment Bylaw readings and public hearing.

FINANCIAL IMPLICATIONS

Staff have reviewed the proposed development and note that the proposal has no implications related to the Board 2018 – 2022 Financial Plan.

STRATEGIC PLAN IMPLICATIONS

Staff have reviewed the proposed development and note that the Board 2016-2020 Strategic Plan's strategic priority Focus on the Environment is supported through the recommended conditions of approval, which address groundwater protection and runoff control.

Stephen Boogaards
sboogaards@rdn.bc.ca
March 15, 2018

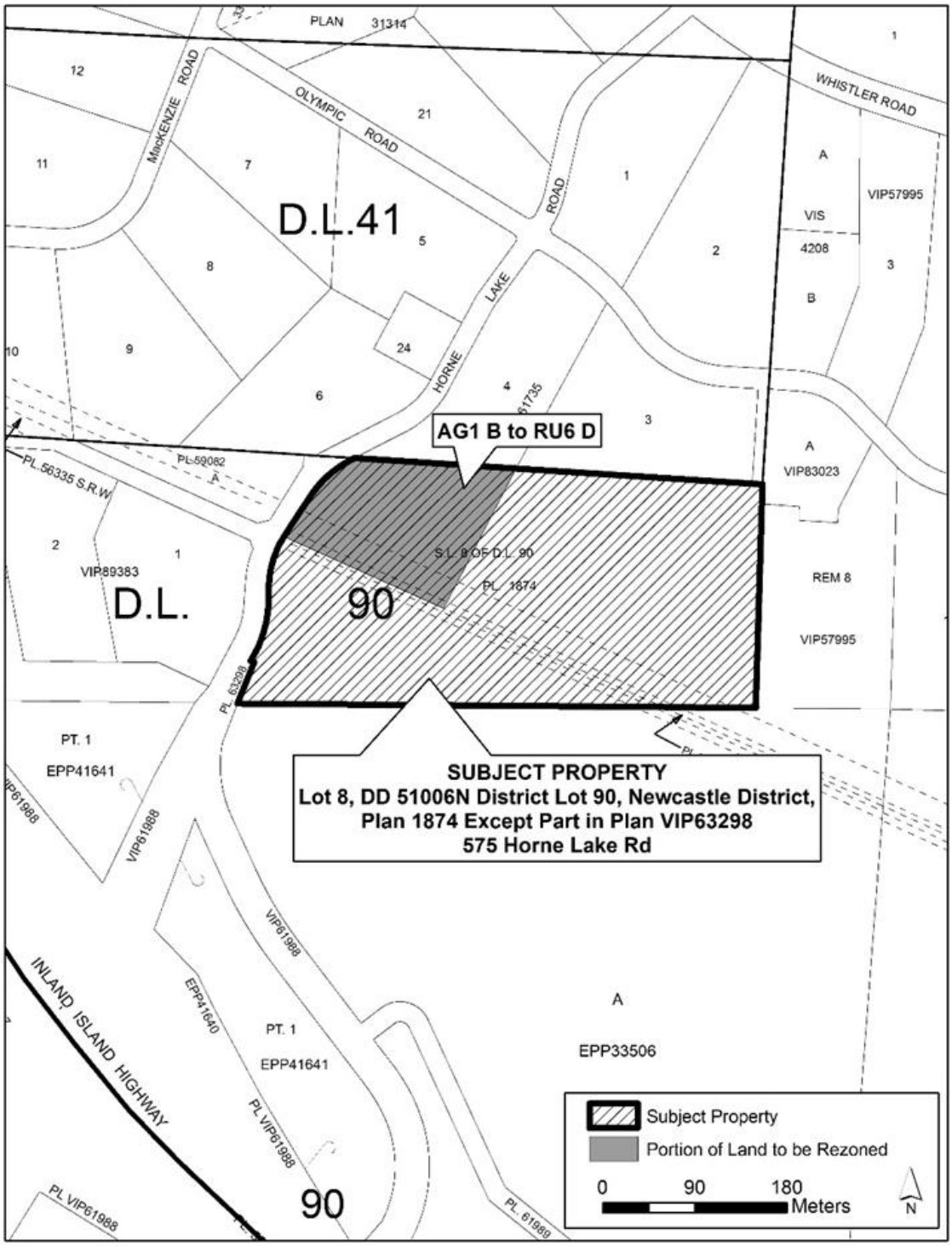
Reviewed by:

- J. Holm, Manager, Current Planning
- G. Garbutt, General Manager, Strategic & Community Development
- P. Carlyle, Chief Administrative Officer

Attachments

1. Subject Property Map
2. Conditions of Approval
3. Proposed Subdivision Plan
4. Summary of Minutes of the Public Information Meeting
5. Qualicum Bay – Horne Lake Waterworks District Letter
6. Proposed Amendment Bylaw No. 500.416, 2018

Attachment 1
Subject Property Map



Attachment 2
Conditions of Approval

The following is required prior to the "Regional District of Nanaimo Land Use and Subdivision Amendment Bylaw No. 500.416, 2018" being considered for adoption:

Conditions of Approval

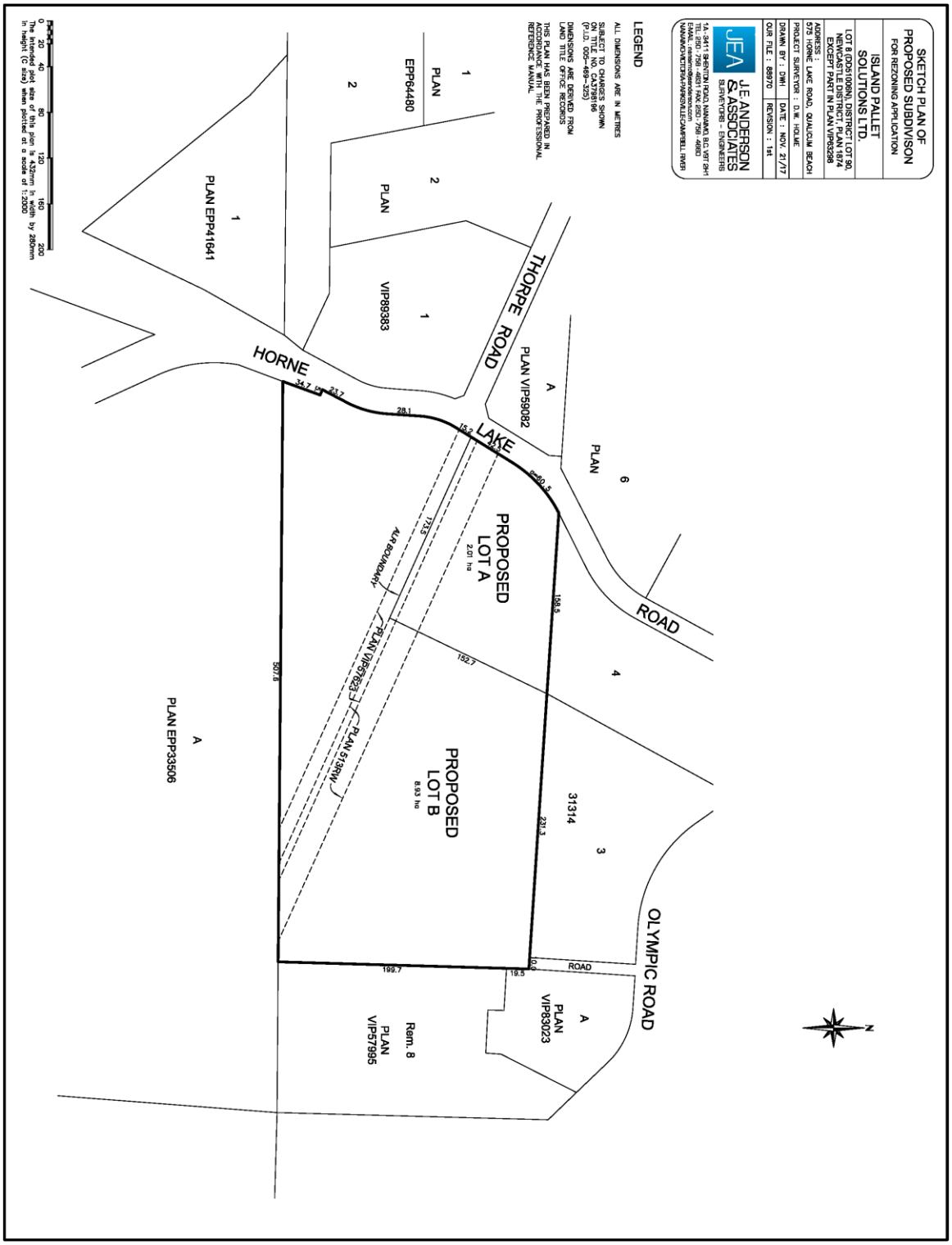
1. The applicant shall register, at the applicant's expense, a Section 219 Covenant on the property title requiring that the development shall be in compliance with the proposed Plan of Subdivision and that no Bareland Strata subdivision as per the Strata Property Act shall be permitted.

2. The applicant is required to register, at the applicant's expense, a Section 219 Covenant on the property title requiring that the development of the land occur in a manner consistent with the Groundwater Potential and Aquifer Impact Review report prepared by Bayne Hydrogeologic Consulting dated June 5, 2014, including recommendations in the report for waste water management, rainwater management, and restrictions on hazardous chemical storage and use.

3. The applicant is required to register, at the applicant's expense, a Section 219 Covenant on the property title stating that wells be constructed and tested in accordance with Board Policy B1.21, and that no subdivision shall occur until such time that a report from a Professional Engineer (registered in BC) has been completed to the satisfaction of the Regional District of Nanaimo confirming that the wells have been pump tested and certified including well head protection, and that the water meets Canadian Drinking Water Standards. The engineer is also to confirm further testing requirements identified in the Groundwater Potential and Aquifer Impact Review report prepared by Bayne Hydrogeologic Consulting dated June 5, 2014, and provide appropriate mitigation for potential impacts from activities occurring on the lots to the Qualicum Bay - Horne Lake Waterworks community water supply to the satisfaction of the RDN and the Qualicum Bay – Horne Lake Waterworks District.

4. The applicant shall register, at the applicant's expense, a Section 219 Covenant on the property title stating that no development or subdivision shall occur until a Stormwater Management Plan be prepared and implemented to the satisfaction of the Regional District of Nanaimo.

Attachment 3
Proposed Subdivision Plan



Attachment 4
Summary of the Public Information Meeting
Held at Lighthouse Community Hall
240 Lions Way, Qualicum Bay
December 5, 2017 at 6:30 pm
RDN Application PL2017-130

Note: This summary of the meeting is not a verbatim recording of the proceedings, but is intended to summarize the comments and questions of those in attendance at the Public Information Meeting.

There were 14 members of the public in attendance at this meeting.

Present for the Regional District of Nanaimo:

Director Bill Veenhof, Electoral Area 'H' (the Chair)
Stephen Boogaards, Planner
Greg Keller, Senior Planner

Present for the Applicant:

Fernando Costa, Subject Property Owner

The Chair opened the meeting at 6:30 pm, outlined the evening's agenda, and introduced the RDN staff and the applicant in attendance. The Chair then stated the purpose of the Public Information Meeting and asked RDN staff to provide background information concerning the development application.

Stephen Boogaards provided a brief summary of the proposed Zoning Amendment application, supporting documents provided by the applicant, and the application process.

The Chair invited the applicant to give a presentation of the development proposal.

Fernando Costa, Island Pallet Services, presented an overview of the proposal. About one third of the property is within the Agricultural Land Reserve. The proposed subdivision will be consistent with the character of neighbouring properties. He also explained that the proposal is consistent with the policies of both the old and draft Official Community Plan, including conditions for one dwelling unit and no frontage relaxation for the new lot.

Keith Nickerson, Kenmuir Road, Chair of the Qualicum Bay Waterworks, asked the applicant what activities would be planned on the properties and for the Agricultural Land Reserve portion. Fernando Costa answered just residential. He was not sure about the Agricultural Land Reserve portion.

Elsa Heeps, 2910 Olympic Road, stated she witnessed the clean-up of the property by DBL, and indicated that the property is becoming unsightly again. Ms. Heeps stated that applicant has not respected the neighbourhood or environment. She also noted that semi-trailers full of garbage and pallets are coming onto the property and indicated that no one from the RDN came out to look at the property. Ms. Heeps spoke to her concern to being allowed to gain value through rezoning.

Rick Golson, 2910 Olympic Road, stated he was concerned about logging on the subject property and their trees dying as a result. Mr. Golson explained that the applicant had cleared the entire hillside of trees which affected drainage on their property. Mr. Golson also stated that during the property clean up there was nothing but garbage. He does not understand how the applicant can profit from the land after turning the land into a garbage dump. Mr. Golson stated that no one from the RDN will come to look at the garbage.

Roy Clemens, 510 Horne Lake Road, stated he has been in the community for 40 years and walked the property and is concerned with the current state of the property. He was concerned that future property owners would not be aware of potential contamination. He also identified that the plan of subdivision had changed since the neighbouring properties were notified, going from 2.01 hectares to 2.93 hectares.

Debbie Hughes, 475 Mackenzie Road, asked if the property is proposed to be sold, why the pallets are on the property. Fernando Costa answered to burn stumps and debris.

Aaron Johnson, 570 Horne Lake Road, explained that using pallets was a great way to get rid of stumps and debris.

Terry Mayer, 655 Horne Lake Road, stated that one of the pallet burn piles was on his property. Mr. Mayer explained that burning has created a concern because of the nails. The nails are now buried in the ground and as a result the entire property would need to be stripped, otherwise the property could not accommodate agriculture and the keeping of animals.

Maggie Little, 209 Huson Road, stated she supports agricultural land and does not support subdivision. She stated the region needs food and she disagrees with taking land out of the Agricultural Land Reserve. The property needs to be remediated. Fernando Costa explained that land was not being taken out of the Agricultural Land Reserve.

Terry Mayer, 655 Horne Lake Road, stated that pallet burn piles did not have adequate venting and left in a half lit state. Mr. Mayer indicated the property still contains piles with nails spread everywhere and further spoke to his concerns with nail contamination.

Elsa Heeps, 2910 Olympic Road, stated that the burn piles were pallets and that the applicant was getting rid of industrial waste. Fernando Costa stated he was only burning stump piles.

Aaron Johnson, 570 Horne Lake Road, stated that they were stump piles and identified the material removed was industrial forms

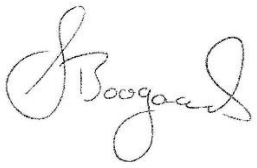
Jennifer Moffatt, 570 Horne Lake Road, identified that the proposal is about the future, and not the past and is about making the property usable.

Aaron Johnson, 570 Horne Lake Road, identified the proposal as providing housing and rentals housing. Mr. Johnson also identified that that a farm on the property can benefit them, and that their farms can work in partnership.

The Chair asked if there were any further questions or comments.

Being none, the Chair thanked those in attendance and announced that the Public Information Meeting was closed.

The meeting was concluded at 6:58 pm.



_____

Stephen Boogaards
Recording Secretary

Attachment 5
Qualicum Bay – Horne Lake Waterworks District Letter

Qualicum Bay-Horne Lake Waterworks District
234 Lions Way, Qualicum Bay, BC V9K 2E2
Tel: (250) 757-8507 ~ Office: Mon-Fri, 12:30-4:00 pm

November 28, 2017

Stephen Boogaards
Planner, Strategic & Community Development
Regional District of Nanaimo
6300 Hammond Bay Road
Nanaimo, BC V9T 6N2
sboogaards@rdn.bc.ca

Re: Zoning Amendment Application for 575 Horne Lake Road

The Wellhead Protection Committee met on Tuesday November 28, 2017 to consider your request for concerns regarding the rezoning of the property at 575 Horne Lake Road. As this property is located within our well capture zone our concerns would be:

- Agriculture: heavy chemical use farming, pesticides and fertilizers, manure storage;
- Transportation Corridors; fuel spills on highways, roadsalts
- Commercial; gas stations, paint strippers, dry cleaners, auto body and repair;
- Industrial: chemical, petroleum, wood processing, food processing;
- Municipal; storm water runoff, pesticides and fertilizers; and
- Residential: septic systems, abandoned well, sewer mains.

With the high risks being;

- Flowing artesian conditions along the base of the Horne Lake Road escarpment;
- Fertilizers and pesticides from agriculture operations; and
- Large fuel spill most likely to occur along a major roadway.
- Manure storage

In the Bayne Hydrogeologic Consulting study of 2014, page 4 reads ``Given the proximity of the Horne Lake-Qualicum Bay Waterworks District supply well and the upgradient property location relative to the water supply well, some well to well interference may be observed between the new water supply well. Hydrogeologic testing and analysis is recommended at the time of the property water supply wells are drilled so that site specific data may then be used to assess whether the cumulative interference between the new water supply wells and the Horne Lake-Qualicum Bay Waterworks District supply be acceptable.

We therefore feel that the property owner should be obligated to complete a comprehensive hydrogeological study, taking into account any activity on the parcels that would impact our groundwater supply.

Thank you.
Leigh Campbell, Chair of the Wellhead Protection Committee

Attachment 6
Proposed Amendment Bylaw No. 500.416, 2018

REGIONAL DISTRICT OF NANAIMO
BYLAW NO. 500.416

A BYLAW TO AMEND REGIONAL DISTRICT OF NANAIMO
LAND USE AND SUBDIVISION BYLAW NO. 500, 1987

The Board of the Regional District of Nanaimo, in open meeting assembled, enacts as follows:

A. This Bylaw may be cited as "Regional District of Nanaimo Land Use and Subdivision Amendment Bylaw No. 500.416, 2018".

B. The "Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987", is hereby amended as follows:

1. By rezoning the lands shown on the attached Schedule '1' and legally described as part of

Lot 8, DD 51006N, District Lot 90, Newcastle District, Plan 1874, Except Part in Plan VIP63298

from Agricultural 1 Subdivision District 'B' to Rural 6 Subdivision District 'D'

Introduced and read two times this ___ day of _____ 20XX.

Public Hearing held this ___ day of _____ 20XX.

Read a third time this ___ day of _____ 20XX.

Approved by the Minister of Transportation and Infrastructure pursuant to the *Transportation Act* this ___ day of _____ 20XX.

Adopted this___ day of _____ 20XX.

CHAIR

CORPORATE OFFICER

Schedule '1' to accompany "Regional District of Nanaimo Land Use and Subdivision Amendment Bylaw No. 500.416, 2018".

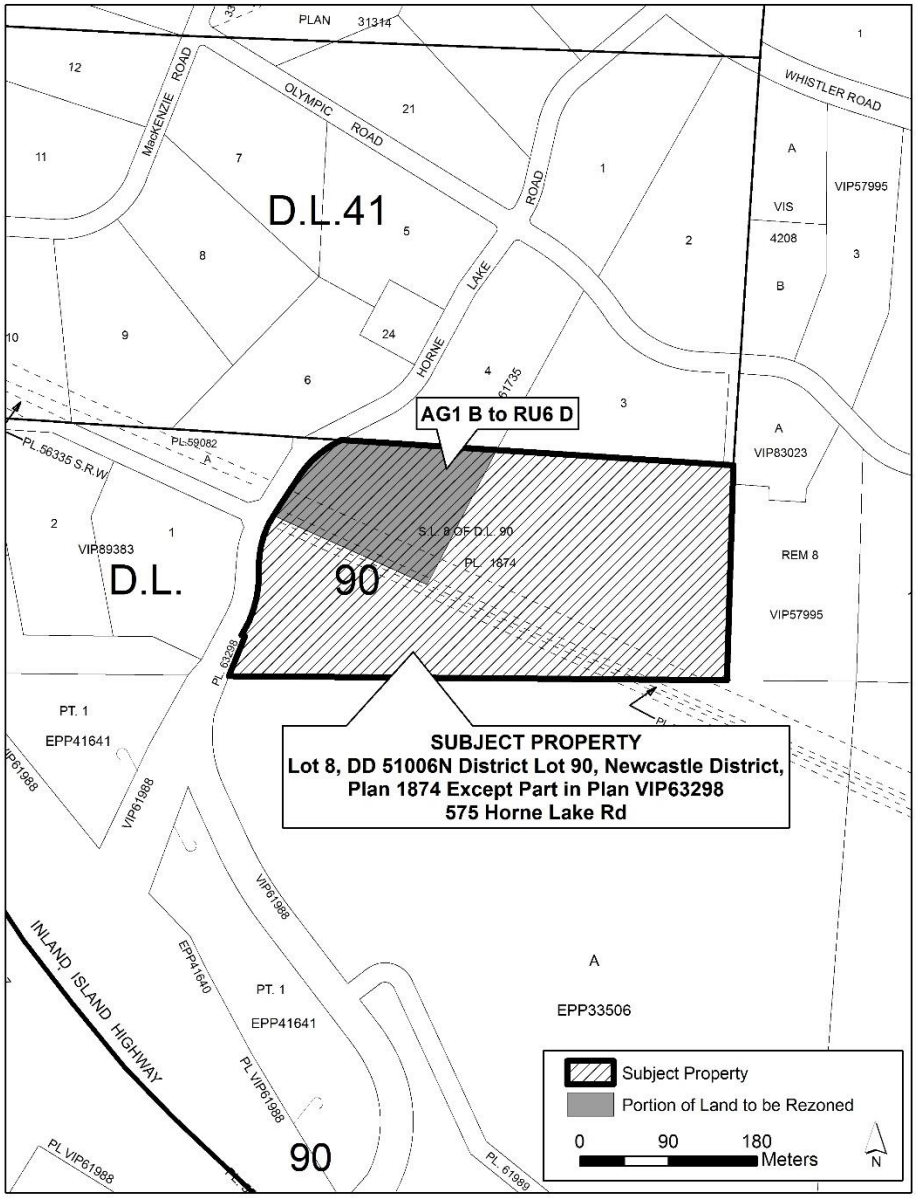
_____

Chair

_____

Corporate Officer

Schedule '1'



REGIONAL DISTRICT OF NANAIMO

STAFF REPORT

TO:	Electoral Area Select Committee	**MEETING:**	April 10, 2018
FROM:	Elaine McCulloch Parks Planner	**FILE:**	2017-016
SUBJECT:	Dunsmuir Community Park Phase 1 Construction		

RECOMMENDATIONS

1. That the Preferred Conceptual Plan for Dunsmuir Community Park be approved.
2. That up to $100,000 be allocated from the Electoral Area 'H' Community Works Funds for the Dunsmuir Community Park Phase 1 Development.
3. That staff proceed with tendering Phase 1 of Dunsmuir Community Park.

SUMMARY

The Dunsmuir Community Park Preferred Conceptual Plan is now complete and construction drawings are underway. The Preferred Conceptual Plan reflects the feedback gathered through a master planning process and input from the Electoral Area 'H' Parks and Open Space Committee. The estimated Phase 1 project cost is $215,000 of which funds in the amount of $115,000 have been allocated from the 2018 Electoral Area 'H' Community Parks Budget. In order to proceed with Phase 1 construction $100,000 from Electoral Area 'H' Community Works Funds is required.

BACKGROUND

During the development of the *Draft RDN Recreation Services Master Plan for District 69*, enhancing or providing new parks and outdoor space was requested by individuals and organizations. In addition, the provision of pickleball courts throughout District 69 was desired. As part of the Recreation Services Master Plan development process, the *State of Recreation in District 69 Research Report* identified that 92% of Electoral Area 'H' residents visit Parks in the area and 42% utilize local playgrounds.

The *Community Parks and Trails Strategy (2014),* identifies the preparation of a Dunsmuir Community Park Master Plan as a key Project Action for Electoral Area 'H'. A master planning process for Dunsmuir Community Park was completed in 2016 and Electoral Area 'H' Parks and Open Space Advisory Committee's (POSAC) Five Year Planning Workplan identifies the park's construction as a high-priority project. Based on input provided from the community and from the Electoral Area 'H' POSAC, park development is to include a playground with traditional play equipment suitable for the 2-5 and 5-12 age groups and youth, a new sports court, and off road parking. Once these elements have been completed, future park development will focus on the development of a network of park trails/boardwalks throughout the remainder of the Park. At the January 24, 2017 Board meeting the following motion was passed.

> *That staff proceed with preparing construction drawings for Concept Plan A for Dunsmuir Community Park.*

The Dunsmuir Community Park Preferred Concept Plan is complete (Attachment 1) and construction drawings are underway.

At their February 28th, 2018 meeting the Electoral Area 'H' Parks and Open Space Advisory Committee provided the following motions:

> *That the Preferred Conceptual Plan for the construction of Dunsmuir Community Park is to include a new sports court, off-road parking, concrete paths, a shade structure, public art wood carvings, and play equipment.*
>
> *That the construction of Dunsmuir Community Park be completed in two phases - Phase 1 to include the sports court and parking lot and Phase 2 to include the playground and remaining park elements.*

ALTERNATIVES

1. That the Preferred Conceptual Plan for Dunsmuir Community Park be approved, up to $100,000 be allocated from the Electoral Area 'H' Community Works Funds for the Dunsmuir Community Park Phase 1 Development, and staff proceed with tendering Phase 1 of Dunsmuir Community Park.

2. That the Preferred Conceptual Plan for Dunsmuir Community Park be approved and the tendering of the project be deferred until an alternate source of funds in the amount of $100,000 can be secured in order to advance the project.

3. That alternative direction be provided.

FINANCIAL IMPLICATIONS

The estimated project costs for Phase 1 Dunsmuir Community Park are $215,000. Included in 2018 budget for Electoral Area 'H' Community Parks is $85,000 funded from Capital Reserves, $20,000 from Operations, and a $10,000 donation. In order to proceed with Phase 1 construction, $100,000 from Electoral Area 'H' Community Works Funds (CWF) is required. This amount has been determined to be available after factoring in other 2018 CWF project commitments in Electoral Area 'H'.

2018 Project Costs - Dunsmuir CP Phase 1

Item	Amount	
2018 Construction Drawings, professional fees	$ 10,000	
2018 Phase 1 Construction (including 20% contingency)	$ 205,000	
Total Project Costs		**$ 215,000**

2018 Project Funding Sources - Dunsmuir CP Phase 1

Source	Amount	
2018 EA 'H' Community Parks – Capital Reserves	$ 85,000	
2018 EA 'H' Community Parks - Operations	$ 20,000	
2015 Donation	$ 10,000	
Total Project Funds		**$ 115,000**
EA 'H' Community Works Fund Grant	$ 100,000	
Total CWF Requested Funds		**$ 100,000**
TOTAL PROJECT FUNDS REQUIRED		**$ 215,000**

Once Phase 1 and Phase 2 are complete, the estimated yearly maintenance costs for the improved park facility is $7,500 which includes regular maintenance services, garbage pick-up services, porta-potty services and water connection fees. This is an increase of $5,220 from 2017 maintenance costs. Park Operations staff hours would be approximately 105 hrs (15 days) per year and would involve playground inspections (every 90 days), regular park inspections and minor maintenance (every 2 weeks), and power washing of the sports court and play equipment (once a year).

STRATEGIC PLAN IMPLICATIONS

The Strategic Plan 2016-2020 identifies a focus on Service and Organizational Excellence and through the development of Dunsmuir Community Park, the Regional District of Nanaimo will provide a critical recreational amenity for the residents of Electoral Area H.

Elaine McCulloch

Elaine McCulloch
emcculloch@rdn.bc.ca
March 23, 2018

Reviewed by:

- W. Marshall, Manager, Parks Services
- W. Idema, Director of Finance
- T. Osborne, General Manager, Recreation and Parks
- P. Carlyle, Chief Administrative Officer

Attachments

1. Dunsmuir Community Park Preferred Concept Plan

PLANT LIST

Key	Qty	Botanical Name	Common Name	Pot Size	Spacing
Deciduous Shade Tree					
Am		Acer macrophyllum	Big Leaf Maple	#5	
Play Space Plantings					
Evergreen Shrubs					
Gs		Gaultheria shallon	Salal	#1	60 cm o.c.
Mn		Mahonia nervosa	Dull Oregon Grape	#1	60 cm o.c.
Vo		Vaccinium ovatum	Evergreen Huckleberry	#1	60 cm o.c.
Ground Cover					
Auu		Arctostaphylos uva-ursi	Kinnikinnick	10 cm	45 cm o.c.
Fv		Frageria vesca	Wild Strawberry	10 cm	45 cm
Ferns					
Pm		Polystichum munitum	Sword Fern	#1	60 cm o.c.
Perennials/Grasses					
My		Miscanthus yaku jima	Maiden Grass	#1	60 cm o.c.
Nd		Nepeta dropmore blue	Catmint	#1	60 cm o.c.
Pa		Penisetum alopecuroides	Fountain Grass	#1	60 cm o.c.
Buffer with Neighbours					
Deciduous Shrubs					
Aa		Amelanchier alnifolia	Saskatoon	#1	1.2m o.c.
Cs		Cornus sericea	Red Osier Dogwood	#1	1.2m o.c.
Hd		Holodiscus discolor	Ocean Spray	#1	1.2m o.c.
Oc		Oemleria cerasiformis	Indian Plum	#1	1.2m o.c.
Pca		Physocarpus capitatus	Pacific Ninebark	#1	1.2m o.c.
Rs		Ribes sanguineum	Red Flowering Currant	#1	1.2m o.c.
Rn		Rosa nutkana	Nootka Rose	#1	1.2m o.c.
Rp		Rubus parviflorus	Thimbleberry	#1	1.2m o.c.
B		Vaccinium	Blueberries	#1	1.2m o.c.
Wetland Plants for Bioswale					
Co		Carex obnupta	Slough Sedge	#1	60 cm o.c.
Ie		Iris ensata	Blue Flag Iris	#1	60 cm o.c.
Sm		Scirpus microcarpus	Small-flowered Bulrush	#1	60 cm o.c.

NOTES:

1. Seed Mix to be Pickseed Coastal Native Sodgrass Mixture, or equivalent.

DESIGN ELEMENTS


1 PLAY POLES
special feature for the play ground, marks the entrance, directs children's movement around and through space, makes space visible from a distance, adds colour & interest to the area


2 BOARDWALK & LOOKOUT
focal point for playground, provides sheltered space for sitting, marks edge of playground and forest/wetland


3 CIRCULAR PAVED PATH
defines space, connects play ground elements, provides continous movement for children on foot or on wheels, accessible to most users


4 NATURAL PLAY AREA
provides play for younger children, utilizes natural elements for play, logs for balancing, sitting, imaginative play (log is a boat, house, kitchen, dinosaur, etc.), sand to manipulate, enclosed by low grassy meadow hill


5 GRASSY HILLS
shape the play space, provide up & down movement for children, form a look out over the play ground, create a barrier from adjacent properties and parking

VICTORIA DRAKEFORD
LANDSCAPE ARCHITECT
236 Pine St Nanaimo BC V9R 2B6
250-754-4335
victorialandscapearchitect@gmail.com

KATE STEFIUK STUDIO
1070 Nelson St Nanaimo BC V9S 2K2
250-753-8093
kate.stefiuk@gmail.com

CLIENT

NO.	DATE	ISSUE
1	18-02-05	80%

NO.	DATE	REVISION

PROJECT

DUNSMUIR COMMUNITY PARK

326 Horne Lake Road
Qualicum Beach, BC

LANDSCAPE PLAN

PROJECT 17010
DB KS **CB** VD

SCALE 1:250
DATE Febuary 05, 2018

L1.01

REGIONAL DISTRICT OF NANAIMO

STAFF REPORT

TO: Electoral Area Services Committee **MEETING:** April 10, 2018

FROM: Kelsey Cramer
Parks Planner **FILE:** 6140-20A

SUBJECT: Electoral Area 'A' – Driftwood Road Beach Access Improvements

RECOMMENDATIONS

1. That staff proceed with the final design, permitting and construction of the Driftwood Road beach access trail improvements in 2018.

2. That up to three parking spaces be designed and constructed in 2019 with $15,000 allocated in the 2019 Electoral Area 'A' Community Parks budget.

SUMMARY

The undeveloped Driftwood Road allowance was identified as a priority for site improvements by the Electoral Area 'A' Parks, Recreation and Culture Commission (PRCC) following the 2014 Beach Access Inventory for Electoral Area 'A'. The site currently contains an informal footpath and rope descent to the beach. Proposed trail improvements include a staircase to the beach and a culvert near the trailhead. The RDN would undertake site improvements and maintenance under Permit from the Ministry of Transportation and Infrastructure (MoTI).

The PRCC received a neighbourhood feedback summary at their February 21, 2018 meeting and discussed the project. The Commission recommends that the project proceed and ensure that adequate parking for 2-3 vehicles is also present at the site.

Driftwood Road would become the RDN's third oceanfront MoTI Permit in Area 'A'. Capital funding of $45,000 is included in the 2018 budget.

BACKGROUND

In September of 2014, the Electoral Area 'A' Parks, Recreation and Culture Commission completed a Beach Access Inventory of 28 ocean-front beach accesses in MoTI road allowance. The RDN currently holds two MoTI permits in Area 'A' for ocean-front beach accesses: A-24, Nelson Rd boat launch and A-06 on Pylades Dr. At the regular PRCC meeting, November 19, 2014, two additional beach accesses (A-20, Driftwood Rd and A-10, Pylades Dr) were identified as potential priorities for the RDN to consider improving under Permit with MoTI in Electoral Area 'A'. In June 2015, A-18, Headland Rd was also included in the potential priority list and sites were visited by Commissioners. In considering priorities, thought was given to relative ease of the project, opportunity to improve safety/site conditions and whether a walking loop could be created or enhanced.

At the July 28, 2015 Board meeting, a motion was passed for staff to commence the design and permitting of the A-20 Driftwood Rd beach access in Electoral Area 'A' and to allocate project costs in the 2016 budget.

> *That staff be directed to commence in 2015 the concept, design and permitting of the A-20 beach access in Electoral Area 'A' and allocate the project's costs in the 2016 budget.*

Herold Engineering was retained, and a preliminary design for an aluminum staircase was prepared. Site improvements also propose a culvert near the existing trailhead (see Attachment 1). The Ministry of Transportation and Infrastructure has reviewed the drawings and has no concerns regarding issuing a Permit as the works are clearly planned within the right-of-way boundary.

Neighbourhood Input

Neighbourhood feedback for the proposal was sought at a site meeting on November 4, 2017. Park staff, the Electoral Area 'A' Director and one Commissioner were on site to speak with attendees and answer questions. At the meeting, some attendees expressed concern that the site would become more popular and used by non-neighbourhood residents if the improvements occur. Others spoke to the importance of improving walkability, trail connectivity and beach access in the area. Twenty-six area residents signed into the meeting, with seventeen formally providing comment via feedback form or email (Attachment 2).

Overall, just over half the responses received were supportive of the stairs and culvert, with most not wanting any other improvement, such as parking, toilets or garbage can. Two respondents expressed support for these amenities or others such as a bike rack, canoe stand and horse hitch. Just under half of the responses received were not supportive of the RDN undertaking any work on the MoTI road allowance, primarily because of concern that quiet the neighbourhood will become congested and heavily used by the greater community. Several of the respondents suggested that the RDN focus on Shasta Road (A-19), where there is an existing trail, rock stairs and a larger beach. Improvements suggested for the Shasta Road site include trail maintenance and parking consideration.

Direct neighbours to the Driftwood Road allowance have concerns about privacy, beach fires, and wildlife/human/dog conflicts. On January 22, 2018 staff met with neighbours to the north of the road allowance to discuss their concerns and their request to cost-share a fence (50/50) to help mitigate privacy issues. A contribution by the RDN of $3,320 (excluding taxes) for 50% of their fence cost would result. Staff also met with the neighbours to the south on January 26th, regarding their interest in additional vegetation to help screen the trail if it is to become more heavily used. It is anticipated that a contribution by the RDN for 7 hedge shrubs would be approximately $280.

An environmental assessment for the project area was completed and it recommends that clearing be avoided during the peak bird nesting period between March 15 and August 15 and that an appropriate buffer zone be implemented around active raptor nests, if applicable, and monitored until the chicks fledge. Contactor care is also recommended, including no equipment refueling or servicing within 30m of the marine environment and ensuring that a fully stocked spill kit is available on the site.

Regarding beach fires, typical RDN park regulatory signage including 'no fires', would be posted on the trail. The foreshore, however, is under provincial and federal jurisdiction. In addition, first responders at the North Cedar Fire Department were consulted regarding the project and have no recollection of calls for beach fires at this location. They have noted support for the stairs because of difficulty extricating patients up the bank when they have previously responded to medical calls at this site.

At the February 21, 2018 PRCC meeting, the Commission received the neighbourhood feedback summary and discussed the project, including the recent loss of adjacent roadside parking for two vehicles due to the placement of soil for planting beds by a neighbour. The Commission concluded that the project should proceed as currently presented with the addition of ensuring that adequate parking for 2-3 vehicles is present at the site.

> *That staff proceed with the Driftwood Road beach access improvements with the addition of ensuring that up to 3 parking spaces are available.*

While a small developed parking area could be created in front of the trailhead by clearing blackberries, installing a culvert, and applying suitable base and surface gravels, it is possible for two to three cars to find parking along sections of the road shoulder near the trailhead. Should parking be a desired amenity at this site in the future, or should it be warranted due to increased use, then there is the space to design and install a parking area that could hold approximately 5 vehicles within the Driftwood Road allowance.

ALTERNATIVES

1. That staff proceed with the final design, permitting and construction of the Driftwood Road beach access trail improvements in 2018 and allocate $15,000 in the 2019 budget for the design and construction of up to 3 parking spaces in 2019.

2. That staff proceed with the final design, permitting and construction of the Driftwood Road beach access trail improvements in 2018 and not plan for additional parking at this time.

3. That staff not proceed with the final design, permitting and construction of the Driftwood Road beach access trail improvements in 2018 and alternative direction be provided.

FINANCIAL IMPLICATIONS

The 2018 budget for Electoral Area 'A' Community Parks has allocated $5,000 for professional engineering fees and $45,000 to construct the trail improvements at the Driftwood Road beach access. It is anticipated that the additional items (vegetation and fence contributions) can be accommodated within this budget. The RDN will have no future responsibility towards the fence or hedge therefore no operational costs are associated with these elements.

Parking was not originally proposed for the site. Based on other recent parking design projects, an estimated $12,000 + 25% contingency should be allocated for the design and install of a small parking area up to 3 stalls within the Driftwood Road allowance near the trailhead. The work would include clearing blackberry, installing a culvert and suitable ditching, and applying base and surface gravels. If a parking area is to be provided for in 2018, additional funds would be necessary, or $15,000 could be allocated in the 2019 budget. Costing will be refined with preliminary design of the parking area.

Operational costs associated with the trail and stairs are considered regular and expected to result in a $500 annual increase to the Electoral Area 'A' Community Parks operation budget. Staff time of ½ day per month is expected to carry out safety inspections, clean and repair the trail and seasonally brush the corridor. No additional expenses are anticipated for First Responders, who have indicated support for the project.

STRATEGIC PLAN IMPLICATIONS

The Driftwood Rd beach access improvement project touches on the RDN's strategic plan focus areas of Relationships and Service and Organizational Excellence. The consultation process relied on two-way communication between the Regional District and the neighbourhood to strengthen relationships. The actual installation of the stairs will improve community walkability and provide a safer opportunity to access the beach.

_____

Kelsey Cramer
kcramer@rdn.bc.ca
March 23, 2018

Reviewed by:

- W. Marshall, Manager, Parks Services
- T. Osborne, General Manager, Recreation and Parks Services
- P. Carlyle, Chief Administrative Officer

Attachments

1. Site Plan - Driftwood Rd Beach Access Improvements
2. Driftwood Road Beach Access Neighbourhood Input Summary


1879
Bostrom Rd
1880
Driftwood Rd
1892
1900
Parking is not currently proposed.
A small parking area could be
considered here.
Existing pathway alignment
NORTH
1+000
1+020
1+040
EXISTING PATH
1+060
CENTRELINE OF PATH
1+080
1+100
1+120
1+128
EXISTING DITCH, INSTALL CULVERT,
SEE DETAIL
Proposed culvert
PROPERTY LINE, TYPICAL
PLAN
1:200
EXISTING PATH ON
ADJACENT PROPERTY
STAIRS, SEE DWG. S03
PATH TO BE
CONSTRUCTED AND
REDIRECTED TO STAIRS
Proposed
stairs
EXISTING PATH TO BE
DISCONTINUED
TOP OF BANK
BOTTOM OF BANK
Prepared for Neighbourhood Meeting
November 4, 2017
Accuracy Not Guaranteed
Meters
0
10
20
40
N

Driftwood Road Beach Access Neighbourhood Input Summary

compiled Nov. 15, 2017

26 people signed in to site meeting Nov. 4, 2017
10 comment forms completed
7 additional email comment submissions

In favour of site development as presented:

Yes	No	Comments
	1	focus in Yellowpoint since there is one at Shasta already, concern over fires/partying, beach is not attractive
1		support stairs, no parking
1		no toilet, no parking
1		essential to have beach access, toilet, parking not necessary
	1	too close to other beach access, concern about fires
	1	don't want non-neighbours using it
1		no toilet, no parking, no garbage
1		long-overdue, provide parking, toilets and garbage cans, more accesses should be developed, adjacent neighbours should build their fences, stairs will allow easier access by elderly parents and children
	1	develop Shasta instead, no beach at high tide, provide fence for neighbour (cost-share), concern over fires, parties, music
1		welcome stairs, plus bike rack, canoe 'stand' and horse hitch, no parking
1		no parking, stairs will benefit neighbourhood
1		put parking at Shasta Rd access
1		support stairs, no change otherwise, put the parking at Shasta Rd
	1	opposed to RDN involvement in any beach access, concern over increased use by broader public
	1	focus on shasta, Driftwood beach less desireable, Heron nests at Drifwood site, opposed to location of stairs closer to property line, concern over fires, do not want RDN involved
	1	wildlife concerns (otter den, herons), bank erosion, fires and public nuisance, direct development at Shasta
	1	locals want it left as is and can maintain trail and install stairs themselves, people drink and drive from site, concern about bank erosion, creek, fires and impact to wildlife, privacy, focus in Pace Rd area or viewpoint at Lofthouse
9	8	

Other Questions/Comments received:

- questions about Lofthouse Rd and why RDN has let this become closed off (mis understanding about jurisdiction).
- why are only already developed sites or those without conflicts noted as suitable to develop in the inventory
- bank stability, creek and erosion are concerns at beach
- wildlife concern (herons and otter den)

REGIONAL DISTRICT OF NANAIMO

STAFF REPORT

TO:	Electoral Area Services Committee	**MEETING:**	April 10, 2018
FROM:	Melissa Tomlinson Special Project Coordinator	**FILE:**	7130 03 NEPP
SUBJECT:	Neighbourhood Emergency Preparedness Program Update		

RECOMMENDATION

That the Neighbourhood Emergency Preparedness Program Update Report be received for information.

SUMMARY

The 2018 Emergency Program Priority Project includes updating the Neighborhood Emergency Preparedness (NEP) program. NEP groups have historically struggled locally and around the Province because the original NEP program was a structured and complex program designed to be implemented over a 3-year timeline, which discouraged many residents from participating.

In 2015, the Province updated the NEP information to offer a simpler process to encourage and develop neighbourhood emergency preparedness. To update the RDN NEP program, the Prepared BC information will be supplemented with additional tips and information on personal, household and neighbourhood preparedness. The RDN website and social media will be utilized for public outreach and to encourage networking between NEP participants for peer support and best practice discussions. These materials will be supported with workshops and face-to-face sessions facilitated by the local emergency program.

BACKGROUND

The project to update the NEP program included reviewing materials and methodologies with a vision to streamline the NEP program to encourage greater resident participation. The previous NEP program was complex in structure and time consuming to coordinate, which discouraged neighbourhood groups from forming. Currently, the RDN has about 80 neighbourhoods registered in the NEP program, including 35 in Parksville and Qualicum Beach and likely several others operating more independently.

The RDN, along with the City of Parksville and Town of Qualicum Beach are already supporting PreparedBC's basic NEP methodologies, and are in the process of creating supplementary materials including handouts and presentations. Social media, including RDN's *Get Involved* platform will also be utilized to encourage peer-to-peer support, information sharing, and as an easy way for new resident groups to participate. With these tools, the intent is to develop a program where residents are working

together and with the RDN to create a basic level of preparedness in a greater number of neighbourhoods as the foundation of a successful NEP program. This differs from past methodologies which were built on forming committees and leadership structures over several years to achieve a perception of success.

In pursuing this project, the RDN had the opportunity to meet with some of the local NEP leaders to discuss the program and receive feedback on changes they would like to see. Suggested changes included updated program information, seminars on personal preparedness and neighbourhood preparedness, communications strategies, current NEP volunteers supporting new neighbourhood start-ups and training opportunities. The feedback aligned well with most aspects of the RDN's goals for streamlining information and encouraging volunteer participation. The use of the RDN website and social media tools for improved public outreach and networking between NEP participants will substantially benefit the program, as well as continued public outreach on topics of personal, household and neighbourhood preparedness. The program will focus time and resources on establishing new NEP neighbourhoods for broader community disaster resiliency at a basic preparedness level, while continuing to encourage established groups to build on their preparedness, and share their knowledge and experience to new NEP groups.

The provincial NEP information from PreparedBC called '*In it together: Neighbourhood Preparedness Guide*' is the foundation of the updated RDN NEP program, and provides a basic approach and template for residents to follow. It starts with identifying that developing neighbourhood groups only comes after working on personal and household preparedness first. It then encourages residents to engage with and discuss emergency preparedness with their neighbours. The Guide booklet provides a very basic overview of topics such as local risks, household preparedness, neighbours with unique needs, skills and resources, and working with the local emergency management program. It provides an easy to follow approach to getting neighbours to work together on emergency preparedness and neighbourhood plans so they can support each other in an emergency.

The RDN information will expand on various topics to provide added local information on preparedness and local emergency preparedness resources. The RDN is also updating its presentation materials for workshops and public presentations with partner support from Emergency Management Oceanside as the program is being mutually adopted to span boundaries within the RDN. The RDN website will be updated to provide both the PreparedBC NEPP Guide as well as the local RDN NEP program information so the materials are readily available online and can be easily shared via social media. The RDN will use its social media platforms, including our *Get Involved* page, to share and promote the information while also encouraging local NEP groups to network between themselves and to support others looking to start up a new NEP program. Some of the revised NEP program information is already being utilized, and the broader roll-out of updated RDN NEP materials will occur in May 2018.

ALTERNATIVES

1. That the Neighbourhood Emergency Preparedness Program Update Report be received for information.
2. That alternate direction be provided.

FINANCIAL IMPLICATIONS

The proposed updates to the Neighbourhood Emergency Preparedness Program are not expected to have additional costs beyond the program costs budgeted within the RDN 2018 Financial Plan.

STRATEGIC PLAN IMPLICATIONS

The proposed updates to NEP including program materials and methodologies are intended to encourage and improve resident participation in NEP for increased community disaster resilience, and therefore meets the strategic priority of "Service and Organizational Excellence" by delivering efficient, effective and economically viable services that meet the needs of the Region.

Melissa Tomlinson
mtomlinson@rdn.bc.ca
March 21, 2018

Reviewed by:

- J. Wilson, Manager, Emergency Services
- D. Pearce, Director, Transportation and Emergency Services
- P. Carlyle, Chief Administrative Officer

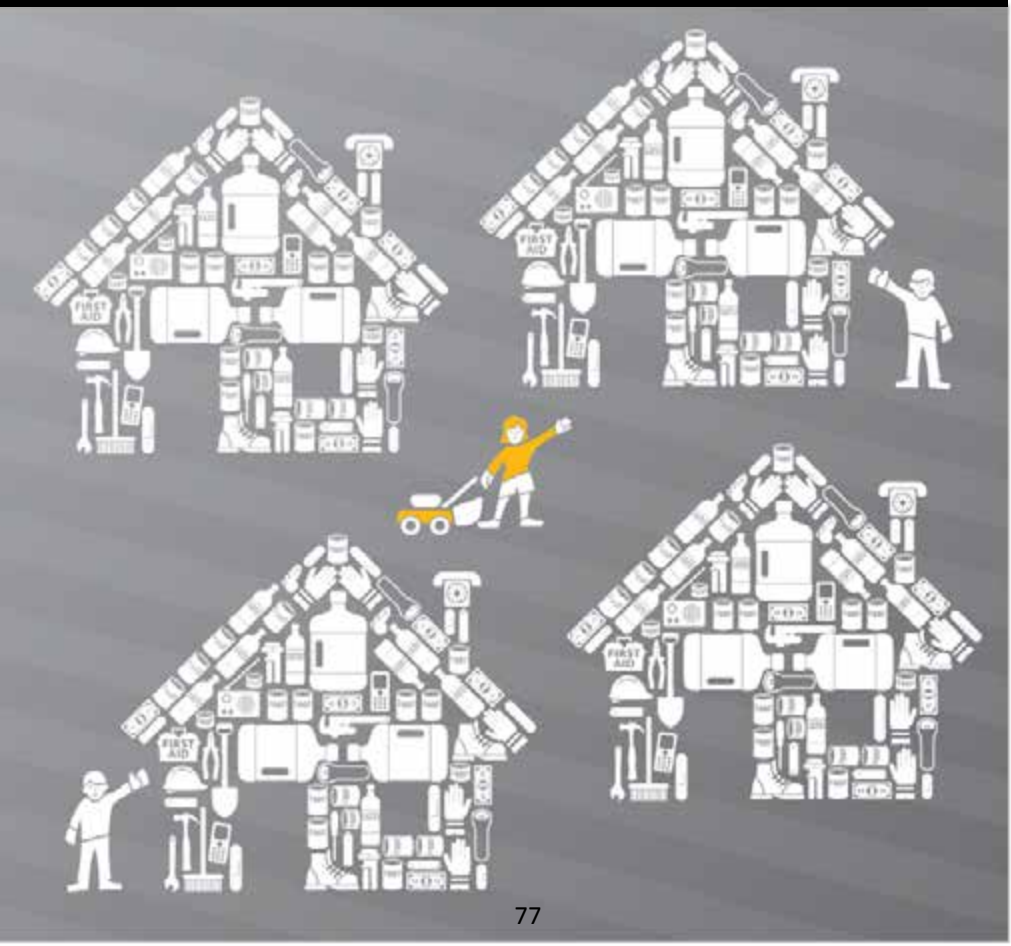
Attachment

1. 'In It Together' – Neighbourhood Emergency Preparedness Guide - PreparedBC

BRITISH COLUMBIA | PreparedBC

In It Together: Neighbourhood Preparedness Guide

A guide for protecting your community



Did you know the simple act of meeting your neighbour will help you cope in a disaster? When people know each other in a day-to-day setting, they're better able to work together during an emergency.

This is critical since the most immediate help following a disaster, like a flood or earthquake, will come from those directly around you — your family and neighbours. Connecting with them today, and working together to get prepared, will mean a better response and faster recovery.

The *In It Together: Neighbourhood Preparedness Guide* will help you join forces with your neighbours so you know what to do, who to check in on and what resources are available should disaster hit.

Prepared neighbourhoods are resilient neighbourhoods. When you're in it together, you're stronger.

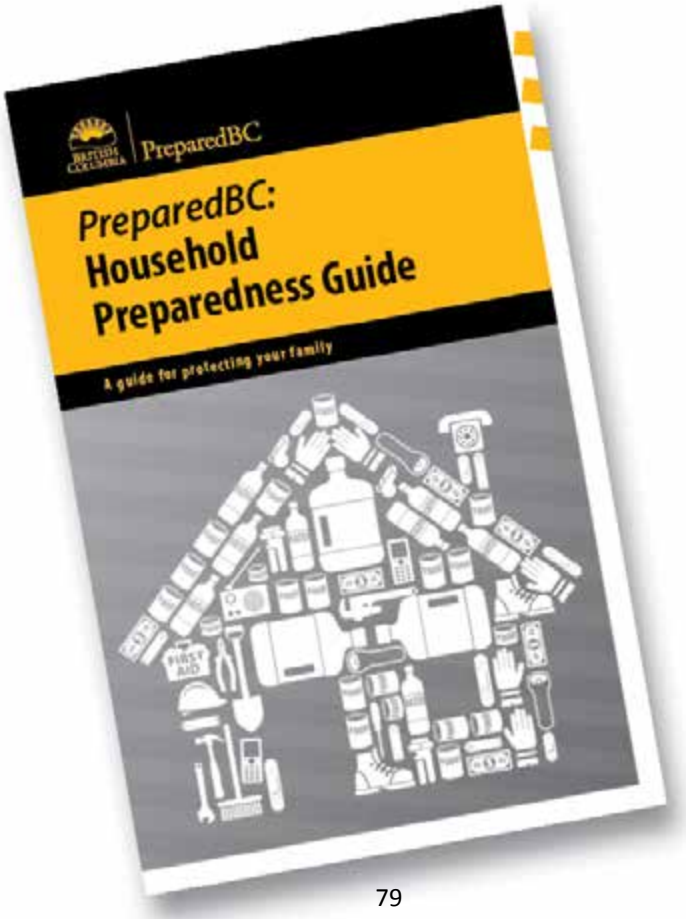
Your Guide to Neighbourhood Preparedness

Complete the following steps and keep your finished guide in an accessible place (like with your household emergency plan). Make sure all members of your household are familiar with the details.

IT'S EASY AS 1... 2... 3...

Step 1 *Complete the PreparedBC: Household Preparedness Guide*

Emergency preparedness begins at home. Download and follow the *PreparedBC: Household Preparedness Guide* at ***gov.bc.ca/PreparedBC*** so you and your family know exactly what to do before, during and after a disaster.



Step 2 *Meet Your Neighbours*

Use this guide as an icebreaker and reach out to your neighbours by organizing a get-together, such as a BBQ or potluck. If you already have a neighbourhood network in place — a Block Watch group, residents association or strata council — start there.

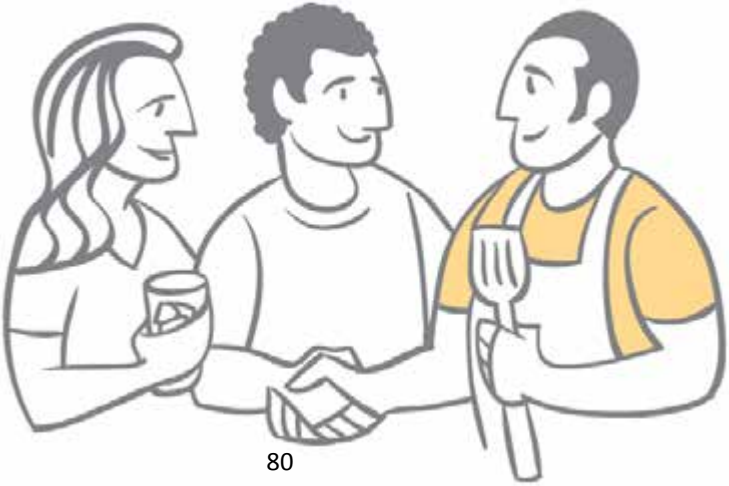
Consider discussing the following topics at your event:

Risks

Learn the potential risks in your area, such as flooding or an earthquake, and how they might impact your community. Not sure what hazards are in your region? Ask your local emergency management program.

Household preparedness

Talk about the need to ensure personal and household safety before responding to neighbourhood needs. Refer to the *PreparedBC: Household Preparedness Guide*.



Neighbours with unique needs

Identify and include anyone who might need extra assistance, such as families with small children or pets, elderly people, people with disabilities or people who speak English as a second language.

Skills and resources

Discuss what skills or resources you have in your area that might be of use in an emergency.

For example, who has a BBQ, generator or chainsaw? Who has construction, first-aid or cooking skills?

Local emergency management program

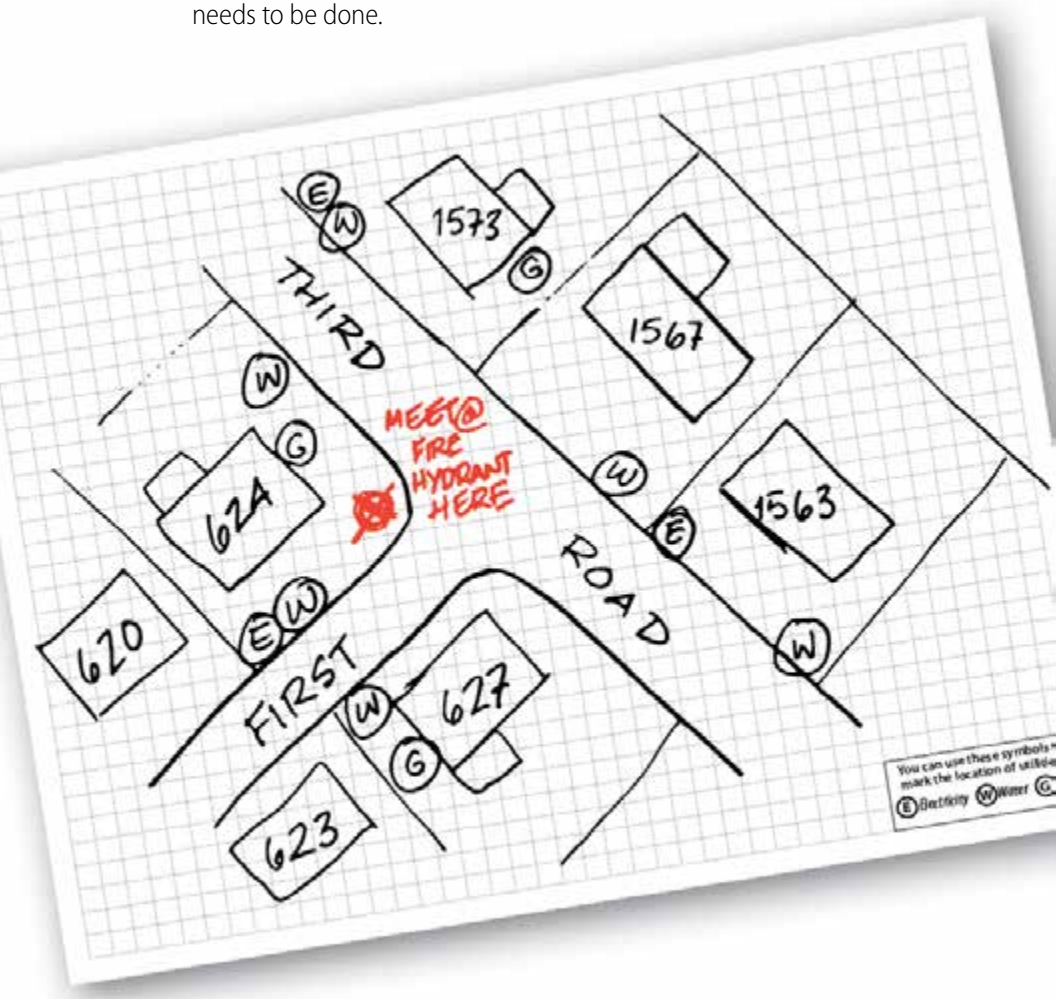
Contact your local program and let them know your neighbourhood is organizing around emergency preparedness. This information can help during a disaster. Your program's coordinator will also be able to answer questions and provide additional tools and tips.

Community Emergency Management Programs

In BC, local governments lead the initial response to emergencies and disasters in their communities. As required by law, they have prepared emergency plans and maintain an emergency management program. Contact your local program for more information on your community's plan.

Step 3 *Identify a Safe Meeting Place*

In an emergency, you, your family and your neighbours should gather at a predetermined safe meeting point to evaluate the situation and what needs to be done.



Basic Household Emergency Kit Supplies

Have enough non-perishable food to support your family for at least three days. If the power is out, use the food from your fridge and freezer first, followed by your pantry. Ensure you have a suitable food supply for babies, toddlers and pets.

First Aid kit and medications

Battery-powered or hand crank radio tuned to Environment Canada weather

Battery-powered or hand crank flashlight with extra batteries

At least a three-day supply of non-perishable food. Manual can opener for cans

Garbage bags, moist towelettes and plastic ties for personal sanitation

Whistle to signal for help

Cell phone with chargers, inverter or solar charger

Local maps (identify a family meeting place) and some cash in small bills

Water, four litres per person per day for at least three days, for drinking and sanitation

Dust mask to help filter contaminated air

Seasonal clothing and footwear

You can use these symbols to mark the location of utilities:

Ⓔ *Electricity* Ⓦ *Water* Ⓖ *Gas*

Our Neighbours

Street address *Residents' names* *Phone* *Email* *Skills/resources* *Emergency role* *Other notes*	**_Street address_** *Residents' names* *Phone* *Email* *Skills/resources* *Emergency role* *Other notes*
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Step 4 *Assign Responsibilities*

It can be difficult to think clearly during and immediately after a disaster. Assigning responsibilities in advance will enable a faster and more coordinated response.

Record each person's role on the household information list located in the centre of this guide. Responsibilities could include:

Checking on others: Visit every home involved in your plan, giving priority to those who need extra support. Afterwards, check on the rest of your neighbourhood.

Checking utilities and other potential hazards: Check all gas, electricity and water mains. Turn them off if you suspect a leak, if lines appear damaged or if instructed to do so by authorities. Also check for fallen trees or power lines, sinkholes or other damage and take appropriate actions to keep people safe.

Gathering information: Listen to the radio and monitor other information sources for emergency updates. Share updates with your neighbours.

Fixing and cleaning up: Assist others in securing their properties, boarding up windows and removing debris. Do not enter buildings or residences that could be unsafe. For instance, beware of electrical wires and outlets under water, as well as façades and insecure items that could give way, particularly in an after shock.

Anything else?

Discuss any other actions you think are important before, during and after an emergency. Be prepared to adapt to your circumstances on the day and reassign roles if needed.

Connect with us

TWITTER:

- *@EmergencyInfoBC* for alerts
- *@PreparedBC* for readiness advice
- *@BCGovFireInfo* for wildland fire updates
- *@DriveBC* for road conditions

FACEBOOK:

- *BC Forest Fire Information*

WEB:

- *www.EmergencyInfoBC.gov.bc.ca* for alerts
- *www.gov.bc.ca/PreparedBC* for preparedness tips

Step 5 *Map Your Street*

Use the grid in the centre of this document to draw the following:

- An outline of your street with the addresses of participating households.
- Your safe meeting point.
- Households that might require extra assistance.
- Water, gas and electricity mains, and where they can be turned off.
- Other key resources or vulnerabilities identified in your planning.

We're In It Together!

We're all first responders in a disaster. Your family and your neighbours will be the most immediate source of help. Remember you're not on your own; you're with your community.

Step 6 Store This Guide

Remove the map and contact details page from the centre of this guide and store it with your household plan in an accessible location. Ensure everyone in your group has a copy of the information.

Step 7 Keep in Touch

Maintain the momentum by staying in contact with your neighbours. Some ideas to stay connected are:

- Organize an annual street BBQ or potluck.
- Offer support during times of need or life changes, such as a new baby, a recent death or home renovations.
- Welcome new neighbours by taking over a tray of cookies or bottle of wine, or invite them over for a meal.
- Share your garden's produce with neighbours or start a communal garden.

United Front

Living in the same neighbourhood, you and your neighbours face the same risks. That means you'll also endure the same impacts. Working together will make it easier to cope.

Step 8 *Review and Update*

Identify someone who will be responsible for organizing a get-together to review and update the plan each year and consider rotating the responsibility of host each year.

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