North Pender Island Local Trust Committee
Regular Meeting Agenda

Date:	May 25, 2017
Time:	3:30 pm
Location:	Pender Island Community Hall
	4418 Bedwell Harbour Road, North Pender Island, BC

Pages

1. CALL TO ORDER 3:30 PM - 3:45 PM

2. APPROVAL OF AGENDA

3. TOWN HALL AND QUESTIONS

4. MINUTES 3:45 PM - 4:00 PM

   4.1 Local Trust Committee Minutes Dated April 27, 2017 (for Adoption) 4 - 13

   4.2 Section 26 Resolutions-without-meeting Report Dated May 2017 14 - 14

   4.3 Advisory Planning Commission Minutes

   none

5. BUSINESS ARISING FROM THE MINUTES

   5.1 Follow-up Action List Dated May 2017 15 - 16

6. DELEGATIONS

   none

7. CORRESPONDENCE

   Correspondence received concerning current applications or projects is posted to the LTC webpage

   none

8. APPLICATIONS AND REFERRALS 4:00 PM - 4:30 PM

   8.1 NP-RZ-2016.1 (Mainroad) - Staff Report 17 - 150

9. LOCAL TRUST COMMITTEE PROJECTS

   none

10. REPORTS

10.1 Work Program Report (attached)

10.1.1 Top Priorities Report Dated May 2017 151 - 151

10.1.2 Projects List Report Dated May 2017 152 - 154

10.2 Applications Report Dated May 2017 (attached) 155 - 159

10.3 Trustee and Local Expense Report

none

10.4 Adopted Policies and Standing Resolutions (attached) 160 - 161

10.5 Local Trust Committee Webpage

10.6 Chair's Report

10.7 Trustee Report

10.8 Trust Fund Board Report April 2107 162 - 163

11. NEW BUSINESS 4:30 PM - 4:40 PM

11.1 2016-2017 Annual Report - Approval of North Pender Island LTC Section - Request For Decision (attached) 164 - 166

12. UPCOMING MEETINGS

12.1 Next Regular Meeting Scheduled for June 28, 2017, at the Royal Canadian Legion Hall, Pender Island

13. TOWN HALL 4:40 PM - 4:50 PM

14. CLOSED MEETING (Distributed Under Separate Cover) 4:50 PM - 5:00 PM

14.1 Motion to Close Meeting

That the meeting be closed to the public in accordance with the Community Charter, Part 4, Division 3, s. 90(1) (a & d) for the purpose of considering:

- *Adoption of In-Camera Meeting Minutes Dated April 6, 2017*
- *Appointment of APC Members*

AND that the recorder and staff attend the meeting.

14.2 Recall to Order

14.3 Rise and Report

---------- BREAK ----------

15. COMMUNITY INFORMATION MEETING 5:00 PM - 5:15 PM

15.1 North Pender Island Local Trust Committee Bylaws 206, 207, 208, 209 & 210

16. PUBLIC HEARING 5:15 PM - 5:45 PM

16.1 Recess for Public Hearing

16.1.1 North Pender Island Local Trust Committee Bylaws 206, 207, 208, 209 & 210

16.2 Recall to Order

17. APPLICATIONS CON'T 5:45 PM - 6:00 PM

17.1 NP-RZ-2016.2 & NP-RZ-2016.3 (Port Browning Marina/Group) - Staff Memo 167 - 186

Bylaws 206, 207, 208, 209 & 210 (for further consideration)

18. ADJOURNMENT 6:00 PM - 6:00 PM

DRAFT

North Pender Island
Local Trust Committee
Minutes of a Regular Meeting

Date:	**April 27, 2017**
Location:	**Pender Island Community Hall** **4418 Bedwell Harbour Road, North Pender Island, BC**
Members Present	**George Grams, Chair** **Dianne Barber, Local Trustee** **Derek Masselink, Local Trustee**
Staff Present	**Justine Starke, Planner** **Shannon Brayford, Recorder**
Others Present	**Seventeen (17) members of the public present**

1. CALL TO ORDER

At 4:00 pm Chair George Grams called the meeting to order. He acknowledged that the meeting was being held in the territory of the Coast Salish people. He also introduced the Local Trust Committee (LTC) and members of the staff present.

Chair Grams noted that the meeting was being audio recorded and read a written statement about the recordings.

2. APPROVAL OF AGENDA

By general consent, the agenda was approved as presented.

3. TOWN HALL AND QUESTIONS

Sharon Card recommended that the LTC adopt a policy such that the meetings be recorded in a more fulsome manner and asked that the minutes of April 6, 2017 record that her home is in close proximity to the site discussed.

Sharon Card further spoke to the staff memo on the Waste and Resource Management project, addressing the issues of a full service facility, the criterion of remoteness, and specific concerns with specific properties being considered.

Michael Sketch read from a written submission regarding trustee conflict of interest. He requested that Trustee Masselink recuse himself from a portion of the meeting's discussion and provided arguments in support of his request.

Michael Sketch also discussed the management plan for the Waste and Resource Project, encouraging a greater focus on the concept of re-use.

Michael Sketch further addressed the proposal that Browning Harbour Agricultural Land Reserve (ALR) be rezoned to permit a Waste Transfer Facility. He provided an overview of the site's history, past decisions of the Agricultural Land Commission (ALC), his reasons for suspecting that the conditions for ALC approval will not be met, and the consequences of this for any bylaw decisions.

Trustee Masselink addressed the conflict of interest matter, providing a history of the issue and rationale for his current position.

4. COMMUNITY INFORMATION MEETING

None.

5. PUBLIC HEARING

None.

6. MINUTES

6.1 Local Trust Committee Minutes Dated April 6 & 8, 2017 (For Adoption)

By general consent, the Local Trust Committee Meeting Minutes of April 6 & 8, 2017 were adopted as presented.

6.2 Section 26 Resolution-Without-Meeting Report Dated March 2017

None.

6.3 Advisory Planning Commission Minutes

None.

7. BUSINESS ARISING FROM THE MINUTES

7.1 Follow-up Action List Dated April 2017

Received for information.

8. DELEGATIONS

None.

9. CORRESPONDENCE

9.1 National Marine Conservation Area Reserve Seminar Ad – S. Steil

Received for information.

10. APPLICATIONS AND REFERRALS

10.1 NP-RZ-2016.2 & NP-RZ 2016.3 (Port Browning Marina) Bylaws 206, 207 & 208 – Staff Report

Planner Starke provided an overview of the Staff Report, including the details of the related bylaws.

NP-2017-030
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee Bylaw No. 208, cited as "North Pender Island Land Use Bylaw 103, 1996, Amendment No. 4, 2016," be amended as follows:

i. Article 8.6.3 (1) is amended by inserting a comma and the words "manager, operator or caretaker", after "owners" and before "of"; and,
ii. Subsection 8.6.3 is amended by inserting the following as Article 8.6.3 (3);

(3) The accessory dwelling for employees is to be located either within one (1) accessory dwelling using or occupying a maximum floor area no greater than 140 m^2 within buildings used for commercial accommodation.

CARRIED

NP-2017-031
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee Bylaw No. 208, cited as "North Pender Island Land Use Bylaw 103, 1996, Amendment No. 4, 2016," be amended to make corrections as specified in Attachment 1.

CARRIED

NP-2017-032
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee Bylaw No. 206, cited as "North Pender Island Land Use Bylaw 103, 1996, Amendment No. 3, 2016," be read a second time.

CARRIED

NP-2017-033
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee Bylaw No. 207, cited as "North Pender Island Official Community Plan Bylaw 171, 2007, Amendment No. 3, 2016," be read a second time.

CARRIED

NP-2017-034
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee Bylaw No. 208, cited as "North Pender Island Land Use Bylaw 103, 1996, Amendment No. 4, 2016," be read a second time as amended.

CARRIED

NP-2017-035
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee directs staff to schedule a Public Hearing for Bylaws 206, 207, and 208.

CARRIED

NP-2017-036
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee endorses the Islands Trust Policy Statement Directive Policies Checklist for proposed Draft Bylaw Nos. 206, 207, and 208.

CARRIED

NP-2017-037
It was MOVED and SECONDED,
That, prior to the Final Adoption of Draw Bylaws 206, 207, and 208, the North Pender Island Local Trust Committee receive two (2) Section 219 Covenants as follows:

i. A permanent covenant to protect identified archaeological resources, implementing the recommendations of the Archeological Impact Assessment (Madrone Environmental Services Ltd, March 10, 2017) and limiting maximum density; and
ii. A temporary covenant to secure future community amenities for the upland portions of the development.

CARRIED

Chair Grams requested information regarding the response from First Nations communities consulted and the manner by which those responses were included in these amendments.

Planner Starke provided an overview of the recommendations, noting that several referenced matters outside of the Islands Trust jurisdiction.

NP-2017-038
It was MOVED and SECONDED,
That staff be requested to communicate First Nations' wishes with regard to the marine aspects of the development to the developer and receive his response for transmission to First Nations.

CARRIED

10.2 NP-RZ-2016.3 (Eakins) – Bylaws 209 & 210 - Staff Report

Planner Starke provided an overview of the bylaws and the proposed amendments.

NP-2017-039
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee Bylaw No. 210, cited as "North Pender Island Land Use Bylaw 103, 1996, Amendment No. 5, 2016," be amended to make corrections as specified in Attachment 2.

CARRIED

NP-2017-040
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee Bylaw No. 209, cited as "North Pender Island Official Community Plan Bylaw 171, 2007, Amendment No. 4, 2016," be read a second time.

CARRIED

NP-2017-041
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee Bylaw No. 210, cited as "North Pender Island Land Use Bylaw 103, 1996, Amendment No. 5, 2016," be read a second time, as amended.

CARRIED

NP-2017-042
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee directs staff to schedule a Public Hearing for Bylaws 209 and 210.

CARRIED

10.3 NP-RZ-2017.1 (PIPRC) Bylaw 213 – Staff Report

Planner Starke provided an overview of the staff report and the recommendations.

Chair Grams invited a representative of the application to speak.

Tim Hall, a commissioner of the Pender Islands Parks and Recreation Commission (PIPRC), provided an overview of the application and the Commission's rationale for making the request.

NP-2017-043
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee Bylaw No. 213, cited as "North Pender Island Land use Bylaw 103, 1996, Amendment No. 2, 2017, be read a first time.

CARRIED

NP-2017-044
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee endorses the Islands Trust Policy Statement Directive Policies Checklist for proposed Draft Bylaw No. 213.

CARRIED

NP-2017-045
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee direct staff to schedule a Community Information Meeting and a Public Hearing for proposed Draft Bylaw No. 213.

CARRIED

11. LOCAL TRUST COMMITTEE PROJECTS

11.1 Waste Management – Staff Report

Planner Starke provided an overview of the Staff Report, including the following points:

- Process for the site visits and results.
- Sites identified as ideal sites for a full-service station and an overview of those sites.
- Potential smaller satellite locations and an overview of each.
- Proposed regulations under both the Land Use Bylaws and the Official Community Plan.

The LTC asked questions to clarify the process for moving forward and discussed the recommendations.

NP-2017-046
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee direct staff to draft amendments to the Land Use Bylaw and Official Community Plan (where applicable) which would rezone Site 9 (4415 Bedwell Harbour) for waste transfer zoning to allow a "Full Service 'A'" facility.

A discussion of the site was held, including concerns of the site. The motion was re-read.

NP-2017-046
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee direct staff to draft amendments to the Land Use Bylaw and Official Community Plan (where applicable) which would rezone Site 9 (4415 Bedwell Harbour) for waste transfer zoning to allow a "Full Service 'A'" facility.

CARRIED

NP-2017-047
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee direct staff to draft amendments to the Land Use Bylaw and Official Community Plan (where applicable) which would rezone Site 11 (Mainroad Yard on Port Washington Rd.) for waste transfer zoning to allow a "Full Service 'A'" facility.

CARRIED

NP-2017-048
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee direct staff to draft amendments to the Land Use Bylaw and Official Community Plan (where applicable) which would rezone Site 1 (5827 Schooner Way) (Medicine Beach) for limited waste transfer uses: "Public Drop Only 'E'".

CARRIED

NP-2017-049
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee direct staff to draft amendments to the Land Use Bylaw and Official Community Plan (where applicable) which would rezone Site 8 (3418 Otter Bay Road) for limited waste transfer uses: "Waste Only Lite 'D'".

CARRIED

NP-2017-050
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee direct staff to draft amendments to the Land Use Bylaw and Official Community Plan (where applicable) which would rezone Site 5 (4606 Razor Pt Rd) for limited waste transfer uses: Waste Only Lite "D".

A discussion was held regarding the motion, including concerns with the site.

The motion was re-read.

NP-2017-050
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee direct staff to draft amendments to the Land Use Bylaw and Official Community Plan (where

applicable) which would rezone Site 5 (4606 Razor Pt Rd) for limited waste transfer uses: Waste Only Lite "D".

CARRIED
Trustee Barber opposed.

NP-2017-051
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee endorse the proposed Official Community Plan policies presented in the staff report for the meeting of April 27 2017 and direct staff to draft a bylaw for consideration.

CARRIED

NP-2017-052
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee direct staff to draft a bylaw that proposes Development Permit Area guidelines for a new Waste Transfer Station Development Permit Area.

CARRIED

Planner Starke provided an overview of the Project Charter Version 5.

NP-2017-053
It was MOVED and SECONDED,
That the North Pender Island Local Trust Committee endorse the updated Project Charter Version 5.

CARRIED

12. REPORTS

12.1 Work Program Report (attached)

12.1.1 Top Priorities Report Dated April 2017

Received for information.

12.1.2 Projects List Report Dated April 2017

Received for information.

12.2 Applications Report Dated April 2017 (attached)

Trustee Masselink asked if there was an update on the Pender Island Community Services Society application.

Planner Starke reported that no update is available.

12.3 Trustee and Local Expense Report

None.

12.4 Adopted Policies and Standing Resolutions (attached)

Received for information.

12.5 Local Trust Committee Webpage

Planner Starke noted that Sara Steil requested that her item of correspondence be posted onto the LTC webpage and distributed on the Islands Trust subscription list.

By general consent, the LTC agreed that the National Marine Conservation Area Reserve Seminar Ad be posted to the webpage and distributed on the Islands Trust subscription list.

12.6 Chair's Report

No report.

12.7 Trustee Report

Both Trustees noted the success of the Special Meeting held on April 8, 2017.

12.8 Trust Fund Board Report February 2017

No report.

13. NEW BUSINESS

None.

14. UPCOMING MEETINGS

14.1 Next Regular Meeting Scheduled for May 25, 2017, at 10:00 am at the Pender Community Hall, Pender Island

A discussion was held regarding the timing of the next meeting, noting that a later meeting time would allow more members of the public to attend.

NP-2017-054
It was MOVED and SECONDED,
That the next meeting of the Pender Island Local Trust Committee be scheduled for May 25, 2017 at 3:30 pm at an appropriate location.

CARRIED

15. TOWN HALL

Michael Sketch requested that road work spoils be given specific consideration. He provided an overview of the issue and its relation to the Waste Management Project.

Lou Henshaw spoke against the decision to allow a waste facility on Browning Harbour.

Dale Henning spoke in favour of the Waste Resource Project moving forward.

Oliver Gannon noted that his property is adjacent to one of the sites proposed in the Waste Resource Staff Report. He expressed concern that the Official Community Plan is not being respected and that his property will be negatively impacted by the decision.

Lou Henshaw provided a history of the Waste and Resource Management project and some sites involved in the project. She also provided an overview of some environmental concerns with some of the sites involved.

16. CLOSED MEETING

None.

17. ADJOURNMENT

By general consent, the meeting was adjourned at 5:48 pm.

_____
George Grams, Chair

Certified Correct:

_____
Shannon Brayford, Recorder

Print Date: May 17, 2017

Resolutions Without Meeting

North Pender Island

Resolution #	Action	Resolution Desciption	Resolution Date
2017-03	In Favour	THAT North Pender Island Local Trust Committee direct staff to enter into a cost recovery agreement with the applicant (Mill Bay Marine Group) for file NP-RZ-2016.2 and NP-RZ-2016.3, for Islands Trust Legal Counsel to draft and register covenants related to the application.	11-May-2017

Follow Up Action Report

North Pender Island

26-Jan-2017

Activity	Responsibility	Target Date	Status
Top Priority - First Nations Interests: - Staff to organize a public educational event in September focused on the archaeological findings of the canal excavation between the two islands during the summers of 1984-85-86.	Justine Starke	31-May-2017	On Going

06-Apr-2017

Activity	Responsibility	Target Date	Status
6.1 Minutes of the February 23rd meeting adopted as amended	Sharon Lloyd-deRosario Regina Robinson	12-Apr-2017	Done
10.2 NP-RZ-2017.1 (PIPRC) - direction to proceed with preparing draft bylaw	Phil Testemale	12-Apr-2017	Done
11.1 Bylaws 203, 204, 205 adopted - ongoing	Sharon Lloyd-deRosario Justine Starke Regina Robinson	12-Apr-2017	On Going
rise and report - all interested returning APC members re-appointed	Sharon Lloyd-deRosario Regina Robinson	21-Apr-2017	On Going

27-Apr-2017

Activity	Responsibility	Target Date	Status

Follow Up Action Report

NP-RZ-2016.2 / NP-RZ2016.3 - Bylaws 206, 207, 208, 209, 210 given second reading, direction given to schedule public hearing, ITPS endorsed. Bylaws 208 and 210 amended as per staff reports.	Sharon Lloyd-deRosario Justine Starke Phil Testemale	25-May-2017	Done
Minutes adopted for April 6 & 8	Sharon Lloyd-deRosario Regina Robinson	10-May-2017	Done
NP-RZ-2017.1 (PIRC) - Bylaw 213 given first reading. ITPS endorsed.	Sharon Lloyd-deRosario Phil Testemale	25-May-2017	Done
Post National Marine Conservation Area Seminar Ad to website, in News Update of NPI LTC website. Send notice out on subscription list.	Sharon Lloyd-deRosario Regina Robinson	10-May-2017	Done
Waste Transfer - Direction to draft LUB and OCP bylaws based on staff reports recommendations.	Sharon Lloyd-deRosario Justine Starke	22-Jun-2017	On Going
Relay First Nations (Cowichan) requests re: Port Browning to applicants and request a response to follow up with First Nations. Also , send Cowichan archaeological report.	Justine Starke Phil Testemale	17-May-2017	On Going

STAFF REPORT

File No.: NP-RZ-2016.1
Mainroad (x-ref Bylaw No. 202)

DATE OF MEETING:	May 25, 2017
TO:	North Pender Island Local Trust Committee
FROM:	Phil Testemale A/Planner 2 Southern Team
COPY:	Robert Kojima, Regional Planning Manager
	Justine Starke, Island Planner
SUBJECT:	Rezoning Application
	Applicant: David Turenne for Mainroad Properties (Gulf Islands) Ltd. Inc. No. 0704096
	Location: 3323 Port Washington Road, Pender Island

RECOMMENDATION

1. **That the North Pender Island Local Trust Committee Bylaw No. 202, cited as "North Pender Island Land Use Bylaw 103, 1996, Amendment No. 1, 2016", be read a first time.**
2. **That the North Pender Island Local Trust Committee direct staff to schedule a public hearing and community information meeting for Bylaw No. 202, cited as "North Pender Island Land Use Bylaw 103, 1996, Amendment No. 1, 2016."**
3. **That the North Pender Island Local Trust Committee endorses the Islands Trust Policy Statement Directive Policies Checklist for proposed Draft Bylaw No. 202.**

REPORT SUMMARY

The purpose of this report is for the North Pender Local Trust Committee (LTC) to provide further direction to staff for the application by (Mainroad Properties) to rezone portions of Lot 8 and 9, Section 18, Pender Island, Cowichan District, Plan 6294. Specifically:

1. Consideration of First Reading of Draft Bylaw 202; And,
2. Scheduling a public hearing and community information meeting for Bylaw No. 202.
3. A decision on referral of Draft Bylaw 202 to the North Pender Island Advisory Planning Committee

BACKGROUND

Background to this application including a preliminary staff report is available on the Islands Trust website:

http://www.islandstrust.bc.ca/islands/local-trust-areas/north-pender/current-applications/

The subject properties are commonly known as the highways works yard, on Port Washington Road. The use on the properties has continued since the 1950's and the current owner is Mainroad Properties. The proposed rezoning will affect the current area of industrial use on the property. Lot 8 is currently zoned **Rural (R)** and Lot

9 is split-zoned **Rural (R)** and **Industrial 2(a)** in the North Pender Island Land Use Bylaw No. 103, 1996 (LUB – Attachment 2.4).

The owner is applying to rezone the areas of properties to correspond with the **Industrial (I)** and **Rural (R)** designations in the North Pender Island Official Community Plan No. 171, 2007. The proposed zoning boundary will follow the north perimeter of **Development Permit Area (DPA) One – Woodland Ecosystem** in order to maintain the DPA in the **Rural (R)** zone (Figure Two).

At its May 6, 2016 Regular Meeting, the LTC passed the following resolution:

> **NP-2016-023**
>
> **It was MOVED and SECONDED,**
>
> that the North Pender Island Local Trust Committee directs staff to proceed with the application NP-RZ-2016.1 (Mainroad) and to prepare draft bylaws. **CARRIED**

On the basis of a site visit in February of 2016, which found the potential for contamination of soils, ground and surface water resources, staff requested under the Development Approval Information (DAI) bylaw that the applicant provide a site profile with the following:

- An inventory of contaminants on site and management plans for these.
- An inventory of current ground and surface water conditions with respect to possible contamination.
- Recommendations for containment and site drainage
- Any recommendations for mitigation and restoration (if applicable).

The applicant has provided the following in response to the request:

- 'Mainroad Group Level 1 - Environmental Management Plan' (general environmental protection and practices and processes for Mainroad facilities and operators – Attachment 5.1)
- Environmental Management Plan Level 2 - Operational Control Manual' (processes and procedures at the operational/facility level - Attachment 5.2)
- 'Level 2B – Incident Prevention and Environmental Management Plan' (emergency response plan - Attachment 5.3)
- 'Mainroad South Island Contracting LP – Environmental Best Practices for Highway Maintenance' (Attachment 5.4)
- Numerous 'Salt Storage Monitoring Reports' dated back to December 2013 (not attached).
- A baseline environmental investigation (profile) was conducted on the site by Morrow Environmental/SNC Lavalin in 2006, updated.
- 'Stormwater Management Plan- 3323 Port Washington Road – North Pender Island, BC' (Ryzuk Geotechnical, November 29, 2016 – Attachment 5.5)

All professional reports and relevant information have been posted to the current applications website: http://www.islandstrust.bc.ca/islands/local-trust-areas/north-pender/current-applications/

The LTC should advise staff if they believe further information or professional reports that should be requested.

The preliminary report at the April LTC meeting generated discussion and concern over the two issues: storm water management and handling of animal carcasses ('road kill'). These two issues are discussed in 'Issues' - below.

An application (NP-DVP-2016.2) for variances to the height of the salt shed on Lot 8 and setbacks for numerous buildings and structures on both lots was approved in July of 2016.

Further, this application was put on hold with the agreement of the applicants pending the site selection and assessment phase of the LTC's Waste Transfer Sites: Suitability and Regulations project. Staff is recommending that this application and the LTC initiated OCP amendments and rezoning for waste management should now proceed independently (see 'Issues'- below).

Staff have visited the site numerous times since 2016.

Figure 1. Subject Property

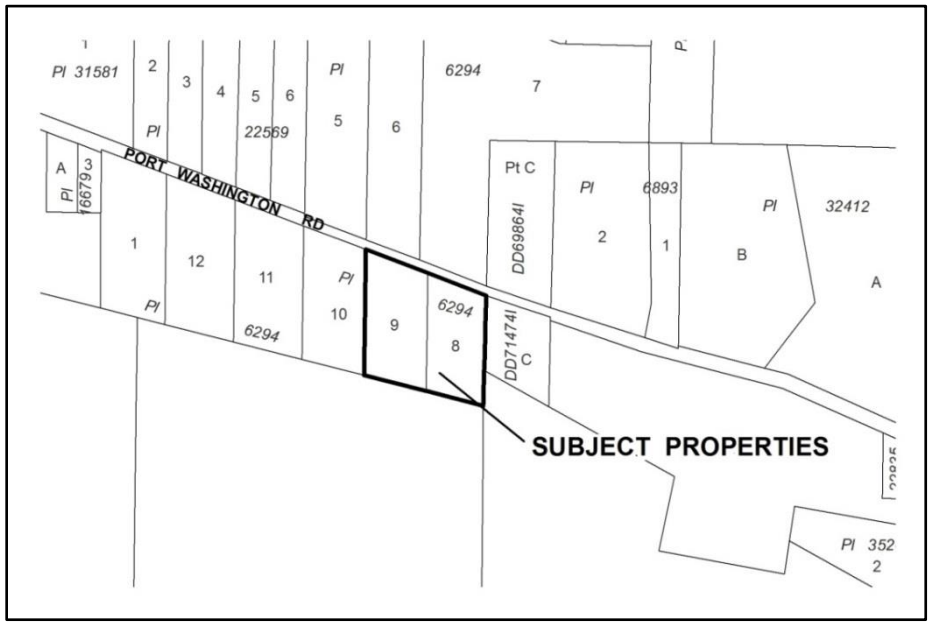


Figure 2. Proposed Zoning

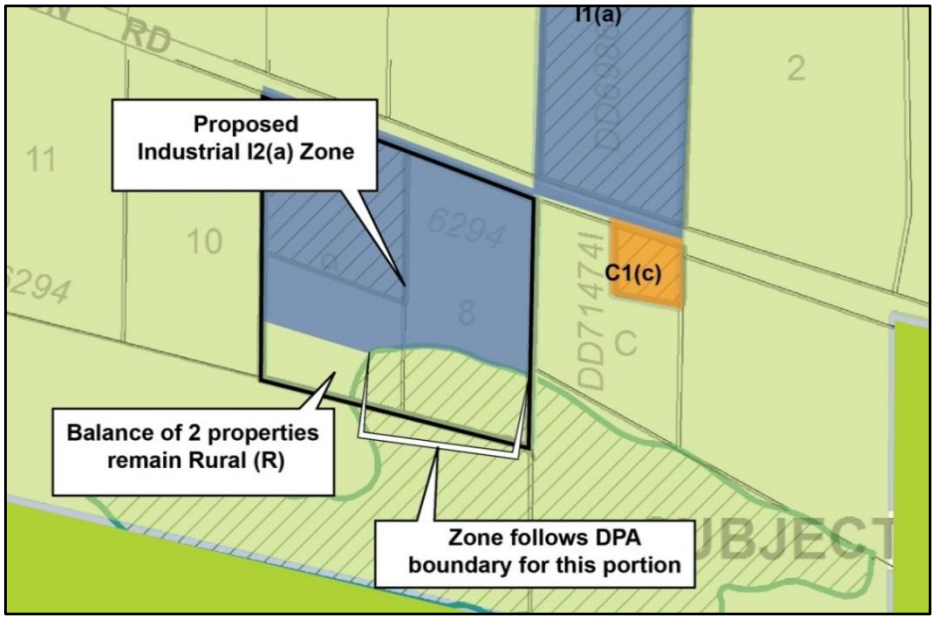
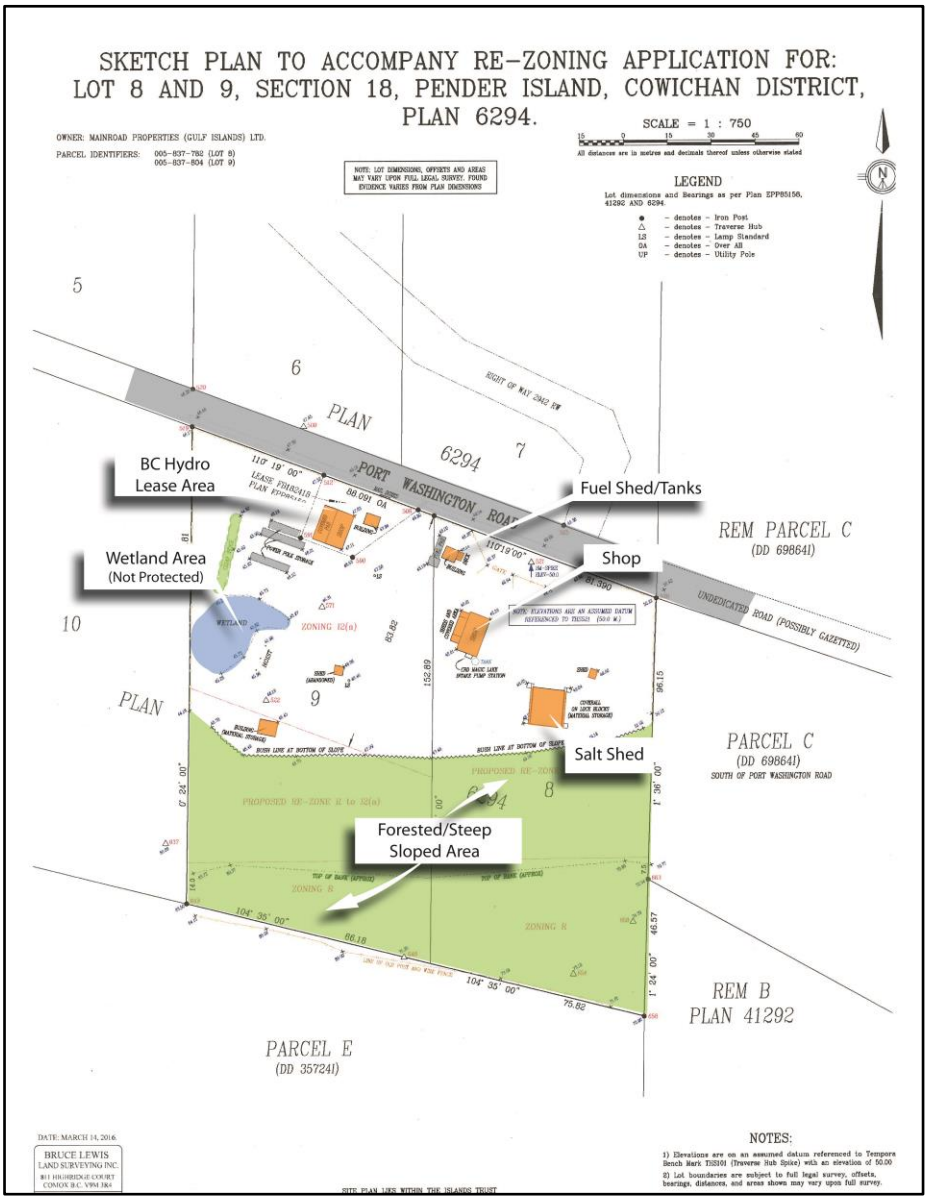


Figure 3. Site Plan



ANALYSIS

Policy/Regulatory

Islands Trust Policy Statement:

Islands Trust Policy Statement Directive Policies Checklist has been reviewed and included in the Policy Checklist (Attachment 3). The proposal is supported by the directive policies.

Official Community Plan:

Please see the attached Policy Checklist (Attachment 4).

The proposal is consistent with the objectives and policies of the Industrial Lands section of the Official Community Plan. Specifically:

> 2.5.1 Priority may be given to the following locations for new or additional industrial development:
> a) by application to rezone the industrially designated land on Port Washington Road;

The proposal rationalizes Zoning with OCP Designations and formalizes the uses that have existed historically on the two properties and that have been permitted on Lot 8 with NP-TUP-2012.2.

The North Pender Island Official Community Plan (OCP) designates the majority of the two properties as **Industrial (I)**, with **Rural (R)** along the rear of both properties (Attachment 2.2). The current proposal would align zoning to these designations, although the proposed border is to follow the north boundary of DPA One in order to afford the sensitive ecosystem further protection by maintaining it fully in the Rural (R) zone.

Amending Bylaw No. 202:

Lot 9 is currently "split-zoned" **Industrial I2 (a)** and **Rural (R)** in the North Pender Island Local Trust Committee Land Use Bylaw No. 103, 1996; and, Lot 8 is entirely zoned as **Rural (R)** (Attachment 2.4).

The site specific allowable uses in the **Industrial 2 (a)** are excerpted on the table (below under 'Issues').

Temporary Use Permit - NP-TUP-2012. 2:

A Temporary Use Permit (NP-TUP-2012.2) for a portion of Lot 8 was issued on February 1, 2013 and expired on February 1, 2016.

Development Guidelines:

See 'Site Context' (Attachment 1) and Attachment 2. 3 for Development Permit Area information.

Generally a zoning amendment application does not initiate Development Permits and the proposal does not include any new buildings and structures. DPA 9 (form and character) would automatically apply to the areas of the property that were rezoned to Industrial**.**

Issues and Opportunities

Site Specific Uses - Handling of Road Kill

The particular issue of the transfer and disposal management of animal carcasses was raised as a concern at the LTC meeting in April. In response, applicant has provided the following information from their *'Environmental Best Practices Manual'* (Attachment 5.4) that outlines procedures for collection and handling of animal carcasses (only relevant parts are included here):

> **2.0 Debris Removal**
>
> Debris removal activities include the removal of items that are not part of the highway from the road surface.
>
> 2.1 Activities
>
> Debris Removal
>
> 2.2 Timing

- Works are preferably undertaken during periods of dry weather. If the work is scheduled during a period of rain, take the necessary steps to install appropriate site isolation and sediment control.
- If the activity requires work in stream, you must schedule them to coincide with your regions in stream work window.

2.4 Waste and Materials Management

- Prevent sediment and other potentially harmful substances from entering any watercourses during removal activities.
- Remove material to an appropriate site, which will not introduce these materials to any watercourses.
- Remove carcasses as soon as possible, and do not store or bury them near any watercourses.
- Animal carcasses that require temporary storage on sites shall be stored on a non-permeable surface prior to appropriate disposal.
- Use appropriate PPE for carcass handling.
- All waste collected from roadways shall be stored and disposed of as per regulatory requirements.

This activity is a necessary function of the highway maintenance role that Mainroad fulfills on the island. As such, the site specific uses for the proposed industrial areas on the two lots have been amended in the proposed Bylaw 202 to include the highlighted text in the following:

Column 1	*Column 2*	*Column 3*
Site-Specific Zone Reference	**Legal Description**	**Site Specific Regulations**
I2(a)	Portions of Lot 8 & 9, Plan 6294, Section 18	Despite 8.9.2(1), the only uses permitted in this location are the storage and processing of materials, supplies and equipment used for, or generated from, the construction, maintenance and repair of highways, the storage of dangerous or hazardous materials, servicing and repairing of goods, materials and equipment, and the processing, crushing and storage of gravel

This use will ensure that the function which is appropriate to the industrial land use is able to be legitimately carried out on the properties.

Drainage Plan

Staff requested Development Approval Information from the applicant in the form of a site profile of the environmental condition of the site and further information on storm water and drainage management. The justification for the request is the potential contamination of soils, ground and surface water resources.

The applicant has provided numerous procedural manuals and management plans that prescribe best management practices for the storage, handling and disposal of potential contaminants and hazardous materials (Attachments 5.1 to 5.4). Additionally, a Stormwater Management Plan was prepared by Ryzuk Geotechnical and submitted by the applicant on December 5, 2016 (Attachment 5.5). The report was limited to a hydrological assessment and does not review containment of leachate potential (See next subsection). The report identified the existing physical conditions and drainage network and was supported by a map which identified the

containment systems associated with the salt shed and a sediment pond on the south and west portion of the active area of the Lot 9. The summary of the report acknowledged a relatively unchanged circumstance for numerous decades and made the following statement:

> *"…we consider that the existing drainage regime can be kept in place and that there is no requirement for storm drainage rerouting or modifications. We recommend that the current network of swales and culverts be maintained periodically as required."* (p.2)

Water and Soil Conditions – Site Profile

A baseline environmental profile report entitled 'Baseline Environmental Investigation Pender Island Works Yard…" (Morrow Environmental Consultants Inc. [SNC - Lavalin], March 30, 2006) was conducted when Mainroad acquired the site from BC Buildings Corporation (http://www.islandstrust.bc.ca/islands/local-trust-areas/north-pender/current-applications/current-application-documents/). This analysis included soil conditions and water quality from on-site test wells and surface interceptors. The results looked at exceedances for Contaminated Sites Regulation (CSR) for potential salt and hydrocarbon pollutants. The summary results for soils indicated that the parameters for Chlorine (Salt) were exceeded at one test well and the pond inlet. The results for water indicted that levels were exceeded for CSR Aquatic Life Water Use for Chlorine and Sodium at one well and both the inlet and outlet of the pond.

Since 2006, Mainroad has improved the infrastructure on site including construction of the salt shed with oil-water separators, sumps and an evaporation bowl and a sediment pond. In addition, as indicated previously, the company has well developed environmental management plans and procedures.

In February of this year, Mainroad contracted SNC- Lavalin to investigate "to determine the current environmental status of groundwater in existing monitoring wells at the property." The report is attached in full (Attachment 5.6) and has also been posted on the current applications website. The tests were conducted on three (3) existing test wells and at the inlet of the surface water pond at the western edge of Lot 9.

The report states that there was insufficient data to indicate any trend with the groundwater wells, however, it described concentrations of chloride and dissolved sodium as 'stable' and noted an improvement in the surface water conditions with the pond inlet levels over 2006.

The conclusions of the report were that sodium and chloride concentrations exceeded CSR Drinking Water (DW) standards in two of the wells, but levels were less than this standard in the other well and pond inlet. In all four cases the levels were below the CSR Aquatic Life Water Use (AW) standards. Therefore the results indicate that there is no threat to neighbouring wells and/or the natural environment, however two wells on-site do not meet drinking water standards and should not be used for such.

Waste Management

The two properties were identified as potential sites as part of the LTC project for Waste Transfer Sites: Suitability and Regulations. With the agreement of the applicant, staff recommended that this application be placed on hold in order for the waste management project to progress through the site selection and assessment phase. At the April 27, 2017 Regular Meeting, the LTC passed a resolution directing staff to draft amendments to the Land Use Bylaw and Official Community Plan (where applicable) which would rezone Site 11 (Mainroad Yard on Port Washington Rd. – the subject properties) for waste transfer zoning to allow a "Full Service 'A'" facility. In that meeting the LTC endorsed the Mainroad and another site as the priority sites.

The rezoning for waste transfer on these and other properties is LTC initiated and the timeframe for completion has the likelihood to be protracted. Staff are recommending that this application should now proceed with the original Industrial rezoning for the two properties, and allow the waste transfer rezoning process to proceed independently and at its own pace.

Draft Bylaw No. 202

Proposed Bylaw No 202 is attached in addition to the Policy Statement Checklist.

Consultation

Statutory Requirements

In accordance with regular statutory requirements, a public hearing is required and it is normal practice to hold a Community Information Meeting (CIM) prior to that. Given the non-controversial nature of the proposal, staff is recommending scheduling a CIM in conjunction with the Public Hearing. The CIM and public hearing notice would be circulated to all property owners and tenants within 100 m of the subject property posted in the newspaper as per statutory requirements in advance of the public hearing.

Agency Referrals

The following agencies have been identified for referring the draft bylaw for comment; the LTC may also direct staff to include other agencies not listed. Additionally the LTC may choose to refer the proposal to the Advisory Planning Commission.

- Ministry of Transportation and Infrastructure
- Island Health
- CRD, Building Inspection Services
- CRD, Electoral Area Director
- Pender Island Fire Rescue
- Mayne Island Local Trust Committee
- Saturna Island Local Trust Committee
- Salt Spring Island Local Trust Committee

First Nations Referrals

First nations have not been identified for consultation as there is not an amendment to the OCP and no potential interest has been identified.

Rationale for Recommendation

As all information requested from the applicant had been submitted, staff are recommending first reading of the draft bylaws in order to advance the application to the point of agency referrals, scheduling of a CIM and Public Hearing, and, if directed by the LTC, consideration by the Advisory Planning Commission. Given the nature of the rezoning, particularly that it does not require an amendment to the OCP, staff are not recommending that Bylaw be referred to the APC. Furthermore, staff is recommending that this application proceed independently of the LTC initiated amendment and rezoning bylaws for waste management.

Alternatives

1. **Request further information**

   The LTC may request further information be provided prior to making a decision. If selecting this alternative, the LTC should be advised to describe the specific information needed and the rationale for this request.

   Recommended resolution:

   That the North Pender Island Local Trust Committee request that the applicant submit to the Islands Trust _____.

2. **Refer to Advisory Planning Commission**

   The LTC may direct staff to refer the Bylaw to the APC.

   Recommended resolution:

   That the North Pender Island Local Trust Committee request staff to refer Bylaw No. 202 to the North Pender Island Advisory Planning Commission for comment.

3. **Proceed No Further**

   The LTC may opt to proceed no further with the application.

   Recommended resolution:

   That the North Pender Island Local Trust Committee proceed no further with proposed Bylaw No. 202, cited as "North Pender Island Land Use Bylaw 103, 1996, Amendment No. 1, 2016"

NEXT STEPS

1. Refer Bylaw No. 202 to agencies.
2. Schedule a CIM and Public Hearing
3. Report back results from agency referrals.

Submitted By:	Phil Testemale, A/Planner 2	May 15, 2017
Concurrence:	Robert Kojima, Regional Planning Manager	May 16, 2017

ATTACHMENTS

1. Site Context
2. Maps, Plans, Photographs
3. Islands Trust Policy Statement Directive Policies
4. Policy Checklist
5. Technical Reports:
   - 5.1 'Mainroad Group Level 1 - Environmental Management Plan' (general environmental protection and practices and processes for Mainroad facilities and operators)

5.2 'Environmental Management Plan Level 2 - Operational Control Manual' (processes and procedures at the operational/facility level)
5.3 'Level 2B – Incident Prevention and Environmental Management Plan' (emergency response plan)
5.4 'Mainroad South Island Contracting LP – Environmental Best Practices for Highway Maintenance'
5.5 'Stormwater Management Plan- 3323 Port Washington Road – North Pender Island, BC' (Ryzuk Geotechnical, November 29, 2016 – Attachment 5.5)
5.6 'Monitoring and Sample Results – January 2017 – Mainroad Pender Island Maintenance Yard…' (SNC - Lavalin Inc., February 27, 2017)

6. Draft Bylaw No.202

ATTACHMENT 1 – SITE CONTEXT

Legal Description	Lot 8 and 9, Section 18, Pender Island, Cowichan District, Plan 6294
PID	0056-837-782 and 005-837-804
Civic Address	3323 Port Washington Road, Pender Island

LAND USE

Current Land Use	Although ownership has changed multiple times, the property has been historically used as a gravel storage yard for highway maintenance. The existing uses on the subject properties include: • An office. • Storage (salt) shed. • Two 'shops' (mechanical/ workshop). • Numerous small buildings (one abandoned). • Storage of gravel and patching materials. • Storage of highways vehicles and equipment. • BC Hydro leases an area on Lot 9 for a storage building and storage of poles.
Surrounding Land Use	Most of the surrounding properties are zoned **Rural (R)** with some other industrial and commercial uses in the vicinity. These include a small retail store/cafe on the adjacent property to the east and a building centre and storage of aggregate, soils and mulch both located across Port Washington Road

HISTORICAL ACTIVITY

File No.	**Purpose**
NP-TUP-2012.2	TUP for the existing/historical uses on the property.
NP-DVP-2016.2	DVP issued for exiting non-conforming height (salt shed) and setbacks.

POLICY/REGULATORY

Official Community Plan Designations	The North Pender Island Official Community Plan (OCP) designates the majority of the two properties as **Industrial (I)**, with **Rural (R)** along the rear of both properties (Attachment 2.2). The proposal would align zoning to these designations, although the proposed border is to follow the north boundary of **DPA One** in order to afford the sensitive ecosystem further protection by maintaining it fully in the **Rural (R)** zone. The Subject properties are located within the following DPAs (Attachment 2.3): • DPA 1- Woodland Ecosystem • DPA 9 – Commercial and Industrial Form and Character (Lot 9 only) • DPA 9 (form and character) would automatically apply to the areas of

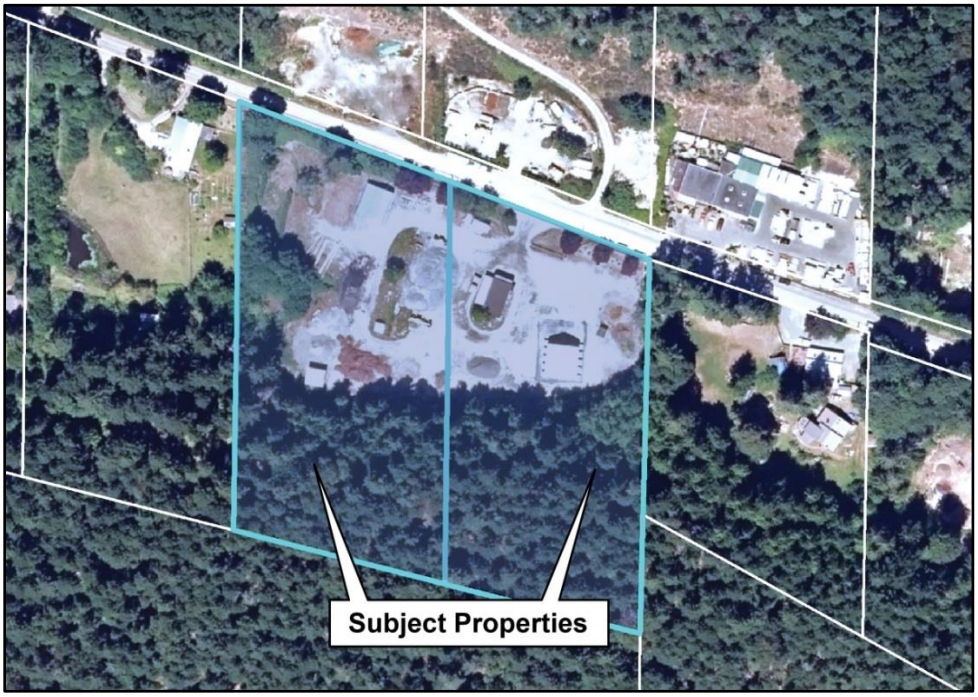
	the property that were rezoned to Industrial.
Land Use Bylaw	Lot 9 is currently "split-zoned" **Industrial I2 (a)** and **Rural (R)** in the North Pender Island Local Trust Committee Land Use Bylaw No. 103, 1996; and, Lot 8 is entirely zoned as **Rural (R)** (Attachment 2.4).
Other Regulations	
Covenants	There are no LTC registered on title for the properties or in the vicinity.
Bylaw Enforcement	There was an enforcement file created in 2008 (**NP-BE-2008.3**) on Lot 9 which was closed in 2009. The violation states that a there was no landscape screening between properties. This is a reference to the zoning requirement for landscape screening in the LUB

SITE INFLUENCES

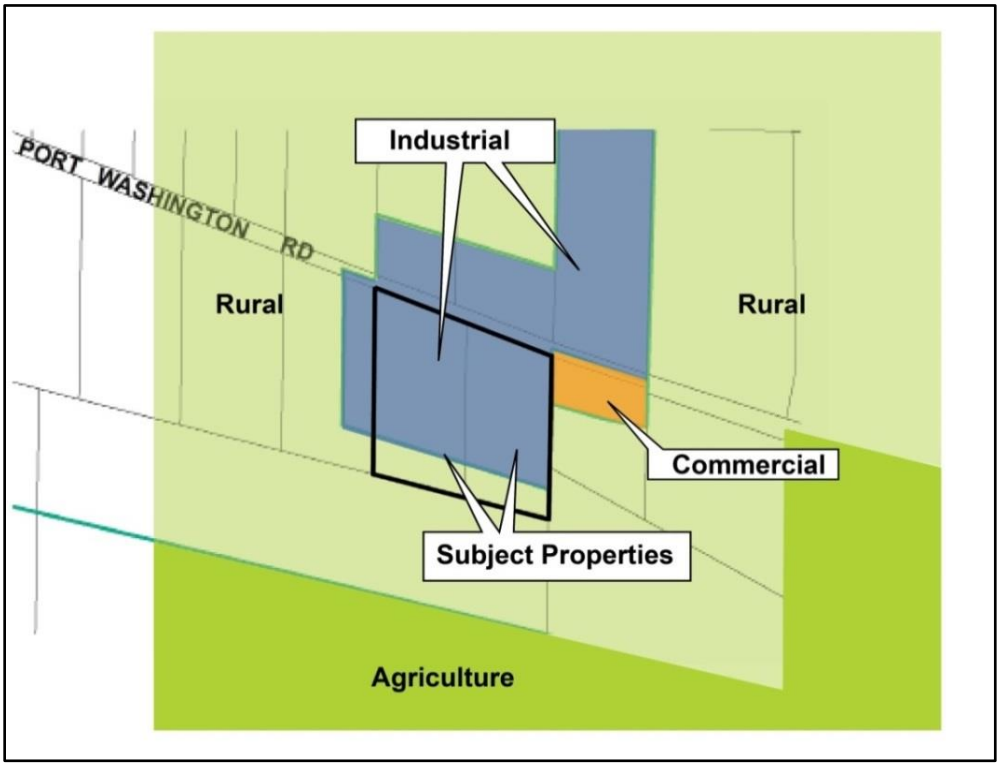
Islands Trust Fund	There are no Trust Fund covenants or properties in the surrounding area. The application does not affect the interests of the Trust Fund Board.
Regional Conservation Strategy	The proposal does not affect the goals and objectives of the Islands Trust Fund regional conservation plan.
Species at Risk	N/A
Sensitive Ecosystems	A portion of the property along the southern (rear) boundary is subject to the Woodland Sensitive Ecosystem DPA One (see above).
Hazard Areas	The steep slope mapping identifies the hillside located on the southern portion of the subject properties as having low, moderate and high hazard hazards (Attachment 2.5). The existing uses are not located in an identified hazard area, and all moderate and high risk is in the **Rural (R)** zone.
Archaeological Sites	Remote Access to Archaeological Data (RAAD) information indicates there are no archaeological sites noted within the property or within 100 metres. Notwithstanding the foregoing, and by copy of this report, the owners and applicant should be aware that there is still a chance that the lot may contain previously unrecorded archaeological material that is protected under the *Heritage Conservation Act*. This would most likely be indicated by the presence of areas of dark-stained soils containing conspicuous amounts of fire-stained or fire-broken rock, artifacts such as arrowheads or other stone tools, or even buried human remains. If such material is encountered during development, all work should cease and Archaeology Branch should be contacted immediately as a *Heritage Conservation Act* permit may be needed before further development is undertaken. This may involve the need to hire a qualified archaeologist to monitor the work.]
Climate Change Adaptation and Mitigation	There are no anticipated changes to the property from climate change impacts as the area of Industrial uses is an existing disturbed area. There are structures (salt shed) that includes measures to mitigate water contamination and improve water conservation

ATTACHMENT 2 – MAPPING

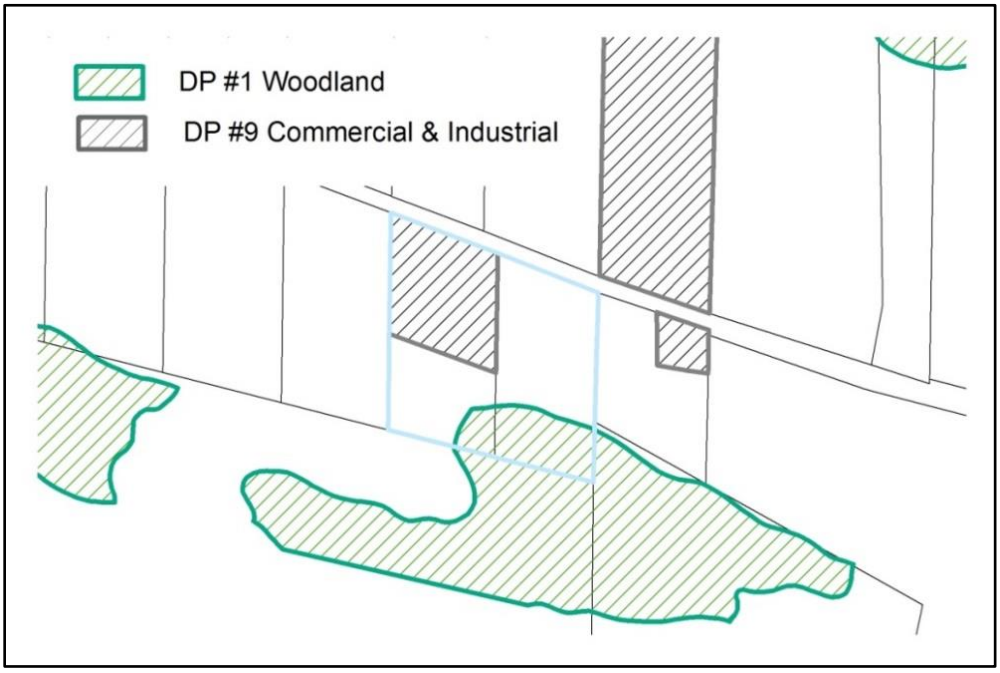
2.1 - ORTHOPHOTO



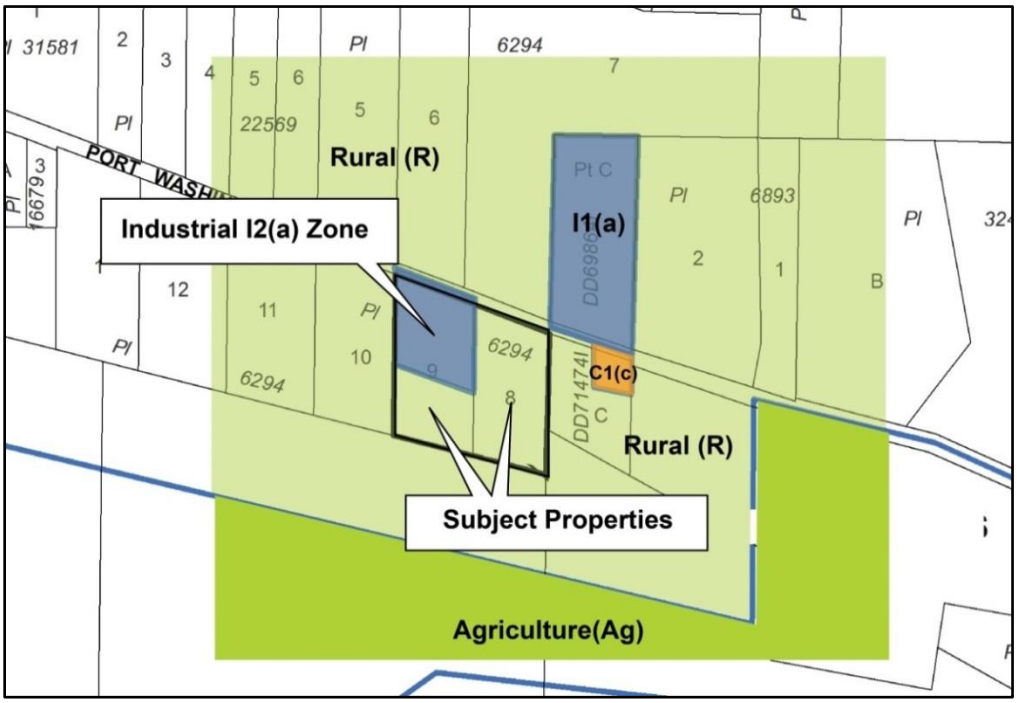
2.2 – OCP DESIGNATIONS



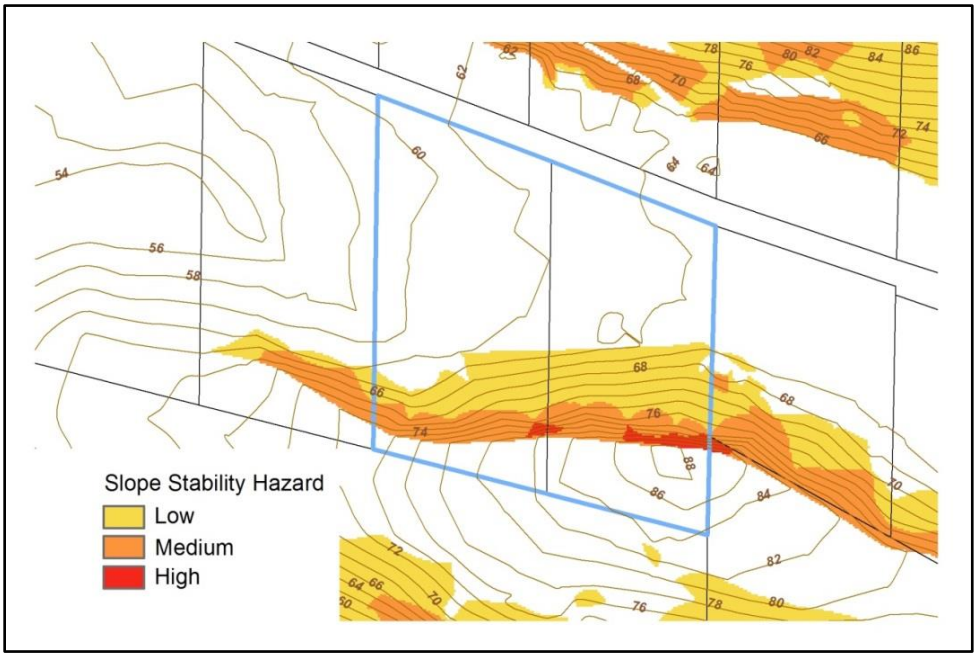
2.3 – DPAs



2.4 – CURRENT ZONING



2.5 – STEEP SLOPE MAPPING



ATTACHMENT 4 – POLICIES

ISLANDS TRUST POLICY STATEMENT

ITPS Policy	Complies	Planner Comments
3.1.3 - address the identification and protection of the environmentally sensitive areas and significant natural sites, features and landforms in their planning area.	yes	DPA One Area (Woodland Ecosystem) is maintained as Rural with zoning boundary alignment.
3.1.4 - Address the planning, establishment, and maintenance of a network of protected areas that preserve the representative ecosystems of their planning area and maintain their ecological integrity.	yes	See previous
3.1.5 – address the regulation of land use and development to restrict emissions to land, air and water to levels not harmful to humans or other species.	yes	
3.2.2 - address the protection of unfragmented forest ecosystems within their local planning areas from potentially adverse impacts of growth, development, and land-use.	yes	DPA One Area (Woodland Ecosystem) is maintained and protected with adjustments to zoning boundary alignment.

NORTH PENDER ISLAND OFFICIAL COMMUNITY PLAN NO. 171, 2007

OCP Objective/Policy	Complies	Planner Comments
2.5.1 Industrial development which may have a deleterious impact on adjacent land uses will not be permitted.	yes	
2.5.2 Priority may be given to the following locations for new or additional industrial development: a) by application to rezone the industrially designated land on Port Washington Road; The Local Trust Committee may consider requiring development information for industrial rezoning applications through adoption of a development approval information bylaw.	yes	

2.5.3	Industrial activity shall not be permitted in areas suitable for agriculture, or in hazardous or environmentally sensitive areas.	yes	
2.5.4	Applications for industrial rezoning must prove sustainable water supply and waste disposal capability, and include provision for remediation of any existing contamination, and in reviewing any application for new industrial uses, the local trust committee should consider potential climate change impacts.	yes	The use on these properties is a long standing, historical one. Applicants have provided a drainage plan, Best Management Practices for the operations and site profile information from 2006 and updated testing from 2017 (Attachment 5.7)The results indicate that there is no threat to neighbouring wells and/or the natural environment, however two wells on-site do not meet drinking water standards and should not be used for such.
2.5.5	Industrial activity, parking and storage areas should be screened.	yes	Screening in place along Port Washington Road from TUP applications.
		Choose an item.	

Mainroad Group
Level 1

About This Release

Document Number: Mainroad EMP Edition 1 / Revision 1

Title: Mainroad Group Environmental Management Plan

Author: Bob Nielsen

Issue	Date	Revision Description	Authorised by
Ed 1 / Rev 1	15 December 2013	New Mainroad Group Environmental Management Plan	Corporate Compliance Manager
Ed 1 / Rev 2	11 March 2014	Revised for application to all Mainroad Companies. Formatting revisions and expansion of document and record control, non-conformities and responsibilities	Corporate Compliance Manager

Management Review

This Plan shall be reviewed in accordance with Section 4.6.

Planned Review Date	Review By	Quality Management Review Date
15 December 2013	President, VP Operations and Corporate Compliance Manager	
15 December 2014		
15 December 2015		

Endorsement of the EMP

_____ / /

President Date

_____ / /

VP Operations Date

_____ / /

Corporate Compliance Manager

Date

Table of Contents

1.0 General Requirements

Mainroad has established, documented, implemented, maintained and continually improved our environmental management system in accordance with the requirements of ISO 14001 international standard and has determined how we are to fulfil these requirements.

This document represents Mainroad's environmental protection program and has been developed and written to provide best practices and guidance for compliance with applicable agency regulations as well as for protecting the public, equipment, property, and the environment.

Employees are expected to adhere to the Mainroad Environmental Plan and to act responsibly toward themselves, their fellow workers, customers, and contractors. Mainroad requires that employees assist the staff and management in updating this program when the need is recognized. Mainroad encourages employees to challenge environmentally degrading work conditions or practices and to assist with the development and implementation of the appropriate corrective solutions.

Employees, at a minimum, are expected to obey all municipal, provincial, and federal laws and to adhere to the Mainroad Environmental Plan.

Scope of the Environmental Management System

This document defines the environmental protection practices and processes that will be followed by all Mainroad Group facilities and operations. The **Mainroad Group** is any company owned in whole or in part by Mainroad Holdings Ltd. and operated under the Mainroad Management umbrella. The Mainroad Group operating companies consists of, but may not be limited to, the following companies:

Mainroad Holdings Ltd.
Mainroad Infrastructure Maintenance LP
Mainroad Transtronic Services LP
Mainroad Fraser Maintenance LP
Mainroad Lower Mainland Contracting LP
Mainroad Pavement Marking LP
Mainroad South Island Contracting LP
G&E Contracting LP
SPR Traffic Services LP
Mainroad Howe Sound Contracting LP
Mainroad East Kootenay Contracting LP
Mainroad Chinook Contracting LP
Mainroad Maintenance Products LP
MRC Total Build LP
Salvador Ready Mix Concrete LP
Raylec Power LP

Objectives of Mainroad's Environmental Management Plan

The purposes of Mainroad's Environmental Management Plan ("EMP") are to:

- Define Mainroad's management of environmental protection when delivering Services,
- Provide guidance to Mainroad staff on Mainroad's obligations under Environmental Responsibility;
- Assure the Mainroad Board of Directors that Mainroad is fulfilling its obligations regarding Environmental Responsibility to the shareholders;
- Define the responsibilities of the Environmental Management Representative and the responsibilities and authorities of other positions in regards to environmental stewardship; and

The Environmental Plan is designed to cover environmental aspects, which Mainroad Group can control and directly manage, and those it does not control or directly manage but can be expected to influence. The Structure of the program is as follows:

1. Level One Documents: Environmental Management Plan (Applies to all companies in the Mainroad Group)
2. Level Two Documents: Documents associated with the implementation of the Environmental plan including procedures and policy. Level Two documents may apply to multiple companies in the Mainroad Group.
3. Level Three Documents: Local Environmental Procedures (Local level procedures for safe operations)

The most current version of this manual is located electronically on the Mainroad Intranet site. Any change / review requests to this manual must be made in writing to the Mainroad Group Safety Committee, 17474 56th Avenue, Surrey B.C. V3S 1C3 or admin@mainroad.ca. This manual supersedes other corporate and company safety manuals currently in use throughout the Mainroad Group.

Please note: Due to version control all forms in this document are for illustrative purposes only. The current versions of these forms are available electronically on the Mainroad intranet document control site.

2.0 Definitions

Aspect – Element of the activities, products or services that interacts with the environment.

Environment – Surroundings in which the companies operate, including air, water, land, natural resources, flora, fauna, humans and their interrelation.

Impact – Any change to the environment, whether adverse of beneficial, resulting from a company's aspect.

Incident - An undesired event that results, or could have resulted, in physical harm to a person or damage to a property or environment.

Further Definitions available in the Quality and Safety Management Systems.

3.0 Environmental Policy

MAINROAD GROUP ENVIRONMENTAL POLICY

Mainroad Group of Companies' management is committed to promoting environmental responsibility throughout the organization by working with employees, suppliers, regulators, industry and the public to conserve natural resources and minimize environmental impact brought on by activities carried out within the group.

Management will ensure all companies in the Mainroad Group shall:

- Commit to the prevention of pollution.
- Comply with all legal, regulatory and other applicable requirements.
- Maintain effective environmental programs and monitor performance.
- Provide the necessary resources to support the environmental program.
- Strive to continually improve environmental performance and the effectiveness of the environmental program.

This policy and key components of the environmental program shall be reviewed annually.

March 1, 2014

The policy will be communicated to all persons working on behalf of the organization and made available to the public on Mainroad's intranet system in accordance with the environmental communication procedure.

4.0 Planning

4.1 Environmental Aspects

Mainroad has established, implemented and maintained procedures that:

a. Identify the environmental aspects of our activities, products and services within the defined scope of our environmental management systems which Mainroad can control and it can influence taking into account planned or new developments or new modified activities, products and services and
b. Determine those aspects that have or can have significant impacts on the environment.

Aspects and Impacts shall be identified for the operational activities and a significance factor is then established. All activities with a moderate level of environmental significance shall have a control factor implemented. Procedures for best practices when performing these activities shall be maintained. Activities with a high level of environmental significance shall be individually assessed and mitigation shall be implemented.

Mainroad has documented this information and shall keep it up to date.
Mainroad ensures that the significant environmental aspects are taken into account in establishing, implementing and maintaining our environmental management system.

The Environmental Management Representative maintains records of impact and aspect assessment and verifies they are reviewed annually

4.2 Legal and Other Requirements

Mainroad has established a process to identify legal and other requirements applicable to operations and sites. Under the authority of the Corporate Compliance Manager, the aspects shall be reviewed by a qualified person to determine applicable legal responsibilities. Impact and Aspects analysis shall consider and document applicable legislation.

Additional information is also available through legal publications. Legal requirements supersede any internal requirements within the environmental management system which will be reviewed annually by an environmental management representative. The representative will review the most current national, regional, provincial and local legal and other requirements as applicable to the Mainroad Group. A bulletin with the information shall be posted on Mainroad's intranet site, meant for the distribution of information within the organization.

Environmental Approvals, Licenses and Permits
Prior to the commencement of any services Mainroad shall obtain from the appropriate authorities which approvals, licenses and permits are required for the services

Mainroad ensures that these applicable legal requirements and other requirements to which we subscribe are taken into account in establishing, implementing and maintaining our environmental management system.

4.3 Objectives, Targets and Programmes

Mainroad has established, implemented and maintained, documented environmental objectives and targets, at relevant functions and levels within the organization.
The objectives and targets are measurable, where practicable, and consistent with the environmental policy, including commitments to prevention of pollution, to compliance with applicable legal requirements and with other requirements to which Mainroad subscribes, and to continual improvement.

When establishing and reviewing its objectives and targets, Mainroad shall take into account the legal requirements to which our organization subscribes, and its significant environmental aspects. These objectives and targets shall:

1. Be consistent with the aspects and impacts of the operations and the environmental policy.
2. Be measurable where practical.
3. Consider legal requirements.
4. Have a defined time frame.
5. Be relevant to current operations.

Objectives and targets are developed considering significant environmental aspects, technology options and financial, operational and business plans, and the views of interested parties, with the goal of continual improvement.

Monitoring and coordinating the determination, implementation and review of environmental objectives is the responsibility of the Corporate Compliance Manager.

Mainroad's Environmental Objectives
Mainroad's overall environmental objectives are to:

- Manage the delivery of the services so that adverse impact on the environment is limited,
- Meet the requirements of all relevant legislation,
- Maintain trust, good faith and cooperation between Mainroad, the community and Mainroad customers.

Mainroad's objectives shall be met through good leadership, commitment and training.

When establishing and reviewing our objectives and targets, Mainroad has taken into account the legal requirements and other requirements to which we subscribe, and the significant environmental aspects. Mainroad also considers technological options, financial, operational and business requirements, and the views of interested parties.

Programmes for achieving the objectives and targets shall be established. The programme includes:

a. Designation of responsibility for achieving objectives and targets at relevant functions and levels of the organization, and
b. The means and time-frame by which they are to be achieved.

Practice of Environmental Protection
Mainroad shall:

- Assess risks and plan work activities to eliminate or control foreseeable impacts or risks and comply with specified environmental protection requirements,
- Comply with relevant environmental, conservation, heritage, pollution, waste management and fire control legislation and regulations,
- Implement and maintain a risk-based performance evaluation program to verify that the services provided are in compliance with this EMP,
- Consult with employees and subcontractors and disseminate environmental information,
- Provide appropriate instruction and training for employees and subcontractors,
- Set up response procedures which shall initially contain, then remedy, any environmental damage which arise that is under Mainroad jurisdictional responsibility; and
- Improve environmental protection measures and revise this EMP promptly when deficiencies are identified and notify the customer when this occurs.

5.0 Implementation and Operation

5.1 Resources, Roles, Responsibility and Authority

Management ensures the availability of resources essential to establish, implement, maintain and improve the environmental management system. Resources include human resources and specialized skills, organizational infrastructure, technology and financial resources.

Management of the EMP
Roles, responsibility and authorities are defined, documented and communicated in order to facilitate effective environmental management. Mainroad's top management has appointed the Corporate Compliance Manager as the overall management representative whom is responsible for reporting to senior management as well as providing recommendations for improvement.

Management within the Mainroad Group operating companies are responsible for ensuring the availability of resources essential to implement the EMP and satisfy objectives and legal requirements. Resources include people, technology, infrastructure equipment and finances.

Organization and Environmental Responsibilities

The principle responsibilities and authorities of Mainroad staff with respect to the environment are:

President

The president is responsible for ensuring Mainroad's delivery of the Services meets Mainroad's environmental objectives with respect to the protection of the environment:

- Is properly resourced with people, equipment and systems; and
- Complies with all environmental legislation.

The president's responsibilities remain with him / her, however, the president has delegated as follows:

Vice Presidents & Directors

The Vice Presidents have delegated authority from, and responsibility to, the president as follows:

- Overall responsibility for environmental protection including:
  - Approving and regular evaluation of Mainroad's environmental controls and this EMP;
  - Ensuring, for both Mainroad staff and subcontractors, documented environmental procedures are followed and records are kept;
- Encouraging the active involvement of all staff in the management of the environment;
- Coordinating EMP activities of all personnel involved;
- Monitoring subcontractor performance and commitment;
- Arranging and ensuring environmental protection training of both staff and subcontractors takes place as required by this plan;
- Acting on corrective/preventive action notifications concerning environmental protection ensuring they are raised when appropriate and are closed out before the process or equipment is used again;
- Ensuring Mainroad's response to environmental emergencies including:
  - Ensuring it is appropriately resourced with trained people and with the equipment and materials required and they are deployed;
  - Ensuring that processes and control systems needed for the plan are established, implemented and maintained;
  - Arranging and approving training which ensures that all personnel understand what is required of them in emergencies;
- Liaison with:
  - Regulatory agencies including determining which approvals, licenses and permits are required and obtaining them;
  - The MOE to ensure its environmental requirements are met and ensuring that variations to the scope or timing of the Services that impact on the environment are discussed with and agreed to by the MOE;
- Community Relations including addressing Environmental Impacts;
- Being one of the 24-hour emergency contacts;
- Ensuring reporting on environmental issues takes place as required.

General Managers
Mainroad's Vice Presidents & Directors have delegated authority and responsibility to the operating company General Managers for:

- Ensuring environmental hazards and risks are controlled in construction activities and work areas;
- Ensuring the requirements of approvals, licenses and permits are met;
- Coordinating or conducting environmental site inspections;
- Monitoring subcontractor behavior on work sites;
- Identifying training needs with respect to spills and other environmental incidents and arranging for employees and subcontractors to attend the training;
- Holding toolbox meetings and team briefings about managing environmental issues, incidents and emergencies;
- Being one of the 24-hour emergency contacts;
- Implementing incident and emergency procedures;
- Arranging the supply of appropriate environmental incident and emergency equipment.

Operations Managers
Generally:

The General Managers have delegated authority and responsibility to, the Operations Managers for:

- Implementing environmental controls during the delivery of Services and in work areas;
- Ensuring the requirements of obtaining approvals, licenses and permits are met on site;
- Ensuring site personnel (including subcontractors) are:
  - appropriately inducted and trained in the use of equipment such as spill kits;
  - comply with environmental protection procedures;
- Advising Human Resources of any environmental training needed;
- Conducting site environmental inspections;
- Ensuring environmental emergency equipment such as spill kits is available at all times and is appropriately located;
- Investigating environmental incidents with the Corporate Compliance Manager or their delegate and a Management Representative;
- Initiating non-conformance reports or corrective/preventive action notification when environmental protection problems are identified;
- Obtaining environmental assessments of subcontractors and their plant and equipment;
- Advising the VP of Operations of any environmental or heritage issues the crews encounters on site;
- Defining storage arrangements for hazardous substances.

When responding to Environmental Incidents, ensuring:

- Safety of Mainroad's staff and subcontractors;

- Liaison with on-site Emergency Services Controllers when Operations Manager is not on site;
- Safety of road users;
- Quickly preventing/minimizing further environmental damage.

Nominated Environmental Management Representative (EMR):
The President has nominated the Corporate Compliance Manager to be Mainroad's Environmental Management Representative (EMR) with delegated authority from, and responsibility to, Vice President of Operations for being fully conversant with Mainroad's Environmental Management Plan ensuring it is fully implemented.

The Environmental Management Representative, through their own actions or by clearly documented delegation, is to keep Mainroad management informed of all issues relevant to the Plans.

The EMR shall report to senior management on the performance of the EMP for review and include recommendations for improvement.

The Environmental Management Representative's responsibilities are:

- Planning environmental controls;
- Evaluating and periodic auditing both staff and subcontractors at worksites;
- Ensuring that Site Environmental Checklists are prepared;
- Assisting site staff and subcontractors in their implementation of this EMP;
- Ensuring that environmental induction and training are carried out;
- Ensuring that environmental records are maintained;
- Being conversant with complaints and pollution incidents and their resolution;
- Investigating, controlling and closing-out environmental Non-conformances;
- Being one of the 24 hour emergency contacts;
- Ensuring that Material Safety Data Sheets (MSDS) are maintained;
- Assisting in the:
    - Determining of which environmental, approvals, licenses and permits are required and then in obtaining them;
    - Reviewing and updating this EMP;
    - Monitoring the environmental performance of subcontractors;

Supervisors and Foremen

Supervisors and Forman are to implement the EMP in the field and monitor the effectiveness of the workers. This includes:

- Verifying workers understand the requirements
- Monitoring subcontractors
- Consider objectives and targets prior to conducting work
- Report all incidents to management

Workers

- Following all procedures and controls put in place at work sites;
- Implementing the environmental controls at work sites correctly;
- Reporting all incidents;
- Work with management to meet objectives and targets.

Subcontractors

- Adopting the EMP for all Services under Contract;
- Implementing the environmental controls at work sites correctly;
- Following all environmental procedures or controls put in place at work sites.

Visitors

- Follow direction of Mainroad employees
- Report all environmental incidents to a Mainroad employee
- Obey posted rules and regulations

5.2 Competence, Training and Awareness

Mainroad ensures that any person performing tasks on its behalf that have the potential to cause a significant environmental impact identified by Mainroad is competent on the basis of appropriate education, training or experience, and retains associated records.

Mainroad has identified training needs associated with the environmental aspects and the environmental management system. Mainroad provides training or takes other action to meet these needs, and retains associated records.
Mainroad has established, implemented and maintained procedures to make persons working for it or on its behalf aware of:

a. The importance of conformity with the environmental policy and procedures and wit the requirements of the environmental management system,
b. The significant environmental aspects and related actual or potential impacts associated with their work, and the environmental benefits or improved personal performance,
c. Their roles and responsibilities in achieving conformity with the requirements of the environmental management system, and
d. The potential consequences of departure from specified operating procedures.

Environmental Protection and Emergency Response Training
All Mainroad and subcontractors' personnel shall attend Mainroad's Environmental Induction Meeting prior to the commencement of works that have the potential to cause environmental damage. The Operations Manager and/or the Environmental Management Representative shall arrange and conduct this meeting. Mainroad may combine this with Safety Induction and other competency training.

Topics covered at this meeting shall typically include the following:

1. Mainroad's environmental objectives in the project,
2. Scope of the project,
3. Organization and Responsibilities,
4. Site specific issues such as boundaries for vegetation clearing, importance of any trees of significant value, location of refuse bins, washing, refueling and maintenance of vehicles, plant and equipment,
5. Environmental Impacts, Safeguards and Control Measures,
6. Sensitive areas, exclusion zones and other precautions to be taken,
7. Waste Management and Reduction,
8. Conditions of any environmental licenses, permits and approvals;
9. Reporting process for environmental harm/incidents,
10. Lessons learned from incidents,
11. Control of subcontractors, and
12. Emergency response training including use of personal protective equipment and spill kits.

Any relevant environmental issues which become apparent during the project shall be added to this topics list.

Employees shall be obliged to sign the attendance record as proof that they have attended a work site induction briefing.

Mainroad may combine the OH&S and Environmental Records of Induction into one.

All Mainroad and subcontractor personnel who commence services that have the potential to cause environmental damage shall undergo the same induction training. This shall be provided by the Operations Manager or Environmental Management Representative.

Only people who have been environmentally inducted upon training, shall be permitted to work on worksites.

5.3 Communication

With regard to the environmental aspects and environmental management system, Mainroad has established, implemented and maintained procedures for:

a. Internal communication among the various levels and functions and
b. Receiving, documenting and responding to relevant communication from external interested parties.

Mainroad shall communicate significant environmental aspects internally. External communications of significant aspects shall be limited to auditors, regulatory agencies and clients as required.

Internal Communications:

Mainroad shall communicate internally about the significant environmental aspects and will document decisions made. Communications will be conducted through:

- Regular operations meetings with Managers and Supervisors;
- Regular 'tool-box' meetings;
- Crew briefings prior to new projects or jobs;
- Special management-led meetings to update changes made to the EMP, processes and procedures;
- Internal memos and e-mails;
- Annual preseason start up orientation and training;
- Training sessions on work procedures;
- Notices and bulletins posted on bulletin boards;
- Newsletters published by management with staff input;
- Management Reviews and other management meetings and briefings;
- Employee surveys and suggestion initiatives; and
- Shareholders' update meetings.

Each operating company shall maintain an Environmental, Occupational Health and Safety Committee (EOH&S). This committee shall:

- Be comprised of a minimum of 4 individuals and have a minimum of half the attendees be workers.
- Monitor the operating company for compliance to the environmental program
- Review incidents and investigations for trends and deficiencies
- Share experience and expertise in reviewing, revising and implementing environmental procedures and/or controls
- Make recommendations on improvements to the environmental program
- Assist in investigations and inspections
- Review input from workers and management for the continual improvement of the safety program.

  Minutes from the EOH&S Committee shall be posted and communicated to crews.

External Communications:

Public are able to comment on Mainroad practices and environmental performance through 24 hour hotlines and through the company website. All communications are then directed to responsible managers for investigation and response. Results are communicated to top management and the EOH&S committee for internal review.

5.4 Documentation and Records

This manual identifies all documents relevant to the Environmental Management System. A copy of the EMS document can be found on Mainroad's intranet site and can be obtained from the environmental representative.

The environmental management system documentation includes:

a. The environmental policy, objectives and targets,
b. Description of the scope of the environmental management system,
c. Description of the main elements of the environmental management system and their interaction, and reference to related documents,
d. Documents, including records, required by ISO 14001 international standard, and
e. Documents, including records, determined by Mainroad to be necessary to ensure the effective planning operation and control of processes that relate to its significant environmental aspects.

5.5 Document Control

Documents that are required by environmental plan are controlled. A documented procedure is established to define the controls needed to:

- Approve documents for adequacy prior to issue;
- Review documents and update as necessary;
- Ensure that changes and revision status of documents are identified;
- Ensure that relevant versions of applicable documents are available at points of use;
- Ensure that documents remain legible and readily identifiable;
- Ensure that documents of external origin are identified and their distribution controlled; and
- Prevent the unintended use of obsolete documents, and to apply suitable identification to them if they are retained for any purpose.

Controlled documents include the following:

- Environmental Policy, Plan and Manuals;
- Job or Task Procedures and Best Practices
- Environmental Forms
- Documents of external origin such as regulation and guidelines.

Control of Document Authority

The Corporate Compliance Manager is responsible for the development, monitoring, and verification of the corporate documentation and the General Manager is responsible for local level documentation.

Managers will ensure that applicable documents within their areas of responsibility are maintained and controlled in compliance with the requirements of this procedure.

Document Control Procedure

Controlled documents will be reviewed for accuracy and approved prior to issue. Documentation control ensures:

- That documents are uniquely identified, including: title, document number and revision date;
- That pertinent documents are available at their point of use;
- That obsolete documents are promptly removed from all points of issue or use, identified as obsolete, and replaced with revised ones;
- A system for controlling and documenting the changes is in place; and
- That revision and approval of documents are performed and identified.

Approval of documentation includes evaluation of content, completeness and clarity of document.

Mainroad's Environmental Plan and procedures are reviewed at regular intervals, to confirm their adequacy and conformity to the environmental policy, applicable standards, regulatory requirements, and company objectives.

Prior revisions of controlled documents that are required to be maintained for legal or information purposes are identified as obsolete, dated, and maintained in a separate file.

Issue status of the environmental plan is recorded in the manual and the revision status of each section is identified on every page of the manual. Form numbers and their latest revision date will identify forms.

The responsible staff ensures that the following actions are taken, prior to issue of a controlled document:

- Review the document for adequacy and accuracy;
- Ensure that the revision is in compliance with the specific requirements;
- Ensure that the reviewers approved and dated the documents for approval;
- Update the pertinent revision record, as applicable;
- Issue the document to the applicable location(s);
- Identify and remove the obsolete documents from all points of issue or use; and
- Destroy the suspended documents, or identify them as "Obsolete".

A revision control system is maintained to identify the current revision status of documents, and is readily available to preclude the use of invalid and/or obsolete documents.

Changes to the controlled documents are performed as follows:

- Review the requested change and consult with the responsible personnel;
- Review the background information of the document;
- Update the revision number and revision date of the document;
- Check if the document has been approved;
- Record or reference the nature of change that is made to the document, on the document or on the applicable revision record; and
- Remove the superseded document from point of use.

The identification of the latest revision, review, and approval of documents and the applicable dates will be present on the document.

5.6 Record Control

Records are established and maintained to provide evidence of conformity to requirements and of the effective operation of the environmental program. Records will remain legible, readily identifiable and retrievable. A documented procedure has been established to define the controls needed for the identification, storage, protection, retrieval, retention time and disposition of records.

This procedure is applicable to all environmental records maintained to provide objective evidence that the stated requirements have been adhered to. Examples of records include:

- Environmental aspects significant aspects
- Target, objectives and programme (s)
- Training records
- Results of Internal Audits
- Results of Management Reviews

Record Control Procedure

Environmental records are maintained to demonstrate conformance to specific requirements and to ensure the following, but not limited to:

- Environmental program requirements have been effectively implemented;
- Inspections/verifications have been performed and documented;
- Legal requirements are being met;
- Monitoring of performance is conducted.

Environmental records are legible, stored and retained in a suitable environment and are readily retrievable.

Environmental records are retained for 7 years. Expired records are evaluated for further retention or destruction at the end of retention period.

The Corporate Compliance Manager identifies the records to be retained and provides forms and media for this purpose and instructs personnel to use them.

Individuals in charge of maintaining the records are responsible for collecting, indexing, filing, storage, maintenance and disposition of records in accordance with the requirements of this procedure. Each operating company shall designate an individual responsible for maintaining records. In the absence of a designated person, the Corporate Compliance Manager is ultimately responsible.

Through monitoring by supervisors and internal audits records are verified to be legible, retrievable and identifiable.

Maintaining and Indexing

Hard copy records are stored and maintained in such a manner as to prevent deterioration and damage. The personnel that are maintaining the records ensure that they are stored in suitable environments, i.e. dry, clean, free of heat, or water hazards, etc.

Environmental records, which are maintained by computer, will be saved on data storage media and regularly updated.

All environmental records are indexed and filed so that they are clearly identified and easily retrievable. When different records are filed together, each set of records are clearly labelled for identification.

In addition to the indexing requirements, the records are dated to identify their retention period.

When appropriate, at the end of each calendar year, environmental records are labelled for the previous year and separated from the next year's files.

At the end of the retention periods of 7 years, the records are evaluated for further record keeping or destroying.

5.7 Operational Control

To ensure that significant environmental impacts are avoided or minimized, Mainroad operating companies shall implement procedures for the aspects with significant impact. These practices shall be documented and trained at the local level.

Activities associated with established and documented local industry standard environmental guidelines may reference these practices.

Further controls shall be implemented if their absence could lead to the deviation from this plan, legislation or the objectives and targets.

Operational controls shall be documented and controlled as required by the document control procedure.

5.8 Emergency Preparedness and Response

Mainroad responds to actual emergency situations and incidents and prevents or mitigates associated adverse environmental impacts. Response plans and handling manuals shall be developed for all aspects with significant risk of environmental emergency and shall be maintained at the local levels.

Further emergency response and plans are developed and maintained through the Health and Safety Program.

6.0 Checking

6.1 Monitoring and Compliance

Mainroad shall monitor the environmental performance of the operating companies through:

- Internal Audits
- Management Review
- Non Conformance Reports
- Compliance and Coaching

Mainroad companies shall ensure the documenting of information to monitor performance, applicable operational controls and conformity with Mainroad's environmental objectives and targets. This includes calibration and maintenance requirements and ensures that records will be retained.

Environmental compliance and monitoring may be done in conjunction with the health and safety. Safety Compliance and Coaching includes environmental considerations and is a component of the environmental management system.

Environmental Performance Evaluation
Using the Environmental Inspection Checklist, the Operations Manager or his delegate shall carry out monthly checks to ensure the service delivery is complying with the EMP. The completed checklists shall be filed in compliance with record control procedures. Bi-annually the Corporate Compliance Manager shall use the checklists to prepare a Summary of Environmental Performance for the Board of Directors–EOH&S Committee.

6.2 Nonconformity, Corrective Action and Preventive Action

Corrective actions and preventative actions may come from a number of sources including, but not limited to, audits, inspections, investigations, crew meetings, employee feedback, impact assessment and surveys. The following corrective and preventative actions must:

- Identify the action required to mitigate the issue;
- Determine the cause of the issue through an investigation;
- Evaluate the need to prevent re-occurrence;
- Record and communicate the results of corrective actions and preventative actions;
- Review effectiveness of corrective and preventative actions.

Responsibility and Authority

All staff are responsible to report a non-conformity to the environmental program by directly reporting the situation to their supervisor or Manager who may in turn issue a Non-Conformity Report (NCR) or other action to resolve the issue.

In the event of an NCR (Non-conformity report), the responsible manager will collect the NCRs, analyze them and report the result of his analysis to the EOH&S Committee. The

EOH&S Committee reviews the data and the actions taken and decides if long-term corrective/preventive action is warranted. Sub-contractors are expected to take corrective action if they are the root cause of the non-conformance.

Non-conformity Control Process

Non-conformity (NC) is when the issue is systemic to an area, process or component of the environmental program. A Non-conformity can be related to any component, practice, requirements, processes or procedures in the environmental program. Nonconformities can be identified by internal other external audit findings, these NCRs will be tracked on the NCR Log. When non-conformities are corrected they will be subject to re-verification to demonstrate conformity to the requirements.

When non-conformities are detected during operation, Mainroad will take action appropriate to the effects, or potential effects, of the non-conformities

6.3 Internal Audit

Mainroad's environmental audits shall be carried out by qualified internal auditors or external contracted auditors in accordance to Mainroad's Quality Management Plan. Qualified internal auditors are those that have attended and passed a recognized ISO Internal Auditors Course.

Mainroad ensures that internal periodic audits of the environmental management system are conducted at planned intervals to:

a. Determine whether the environmental management system
    1. Conforms to planned arrangements for environmental management including the requirements of ISO 14001 international standard, and
    2. Has been properly implemented and is maintained, and
b. Provide information on the results of audits to management.

Audit programmes are planned, established, implemented and maintained by Mainroad taking into consideration the environmental importance of the operations concerned and the results of previous audits.

The results of these audits are provided to management. Audits are performed according to a schedule, which is based in the environmental importance of activity, the results of the last audit and the audit schedule. The selection of auditors and conduct of audits is objective and impartial of the audit process. Auditors must be trained and qualified and records will be kept with the Managing Director.

7.0 Management Review

Top management reviews Mainroad's environmental management system at planned intervals, to ensure its continuing suitability, adequacy and effectiveness. Reviews include assessing opportunities for improvement and the need for changes to the environmental management system, including the environmental policy, and environmental objectives and targets. Records of the management reviews are retained.

Input to management reviews include:

a. Results of internal audits and evaluations of compliance with legal requirements and with other requirements to which Mainroad subscribes,
b. Communication from external interested parties, including complaints,
c. The environmental performance of Mainroad,
d. The extent to which objectives and targets have been met,
e. Status of corrective actions,
f. Follow-up actions from previous management reviews,
g. Changing circumstances, including developments in legal and other requirements related to the environmental aspects, and
h. Recommendations for improvement.

The outputs from management reviews include any decisions and actions related to possible changes to environmental policy, objectives, targets, and other elements of the environmental management system, consistent with the commitment to continual improvement.

Management review meetings will be minuted. Environmental management review meetings may be combined with health and safety management review.

Reviewing the Environmental Management Plan

The VP of Operations, Corporate Compliance Manager, General Managers, Operations Managers and Quality Managers (when applicable) shall annually review this Environmental Management Plan to ensure it is appropriate and is being implemented effectively.

Changes may arise from a change of scope of work, Mainroad internal audits, Customer audits, Customer comments or from opportunities for improvement initiated from other sources, such as worker input.

The Plan shall then be updated to reflect any changes which have occurred. The revised document and the input which led to the revisions shall be reviewed by the President, VP of Operations and the Corporate Compliance Manager, approved by them and then forwarded to the Board of Directors-EOH&S Committee.

Controlled copies of this Plan shall be updated.

The planned target dates (or frequencies) at which the Environmental Management Plan shall be subject to formal review and the personnel who shall participate in the review. Mainroad's Corporate Compliance Manager shall maintain records of any review.

2014

Environmental Management Plan

Level 2

Printed copies of this document are uncontrolled

Table of Contents

1. Environmental Aspects & Impacts Assessment Procedure

1.1 Purpose

The Mainroad Group has implemented a procedure for identifying, quantifying and periodically reviewing environmental aspects and impact caused by all normal and abnormal business operations.

1.2 Responsibility

The Corporate Compliance Manager and/or designate is responsible for the aspects and impacts documentation in accordance with the ISO 14001 standard.

1.3 Environmental Aspects and Impacts Procedure

1.3.1 Identification of Aspects and Impacts:

- Create or refer to a comprehensive list of activities.
- Populate the 'Aspect Description' columns in with the environmental aspects for normal and abnormal working conditions.
- Populate the 'Impact Description' columns in with the potential environmental impacts for normal and abnormal working conditions.

1.3.2 Calculating Impact Significance:

Regulatory Requirement:
If the aspect is associated with a regulatory requirement, assign a score of 5. If no requirement is identified, assign a score of 0.

Severity of Damage/Impact:
Use the following scoring to determine severity of potential damage or environmental impact.

1 = Insignificant damage/impact
2 = Minor damage/impact with reversible consequences
3 = Moderate damage/impact with localized consequences
4 = Severe damage/impact with potential for long term consequences
5 = Catastrophic damage/impact with irreversible consequences

Likelihood of Impact:
Use the following scoring associated with the likelihood an environmental impact may occur as a result of activities:

1 = Unlikely to occur
2 = Unlikely with some chance of occurrence
3 = Moderate, could potentially occur
4 = Likely to happen at some point
5 = Almost certain impact will occur if not attended to.

Frequency of Activity:
The Frequency of the Activity is scored from one to three:

1 = Annual activity or under abnormal conditions only.
2 = Regular activity that occurs approximately once a month.
3 = Weekly activity or more.

Stakeholder Concern

Breadth of Stakeholders and their level of concern in scored as follows:

0 = None, no stakeholder concern and no potential for damage to reputation.
1 = Neighbors / singular stakeholder with minor local concerns and possible limited or insignificant damage to reputation.
2 = Regional / multiple stakeholders with concerns and potential for damage to reputation in the marketplace.
3 = Large reaching concerns with many stakeholders and high potential for damaged reputation in the market.

Global Concern / Issue

Some impacts are related to a larger global issue. If the potential impact may reasonably contribute to a larger global issue it is given a score of 2. If there is no, or miniscule, contribution to a global issue, it is given a score of 0.

Cost of Mitigation

In the event an impact requires mitigation, the cost of the mitigation is scored from 0-3:

0 = Little or no cost, approximately less than $100
1 =Some cost though not a major financial impact, approximately less than $5000
2 = Costly with impact to annual budgets, approximately less than $75,000
3 = Large financial impact to the profitability and sustainability of the company with further impact to the group of companies.

1.3.3 Impact Significance Score:

If the total of all scores is above 15, a measure of control is required and the procedure is to be documented in the local procedure manual. Further to this, activities scoring between 10 and 15 shall be monitored if controls are not in place. At a minimum, controls shall meet all regulatory requirements. Further to this, they shall work to prevent or reduce impact as much as is reasonable.

Significant impacts shall have a review the effectiveness of controls through a reassessment after mitigation. This shall be done once the control has been implemented for an appropriate amount of time.

1.4 Management Review of Impacts and Aspects

At least annually, the aspects and impacts spreadsheet will be re-evaluated by the Corporate Compliance Manager or designate. During the re-evaluation process the following questions should be considered:

- Does the existing list of aspects and impacts cover all existing, new or proposed components of business operations?
- Are there any changes (e.g. upgrades, downgrades) that need to be made to the significance rating of any impacts?
- Are there any changes in legislation that require modifications to the Aspects and Impacts Matrix?

- Are there any emerging technologies or trends in environmental responsibility that would require additional assessment or improvement in controls?
- Was there any input from the public interest groups, customers or employees that should be reflected in the Aspects and Impacts Matrix?
- Do any changes to the environmental rules and regulations related to current or proposed business operations need to be reflected in the Aspects and Impacts Matrix?
- Are there any changes that need to be made to this procedure?

2. Time Management in Environmental Protection

Mainroad aims to meet its time related obligations regarding Environmental Protection as they are set out by the Contractor(s) and Regulatory Bodies.

3. Environmentally Sensitive Areas

- There are several sites of known environmental sensitivity within Service Areas or worksites. These sites will be listed by the individual company or site and communicated to the staff that would have the likelihood of encountering these environmentally sensitive areas.
- Stock piles for Salt and Pickled Winter Sand will be listed by the individual companies.

4. Waste management

Legislative Requirements

When Mainroad stores or transports Hazardous or Industrial waste it is classified as a non-licensed waste activity. Accordingly, Mainroad will:

- Ensure that waste is stored in an environmentally safe manner,
- Ensure that waste is not stored with and does not come into contact with any incompatible waste,
- Retain information regarding the generation, storage, treatment or disposal of the waste,
- Obtain a consignment authorization number for the waste from the person to whom the waste is being delivered, complete and retain an approved waste data form in relation to the consigned waste and give a copy of the form to the person transporting the waste prior to transporting the waste,
- Ensure that the person transporting the waste is licensed if the waste is of such an amount as to require the person transporting the waste to be licensed,
- Ensure that the waste is being transported to a place that may be lawfully used as a waste facility,
- Accurately identify the waste and advise the transporter accordingly and
- Inform the regulatory authority of any suspected breach of the Transportation of Dangerous Goods Regulation or the Hazardous Waste Act in connection with the transportation of waste from sites.

Mainroad, as a non-licensed transporter of wastes, will ensure that:

- Vehicles carrying waste will be kept clean and be constructed and maintained so as to prevent spillage of waste,
- Loads which may spill or emit odors are covered so that spillage and/or emission is prevented,
- Any container is safely secured,
- Incompatible waste will not be mixed or transported together,
- Any hazardous waste is not mixed with any other type of waste,
- Any waste containing asbestos is wetted and fully covered,
- Material segregated for recycling is not mixed with other wastes,
- Any waste is transported only to controlled waste facilities or other facilities that can lawfully receive the waste and
- The occupier of the waste facility is advised of the type of waste involved before the waste is unloaded.

Waste Management

Mainroad will conform to the requirements of environmental legislation and any other waste management related regulatory bodies as applicable including municipal requirements.

Licensed Waste Facilities

When waste is required to be disposed of at a licensed waste facility it is done so by one of the following:

- Call for pickup by Waste Management Professionals;
- Take the waste to a Licensed Waste Management Facility for disposal or recycling.

Waste Recycling Facilities

Recyclable Waste Materials:	Recycling Facilities:
Metals: Aluminum, Steel, Iron and other metals	Local metals recyclers will be contracted for recycling of metals.
Recycled Asphalt Pavement	All RAP suitable for reuse will be stockpiled at Mainroad Depots. RAP will be recycled by Mainroad, local residents and farmers.
Plastics	Recyclable plastics will be collected and recycled locally, unless no such services are available or economically feasible.
Paper and other office products	Paper, cardboard and other office products will be recycled locally, unless no such services are available or economically feasible.

5. Stockpile Management

Mainroad's Stockpile Management Plan for salt is covered in the Salt Management Plan document to manage the establishment and maintenance of salt stockpile sites.

All aggregate stockpiles are not covered, nor does Mainroad intend to cover all stockpiles. Aggregates such as winter sand, road base, chip seal aggregate and road mulch are kept in open piles. Pickled winter sand (sand mixed with a small amount of salt to reduce freezing) is exposed to the elements, however, as economic feasibility allows, it is the intent of Mainroad to cover these winter pickled sand stockpiles.

6. Soil and Water Management

Erosion and Sedimentation Control

Mainroad will plan and carry out the whole of the Services to comply with Regulations. Where required, Mainroad will prepare an Erosion and Sedimentation Control Plan to regulatory requirements if and when required to do so.

Water Quality

Mainroad will provide adequate controls to ensure that any water entering the waterways or storm water drainage system from areas it disturbs complies with the requirements of the provincial, federal and the local water authority.

Appropriately constructed and situated wash out areas will be used when washing out trucks and washing down plant and equipment.

Water Extraction

Mainroad will identify any water source it intends to use for dust control, bridge or structure cleaning, earthworks/pavement compaction, on-site concrete batching and the like, obtain any required licenses, permits or approvals and comply with any conditions they or Legislation impose.

7. Noise & Vibration Control

Mainroad will make all practical efforts to comply with the requirements of the Occupational Health and Safety Regulation as well as criteria for road traffic noise and the noise management bylaws.

Mainroad will:

- Restrict, where possible, noise making activities to normal working hours,
- When working near schools, hospitals, residences and places of worship avoid sensitive times for example those leading up to and during examinations or during religious services,
- Inform and consult with affected residents,
- Ensure works and equipment has efficient noise suppression devices.

8. Vegetation

Protection

Mainroad will:

- Adhere to the requirements and precautions of regulatory authorities.
- Preserve existing trees, plants, and other vegetation within the projects and use every precaution necessary to prevent damage or injury thereto except as otherwise allowed.
- Ensure that all site personnel observe the limits of clearing and are made aware of the importance of any trees of significant value.
- When required, get approvals under the regulatory authorities.

Weeds

The Services include the eradication or controlling of only those weeds which interfere with safe travel or which may damage customer property and then only to the extent necessary for work area purposes.

Mainroad shall do everything reasonably practicable to stop the spread of invasive species.

9. Native Wildlife

Mainroad will protect all native fauna from the impact of it Services in accordance regulatory guidelines.

All native wildlife will be protected. No firearms will be allowed on site except for purposes permitted by law.

10. Fire Precautions

Mainroad will take all necessary precautions with equipment in bush-fire prone areas and, when the danger of fire is high, it will restrict or, when prudent, refrain from welding, grinding, using cut-off wheels and other heat or spark generating work such as operating mowers.

11. Potential Contaminants

Mainroad will plan and execute the services so as to minimize the risk of polluting with chemicals, dangerous goods and other potential contaminants.

Where a significant risk exists (e.g. fuel storage and transfer to vehicles, use of pesticides, concrete batching, and application of pre-coat) and especially near waterways and drains, it will meet all the requirements of the regulatory authorities..

12. Aboriginal Heritage Protection

Mainroad will ensure that all personnel performing the services are made aware of any relevant sites/areas which must be avoided.

If Mainroad encounters any previously unknown Aboriginal object or material (including skeletal remains) suspected of being of Aboriginal origin, it will cease all construction work that might cause damage or disturbance.

Mainroad will then notify the appropriate authority immediately, who will then arrange for proper authorities to be contacted so that it can be determined if a member of the appropriate Local Aboriginal community should be consulted.

13. Non-Aboriginal Heritage Protection

Should any previously unknown item be encountered which is suspected to be a relic or heritage item, services in the affected area will stop and measures to protect the item from damage or disturbance will be taken. The appropriate authority will be notified immediately.

14. Materials with Recycled Content Preferred

Materials and products with recycled content will be proposed wherever they are cost and performance competitive and environmentally preferable to the non-recycled alternative.

15. Site Restoration

Mainroad will reinstate any areas disturbed by its delivery of the services so as to meet any and all federal, provincial and local jurisdictional requirements.

16. Control of Subcontractors

Subcontractors' Environmental Management Plans (EMP)

If the Subcontractor has its own EMP, Mainroad will:

1. Document the duties of that subcontractor,
2. Audit that subcontractor's EMP and record the results,
3. Induct that subcontractor's personnel in accordance with Mainroad Requirements
4. Set down the responsibilities Mainroad will retain for the management of site environmental protection issues,
5. Set down a surveillance program to monitor and document effectiveness of each subcontractor's systems

If the Subcontractor does not have its own EMP, Mainroad will:

Engage the subcontractor upon the basis that it will adopt this EMP.

Subcontractor Nonconformance

In the event that a subcontractor is found to be not working to the requirements of the EMP, Mainroad will immediately issue a NCR with a Hold Point which stops the noncompliant process until the NCR is closed out.

Process Held:	Subcontractor's noncompliant process, equipment or works.	**Mainroad Hold Point**
Submission:	Close out of NCR to Quality Manager	
Release:	Operations Manager considers documentation submitted.	

17. Community Relations

Working Hours

Mainroad adjusts working hours for projects to minimize the impact on residents or commuters as and when required if the adjustments fit in to required work windows and are operationally feasible.

24 hours per day, 7 days per week

18. Complaints Procedure

If Environmental complaints made by the public to Mainroad staff cannot be immediately resolved, they will be recorded and dealt with promptly using Mainroad's complaint procedure

19. Environmental Reporting to the Customer

Mainroad will submit to the customer within the required times:

- A report on each occasion when the site is visited by an environmental authority, notifying Mainroad of the purpose and outcome of the authorities' visit and of all actions being taken by Mainroad in response to the visit,
- A report of any incident resulting in failure to meet environmental obligations, the immediate action taken to alleviate the problem and the proposed measures to prevent the occurrence of a similar incident.
- A summary report of environmental performance evaluations as and when required,
- Other environmental reports and notifications set down in specific contracts as required.

20. Salt Management

Salt Management

Mainroad has prepared a Salt Management Plan; with the Plan is an overview of winter chemical management, including the current winter chemical practices, documentation, and planned improvements in winter chemical management.

Winter Chemical Handling

Mainroad has established the proper handling practices for all winter chemicals. Each winter chemical product has a corresponding Handling Manual which outlines the best practices for storage, mixing, and loading. Winter chemical handling will be implemented into the Winter Orientation, where employees will be trained on salt management and receive the handling manuals that are appropriate to their operation.

Winter Chemical Spill Response

Mainroad will provide each employee with the proper training in the event of a winter chemical spill, this training has been incorporated into the Winter Orientation. Training will include procedures on effectively responding to a yard and a site incident, in the event of both small and

large spills. All employees will receive a spill response procedure and all corresponding vehicles will be equipped with the materials required to clean up various types and sizes of spills.

Winter Chemical Storage Monitoring

Mainroad has implemented evaluations which assess the current conditions and risks of environmental impact of all sites where winter chemicals are being stored. Monitoring programs are set up for each site and are put into one of 3 stage categories. The various stages determine the level and amount of monitoring that needs to be performed in order to ensure the environmental impact has been minimized and meets legislative standards. The Stage 1 Monitoring Report is to be done quarterly, and evaluates the general conditions of each yard. The Storage Impacts and Risk Assessment outlines the stage of contamination and level of risk to the environment, if any, each yard is at. With consideration from both evaluations, Mainroad is able to maintain a clear knowledge of the conditions of each yard and implement procedures to maintain and/or reduce the associated environmental accountabilities.

20.1 Sodium Chloride

20.1.1 Storage

- All deliveries should be covered and arranged for periods of good weather.
- All areas in contact with salt after a delivery should be swept and salt returned into storage facility.
- All road salt will be stored in covered, leak proof shelters, including tarpped piles and placed on concrete or asphalt pads to prevent leaching into ground areas, away from open ditches and storm drains.
- Any sodium chloride exposed to the weather will be covered to prevent dissolving into liquid brine.
- If stockpile freezes, frozen blocks should be allowed to thaw and dry and broken up before being loaded into spreader, or blocks can go into brine production tank.
- All vehicles and equipment will be washed in a designated area away from open water areas and/or streams. All cleaning agents will be environmentally friendly and approved by Mainroad's Quality Manager before use.

20.1.2 Loading

- Loading areas are on asphalt pads and any salt spillage is swept/contained and placed back under cover constantly.
- Spreaders should not be loaded beyond capacity.
- Where feasible should be covered with tarps when loaded.
- Do not "run off" any residual salt on the roadway at the end of your assignment, return it to the storage facility. All stock withdrawals should be documented in order to ensure that both product quantity tracking information and application rate calculations are accurate.
- Excess salt remaining in the spreader should be returned to the storage facility.

20.2 Brine

20.2.1 Storage

- Liquid brine will be stored in leak proof polyethylene tanks, away from open ditches and storm drains.
- The tanks should be on impervious bases and provide spill protection either by being double walled or being contained in a structure where any leaks can be contained.
- Connected tanks should have shut off valves that prevent all the tanks from draining if one should be ruptured or begin to leak.
- Brine storage facilities should have insulation against significant temperature drops to prevent formation of ice crystals.
- The brine should be tested periodically to determine the desired concentration is being maintained.
- Anyone handling brine should wear protective equipment including eye protection.

20.2.2 Mixing

- The brine making equipment, along with storage tanks are set up within sealed enclosures.
- Enclosures are to be capable of containing any system spill that may occur through accident or failure of the system.
- The containment area is 10% greater than the capacity of the tanks.
- Salt used for brine production should be kept separate and clean.
- Consideration should be given to using wash water or salt laden drainage water for brine production.
- Where possible, clumps of salt or wet salt can be placed in the brine production plant rather than placing this material in the salt storage facility.

20.3 Pickled Sand

20.3.1 Storage

- All deliveries should be covered and arranged for periods of good weather.
- All salt and sand mixtures will be stored in covered, leak proof shelters, including tarpped piles and placed on concrete or asphalt pads to prevent leaching into ground areas, away from open ditches and storm drains.
- Any pickled sand exposed to the weather will be covered to prevent the salt from dissolving into liquid brine.
- If stockpile freezes, frozen blocks should be allowed to thaw and dry and broken up before being loaded into spreader.
- All vehicles and equipment will be washed in a designated area away from open water areas and/or streams. All cleaning agents will be environmentally friendly and approved by Mainroad's Quality Manager before use.

20.3.2 Mixing

- Salt and sand mixtures should be mixed inside storage area, or on an impermeable pad.
- Mixing should be done during good weather to minimize salt loss due to precipitation and wind, and minimize moisture content.

- Sand should be dry as possible to reduce amount of salt required to prevent freezing.
- Any residual salt on outside pad should be swept up and deposited inside the storage structure.

20.3.3 Loading

- Loading areas are on asphalt pads and any salt spillage is swept/contained and placed back under cover constantly.
- Spreaders should not be loaded beyond capacity.
- Do not “run off” any residual salt and sand on the roadway at the end of your assignment, return it to the storage facility. All stock withdrawals should be documented in order to ensure that both product quantity tracking information and application rate calculations are accurate.
- Excess salt and sand remaining in the spreader should be returned to the storage facility.
- Where feasible should be covered with tarps when loaded with salt or sand.

20.4 Calcium Chloride

20.4.1 Storage

- All deliveries should be covered and arranged for periods of good weather.
- All areas in contact with the salt after a delivery should be swept and salt returned into storage facility.
- Calcium chloride bags will be stored in a cool dry shed designated on the site plan, away from any water systems.
- Any calcium chloride exposed to the weather will be covered to prevent dissolving into liquid brine.
- If stockpile freezes, frozen blocks should be allowed to thaw and dry and broken up before being loaded into spreader, or blocks can go into brine production tank.
- Calcium chloride bags will be transported in their original bags, if a bag is punctured then the product will be stored and transported in covered metal drums.
- All vehicles and equipment will be washed in a designated area away from open water areas and/or streams. All cleaning agents will be environmentally friendly and approved by Mainroad’s Quality Manager before use.

20.4.2 Loading

- Loading areas are on asphalt pads and any salt spillage is swept/contained and placed back under cover constantly.
- Spreaders should not be loaded beyond capacity.
- Where feasible should be covered with tarps when loaded.
- Do not “run off” any residual salt on the roadway at the end of your assignment, return it to the storage facility. All stock withdrawals should be documented in order to ensure that both product quantity tracking information and application rate calculations are accurate.
- Excess salt remaining in the spreader should be returned to the storage facility.

20.5 Magnesium Chloride

20.5.1 Storage

- All deliveries should be covered and arranged for periods of good weather.
- All areas in contact with the salt after a delivery should be swept and salt returned into storage facility.
- Magnesium chloride will be stored in a cool dry shed designated on the site plan, away from any water systems.
- Any Magnesium chloride exposed to the weather will be covered to prevent dissolving into liquid brine.
- If stockpile freezes, frozen blocks should be allowed to thaw and dry and broken up before being loaded into spreader, or blocks can go into brine production tank.
- All vehicles and equipment will be washed in a designated area away from open water areas and/or streams. All cleaning agents will be environmentally friendly and approved by Mainroad's Quality Manager before use.

20.5.2 Loading

- Loading areas are on asphalt pads and any salt spillage is swept/contained and placed back under cover constantly.
- Spreaders should not be loaded beyond capacity.
- Where feasible should be covered with tarps when loaded.
- Do not "run off" any residual salt on the roadway at the end of your assignment, return it to the storage facility. All stock withdrawals should be documented in order to ensure that both product quantity tracking information and application rate calculations are accurate.
- Excess salt remaining in the spreader should be returned to the storage

Level 2B

Environmental Incident Prevention and Emergency Management Plan

BC Highway Maintenance Contracting Companies

March 11, 2014

About This Release

Document Number:	Mainroad Emergency Plan – BC Highway Maintenance Edition 2 / Revision 1
Title:	Environmental Incident Prevention and Emergency Management Plan - BC Highway Maintenance Contracting Companies
Author:	Bob Nielsen

Issue	Date	Revision Description	Authorised by
Ed 1 / Rev 1	15 December 2013	New Mainroad Group Environmental Management Plan	Corporate Compliance Manager
Ed 2 / Rev 1	11 March 2014	Separated Incident Prevention and Emergency Management into individual document	Corporate Compliance Manager

Management Review

This Plan shall be reviewed in accordance with Section 4.6.

Planned Review Date	Review By	Quality Management Review Date
15 December 2013	President, VP Operations and Corporate Compliance Manager	
15 December 2014		
15 December 2015		

Endorsement of the Environmental Incident Prevention and Emergency Management Plan - BC Highway Maintenance Contracting Companies

_____ / /

President Date

_____ / /

VP Operations Date

_____ / /

Corporate Compliance Manager

Date

Table of Contents

1. Scope:

Mainroad has prepared an Environmental Incident Prevention and Emergency Management Plan. It deals with key response personnel, emergency contracts, containment measures, cleaning, collecting and disposal, availability of MSDS, the emergency procedure and communications strategy.

Specific Handling Manuals and Procedures accompany this document as incident prevention.

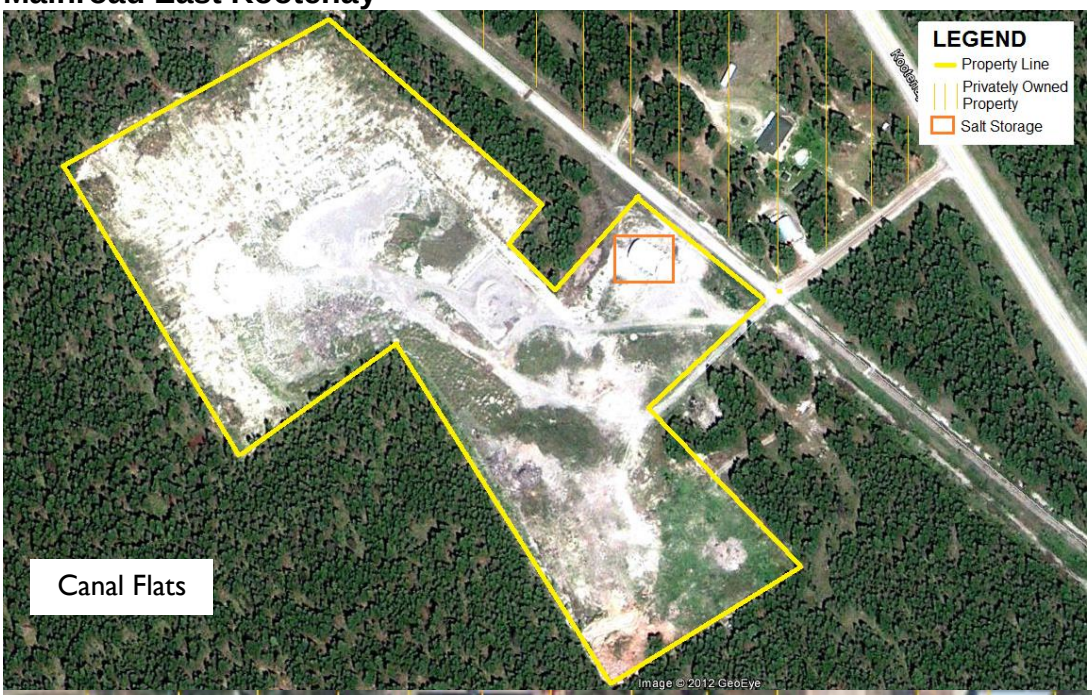
This Plan applies to Mainroad companies operating as highway maintenance contractors and winter maintenance material suppliers in British Columbia including:

Mainroad Infrastructure Maintenance LP
Mainroad Fraser Maintenance LP
Mainroad Lower Mainland Contracting LP
Mainroad South Island Contracting LP
Mainroad Howe Sound Contracting LP
Mainroad East Kootenay Contracting LP
Mainroad Maintenance Products LP

2. Mainroad Environmentally Sensitive Areas

Mainroad has identified areas with the highest potential for environmental impact as those that store and handle winter materials including salt and brine.

Mainroad East Kootenay



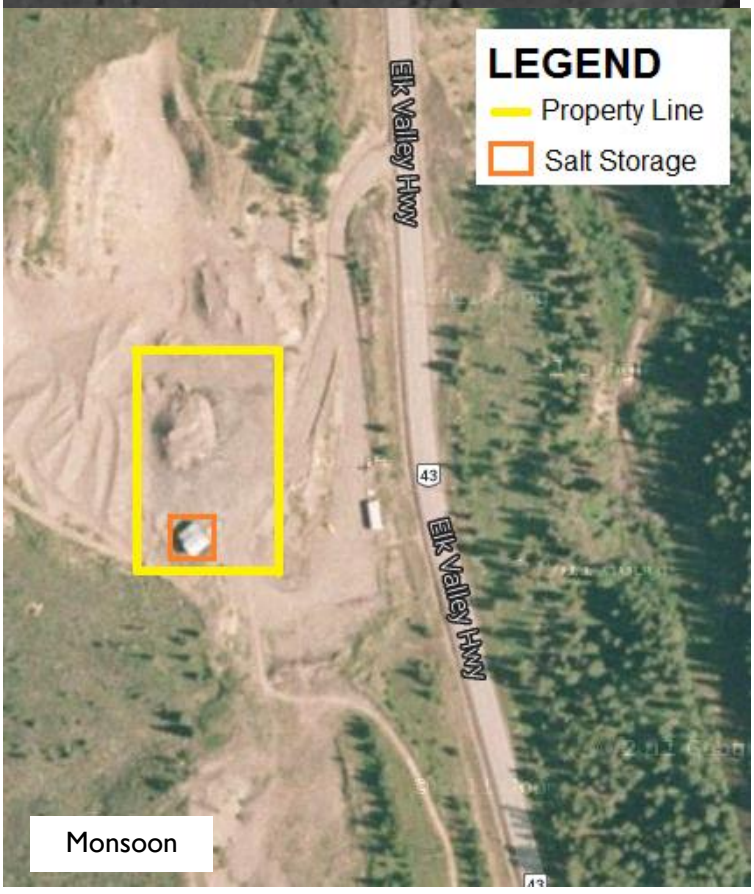

LEGEND
Property Line
Privately Owned Property
Salt Storage
Dicken Rd
Fernie


LEGEND
Property Line
Privately Owned Property
Brine Production
Salt Storage
Vehicle Wash Area
Invermere

Jaffray

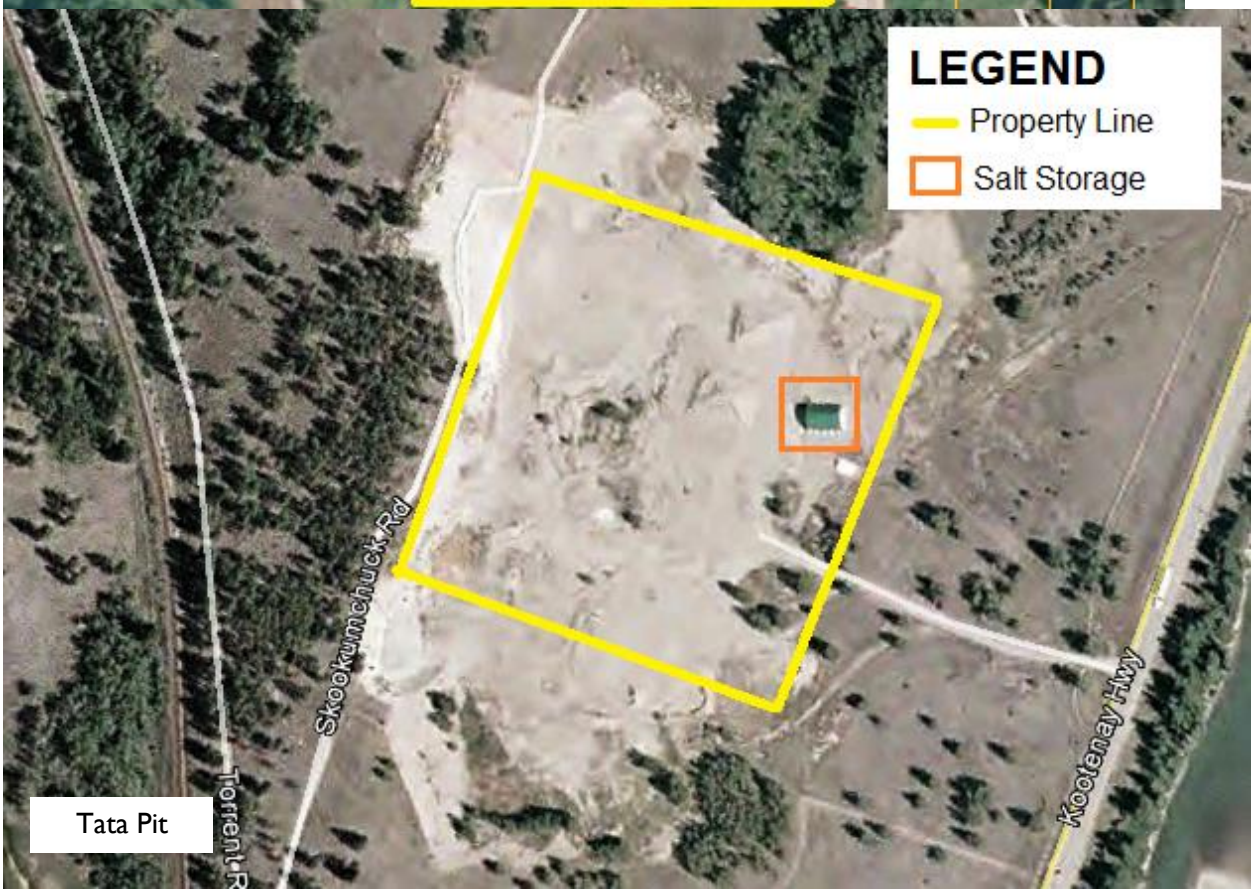
Kimberley

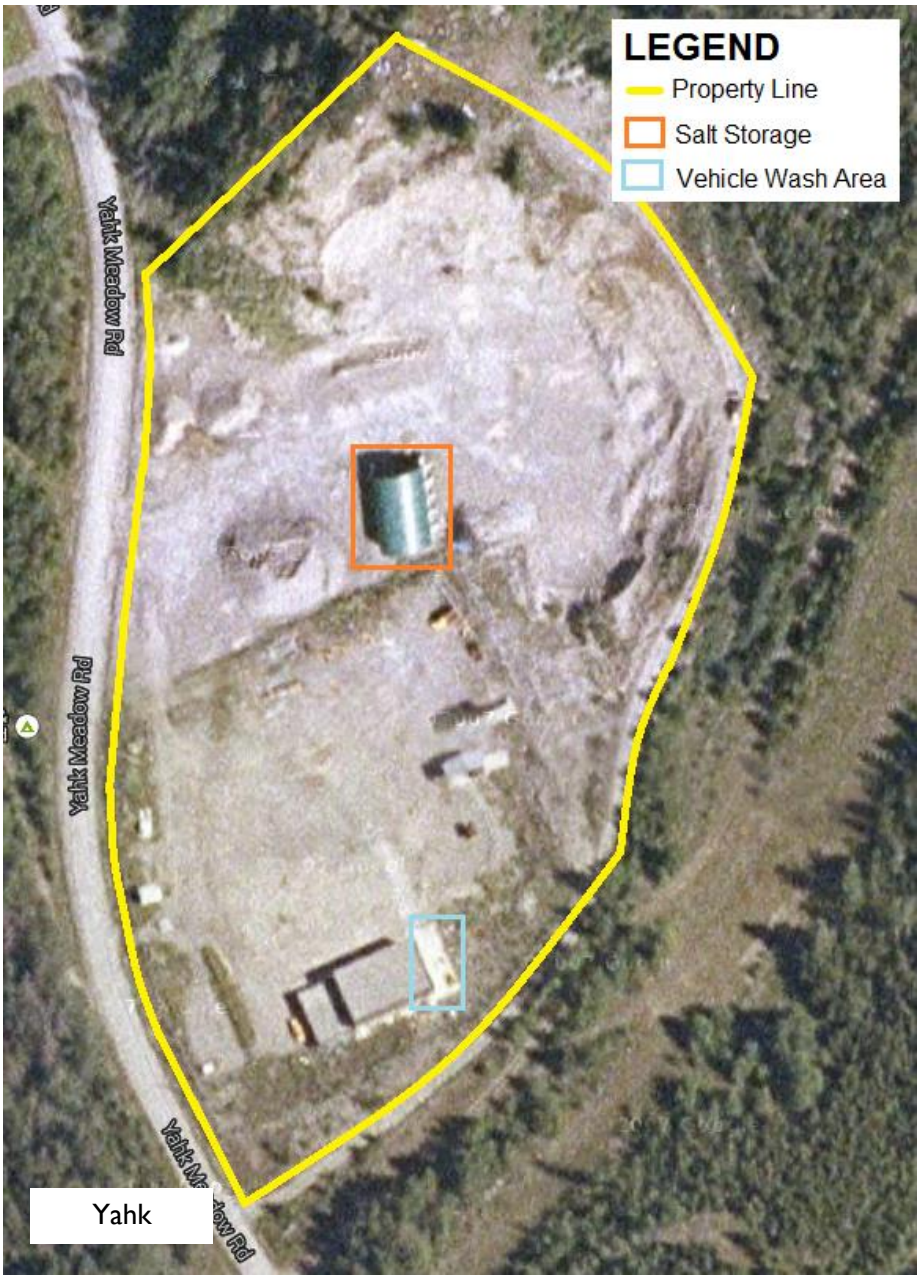
Sawmill



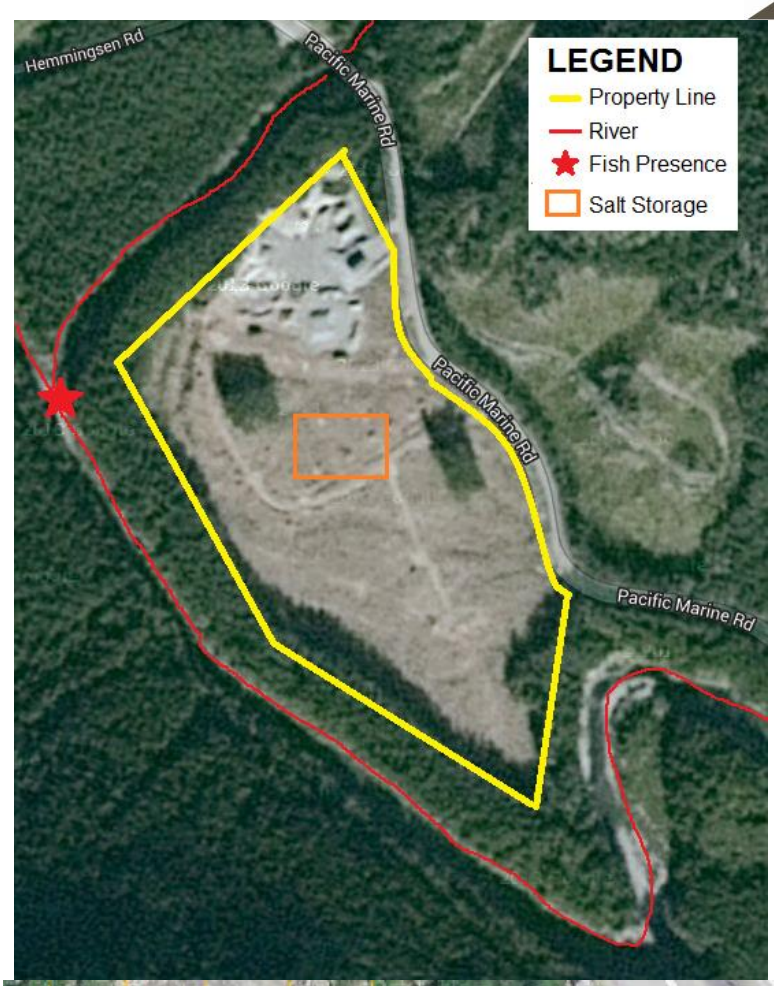
Monsoon


LEGEND
Property Line
Privately Owned Property
Salt Storage
Vehicle Wash Area
Engelmann Spruce Dr
Pine Ave
Sparwood


LEGEND
Property Line
Salt Storage
Skookumchuck Rd
Kootenay Hwy
Tata Pit

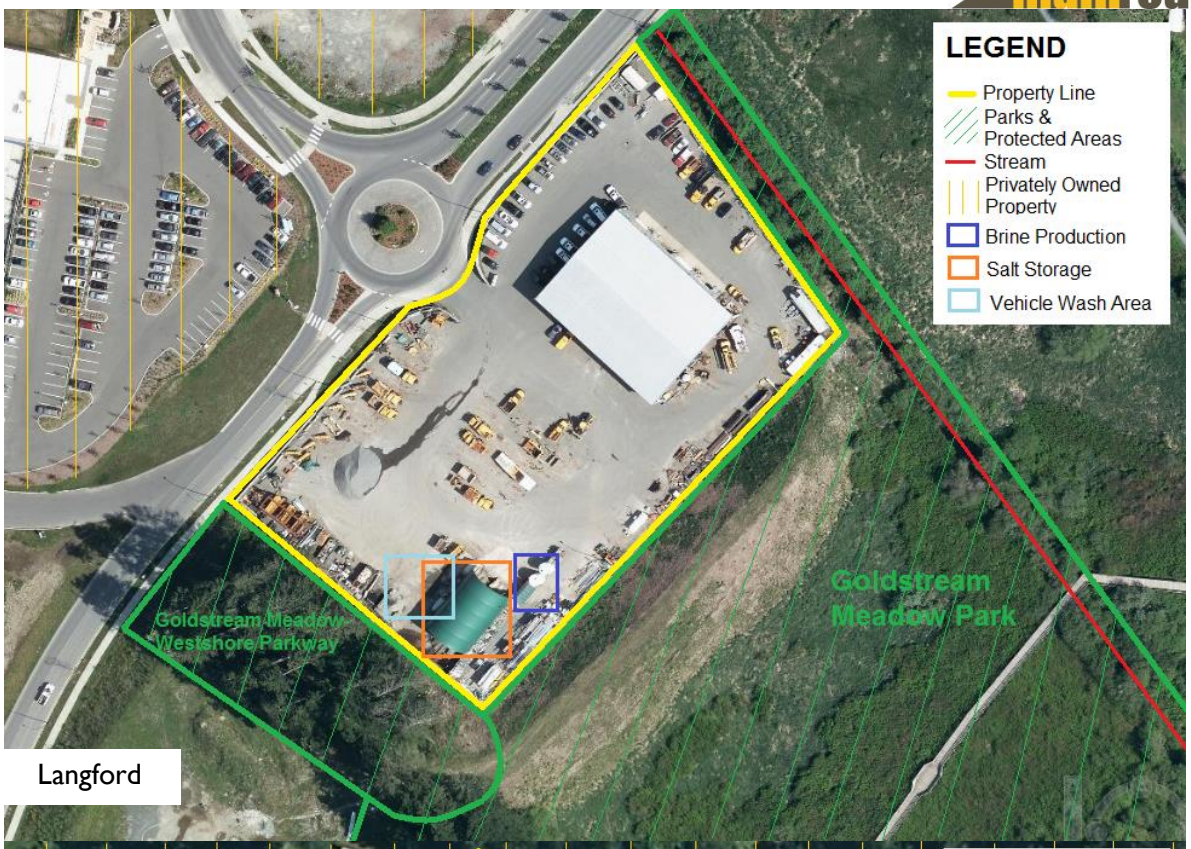

LEGEND
Property Line
Salt Storage
Vehicle Wash Area
Yahk Meadow Rd
Yahk Meadow Rd
Yahk


LEGEND
Property Line
Privately Owned Property
Salt Storage
Blackfish Rd
Blackfish
LEGEND
Property Line
Privately Owned Property
Salt Storage
Galiano



Hemmingston

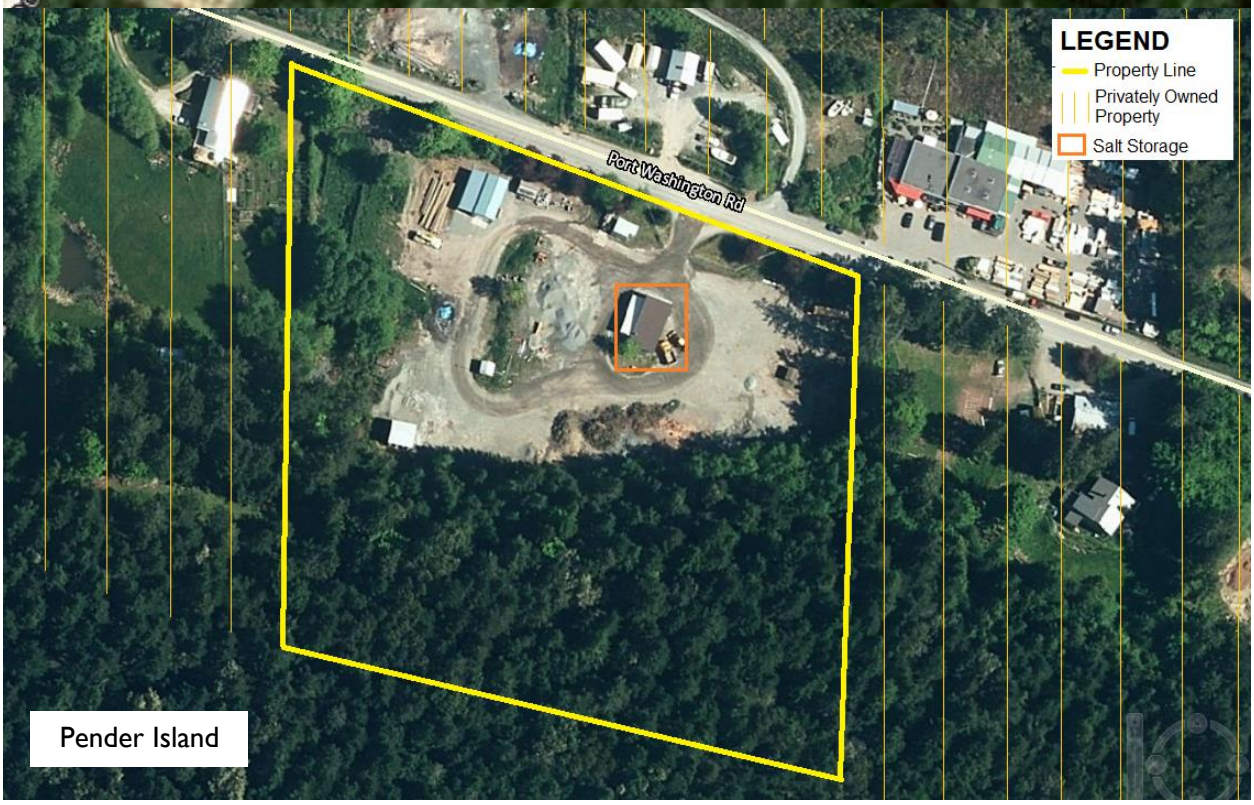
Johns Farm



Langford

Mayne Island

Meade Creek

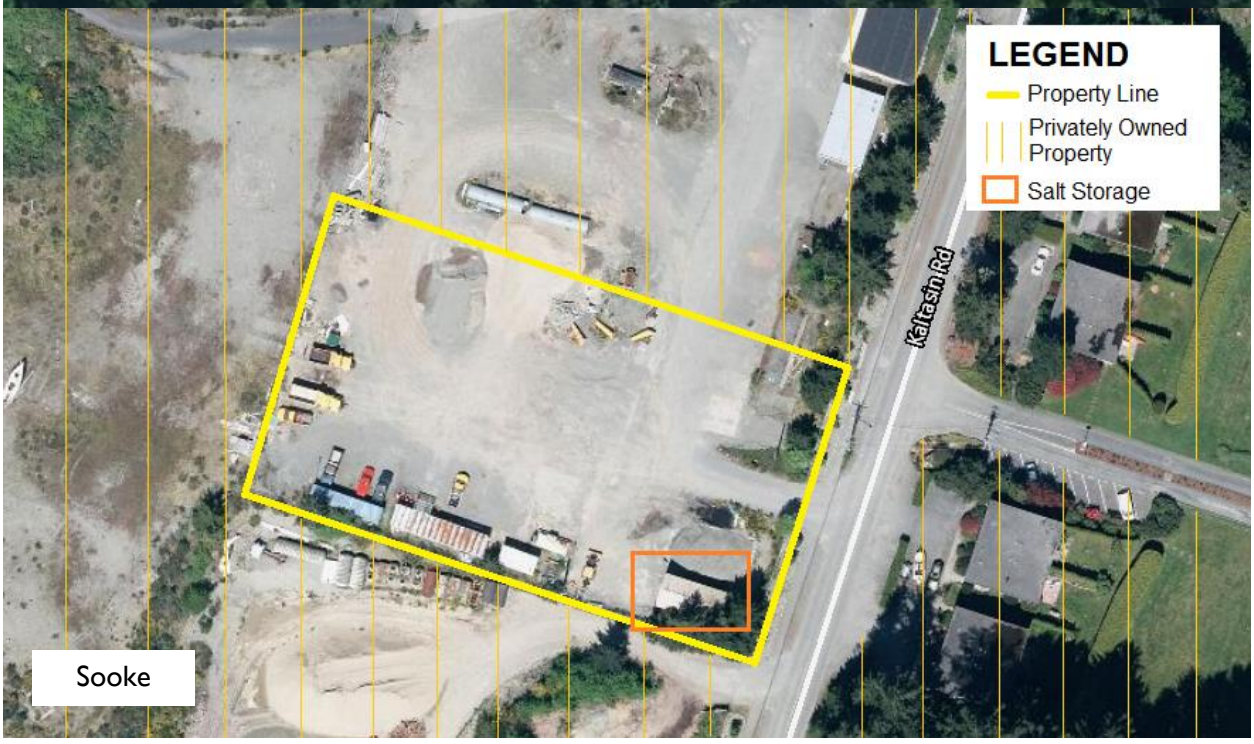


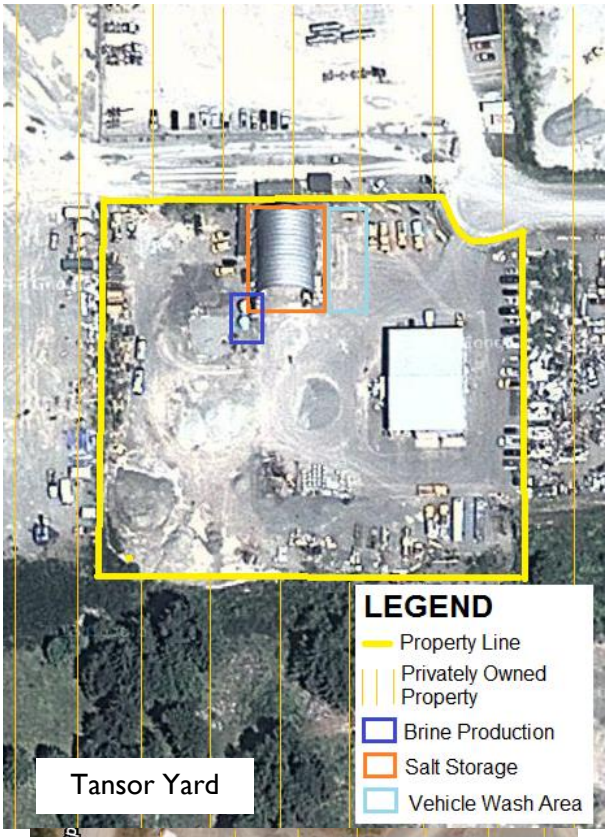
Pender Island

Rosemund Pit

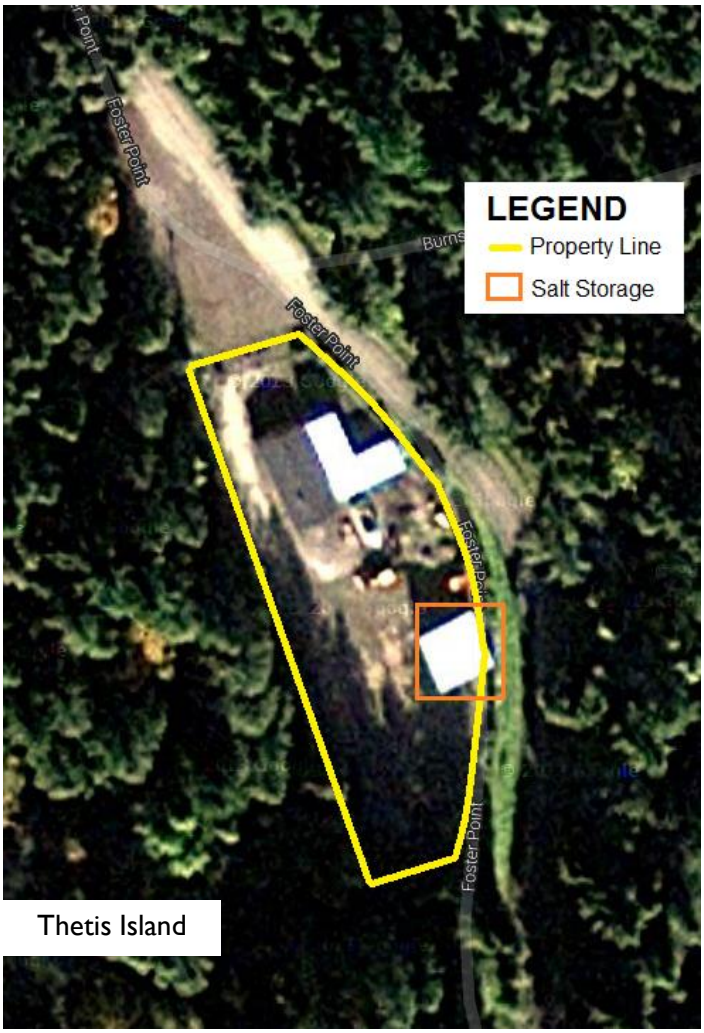
Saltspring Island


LEGEND
Property Line
Privately Owned Property
Salt Storage
Narvaez Bay Rd
Harris Rd
Saturna

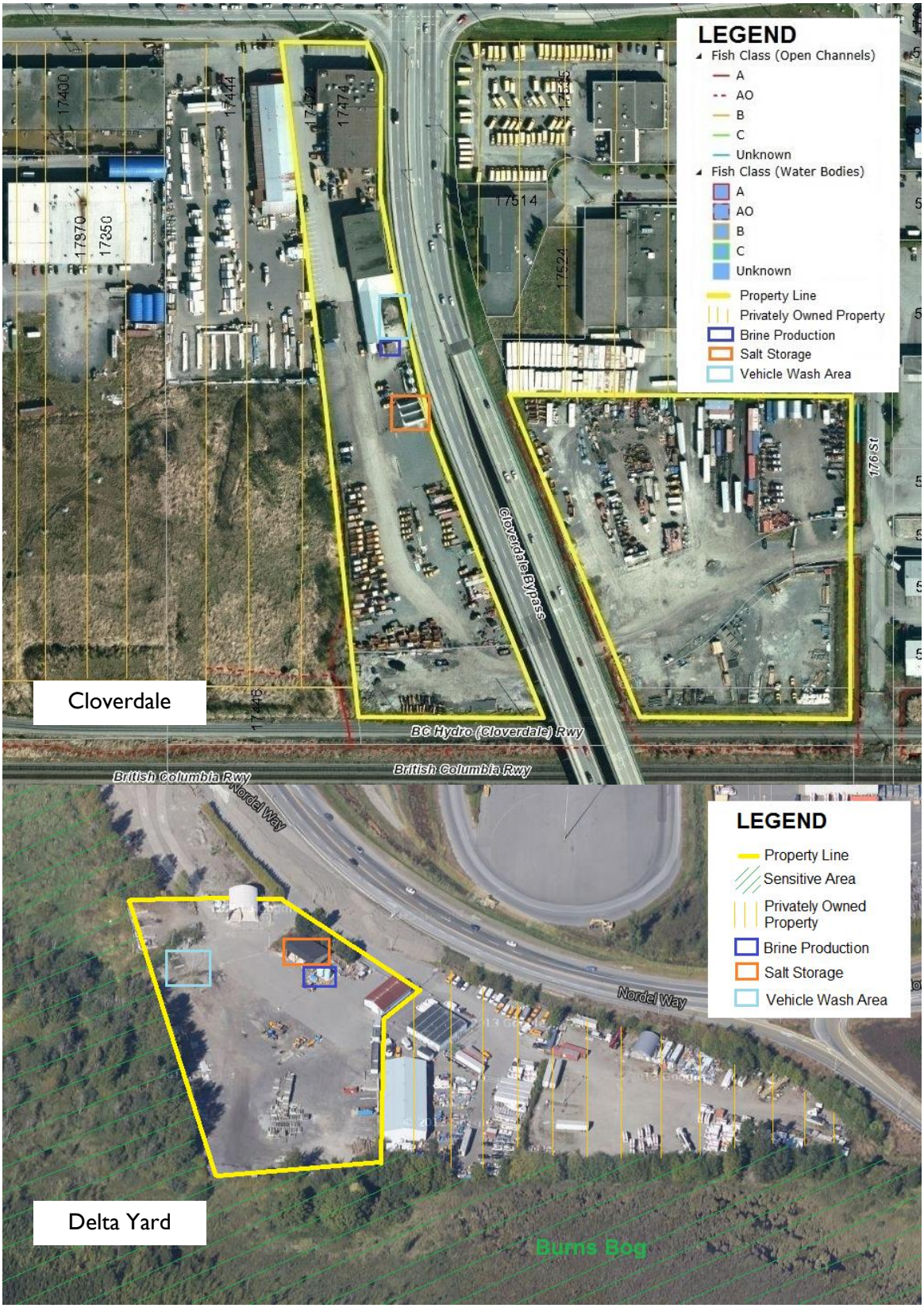

LEGEND
Property Line
Privately Owned Property
Salt Storage
Kaltasin Rd
Sooke

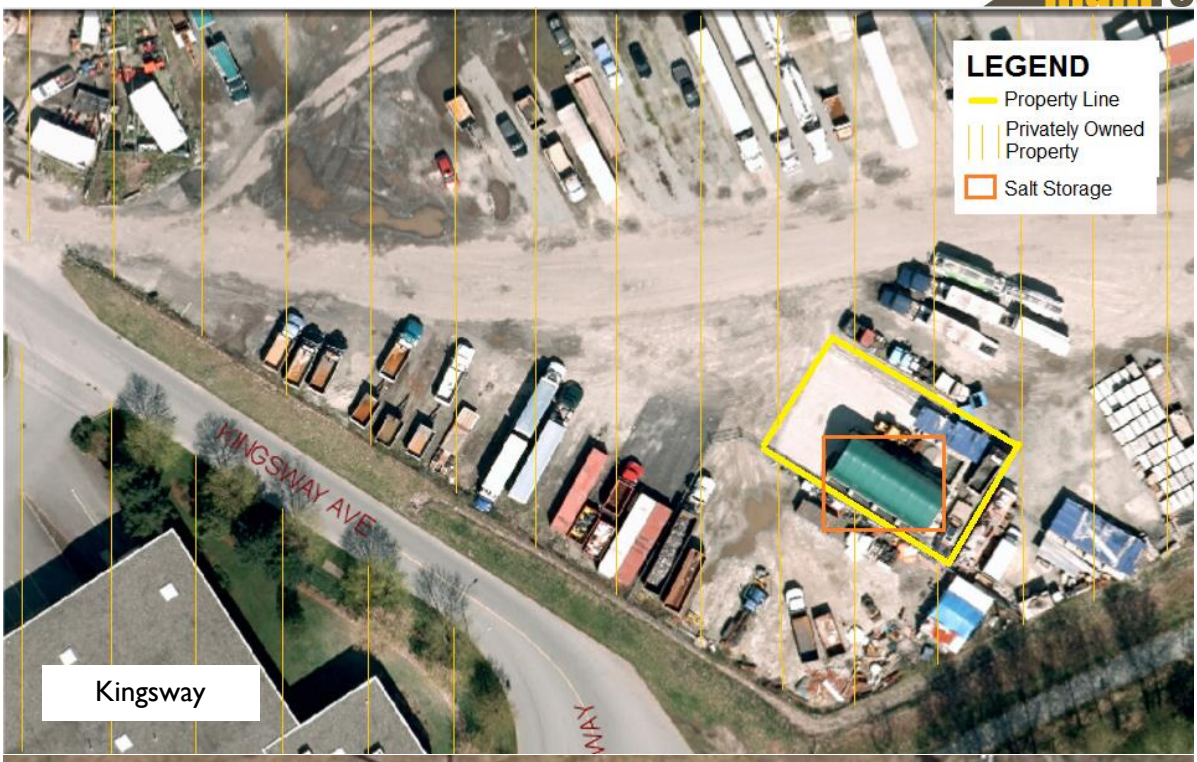

LEGEND
Property Line
Privately Owned Property
Brine Production
Salt Storage
Vehicle Wash Area
Tansor Yard


LEGEND
Property Line
Privately Owned Property
Brine Production
Salt Storage
Vehicle Wash Area
Telegraph Yard



Thetis Island

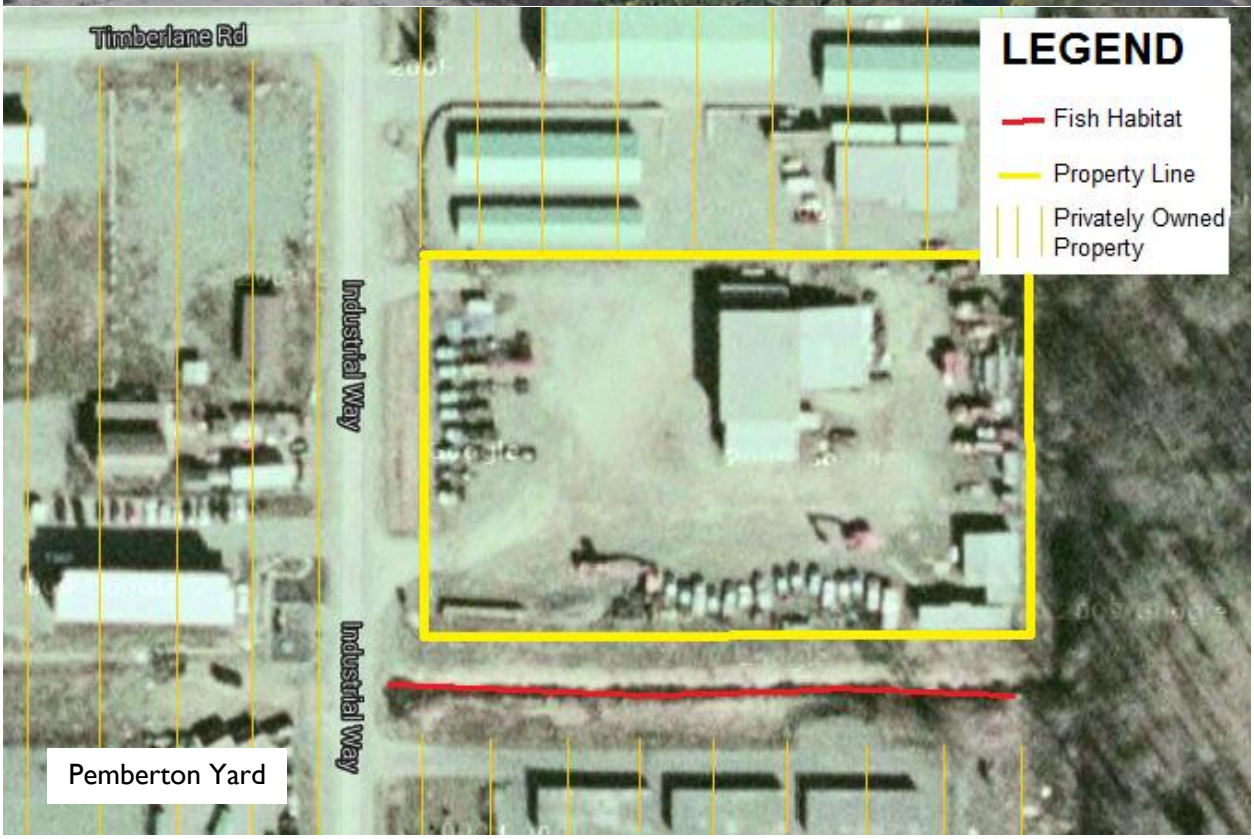

LEGEND
Fish Class (Open Channels)
A
AO
B
C
Unknown
Fish Class (Water Bodies)
A
AO
B
C
Unknown
Property Line
Privately Owned Property
Brine Production
Salt Storage
Vehicle Wash Area
Cloverdale
Cloverdale Bypass
BC Hydro (Cloverdale) Rwy
British Columbia Rwy
British Columbia Rwy
176 St
Nordel Way
Nordel Way
LEGEND
Property Line
Sensitive Area
Privately Owned Property
Brine Production
Salt Storage
Vehicle Wash Area
Delta Yard
Burns Bog


LEGEND
Property Line
Privately Owned Property
Salt Storage
KINGSWAY AVE
Kingsway


LEGEND
Property Line
Salt Storage
Oak Street


LEGEND
Property Line
Salt Storage
Duffey Lake Rd
99
Duffy Lake
LEGEND
Fish Habitat
Property Line
Privately Owned Property
Brine Production
Salt Storage
Vehicle Wash Area
Central Valley Greenway
Gilmore Ave
Gilmore Ave
Central Valley Greenway
Gilmore Ave
Gilmore
Still Creek Ave
Still Creek Ave
Still Creek Ave

Lions Gate

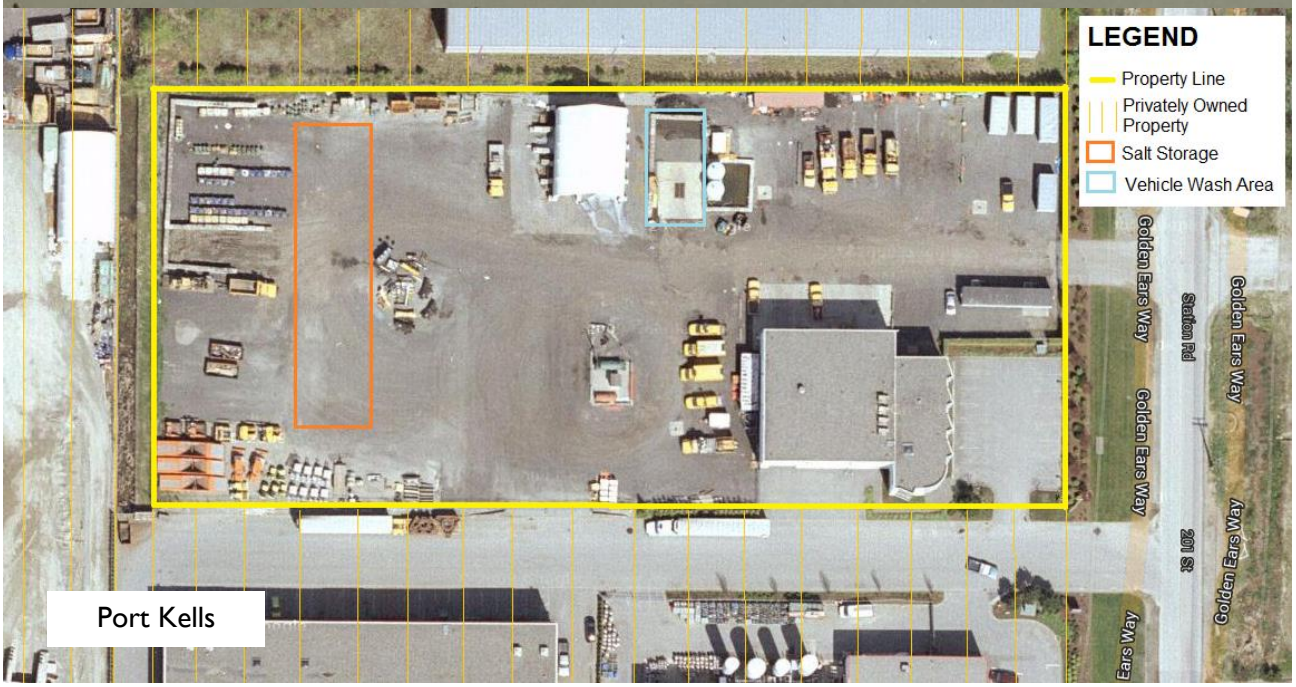


Pemberton Yard


LEGEND
Property Line
Privately Owned Property
Salt Storage
Vehicle Wash Area
Pemberton


LEGEND
Property Line
Salt Storage
99
99
Rutherford

#5 Road



Port Kells

3. Environmental Emergency Plan

3.1. Preface

Scope of this Plan

This Environmental Emergency Plan ("EEP") sets down Mainroad's management of environmental emergencies during the services.

It deals with:

- Being prepared for emergencies and
- Responding to and managing emergencies.

The following are of particular significance:

- Incidents and accidents (including vehicle fires) on the Network,
- Refueling, maintenance or cleaning of tools and equipment including concrete agitators, bitumen spray bars and asphalt pavers.
- Mixing of cutting oil and additives with bitumen, and
- Application of liquid membranes, including paint and thermoplastic, resin emulsion, pre-coat agent and curing compound.

This Plan is part of Mainroad's Environmental Management Plan and complements Mainroad's Safety Incident Management Plan. This Plan should be read in conjunction with those.

The Plan addresses requirements of the Environmental Management Act, July 2004.

Should a conflict exist between any of Mainroad's Plans and the Environmental Management Act, the Environmental Management Act shall prevail.

Principle

In the event of an emergency the first consideration is the safety of Mainroad and customer personnel and the public. Following the safety of the staff and the public the next consideration is the minimization of damage to the environment and property.

Purposes of this Plan

This Plan aims to make staff aware of the requirements for the timely planning and safe response to incidents in order to minimize damage to the environment.

3.2. Mainroad's Key Response Personnel

The Operations Manager shall be the first point of contact when an incident or spill occurs. He should be available for contact 24 hours a day.

Back up for the Operations Manager shall be provided by the General Manager and Project Manager.

In the event of Mainroad finding or being notified of an incident or accident or environmental emergency on one of their projects or in the Services to which Mainroad is required to respond to, any one of these people shall mobilize Mainroad's emergency people and their equipment and ensure the relevant Procedure, Communication Strategy and Reporting is being followed.

The names and contact numbers for these people shall be given to all staff and contractors at their induction. They shall also be displayed in the site offices and assembly areas together with the numbers of emergency services (e.g. ambulance, fire brigade, spill clean-up services).

A copy of the Environmental Emergency Procedure & Communication Strategy flowchart shall be kept in every Mainroad operations vehicle and at the 24hr communications center.

3.3. Emergency Contacts

Reproduced from Mainroad's Quality Management Plan.

MSI - Service Area 1:

Name	Position	Day-time Contact No.	Mobile phone No.
Leon Bohmer	Operations Manager	250 391-7310 ext2100	250 580 6494
Rick Gill	General Manager – back up for Ops Mgr	250 391 7310 ext2103	250 880 1976
Todd Mcvey	Quality/Safety Manager – back up for Gen Mgr	250 391 7310 ext2102	250 516 3927
911 - Ambulance, Fire, Police, HAZMAT, MOE, Mainroad Communications Center **250-391-7310**			

MHS - Service Area 4:

Name	Position	Day-time Contact No.	Mobile phone No.
Bob Devaney	Operations Manager	604 433 3002 ext1209	604 970 2667
Darren Ell	General Manager – back up for Ops Mgr	604 575 7021 ext 1121	604 250 5759
Nicole Bull	Quality/Safety Manager – back up for Gen Mgr	604 575 7021 ext1136	604 313 2655
911 - Ambulance, Fire, Police, HAZMAT, MOE, Mainroad Communications Center **604-815-0652**			

MLM - Service Area 6:

Name	Position	Day-time Contact No.	Mobile phone No.
Calvin Chan	Operations Manager	604 575 7041	778 386 9105
Darren Ell	General Manager – back up for Ops Mgr	604 575 7021 ext 1121	604 250 5759

Nicole Bull	Quality/Safety Manager – back up for Gen Mgr	604 575 7021 ext1136	604 313 2655
911 - Ambulance, Fire, Police, HAZMAT, MOE, Mainroad Communications Center **604-271-0337**			

MEK - Service Area 11:

Name	Position	Day-time Contact No.	Mobile phone No.
Geoff Gwynne	Operations Manager	250 417 4624 ext 1511	250 581 0439
Jim Conley	General Manager – back up for Ops Mgr	250 417 4624 ext1501	250 919 2707
Gerry Christie	Quality/Safety Manager – back up for Gen Mgr	250 417 4624 Ext 1503	250 417 6791
911 - Ambulance, Fire, Police, HAZMAT, MOE, Mainroad Communications Center **250-417-4624**			

3.4. Material Safety Data Sheets

Mainroad's Stores Personnel shall maintain an up-to-date master file ("Register") of Material Safety Data Sheets ("MSDS") for all materials used by Mainroad in performing the Services and for materials it reasonably expects could be spilled or be found burning in vehicle fires on the network e.g. bitumen, fuels, pesticides, strong acids and alkalis, paint, etc.

Controlled, updated copies of these MSDS shall be immediately available:

- To each of Mainroad's 24 hour Emergency Contacts,
- In all assembly yards,
- In all Mainroad trucks and
- On all worksite bulletin boards.

3.5. Containment Measures

In the event of spillage of fuels, paint and/or chemicals on the Network, Mainroad shall:

1. Identify the spilled material and, from its Material Safety Data Sheet ("MSDS"), determine what precautions need to be taken e.g. wearing Personal Protective Equipment, prohibit personnel and public entry into area if required, etc.,
2. Stop the source of the spill,
3. Use containment equipment/kits to contain the spill in accordance with the MSDS,
4. Block nearby drainage channels with earth or sandbags,
5. If the spill occurs in the vicinity of a natural watercourse or in an environmentally sensitive area take immediate extra precautions such as construction of earth mounds downstream of the spill, blocking-off natural drainage channels with earth or sandbags,
6. Treat any chemical spill according to the MSDS,

7. If the spill is large or if the above measures appear to be inadequate, call the Fire Department and give them location, MSDS code and size of spill
8. Excavate and store (in labeled drums) contaminated material and have it transported to and dispose of it in an approved waste management facility.
9. Raise an Environmental Incident Report and report the incident to the supervisor or Manager,
10. Notify the Customer Representative then the MOE ***IF*** :
    - Actual or potential non- trivial harm to the health or safety of people has been done or,
    - Non-trivial damage to ecosystems has been done or
    - Actual or potential loss or property damage (including clean-up charges) exceeds $10,000.

Collecting, Cleaning and Disposal

Activity	Material	Method
Collecting	Liquid	Pump into tank or drum
	Powders	Shovel or suck into tanks or drums
Cleaning	Liquids (water soluble)	Hose down with water - do not use more than is necessary Pump into tank or drum
	Liquids(non-water soluble)	Hose down with high pressure water jet - do not use more than is necessary Pump into tank or drum
	Powders	Shovel. Use a broom to pick up remainder.
	If in doubt about what to use as a cleaning agent, contact MOE	
Disposal	All	By a "controlled waste facility" ("Controlled Waste Facility" is defined to mean a waste facility of a class specified in the regulations)

3.6. Follow-Up Action

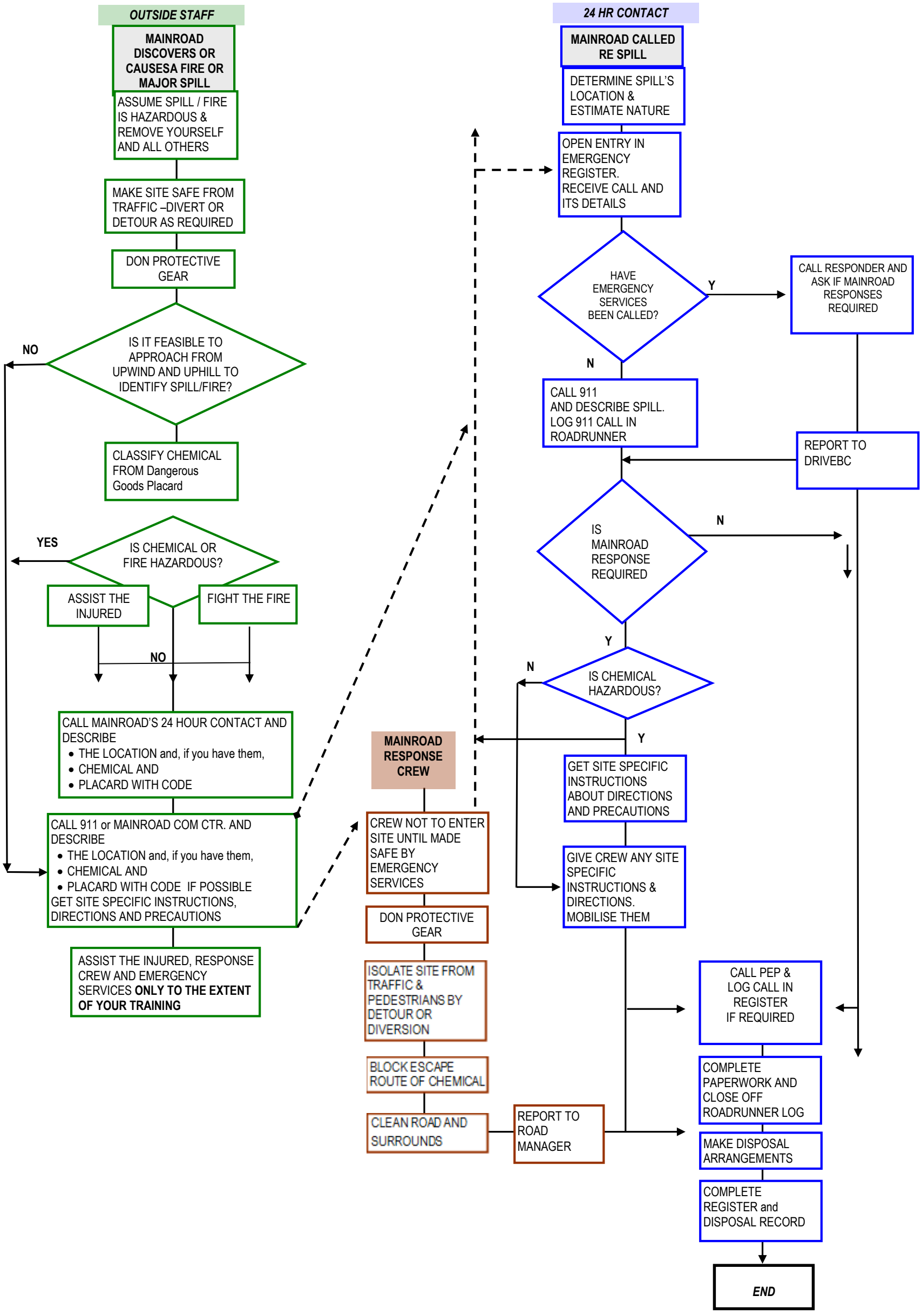
1. Send any staff exposed to hazardous materials, including smoke or fumes, to health authorities to assess any effect upon their health,
2. Restore Emergency Equipment to original state,

3.7 Resources – Emergency Equipment

Mainroad shall provide, locate and man the following Emergency Equipment to meet the Response Time:

EMERGENCY EQUIPMENT		
Locations:	**One set at each Highway Maintenance Yard, Where applicable** **(See attached List of Yards)**	
Signs and traffic control items:	▪ Traffic accident signs ▪ Barrier board sets with lights ▪ Warning signs; prepare to stop, workmen ahead, flagman ahead, stop/slow x 6 night and day signs ▪ Traffic hazard ahead signs x 6	▪ Traffic accident ahead signs x2 ▪ Water over road signs x 2 ▪ Road closed signs x 2 ▪ Detour signs, 2 “Right” & 2 “Left” ▪ 100 traffic cones
Equipment / Materials:	▪ Site to base communication system ▪ Shovels ▪ Axe ▪ Bolt Cutters ▪ Crowbar (spud & wreckers) ▪ Floodlights ▪ Mobile generator (silenced)	▪ Mobile chemical/fuel spill containment and clean up kit ▪ Fire Extinguishers in each vehicle: ▪ Chainsaws ▪ Miscellaneous tools for basic fencing, sign and fixture dismemberment / removal etc, and tree and branch removal. ▪ Brooms ▪ Torches, batteries, wands ▪ PPE for all weather conditions, day & night

3.7. Environmental Emergency Procedure, Communication Strategy and Reporting



4. Spill Prevention and Containment Procedures

Spill Prevention

Purpose
To fulfill Mainroad's commitment to providing a work site free from the risk of environmental incidents due to spillage.

Scope
This procedure outlines the actions that shall be followed to prevent and contain spills at the worksite. It outlines the measures to be employed to control and remove chemical, fuel and lubricant spillage.

The activities covered by this procedure include:

- Refueling, maintenance or cleaning of tools and equipment including concrete agitators, bitumen spray bars and asphalt pavers,
- Mixing of cutting oil and additives with bitumen, and
- Application of liquid membranes, including paint and thermoplastic, resin, emulsion, pre-coat agent and curing compound.

Procedure – preventing spills
No hazardous material shall be stored within 50 meters of a waterway.

All Mainroad trucks shall carry the MSDS for the material that they are transporting or using on the jobsite. These are also to be available at the 24-hour contact number.

All hazardous liquids shall be stored in imperviously containment areas.

The containment areas:

- Shall conform with applicable Canadian Standards
- Shall each have a capacity (after allowing for the reduction in containment capacity caused by containers sitting on the floor of the containment) of not less than 120% of the volume of the largest container stored in the containment area.

A register is to be maintained of all chemicals kept on site.

Empty chemical containers shall be visibly marked to identify the material that was in the container, temporarily stored in a location that does not present any hazard to persons, property or the environment and shall then be removed from site and either:

- Returned to the supplier (where possible) or
- Disposed of in accordance with the relevant legislation

All staff shall be made aware of this procedure.

Minor Spill Procedure

If a spillage occurs the following procedure shall be followed.

- Immediately identify the spilled material and notify the supervisor or Manager of the Project, failing that the Operations Manager. Subcontractors are to notify Mainroad site personnel.
- Any volume of deleterious material released into water must be reported to the supervisor or Manager of the Project.
- Refer to MSDS for Personal Protective Clothing needed.
- Assess the need for containment
- If containment is required, contain using earth mound and/or absorbent socks/spill kit.
- Use the relevant clean up procedure in MSDS to clean the pavement, shoulders and other affected areas and structures.
- Dispose of material using a licensed contractor, and keep records of disposal on site.
- Complete an Incident Reporting Form and forward it to the supervisor, subsequently to the Project Manager.

Refer back to de-icing agents spill response as it includes specific reporting and does say that any volume entering water must also be noted)

5. Mainroad's Environmental Incident Classification

Category	Incident type	Primary Requirements
Category 1	Material, odour or noise that travels beyond site boundary causing or potentially causing adverse impact to the environment.	Any incident that threatens the environment by causing one of the following: • water pollution, sediment laden water, chemical/oil spill and sewage/septic overflow; • offensive odour; • dust exceeding reasonable levels without active management measures in place. • offensive noise
	Discharge of waters from site not in accordance with any applicable MOE determination / approval / license condition.	
	Unauthorized damage or interference to threatened species, endangered ecological communities or critical habitat.	
	Unauthorized damage, disturbance, destruction or works to heritage items.	
	Unauthorized damage, disturbance or destruction to Aboriginal objects or places.	
	Failure to comply with a MOE determination / approval / license condition.	
	Works without required approval.	
	Material harm to the environment or persons	
Category 2	Spills that do not leave the site boundary and are cleaned up without material environmental harm or residual environmental impact.	
	Failure to implement component of Environment Management Plan that does not result in a Category 1 incident.	
Environmental Hazard	Issues that may lead to an incident or adverse environmental impact if not attended to.	
	An action, failure to act or a management issue that has the potential to cause or result in adverse environmental impact.	
Notifiable Events	Material travelling beyond site boundary, and where it can be demonstrated that the management control plan has been designed appropriately (in consultation with a soil consultant if required), the controls have been installed appropriately, are being maintained well, and the weather (rain, wind etc.) event exceeds the design capacity of the controls.	
	A complaint from a Regulatory Agency	

6. Environnemental Incident Management Response

Category 1 Management Response		Site Supervisor Response	Mainroad Management Response
1	If necessary, stop Services in relevant area and/or take immediate actions to prevent adverse impact to the environment or community.	✓	✓
2	As soon as Mainroad staff becomes aware of a category 1 incident, advise relevant Supervisor/Manager who in turn advises MOE	✓	✓ (Advise Contract Manager)
3	Environmental Emergency Reporting in B.C. To report an environmental emergency within the province of BC, please call the 24 hour toll-free number 1-800-663-3456. This number puts the caller in contact with the Emergency Coordination Centre, which is run by the Provincial Emergency Program (PEP). The dispatcher shall notify the appropriate Environmental Emergency Response Officer within a regional office of the BC Ministry of Environment. If more information is required about environmental incident notification, please contact a Response Officer in the closest regional office to you.	✓	✓
4	For the purposes of section 79 (5) of the Act, a person who had possession, charge or control of a substance immediately before its spill shall immediately report the spill to PEP by telephoning 1-800-663-3456. Where it appears to a person observing a spill that a report has not been made, he or she shall make the report referred to in this section. A report under this section shall include, to the extent practical, ▪ the reporting person's name and telephone number, ▪ the name and telephone number of the person who caused the spill, ▪ the location and time of the spill, ▪ the type and quantity of the substance spilled, ▪ the cause and effect of the spill, ▪ details of action taken or proposed to comply with section 3, ▪ a description of the spill location and of the area surrounding the spill, ▪ the details of further action contemplated or required, ▪ the names of agencies on the scene, and ▪ the names of other persons or agencies advised concerning the spill.	✓	
5	Review the cause, nature and management response to the incident by Project Manager and Operations Manager, and/or a representative of Ministry of Environment Branch and recommend improvements to processes where appropriate.	✓	✓
6	Review and check implementation of recommended improvement measures.	✓	✓

Category 2 Management Response		Site Supervisor Response	Mainroad Management Response
1	If necessary, stop Services in relevant area and/or take immediate actions to prevent adverse impact to the environment or community.	✓	✓
2	Complete environmental incident report form and submit to MOE.	✓	
3	Review the cause, nature and management response to the incident by Project Manager and Operations Manager, and/or a representative of Ministry of Environment Branch and recommend improvements to processes where appropriate.	✓	✓
4	Review and check implementation of recommended improvement measures.	✓	✓
Environmental Hazard		**Site Supervisor Response**	**Mainroad Management Response**
1	Detail hazard in Environmental Inspection Report and manage in accordance with inspection guidance	✓	
Notifiable Event		**Site Supervisor Response**	**Mainroad Management Response**
1	SEO to advise Manager Environmental Performance Improvement.	✓	✓
2	Review the cause and nature of the event by Senior Environmental Officer and advise outcome of review to Manager Environmental Performance Improvement within 5 working days of event.	✓	
Where a spill occurs, the person who immediately before the spill had possession, charge or control of the spilled substance shall take all reasonable and practical action, having due regard for the safety of the public and of himself or herself, to stop, contain and minimize the effects of the spill.			

7. Reportable Levels for Certain Substances

The following table indicates the type and volume of spills that must be reported to PEP by telephoning 1-800-663-3456

"Federal Regulations" means the Transportation of Dangerous Goods Regulations made under the *Transportation of Dangerous Goods Act* (Canada);

"Hazardous Waste Regulation" means B.C. Reg. 63/88.

Item	Column 1 Substance spilled	Column 2 Specified amount
1	Class 1, Explosives as defined in section 2.9 of the Federal Regulations	Any quantity that could pose a danger to public safety or 50 kg
2	Class 2.1, Flammable Gases, other than natural gas, as defined in section 2.14 (a) of the Federal Regulations	10 kg
3	Class 2.2 Non-Flammable and Non-Toxic Gases as defined in section 2.14 (b) of the Federal Regulations	10 kg
4	Class 2.3, Toxic Gases as defined in section 2.14 (c) of the Federal Regulations	5 kg
5	Class 3, Flammable Liquids as defined in section 2.18 of the Federal Regulations	100 L
6	Class 4, Flammable Solids as defined in section 2.20 of the Federal Regulations	25 kg
7	Class 5.1, Oxidizing Substances as defined in section 2.24 (a) of the Federal Regulations	50 kg or 50 L
8	Class 5.2, Organic Peroxides as defined in section 2.24 (b) of the Federal Regulations	1 kg or 1 L

Item	Column 1 Substance spilled	Column 2 Specified amount
9	Class 6.1, Toxic Substances as defined in section 2.27 (a) of the Federal Regulations	5 kg or 5 L
10	Class 6.2, Infectious Substances as defined in section 2.27 (b) of the Federal Regulations	1 kg or 1 L, or less if the waste poses a danger to public safety or the environment
11	Class 7, Radioactive Materials as defined in section 2.37 of the Federal Regulations	Any quantity that could pose a danger to public safety and an emission level greater than the emission level established in section 20 of the "Packaging and Transport of Nuclear Substances Regulations"
12	Class 8, Corrosives as defined in section 2.40 of the Federal Regulations	5 kg or 5 L
13	Class 9, Miscellaneous Products, Substances or Organisms as defined in section 2.43 of the Federal Regulations	25 kg or 25 L
14	waste containing dioxin as defined in section 1 of the Hazardous Waste Regulation	1 kg or 1 L, or less if the waste poses a danger to public safety or the environment
15	leachable toxic waste as defined in section 1 of the Hazardous Waste Regulation	25 kg or 25 L
16	waste containing polycyclic aromatic hydrocarbons as defined in section 1 of the hazardous Waste Regulation	5 kg or 5 L
17	waste asbestos as defined in section 1 of the Hazardous Waste Regulation	50 kg
18	waste oil as defined in section 1 of the Hazardous Waste Regulation	100 L

Item	Column 1 Substance spilled	Column 2 Specified amount
19	waste containing a pest control product as defined in section 1 of the Hazardous Waste Regulation	5 kg or 5 L
20	PCB Wastes as defined in section 1 of the Hazardous Waste Regulation	25 kg or 25 L
21	waste containing tetrachloroethylene as defined in section 1 of the Hazardous Waste Regulation	50 kg or 50 L
22	biomedical waste as defined in section 1 of the Hazardous Waste Regulation	1 kg or 1 L, or less if the waste poses a danger to public safety or the environment
23	A hazardous waste as defined in section 1 of the Hazardous Waste Regulation and not covered under items 1 – 22	25 kg or 25 L
24	A substance, not covered by items 1 to 23, that can cause pollution	200 kg or 200 L
25	Natural gas	10 kg, if there is a breakage in a pipeline or fitting operated above 100 psi that results in a sudden and uncontrolled release of natural gas

2014

Mainroad South Island Contracting LP

ENVIRONMENTAL BEST PRACTICES FOR HIGHWAY MAINTENANCE

Table of Contents

1.0 Highway Surface Management

Highway surface management ensure public safety on our highways by maintaining clean, level, and unbroken road surface conditions. Dust management activities are in place to reduce the creation of airborne particulates during operation, maintenance, and cleaning.

1.1 Activities

Roadway Pavement Patching and Crack Sealing
Roadway Surface Treatment
Pavement Surface Cleaning and Sweeping
Curb and Island Repair

1.2 Timing

- Works are preferably undertaken during periods of dry weather. If the work is scheduled during a period of rain, take the necessary steps to install appropriate site isolation and sediment control.
- Surface cleaning activities are best scheduled after a rainfall. Although light rain may be helpful for cleaning pavement surfaces, work should be halted during heavy rainfall.
- Dust palliatives are best applied to a pre-wetted surface, therefore, work should be scheduled after a rainfall.
- To prevent transport of runoff to watercourses, avoid applying dust control palliatives to overly wet or saturated roadbeds and during heavy precipitation.

1.3 Site Management

- If the work involves the disturbance of soils or the use/storage of erodible materials, prevent the transport of sediment.
- Ensure the spray of dust palliatives is limited to the travelled road surface and be cautious when applying near watercourses.

1.4 Material Storage

- Covers must be used to keep erodible materials dry.
- Make sure to store hazardous materials in accordance with regulations and with care.
- All compounds and chemicals must be mixed in a contained area and away from all watercourses.
- Wash water should be managed appropriately to reduce impacts to the environment.
- Make sure to store hazardous materials in accordance with regulations and with care.
- All compounds and chemicals must be mixed in a contained area and away from all watercourses.
- Transfer and load products at designated sites away from all watercourses.
- Ensure all equipment is well maintained.

1.5 Waste and Materials Containment

- Ensure there is a spills response plan in place and spill kits on site.
- If potentially deleterious materials are used, ensure no release of substances to any watercourses.
- All loose materials must be swept up and disposed of accordingly.
- Inspect all runoff components to ensure proper function.
- Keep aggregate from entering any watercourses.
- Do not overspray chemicals

2.0 Debris Removal

Debris removal activities include the removal of items that are not part of the highway from the road surface.

2.1 Activities

Debris Removal

2.2 Timing

- Works are preferably undertaken during periods of dry weather. If the work is scheduled during a period of rain, take the necessary steps to install appropriate site isolation and sediment control.
- If the activity requires work in stream, you must schedule them to coincide with your regions in stream work window.

2.3 Site Management

- If machinery will be working on site ensure there is a spills response plan in place and spill kits on site.
- Ensure all equipment is well maintained.

2.4 Waste and Materials Management

- Divert any recyclable materials from the landfill.
- Prevent sediment and other potentially harmful substances from entering any watercourses during removal activities.
- Remove material to an appropriate site, which will not introduce these materials to any watercourses.
- Remove carcasses as soon as possible, and do not store or bury them near any watercourses.
- Animal carcasses that require temporary storage on sites shall be stored on a non-permeable surface prior to appropriate disposal.
- Use appropriate PPE for carcass handling.
- Prevent potentially harmful materials from vehicle removal from entering the ground or any watercourses.
- Ensure there is a spills response plan in place and spill kits on site.
- Make sure any vehicle is transported to a proper storage or disposal facility. All waste collected from roadways shall be stored and disposed of as per regulatory requirements
- Hazardous materials which pose a risk of runoff shall be stored on a non-permeable surface with secondary containment considered prior to disposal/

3.0 Ditch and Stormwater Drainage Maintenance

These activities are undertaken to provide safe, unobstructed drainage for all highway surface runoffs. As well as to create collection areas for debris, ice, and snow.

3.1 Activities

Ditch and Stormwater Drainage Maintenance

3.2 Timing

- Works are preferably undertaken during periods of dry weather. If the work is scheduled during a period of rain, take the necessary steps to install appropriate site isolation and sediment control.
- If the activity requires work in stream, you must schedule them to coincide with your regions in stream work window.
- If there is a risk posed to highway stability and safety by limiting drainage, you must reduce the flood threat as soon as possible.

3.3 Site Management

- Minimize disturbance to areas surrounding the worksite and avoid impacts to trees and shrubs.
- Leave topsoil and root systems intact on upper portions of cleaned banks and above areas where riprap is placed, to assist with bank stability.

3.4 Equipment Use

- In order to reduce damage to riparian vegetation and watercourse banks, select appropriate access routes.
- If removing debris from a watercourse, operate equipment from the bank or road shoulder.
- Do not allow machinery to cross through water.
- Ensure all equipment is well maintained.

3.5 Worksite Isolation

- Isolate your work from any flowing water by ensuring they are temporarily diverted.
- Contain any sediment-laden water generated during work in an isolated work cell.

3.6 Erosion and Sediment Control

- Use clean materials when installing riprap or other bank erosion protection measures.
- Ensure all erodible materials left on site are placed in a manner that will prevent introduction of sediment into watercourses.
- Install appropriate erosion and sediment control devices, and monitor them until they are no longer needed.

3.7 Ditch and Watercourse Maintenance

- Do not dump ditch waste above or below the ditch where desirable vegetation is established.
- Ensure any ditch material deposited on existing vegetation is spread evenly and reseeded.
- Minimize soil exposure and removal of desirable vegetation to prevent establishment of invasive plants.

4.0 Drainage Appliance Management

This activity ensures that highway surfaces are safe and efficiently drained, water is efficiently channeled to ditches and watercourses, and erosion of highways and adjacent properties is prevented.

4.1 Activities

Drainage Appliance Operating

4.2 Timing

- Works are preferably undertaken during periods of dry weather. If the work is scheduled during a period of rain, take the necessary steps to install appropriate site isolation and sediment control.
- If the activity requires work in stream, you must schedule them to coincide with your regions in stream work window.
- If there is a risk posed to highway stability and safety by limiting drainage, you must reduce the flood threat as soon as possible.

4.3 Site Management

- Minimize disturbance to areas surrounding the worksite and avoid impacts to trees and shrubs.
- Apply native grass and ground cover seed mixes to exposed soils to reduce the risk of invasive plant establishment.
- Ensure any works to repair damaged appliances retain the pre-repair channel condition.

4.4 Equipment Use

- In order to reduce damage to riparian vegetation and watercourse banks, select appropriate access routes.
- Remove materials by hand for smaller scale debris and sediment removal activities.
- If removing debris from a watercourse, operate equipment from the bank or road shoulder.
- Do not allow machinery to cross through water.
- Ensure all equipment is well maintained.

4.5 Worksite Isolation

- Isolate your work from any flowing water by ensuring they are temporarily diverted.
- Ensure raw material and wash water is not released to any watercourses if using potentially deleterious materials.

- Contain any sediment-laden water generated during work in an isolated work cell.

4.6 Waste and Materials Management

- Ensure there is a spills response plan in place and spill kits on site.
- Equipment should be washed off site and wash water should be managed appropriately to reduce impacts to the environment.
- All loose materials must be swept up and disposed of accordingly.
- Dispose of excess materials, excavated soils, and removed debris away from any watercourse to prevent future introduction into the watercourse.
- Ensure all erodible materials left on site are placed in a manner that will prevent introduction of sediment into watercourses.
- Make sure to store hazardous materials in accordance with regulations and with care.
- All compounds and chemicals must be mixed in a contained area and away from all watercourses.

4.7 Erosion and Sediment Control

- Use clean materials when installing rock or other scour protection measures.
- Install appropriate erosion and sediment control devices, and monitor them until they are no longer needed.

5.0 Shore, Bank, and Watercourse Management

This activity includes removal of obstructions, beaver dams, and debris from natural and man-made shores, banks, and watercourses and the placement of riprap for bank protection.

5.1 Activities

Shore, Bank and Watercourse Management

5.2 Timing

- Works are preferably undertaken during periods of dry weather. If the work is scheduled during a period of rain, take the necessary steps to install appropriate site isolation and sediment control.
- If the activity requires work in stream, you must schedule them to coincide with your regions in stream work window.
- If there is a risk posed to highway stability and safety by limiting drainage, you must reduce the flood threat as soon as possible.

5.3 Site Management

- Minimize disturbance to areas surrounding the worksite and avoid impacts to trees and shrubs.
- Ensure any riprap works to armor eroding banks or shores retain the pre-work channel or shore conditions.
- Apply native grass and ground cover seed mixes to exposed soils to reduce the risk of invasive plant establishment.

5.4 Beaver Dam and Debris Obstruction Removal

- Remove the dam or obstruction in a controlled manner.
- Allow water levels on both sides of the obstruction to stabilize before the next level drop.
- Consider the placement of sediment control measures.

5.5 Tree Removal

- Only remove trees that pose a significant risk of impacting the drainage within the highway right-of-way.
- Ensure that no bird or wildlife species are currently occupying the tree and that it does not contain a protected nest.
- If possible, limit the removal to topping the tree.
- If site conditions permit, buck the cut portion of the tree and leave on site.

5.6 Equipment Use

- In order to reduce damage to riparian vegetation and watercourse banks, select appropriate access routes.
- Remove materials by hand for smaller scale debris and sediment removal activities.
- If removing debris from a watercourse, operate equipment from the bank or road shoulder.
- Do not allow machinery to cross through water.
- Ensure all equipment is well maintained.

5.7 Worksite Isolation

- Isolate your work from any flowing water by ensuring they are temporarily diverted.
- Contain any sediment-laden water generated during work in an isolated work cell.

5.8 Waste and Materials Containment

- If machinery will be working on site, ensure there is a spills response plan in place and spill kits on site.
- Equipment should be washed off site and wash water should be managed appropriately to reduce impacts to the environment.
- Dispose of excess materials, excavated soils, and removed debris away from any watercourse to prevent future introduction into the watercourse.
- Ensure all erodible materials left on site are placed in a manner that will prevent introduction of sediment into watercourses.

5.9 Erosion and Sediment Control

- Use clean materials when installing riprap or other shore or bank protection measures.

- Ensure all erodible materials left on site are placed in a manner that will prevent introduction of sediment into watercourses.
- Install appropriate erosion and sediment control devices, and monitor them until they are no longer needed.

5.10 Ditch and Watercourse Maintenance

- Do not dump ditch waste above or below the ditch where desirable vegetation is established.
- Ensure any ditch material deposited on existing vegetation is spread evenly and reseeded.
- Minimize soil exposure and removal of desirable vegetation to prevent establishment of invasive plants.

6.0 Engineered Wetland and Water Quality Pond Maintenance

This activity includes protection and maintenance of identified Wetlands and Water Quality ponds within the maintenance areas.

6.1 Activities

Engineered Wetland Maintenance

6.2 Timing

- If the activity requires work in stream, you must schedule them to coincide with your regions in stream work window.
- Bird nesting and native plant life cycles shall be considered when doing any work within the wetlands.

6.3 Site Management

- Minimize disturbance to areas surrounding the wetlands and avoid impacts to vegetation. All maintenance activities related to vegetation and landscape control must cease 30 meters from water's edge.
- Where the traveled roadway is within 30 meters of the wetland, maintenance activities are limited to the roadway and shoulder. Vegetation control may only be conducted in the interest of public safety and with the approval of CHOI and relevant regulatory authorities.
- Minimize soil exposure and removal of desirable vegetation to prevent establishment of invasive plants.

6.4 Equipment Use

- All reasonable measure shall be taken to keep equipment 30 meters back from the waterline.
- If equipment use is necessary, reduce damage to riparian vegetation and watercourses by selecting appropriate access routes.
- Remove materials by hand for smaller scale debris and sediment removal activities.

- If removing debris from a watercourse, operate equipment from the bank or road shoulder.
- Do not allow machinery to cross through water.
- Ensure all equipment is well maintained.

6.5 Worksite Isolation

- Isolate your work from any flowing water by ensuring they are temporarily diverted.
- Contain any sediment-laden water generated during work in an isolated work cell.
- All vegetation control and landscape maintenance is to remain 30 meters from open water

6.6 Waste and Materials Containment

- If machinery will be working on site, ensure there is a spills response plan in place and spill kits on site.
- Equipment should be washed off site and wash water should be managed appropriately to reduce impacts to the environment.
- Dispose of excess materials, excavated soils, and removed debris away from any watercourse to prevent future introduction into the watercourse.
- Ensure all erodible materials left on site are placed in a manner that will prevent introduction of sediment into watercourses.

7.0 Winter Road Management

Winter road maintenance activities are undertaken to ensure winter road surfaces remain clear and safe for the travelling public.

7.1 Activities

Roadway Snow and Ice Removal
Winter Abrasive and Chemical Snow and Ice Control
Bridge Deck Preferential De-Icing
Snow Removal on Sidewalks and Multi-Use Trails

7.2 Site Management

- Identify and avoid sensitive habitat areas when side casting snow and ice cleared from winter roads.
- Avoid ploughing snow and ice into sensitive habitat areas.

7.3 Material Selection

- Consider the use of alternatives to road salts in environmentally sensitive areas.
- Where possible, in areas where dust generation is a concern during spring highway surface cleaning activities, choose larger sized aggregate.

7.4 Material Storage

- Store de-icing materials on impermeable surfaces.

- Ensure that aggregate storage piles are not contributing sediment to any watercourses.
- Keep storage piles well covered and dry.
- Use caution during loading to minimize loss of materials.
- Direct runoff from salty snowmelt to less sensitive areas.

7.5 Equipment Use

- Ensure proper equipment selection and operation.
- Reduce the need for salt application through better removal of snow and ice prior to the application of de-icing chemicals.

8.0 Roadside Vegetation Management

Roadside vegetation management activities ensure clear sight lines for highway users, control noxious weeds, facilitate effective drainage, and reduce possible fire hazards.

8.1 Activities

Roadside Mowing and Vegetation Control

8.2 Timing

- Be aware that vegetation clearing can negatively impact nesting birds in spring and early summer. Inspect the work area for occupied bird nests, eggs, or other protected species.

8.3 Site Management

- Keep cut vegetation out of watercourses.
- Install appropriate erosion and sediment controls.

8.4 Brushing and Mowing

- Establish annual brushing/mowing schedule in collaboration with the regional invasive plant authorities is possible. Schedule the route to start in un-infested areas and move toward infested areas.
- Implement effective mowing in areas where herbicides cannot be applied.
- Prior to commencing activities, identify sensitive habitat areas.
- Avoid mowing grasses and vegetation lower than 15 cm above ground level.
- Determine how much impact your work will have on the identified areas.
- Maintain established riparian buffer zones, which should be visible from past vegetation removal activity.
- Identify the appropriate required buffer width from each watercourse bank.
- Stop brushing or mowing once buffer is reached. If vegetation removal is required within buffer zone:
  - Limit area of clearing.
  - Consider limbing or topping the vegetation.
  - Ensure root structures and bank stability is maintained.
  - Use hand tools where possible.
  - Ensure all equipment is well maintained.
  - Consider installing slower-growing plant species.
- Do not brush or mow within 7 days of an herbicide treatment.

8.5 Invasive Plant Control

- Ensure all chemical control of noxious weeds/invasive plants is done under a valid Pest Management Plan and/or Permits from the appropriate authority.
- Contractors should coordinate manual/mechanical controls with other agencies carrying out herbicide work.
- Ensure all noxious weed/invasive plant materials are disposed of appropriately.
- Use a covered container when transporting noxious weeds/plants and their seeds.
- Ensure all equipment is free of noxious weeds/invasive plants, and their materials, prior to leaving the work scene.
- Follow all regulations.

9.0 Litter Collection and Graffiti Management

Roadside litter collection and removal of graffiti to maintain slightly roadways for the travelling public.

9.1 Activities

Roadside Litter Collection
Roadside Graffiti Removal

9.2 Timing

- Be aware that disturbing vegetation can negatively impact nesting birds in spring and early summer. Monitor the work area for occupied bird nests, eggs, or other protected species.

9.3 Site Management

- Prior to commencing activities, identify sensitive habitat areas.

9.4 Litter Collection

- Litter can potentially contain environmentally hazardous materials. Handle litter appropriately and ensure liquids are not spilled and do not enter waterways.
- If an environmentally hazardous material is discovered, follow the spill response plan and notify the direct supervisor.

9.5 Waste Storage and Disposal

- All waste must be disposed of in appropriate containers. Roadside litter shall be contained in plastic bags and disposed of as garbage.
- Mainroad shall have available bins for the recycling of metal and other waste streams that are able to be reasonably diverted from the landfill.
- Waste for the landfill shall be contained and stored on a non-permeable surface within secure containers.

9.6 Graffiti Removal

- Graffiti removal chemicals shall have an MSDS on site and it shall be reviewed for environmental contamination prior to use.
- Contaminated waste water shall be contained and prevented from entering a water way.

10.0 Roadside Fence and Guardrail Maintenance

Roadside fences are required to restrict wildlife, livestock, game, and pedestrian access to highways.Gardrails provide protection for the traveling public.

10.1 Activities

Roadside Fence Repairs / Replacement
Roadside Guardrail Repairs / Replacement

10.2 Site Management

- Wildlife exclusion fencing and associated components are to be repaired at least once per calendar year in late spring or early summer.
- Repairs should be made before the onset of winter.
- Fallen trees must be removed from fencing as soon as possible.
- Broken fence components must be repaired or replaced with identical materials.
- If fence or post foundation is unstable, posts or poles must be relocated to more stable ground.
- Wildlife exclusion fencing and gate areas must be kept clear of vegetation to a width of 3 meters on either side.
- Prevent the transport of sediment through the installation of appropriate erosion and sediment control.
- Be aware that vegetation clearing can negatively impact nesting birds in spring and early summer. Inspect the work area for occupied bird nests, eggs, or other protected species.
- Ensure all noxious weed/invasive plant materials are disposed of appropriately.

10.3 Equipment Use

- In order to reduce damage to riparian vegetation and watercourse banks, select appropriate access routes.
- Ensure all equipment is well maintained.

11.0 Traffic Maintenance

Activities associated with maintaining the flow of traffic as designed.

11.1 Activities

Sign repairs/Replacements
Delineator Post Replacements
Roadway Traffic Control
Traffic Signal Operating and Preventative Maintenance

11.2 Site Management

- Traffic Maintenance activities shall consider environmentally sensitive areas prior to the task.
- Disruption of soils shall be minimized to reduce likelihood of propagation of invasive species and disturbance of habitat.
- Nesting birds and other wildlife shall be avoided.
- Be aware that vegetation clearing can negatively impact nesting birds in spring and early summer. Inspect the work area for occupied bird nests, eggs and other wildlife

11.3 Sign and Delineator repairs, replacement and washing.

- Disturbance of soils shall be kept to a minimum and all mobile equipment kept away from sensitive areas.
- Materials shall be disposed of appropriately, including diverting waste from the landfill when possible.
- Washing shall use the minimum water to complete the task to specifications
- All contaminated wash water shall be contained.
- Waterways shall be protected from contamination by wash water.
- Chemicals used for washing must meet environmental regulations and used sparingly.
- Ensure all equipment is well maintained.

11.4 Traffic accommodations and control

- All traffic accommodations shall follow the approved traffic accommodation schedule
- Considerations shall be made for the prevention of idling traffic and excessive changes in speed.
- Traffic shall be controlled in a manner as to not interfere with environmentally sensitive areas

11.5 Traffic Signal Operating and Penetrative Maintenance

- While working on signals, do not idle vehicles unless necessary for safety reasons.
- Keep maintenance vehicles out of sensitive areas and complete work on foot if necessary.
- Inspect the work area for occupied bird nests, eggs and other wildlife.
- All chemicals shall be reviewed for environmental impact and MSDS sheets available. Appropriate spill response supplies shall accompany chemical use.

12.0 Bridge Structure Management

These activities ensure bridge structures remain structurally sound and safe for public use.

12.1 Activities

Bridge and Structure Cleaning
Bridge Drain and Flume Maintenance
Bridge Joint Maintenance
Bridge Bearing Maintenance

12.2 Timing

- Works are preferably undertaken during periods of dry weather. If the work is scheduled during a period of rain, take the necessary steps to install appropriate site isolation and sediment control.
- If the activity requires work in stream, you must schedule to coincide with your regions in stream work window.
- Schedule bridge cleaning activities to coincide with the watercourses spring freshet when possible.

12.3 Site Management

- When preparing and during work, minimize vegetation clearing activities.
- Prevent the transport of sediment through the installation of appropriate erosion and sediment control.

12.4 Material Storage

- Covers must be used to keep erodible materials dry.
- All hazardous materials must be stored in accordance with regulations and deleterious substances must be handled with care.
- Mix concrete compounds, sealants and paints off the bridge and away from any watercourse.
- Clean tools and equipment off-site to prevent the release of wash water that may contain deleterious substances.
- Ensure all equipment is well maintained.

12.5 Waste and Materials Containment

- Ensure there is a spills response plan in place and spill kits on site.
- Ensure raw material and wash water will not be released to any watercourse from potentially deleterious materials.
- Where possible, sweep up loose material or debris.
- For larger works or sites with greater sensitivity, suggested techniques to help prevent wash water and construction and maintenance debris entering the watercourse include:
    - Building forms around the work area
    - Hanging tarps to trap loose material
    - Using booms on surface waters below work areas to trap and remove any floating substances that may escape the primary containment system.
- Inspect tarps, drain blocks, and wash water runoff areas regularly to ensure they are functioning. Repair as required.

12.6 Bridge Cleaning

- Collect loose material off bridge surfaces before washing.
- Use water alone. Approval must be obtained if your cleaning activities require degreasers or any other chemical.
- If superstructure cleaning is undertaken above or on the bridge deck level, prevent potentially harmful materials from entering into road drains.

- Contain any wash water or runoff to the bridge deck by directing wash water towards the bridge approaches and away from the watercourse.
- If dry sweeping is not feasible for the surface to be cleaned, discussion with local regulatory agencies will be required should the work plan calls for a flushing of materials off the bridge and directly into the watercourse.
- If water for cleaning is extracted from a watercourse, a short-term water use approval must be obtained from the BC Ministry of Environment.

12.7 Repairs Using Cement-based Products

- Concrete works should be isolated from water with a waterproof barrier to prevent the introduction of raw product or wash water to a watercourse.
- Isolate the site to ensure that any wash water generated from the repaired area is prevented from entering bridge drains and watercourses.

13.0 Retaining Structure Management

Retaining structure management includes the regular cleaning, maintenance, repair and replacement of highway retaining structures to ensure their continued safe and stable condition.

13.1 Activities

Retaining Structure Maintenance

13.2 Timing

- Works are preferably undertaken during periods of dry weather. If the work is scheduled during a period of rain, take the necessary steps to install appropriate site isolation and sediment control.
- If the activity requires work in stream, you must schedule them to coincide with your regions in stream work window.

13.3 Site Management

- When preparing and during work, minimize vegetation clearing activities.
- Prevent the transport of sediment through the installation of appropriate erosion and sediment control.

13.4 Material Storage

- Covers must be used to keep erodible materials dry.
- All hazardous materials must be stored in accordance with regulations and deleterious substances must be handled with care.
- Mix concrete compounds, sealants and paints off the bridge and away from any watercourse.
- Clean tools and equipment off-site to prevent the release of wash water that may contain deleterious substances.

- Ensure all equipment is well maintained.

13.5 Waste and Materials Containment

- Ensure there is a spills response plan in place and spill kits on site.
- Ensure raw material and wash water will not be released to any watercourse from potentially deleterious materials.
- Inspect containment structures regularly to ensure they are functioning. Repair as required.
- Where possible, sweep up loose material or debris.

13.6 Repairs Using Cement-based Products

- Concrete works should be isolated from water with a waterproof barrier to prevent the introduction of raw product or wash water to a watercourse.
- Isolate the site to ensure that any wash water generated from the repaired area is prevented from entering bridge drains and watercourses.

14.0 Roadway Incident and Vandalism Response

Such activities are required to protect the driving public from unsafe road conditions. Emergency response is often an activity coordinated with local law enforcement or other first-response agencies.

14.1 Activities

Flood Control and Washout Response
Roadway Incident and Vandalism Response
Snow Storm Event Response
Severe Storm Event Response
Structural damage Response

14.2 Spill Response

- It is your responsibility to contain spills on highways in conjunction and cooperation with regulatory agencies, police authorities and the Province.
- Prevent all potentially harmful materials from entering into road drains and watercourses.
- Apply containment devices as quickly as possible.
- Collect any waste material and dispose of in an approved manner.
- Sweep up contaminated absorbents; don't flush materials into roadside ditches.
- Any soils that have been contaminated by a highway accident may need to be excavated from the site and disposed of in accordance with provincial and federal waste management regulations.
- Ensure that hazardous materials use, storage and disposal is in accordance with the information contained in their Material Safety Data Sheets.
- Install appropriate erosion and sediment controls.

14.3 Materials Management

- Prevent spilled materials and debris from entering into any watercourse.

- Remove materials to an appropriate storage or disposal site.
- In the case of abandoned vehicle removal, ensure that potentially harmful materials are contained and prevented from contaminating soils and ground and surface waters. Ensure that the vehicle is transported to an appropriate storage or disposal facility.

15.0 Roadway Inspections

Patrolling the roadway and completing inspections is a vital component of operations.

15.1 Activities

Roadway Patrol and Inspection

15.2 Timing

- Patrols shall take place as required and scheduled.

15.3 Site Management

- Minimize disturbance to environmentally sensitive areas by keeping vehicles to paved and graveled areas unless necessity dictates otherwise.
- Complete inspections on foot in sensitive areas with consideration of footing and disturbance of wildlife habitat and nesting areas.

15.4 Equipment Use

- Inspections and patrol will be conducted using the most fuel efficient vehicle with the highest emission control available for the task.
- Purchase and lease of vehicles to be used for patrol and inspections shall consider environmental impact of fuel consumption and emissions.

15.5 Patrol and Inspection

- While operating the patrol vehicle, consider fuel consumption and emissions.
- Unless required for safety, accelerate and reduce speed slowly.
- Do not idle unless at a traffic signal or if required for safety reasons.

16.0 Line Painting

Line painting includes replacing lane markings and painted signage on the roadways.

16.1 Activities

Temporary Line Marking
Line Painting

16.2 Timing

- Works are undertaken during periods of dry weather.

16.3 Site Management

- Painting equipment shall remain on the right of way and not enter environmentally sensitive areas.

16.5 Worksite Isolation

- Isolate your work from any flowing water by ensuring they are temporarily diverted.
- Ensure paint is not released into any watercourses and storm drains are protected.
- Protect fresh paint from traffic to prevent the spread of paint with public vehicles.

16.6 Waste and Materials Management

- MSDS Sheets shall be on site and understood by all workers.
- Ensure there is a spill response plan in place and spill kits on site.
- Equipment should be washed off site and wash water should be managed appropriately to reduce impacts to the environment.
- Make sure to store hazardous materials in accordance with regulations, MSDS sheets and with care.
- All compounds and chemicals must be mixed in a contained area and away from all watercourses.

RYZUK GEOTECHNICAL
Engineering & Materials Testing

28 Crease Avenue, Victoria, BC, V8Z 1S3 Tel: 250-475-3131 Fax: 250-475-3611 www.ryzuk.com

November 29, 2015
File No: 4789-13

Mainroad South Island Contracting
2893 Westshore Parkway
Victoria, BC
V9B 0B2

Attn: Mr. David Turenne

Dear Mr. Turenne,

Re: Stormwater Management Plan
3323 Port Washington Road – North Pender Island, BC

As requested, we visited the above referenced site on November 22, 2016, to carry out a visual review of the existing drainage conditions of the maintenance yard. Our scope was to provide a Stormwater Management Plan and was limited to a hydrological assessment which does not include review of contaminant or leachate potential or containment. Our associated observations, comments, and recommendations in this regard are contained herein. Our work has been carried out in accordance with, and is subject to, the attached Terms of Engagement.

The maintenance yard is located within north-central portion of North Pender Island and is generally bounded to the east, south, and west by developed rural residential properties, and Port Washington Road to the north. We understand that the yard has been in operation as a road maintenance and materials storage facility for several decades, being formerly operated by The Ministry of Transportation and Infrastructure prior to occupancy by Mainroad.

The property slopes gently downwards from the northeast to the southwest within the existing maintenance yard, while a steep vegetated slope rises along the yard boundary within the southern areas, and local moderately steep slopes are present within the western peripheral portions of the site. The majority of the yard is surfaced with compacted gravel between intermittent structures and local grassy swale/boulevard areas. Additionally, grasses, brush, and intermittent trees, are present within the western portion surrounding a local dugout storage pond. The existing site layout is generally shown on the attached site plan produced by Morrow, dated March 21, 2006.

Soils within the site are understood anecdotally to include local sand and gravel within the northeastern portions, while silty, clayey soils, as well as shale bedrock are present within the remaining portions overlain by surficial fills associated with past site use.

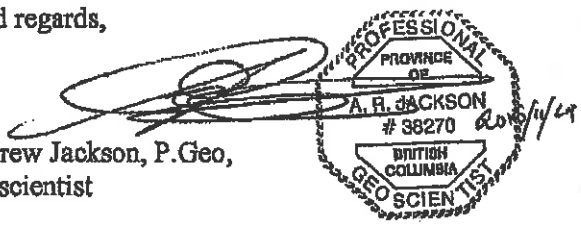
The site is located within the high point of a 'saddle', being near the watershed divide and this catchment area is confined by east-west bedrock controlled ridges, ultimately draining to the western shore of the island at Grimmer Bay. Drainage conditions within the yard typically comprise shallow surface flow from northeast to southwest and local ditching is present along the toe of the slope rising to the south, which includes a smaller dugout (a below grade depression) where past extraction of shale bedrock occurred. A grassy swale is also present within the central western portion which drains to a 300 mm diameter culvert that outfalls to another swale which leads to the dugout within the western boundary. This dugout/pond outfalls to the adjacent property to the west via a small ditch which bisects the low lying wooded area of the adjacent property. The structures generally do not have roof gutters and we noted that the sand and salt semi-quonset storage tent has an oil and sediment catchment tank out-falling to an adjacent cobble filled infiltration area (labeled as 'evapo-bowl' on the site plan). Local seepage areas exist near the driveway access along the front, likely the result of the gravelly deposit which is inferred to be fed by groundwater recharge areas within the higher ground to the north.

We understand that the existing drainage conditions have remained relatively unchanged over the past few decades and that no indications of erosion or adverse drainage effects have been apparent since the development of the maintenance yard. We carried out hydrology modelling based on the Rational Method to review peak runoff flows expected for the 200 year storm event, with an assumed time of concentration of 5 minutes and using relatively conservative design parameters. Our modelling indicated that the existing swales and culverts were adequately sized to accommodate the peak design flows associated with a 200 year storm event.

In summary, we consider that the existing drainage regime can be kept in place and that there is no requirement for storm drainage rerouting or modifications. We recommend that the current network of swales and culverts be maintained periodically as required.

We trust that the preceding is suitable for your current requirements. Please call if you have questions.

Kind regards,



Andrew Jackson, P.Geo,
Geoscientist

Attached – Terms of Engagement and Site Plan

SNC·LAVALIN

SNC-Lavalin Inc.
8648 Commerce Court
Burnaby, British Columbia, Canada, V5A 4N6
604.515.5151 604.515.5150

February 27, 2017 Project: 616441

Mainroad Properties LP
2nd Floor, 17474 – 56th Avenue
Surrey, BC
V3S 1C3

ATTENTION: Mr. David Turenne,
Project Manager

REFERENCE: **Monitoring and Sampling Results – January 2017**
Mainroad Pender Island Highway Maintenance Yard
3323 Port Washington Road, Pender Island, BC

Under the authorization of Mainroad Properties LP (Mainroad), SNC-Lavalin Inc. (SNC-Lavalin) completed a groundwater sampling program at the Mainroad Pender Island Highway Maintenance Yard located at 3323 Port Washington Road, Pender Island, BC (Property). The location and general arrangement of the Property are shown on Drawings 130659-001 and 130659-002, respectively.

Background

The Property is located on Port Washington Road, near the centre of Pender Island. The Property comprises of an upper yard with a garage and shed, a fuel shed/fuel pad area, and gravel storage. The lower yard is currently used for road-salt and gravel storage.

Previous 2006 environmental investigations on the Property indicated that hydrocarbon concentrations in soil and groundwater were less than the applicable standards and mostly less than laboratory detection limits.

Objective

The objective of this investigation was to determine the current environmental status of groundwater in exisiting monitoring wells at the Property.

Scope of Work

The monitoring and sampling program comprised of the following:

- Monitor 3 existing monitoring wells (MWs 06-3, 06-4, and 06-6) on the Property;
- Purge and sample 3 monitoring wells (MWs 06-3, 06-4, and 06-6);
- Collection of a surface water sample from the pond intake location; and
- Submit all samples to Maxxam for laboratory analysis of salt-related contaminants of concern.

This report summarizes the observations and results from the above work.

Regulatory Framework

The following is a review of the current relevant regulatory standards, criteria, and guidelines applicable at the time this report was prepared for the Property. The salt potential contaminants of concern (PCOC) at the Property were assessed by analysis of groundwater and the analytical results were compared to current standards contained in the following provincial regulation:

› *Contaminated Sites Regulation* (CSR), B.C. Reg. 375/96, including amendments up to B.C. Reg. 184/2016, July 19, 2016.

A surface water sample was also collected and the analytical results were compared to current guidelines contained in the following provincial guideline:

› *British Columbia Approved Water Quality Guidelines, includes Working Water Quality Guidelines for BC* (BCWQG). British Columbia Ministry of Environment (MoE), January 2017.

Applicable Groundwater Standards

The selection of applicable groundwater standards is based on the presence, proximity and end-use of potential receptors of groundwater near a site as outline in Protocol 21: Water *Use Determination,* BC MoE, Version 1.0 Draft 15 (effective December 15, 2015).

Considering the potential receptors (i.e., a pond at the site, one to the southeast, and one to the east) within 500 m of the Property, the following forms the basis for the applicable numeric groundwater standards used in the evaluation of analytical data:

› CSR aquatic life water use (AW) standards for groundwater discharging to surface water used by freshwater or marine/estuarine aquatic life; and
› CSW drinking water use (DW).

The DW standards were considered applicable at this stage of investigation due to the absence of hydrogeological data. Additional testing of the saturated thickness of the aquifer, hydraulic conductivity, and presence of aquitards (if any) would be required to rule out DW pursuant with Protocol 21. As such, the applicability of the DW standards may be subject to change.

Potential Contaminants of Concern

The regulated analytical parameters for the PCOCs for road-salt storage include sodium and chloride in soil, and chloride and salinity in groundwater.

Note that the scope of this sampling investigation was limited to the assessment salt-related PCOCs at the Property, as these are the ongoing source of contamination at the Property.

Methodology

All field tasks were completed in accordance with SNC-Lavalin's Preferred Operating Procedures (POPs) and industry best practices.

Monitoring

On February 1, 2017, SNC-Lavalin personnel completed groundwater monitoring of all monitoring wells (MWs 06-3, 06-4, and 06-6) remaining or found at the Property. A water level probe was utilized to measure the depth to groundwater and the depth to well bottom.

Groundwater Sampling

On February 1, 2017, groundwater samples were collected the existing monitoring wells (MWs 06-3, 06-4, and 06-6).

Groundwater samples were collected from the existing monitoring wells after purging three well volumes of water from the well by manually pumping with a Waterra® inertial lift pump and tubing. During purging, the removed water was periodically monitored for changes in pH, conductivity, temperature, and appearance (i.e., colour, turbidity, and sediment load). Samples for all parameters were collected directly from the Waterra® tubing.

Samples were immediately transferred to appropriate laboratory-prepared bottles, stored in ice-chilled coolers and shipped by courier with appropriate chain-of-custody documentation to Maxxam.

Surface Water Sampling

On February 1, 2017, a surface water sample was also collected from the pond intake location roughly 5 cm below the water surface. The surface water sample was collected directly from the pond into laboratory supplied bottles, stored in ice-chilled coolers and shipped by courier with appropriate chain-of-custody documentation to Maxxam.

Results

Groundwater Monitoring

On February 1, 2017, groundwater levels collected from MWs 06-3, 06-4, and 06-6 ranged from 0.6 m bgs to 1.2 m bgs. The results of the groundwater monitoring are presented in the Monitoring Report, Attachment 1.

Based on the limited number of monitoring wells with reference elevations, a sketch of the potentiometric surface contours could not be prepared.

Groundwater Analytical Results

Groundwater analytical results are summarized in Table 1, and the 2006 results are included for reference in Table 2. The laboratory analytical report is included in Attachment 2.

In the vicinity of the fuel shed/fuel pad area (i.e., at the north central portion of the Property) at MW06-6, concentrations of chloride and dissolved sodium were greater than the CSR DW standards (1,400 mg/L and 365 mg/L, respectively). The concentration of calculated salinity from this well was less than the CSR AW standard.

In the vicinity of garage (i.e., at the central portion of the Property) at MW06-4, concentrations of chloride, dissolved sodium, and calculated salinity were less than the CSR DW and AW standards.

In the lower yard (i.e., at the west central portion of the Property) at MW06-3, concentrations of chloride and dissolved sodium were greater than the CSR DW standards (1,600 mg/L and 590 mg/L, respectively). The concentration of calculated salinity from this well was less than the CSR AW standard.

In comparison with previous (2006) results, only MW06-3 was previously tested, and the 2017 concentrations of chloride and dissolved sodium were comparable to 2006 concentrations. There is insufficient data to identify a trend, but considering there was more than 11 years between results, the concentrations appear to be stable.

Surface Water Analytical Results

The surface water analytical results are also summarized in Table 1, and previous (2006) results are summarized in Table 2.

At the pond inlet location, concentrations of chloride were less than the BCWQG DW guidelines. Note that there is no actual BCWQG number for AW; however, the guidance states that human activities should not cause the chloride of marine or estuarine waters to fluctuate by more than 10% of the natural chloride expected at that time and depth. Since the natural chloride concentration of the marine waters surrounding Pender Island was not assessed at this time, it could not be determined how chloride concentrations collected at SW-IN compare to the natural chloride concentration of the surrounding marine waters. For comparison purposes, these concentrations were also compared to the CSR standards and concentrations of chloride, dissolved sodium, and calculated salinity were less than the CSR DW and AW standards in a sample collected from the pond inlet (SW-IN).

In comparison with previous (2006) results of the pond inlet concentrations, the 2017 concentrations of chloride and dissolved sodium are lower than the 2006 concentrations.

Conclusions

The following is a summary of the finding of the 2017 groundwater investigation completed at the Property:

- Groundwater levels ranged between approximately 0.6 m bgs and 1.2 m bgs.
- The concentrations of sodium and chloride were greater than the CSR DW standards in MWs 06-3 and 06-4, but were less than the standards at MW06-4 and the pond inlet. All results were less than CSR AW standards.
- Concentrations of salt-related contaminants were similar to 2006 concentrations.

Notice to Reader

This report has been prepared and the work referred to in this report have been undertaken by SNC-Lavalin Inc. (SNC-Lavalin) for the exclusive use of Mainroad Properties LP, who has been party to the development of the scope of work and understands its limitations. The methodology, findings, conclusions and recommendations in this report are based solely upon the scope of work and subject to the time and budgetary considerations described in the proposal and/or contract pursuant to which this report was issued. Any use, reliance on, or decision made by a third party based on this report is the sole responsibility of such third party. SNC-Lavalin accepts no liability or responsibility for any damages that may be suffered or incurred by any third party as a result of the use of, reliance on, or any decision made based on this report.

The findings, conclusions and recommendations in this report (i) have been developed in a manner consistent with the level of skill normally exercised by professionals currently practicing under similar conditions in the area, and (ii) reflect SNC-Lavalin's best judgment based on information available at the time of preparation of this report. No other warranties, either expressed or implied, are made as to the professional services provided under the terms of our original contract and included in this report. The findings and conclusions contained in this report are valid only as of the date of this report and may be based, in part, upon information provided by others. If any of the information is inaccurate, new information is discovered, site conditions change or applicable standards are amended, modifications to this report may be necessary. The results of this assessment should in no way be construed as a warranty that the subject site is free from any and all contamination.

Any soil and rock descriptions in this report and associated logs have been made with the intent of providing general information on the subsurface conditions of the site. This information should not be used as geotechnical data for any purpose unless specifically addressed in the text of this report. Groundwater conditions described in this report refer only to those observed at the location and time of observation noted in the report.

This report must be read as a whole, as sections taken out of context may be misleading. If discrepancies occur between the preliminary (draft) and final version of this report, it is the final version that takes precedence. Nothing in this report is intended to constitute or provide a legal opinion.

Closure

We trust this provides you with the information you currently require. If you have any questions, please contact the undersigned.

Harbey Bains, P.Eng.
Senior Project Manager

Environment & Geoscience
Infrastructure

HB/rck
P:\CP\MAINROAD HOLDINGS\130659 (PENDER)\5.0\5.5\L224EWA.DOCX
enc.

Drawings

- 130659-001 – Location Plan
- 130659-002 – Site Plan

Tables

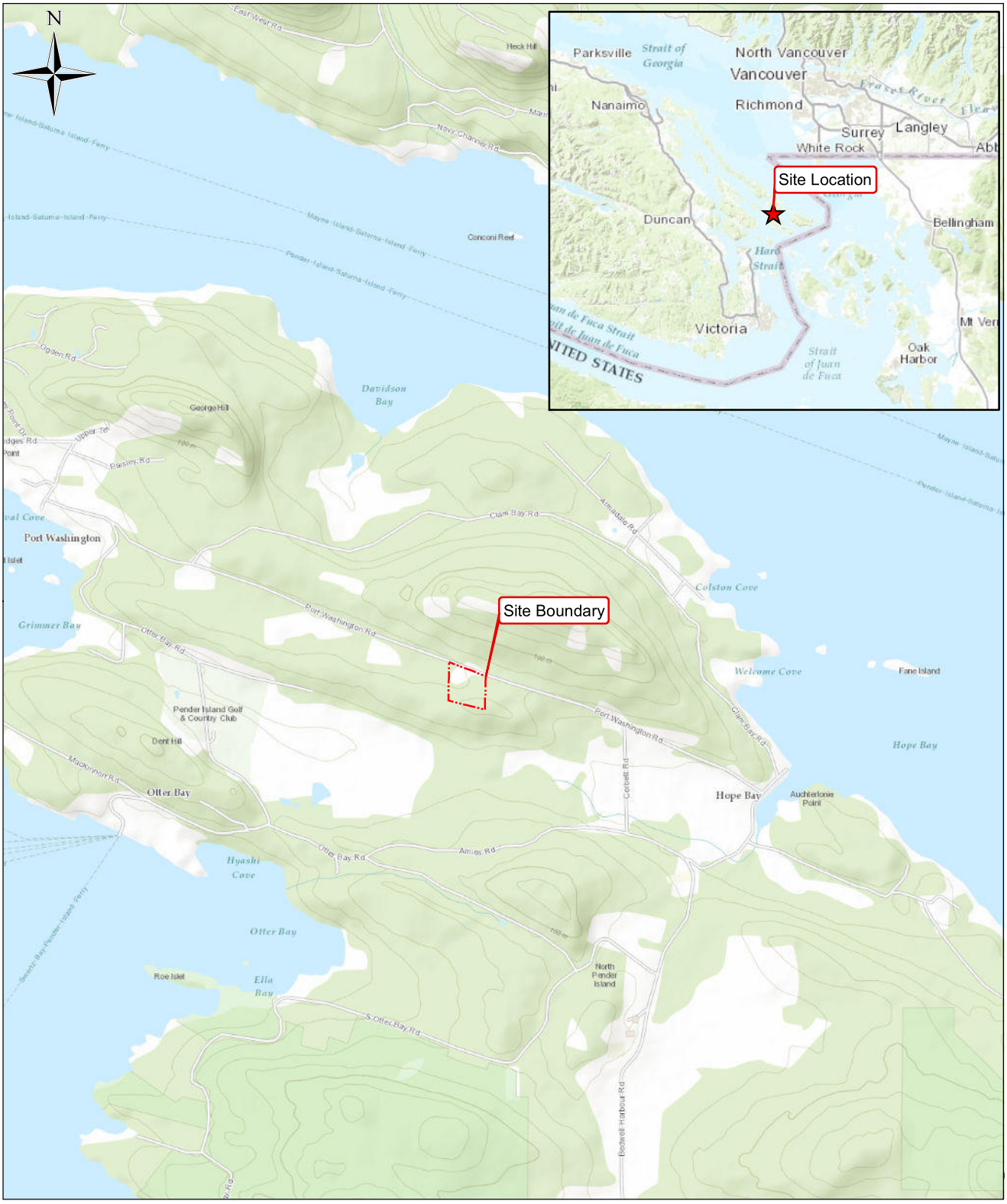
1. Summary of Analytical Results for Salt PCOCs in Water (2017 Sampling)
2. Summary of Analytical Results for Salt PCOCs in Water (Previous 2006 Sampling)

Attachments

1. Monitoring Report
2. Analytical Laboratory Report

DRAWINGS

- 130659-001 – Location Plan
- 130659-002 – Site Plan



Legend

- Site Boundary
- Site Location

Notes:
1. Intended for Illustration purposes only.
2. Original in colour.
3. Site location is approximate.

References:

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

PROJECT LOCATION:
3233 Port Washington Road,
Pender Island, BC

CLIENT NAME:
Mainroad Group

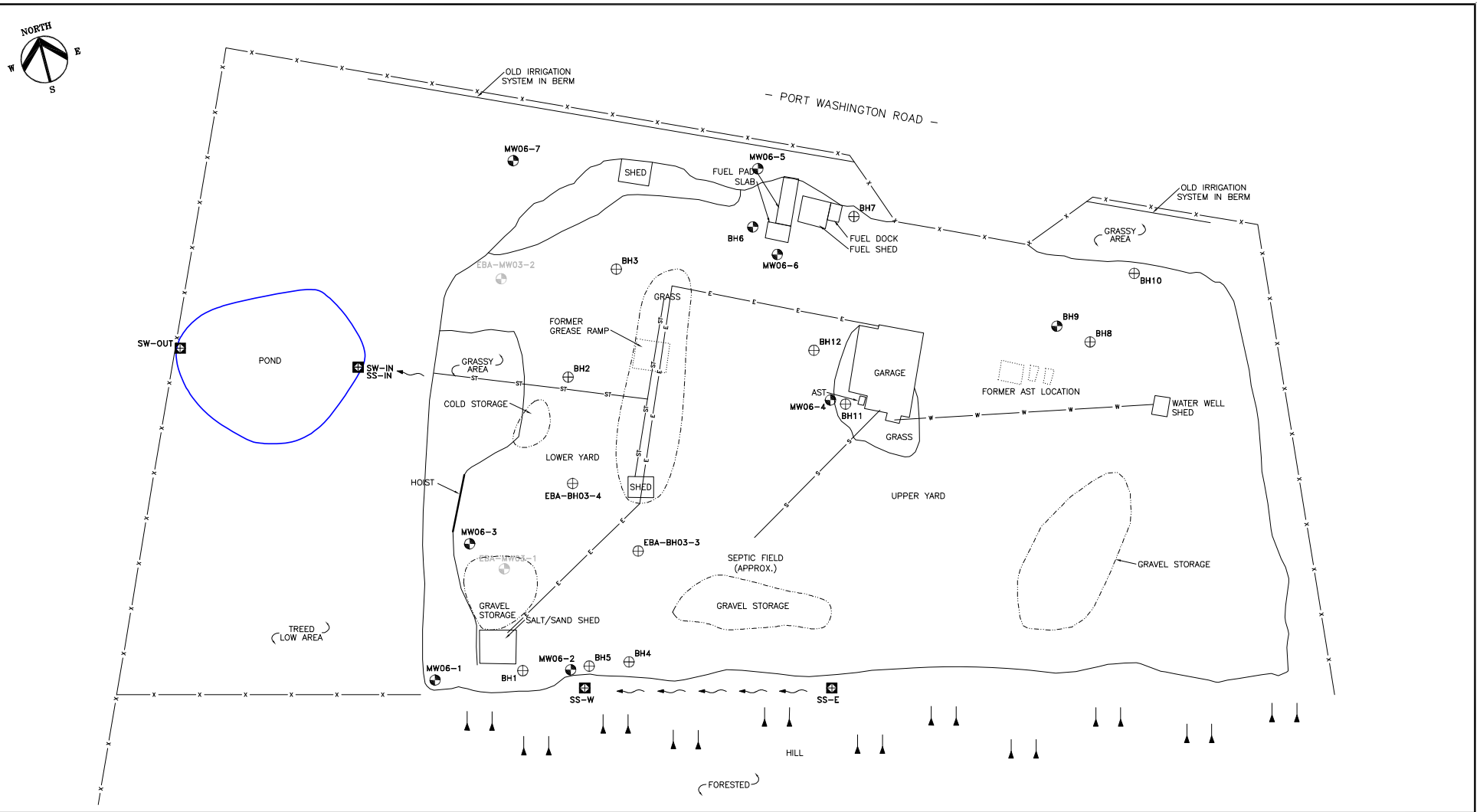
SNC·LAVALIN

LocationPlan

0 275 550 1,100 1,650 2,200 Meters

CHK'D: EW	DATE: 2017/02/24	SCALE: 1:25,000	Ref Num:	REV: 0
BY: CJW	COORD SYS: NAD 1983 UTM Zone 10N		130659-001	

Project Path: C:\Users\wallc2\Desktop\130659-001_LocPlan.mxd



LEGEND

0 10 20 30 METRES

- E — ELECTRICAL
- W — WATER
- S — SEWER
- ST — STORM
- x — FENCE
- STOCKPILES
- FORMER FEATURES
- MONITORING WELL LOCATION
- MONITORING WELL LOCATION (DESTROYED)
- BOREHOLE LOCATION
- SEDIMENT AND/OR SURFACE WATER SAMPLE LOCATION

NOTES

1. ORIGINAL DRAWING IN COLOUR.
2. LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED ON SITE. NOT ALL UTILITIES MAY BE SHOWN.

REFERENCE DRAWINGS

FIGURE 2	MARCH 2004	EBA ENGINEERING CONSULTANTS LTD.
		2004 DSI REPORT
DWG. NO.	DATE	DESCRIPTION

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
0	2017-02-23	ISSUED TO CLIENT	AJK	EW

SNC·LAVALIN

CLIENT NAME: MAINROAD HOLDINGS LTD.

PROJECT LOCATION: PENDER ISLAND WORKS YARD, PENDER ISLAND, BC

TITLE: **SITE PLAN**

DWN BY: PRT | SCALE: 1:600 | DATE: 2006-03-07 | DWG No: REV.: 0

CHK'D: JDS | PLOT: 20170223.1333 | CADFILE: 130659R02 | **130659-002**

PATH: \\SLI2606\PROJECTS\CURRENT PROJECTS\MAINROAD HOLDINGS\130659 (PENDER)\PRE 2014 QMS FILING\CAD\130659R02.DWG

TABLES

TABLE 1: Summary of Analytical Results for Salt PCOCs in Water (2017 Sampling)

Sample Location	Sample ID	Sample Date (yyyy mm dd)	Dissolved Inorganics		
			Chloride mg/L	Salinity (Calculated) mg/L	Dissolved Sodium mg/L
MW06-3[c]	MW06-3-170201	2017 02 01	***1,600***	1,500	***590***
MW06-4[c]	MW06-4-170201	2017 02 01	17	16.6	6.51
MW06-6[c]	MW06-6-170201	2017 02 01	***1,400***	927	***365***
Pond Inlet[d]	SW-IN-170201	2017 02 01	96	84.4	33.2
BC Standard					
CSR Drinking Water (DW)			250	n/a	200
CSR Aquatic Life (AW)[a]			n/a	10,000 - 40,000[b]	n/a
BC Guideline					
BCWQG Drinking Water (DW)			250	n/a	n/a
BCWQG Aquatic Life (AW)[a]			See note "e"	n/a	n/a

Associated Maxxam file(s): B707682.

All terms defined within the body of SNC-Lavalin's report.

< Denotes concentration less than indicated detection limit or RPD less than indicated value.

- Denotes analysis not conducted.

n/a Denotes no applicable standard/guideline.

BOLD Concentration greater than CSR/BCWQG Drinking Water (DW) standard.

SHADOW Concentration greater than CSR/BCWQG Aquatic Life (AW) standard.

[a] Standard to protect freshwater or marine/estuarine aquatic life, whichever is most stringent.

[b] Standard dependant on salinity of receiving environment.

[c] CSR standards apply only at this location.

[d] BCWQG standards apply only at this location.

[e] Human activities should not cause the chloride of marine and estuarine waters to fluctuate by more than 10% of the natural chloride expected at that time and depth.

TABLE 2: Summary of Analytical Results for Salt PCOCs in Water (Previous 2006 Sampling)

Sample Location		MW06-3[c]			MW06-7[c]	Pond Inlet[d]	Pond Outfall[d]	BC Standards		BC Guideline	
Sample ID		MW06-3-060307	MW06-A-060307	QA/QC	MW06-7-060307	SW-IN-060307	SW-OUT-060307	CSR	CSR	BCWQG	BCWQG
Sample Date (yyyy mm dd)		2006 03 07	Dup of MW06-3-060307	RPD %	2006 03 07	2006 03 07	2006 03 07	Drinking Water (DW)	Aquatic Life[a] (AW)	Drinking Water (DW)	Aquatic Life[a] (AW)
Parameter	**Units**	**Analytical Results**									
Physical Parameters											
Conductivity	µS/cm	3,760	3,730	< 1	198	1,160	2,860	n/a	n/a	n/a	n/a
Dissolved Inorganics											
Salinity	SAL	2.5	2.5	0	< 2	< 2	< 2	n/a	n/a	n/a	n/a
Salinity (Calculated)	mg/L	656	668	0	17.8	259	666	n/a	10,000 - 40,000[b]	n/a	n/a
Chloride	mg/L	***1,030***	***1,010***	2	17.4	***306***	***794***	250	n/a	250	see note "e"
Sodium	mg/L	***398***	***405***	2	10.8	***157***	***404***	200	n/a	n/a	n/a
Cyanide (WAD)	mg/L	< 0.01	-	*	-	-	-	n/a	0.01	n/a	n/a

Associated CanTest file: 70309088.

All terms defined within the body of Morrow's report.

* RPDs are not normally calculated where one or more concentrations are less than five times MDL.

< Denotes concentration less than indicated detection limit.

\- Denotes analysis not conducted.

n/a Denotes no applicable standard.

BOLD Concentration greater than CSR/BCWQG Drinking Water (DW) standard.

SHADOW Concentration greater than CSR/BCWQG Aquatic Life (AW) standard.

[a] Standard to protect freshwater or marine/estuarine aquatic life, whichever is most stringent.

[b] Standard dependant on salinity of receiving environment.

[c] CSR standards apply only at this location.

[d] BCWQG standards apply only at this location.

[e] Human activities should not cause the chloride of marine and estuarine waters to fluctuate by more than 10% of the natural chloride expected at that time and depth.

ATTACHMENT 1

Monitoring Report

MONITORING REPORT

SNC·LAVALIN

Project No.: 130659
Date: February 1, 2017
Observer: GG
Weather: 5℃ Clear
Time: 9:45 AM
Approved by:

Mainroad Group
3323 Port Washington Road
Pender Island, BC

Monitoring Well No.	Reference Elevation[1] (m)	Depth to Water (m)	Potentiometric Elevation (m)	Depth to Bottom (m)	Comments
BH6	-	-	-	-	Could not locate.
BH9	-	-	-	-	Could not locate.
03-1	-	-	-	-	Could not locate.
03-2	-	-	-	-	Could not locate.
06-1	-	-	-	-	Could not locate.
06-2	-	-	-	-	Could not locate.
06-3	98.348	1.246	97.102	2.938	*
06-4	100.187	0.604	99.583	2.883	*
06-5	-	-	-	-	Could not locate.
06-6	100.567	0.564	100.003	2.837	*
06-7	-	-	-	-	Could not locate.

NOTES: * Waterra in well during measurement

[1] Reference Elevation is a mark on the rim of the monitoring well standpipe surveyed with respect to Local Datum.

ATTACHMENT 2

Analytical Laboratory Report

Maxxam
A Bureau Veritas Group Company

Success Through Science®

Your P.O. #: 644509
Your Project #: 130659
Site Location: MAIN ROAD, PENDER ISLAND
Your C.O.C. #: 515783-02-01

Attention:Edna Wong

SNC-LAVALIN INC.
BURNABY, ENVIRONMENT DIVISION
8648 COMMERCE COURT
BURNABY, BC
CANADA V5A 4N6

Report Date: 2017/02/08
Report #: R2343369
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B707682
Received: 2017/02/02, 08:30

Sample Matrix: GROUND WATER
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Chloride by Automated Colourimetry	2	N/A	2017/02/02	BBY6SOP-00011	SM 22 4500-Cl- E m
Chloride by Automated Colourimetry	2	N/A	2017/02/03	BBY6SOP-00011	SM 22 4500-Cl- E m
Elements by CRC ICPMS (dissolved)	4	N/A	2017/02/08	BBY7SOP-00002	EPA 6020B R2 m
Filter and HNO3 Preserve for Metals	1	N/A	2017/02/03	BBY7 WI-00004	BCMOE Reqs 08/14
Filter and HNO3 Preserve for Metals	3	N/A	2017/02/08	BBY7 WI-00004	BCMOE Reqs 08/14
Salinity Maximum (Calc)	4	N/A	2017/02/08		

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported: unless indicated otherwise, associated sample data are not blank corrected.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods. Results relate to samples tested.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Your P.O. #: 644509
Your Project #: 130659
Site Location: MAIN ROAD, PENDER ISLAND
Your C.O.C. #: 515783-02-01

Attention:Edna Wong

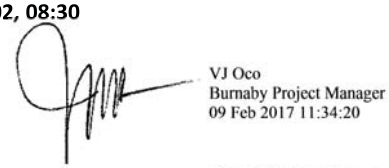
SNC-LAVALIN INC.
BURNABY, ENVIRONMENT DIVISION
8648 COMMERCE COURT
BURNABY, BC
CANADA V5A 4N6

Report Date: 2017/02/08
Report #: R2343369
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B707682
Received: 2017/02/02, 08:30

Encryption Key



Please direct all questions regarding this Certificate of Analysis to your Project Manager.
VJ Oco, Burnaby Project Manager
Email: VOco@maxxam.ca
Phone# (604)639-8422

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Job #: B707682
Report Date: 2017/02/08

SNC-LAVALIN INC.
Client Project #: 130659
Site Location: MAIN ROAD, PENDER ISLAND
Your P.O. #: 644509
Sampler Initials: GV

RESULTS OF CHEMICAL ANALYSES OF GROUND WATER

Maxxam ID		QM4519	QM4519			QM4520		
Sampling Date		2017/02/01 12:50	2017/02/01 12:50			2017/02/01 11:00		
COC Number		515783-02-01	515783-02-01			515783-02-01		
	UNITS	MW06-3-170201	MW06-3-170201 Lab-Dup	RDL	QC Batch	MW06-4-170201	RDL	QC Batch
Calculated Parameters								
Filter and HNO3 Preservation	N/A	FIELD			ONSITE	FIELD		ONSITE
Maximum Calculated Salinity	mg/L	1500		5.0	8543835	16.6	0.50	8543835
Anions								
Dissolved Chloride (Cl)	mg/L	1600 (1)	1600	5.0	8544139	17	0.50	8545972

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
(1) Detection limits raised due to dilution to bring analyte within the calibrated range.

Maxxam ID		QM4521			QM4522		
Sampling Date		2017/02/01 14:30			2017/02/01 13:20		
COC Number		515783-02-01			515783-02-01		
	UNITS	MW06-6-170201	RDL	QC Batch	SW-IN-170201	RDL	QC Batch
Calculated Parameters							
Filter and HNO3 Preservation	N/A	FIELD		ONSITE	FIELD		ONSITE
Maximum Calculated Salinity	mg/L	927	5.0	8543835	84.4	0.50	8543835
Anions							
Dissolved Chloride (Cl)	mg/L	1400 (1)	5.0	8544139	96	0.50	8545972

RDL = Reportable Detection Limit
(1) Detection limits raised due to dilution to bring analyte within the calibrated range.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Maxxam Job #: B707682
Report Date: 2017/02/08

SNC-LAVALIN INC.
Client Project #: 130659
Site Location: MAIN ROAD, PENDER ISLAND
Your P.O. #: 644509
Sampler Initials: GV

ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Maxxam ID		QM4519	QM4520	QM4521	QM4522	QM4522		
Sampling Date		2017/02/01 12:50	2017/02/01 11:00	2017/02/01 14:30	2017/02/01 13:20	2017/02/01 13:20		
COC Number		515783-02-01	515783-02-01	515783-02-01	515783-02-01	515783-02-01		
	UNITS	**MW06-3-170201**	**MW06-4-170201**	**MW06-6-170201**	**SW-IN-170201**	**SW-IN-170201 Lab-Dup**	**RDL**	**QC Batch**
Dissolved Metals by ICPMS								
Dissolved Sodium (Na)	ug/L	590000	6510	365000	33200	34500	50	8544878

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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Maxxam Job #: B707682
Report Date: 2017/02/08

SNC-LAVALIN INC.
Client Project #: 130659
Site Location: MAIN ROAD, PENDER ISLAND
Your P.O. #: 644509
Sampler Initials: GV

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	5.0°C

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

DRAFT

NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 202

A BYLAW TO AMEND NORTH PENDER ISLAND LAND USE BYLAW, 1996

The North Pender Island Local Trust Committee, being the Trust Committee having jurisdiction in respect of the North Pender Island Local Trust Area under the *Islands Trust Act,* enacts as follows:

1. Citation

   This bylaw may be cited for all purposes as "North Pender Island Land Use Bylaw 103, 1996, Amendment No. 1, 2016".

2. North Pender Island Local Trust Committee Bylaw No. 103, cited as "North Pender Island Land Use Bylaw 103, 1996," is amended as follows:

   2.1 Schedule "1" – Zoning Map, is amended by changing the zoning classification of portions of Lot 8 and 9, Section 18, North Pender Island, Cowichan District, Plan 6294 from Rural (R) to Industrial 1 (a) (I2 [a]), as shown on Plan No. 1 attached to and forming part of this bylaw, and by making such alterations to Schedule "1" to Bylaw No. 103, as are required to effect this change.

   2.2 Section 8.9. – Industrial (I2) Zone, Subsection 8.9.8 is amended by deleting Row 1, Columns 2 and 3 in their entirety and inserting the following:

Column 1	*Column 2*	*Column 3*
Site-Specific Zone Reference	**Legal Description**	**Site Specific Regulations**
I2(a)	Portions of Lot 8 & 9, Plan 6294, Section 18	Despite 8.9.2(1), the only uses permitted in this location are the storage and processing of materials, supplies and equipment used for, or generated from, the construction, maintenance and repair of highways, the storage of dangerous or hazardous materials, servicing and repairing of goods, materials and equipment, and the processing, crushing and storage of gravel.

3. Severability

   If any provision of this Bylaw is for any reason held to be invalid by a decision of any Court of competent jurisdiction, the invalid provision must be severed from the Bylaw and the decision that such provision is invalid must not affect the validity of the remaining provisions of the Bylaw.

READ A FIRST TIME THIS _____ DAY OF _____ 20____

PUBLIC HEARING HELD THIS _____ DAY OF _____ 20____

READ A SECOND TIME THIS _____ DAY OF _____ 20____

READ A THIRD TIME THIS _____ DAY OF _____ 20____

APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST THIS
_____ DAY OF _____ 20____

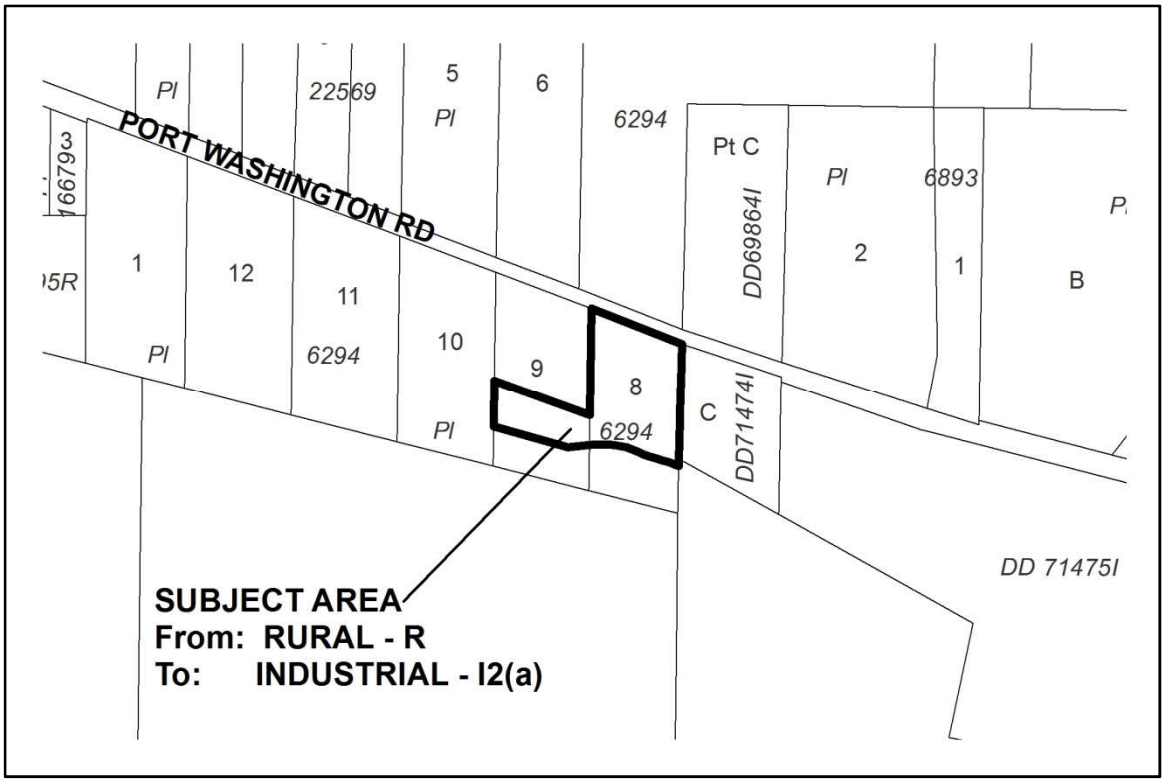
ADOPTED THIS _____ DAY OF _____ 20____

_____ _____

Chair **Secretary**

NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 202

Plan No. 1



Islands Trust

Top Priorities

North Pender Island

No.	Description	Activity	R/Initiated	Responsibility	Target Date
1	Land Use Planning for Waste Management	Identify land to be zoned for solid waste transfer facilities. Involves coordination with the Capital Regional District Solid Waste Management planning process.		Justine Starke	
2	Housing	This is a broad scope project focused on housing; the first priority was consideration of vacation rentals in residential zones (COMPLETED). The LTC will now consider permitting secondary suites on North Pender.	03-Feb-2015	Justine Starke	
3	First Nations Interests	LTC to consider First Nations issues and interests affecting North Pender.	24-Nov-2016		

Islands Trust

Projects

North Pender Island

Description	Activity	R/Initiated
Potable Water		29-Oct-2015
Conservation Subdivisions	Continue exploring 2013-2014 work on conservation subdivisions. Consult with community on recommendations for LUB and OCP amendments.	03-Feb-2015
Agricultural Projects	Consider implementing agricultural initiatives identified in OCP, including an Area Farm Plan	22-Jan-2009
Other OCP projects: 1. View corridor review 2. Parks and Conservation area review 3. Pedestrian and Cycle paths - DONE 4. Groundwater protection strategy 5. Include advocacy policies for ultra vires regulations removed from the LUB (commercial airstrips, private marinas, use of personal watercraft) 6. Marine riparian areas		22-Jan-2009
Agricultural Buildling Watercourse Setbacks		28-Jul-2011
Geological Hazard Mapping	Continue work on proposed DPA for Hazardous Areas	22-Feb-2012

Islands Trust

Projects

North Pender Island

Description	Activity	R/Initiated
LUB Amendments	·review of industrial zoning, including waste management ·tourist commercial zoning review ·home industry regulation ·review of commercial (C1) zoning ·incorporate TUP's into zoning ·landscape screening review ·review of marine zoning regulations in conjunction with overall shoreline development review ·amendments to permit renewable energy ·review of floor area calculations, applicable for cottages in support of alternative, energy efficient building designs, and review maximum floor area restriction ·height exemptions for agricultural or forestry buildings ·max floor area for principal dwellings	22-Mar-2012
Road Side Signs		26-Apr-2012
Applications after the fact	options to address situations where construction work has occurred without the required permits or approvals	28-Jun-2012
LUB/OCP Amendments Related to Roadway and Transportation Initiatives	·NZEV designation ·Level 2 Charging Stations ·Additional Car Stop Locations ·Additional Bicycling-Walking Routes ·Heritage Roads ·Road standards in subdivision servicing regulations ·Related policy and regulatoy options	20-Sep-2012
Item 10.1 LUB Technical Amendments Project: Bylaw Enforcement Manager to provide a report regarding the applicability of the NPILTC Bylaw Infraction Investigations Bylaw No. 54, 1990, including recommended amendments.		

Islands Trust

Projects

North Pender Island

Description	Activity	R/Initiated
Shoreline information communications (QR Codes)	Investigate incorporating shoreline information and classification into new Gulf Islands app and using QR code for smart phones	
Climate Change Adaptation and Community Resilience	Review available baseline data and consider policy and regulatory land use changes to address climate change adaption and community resilience	22-Jan-2009

Applications

Development Permit

File Number	Applicant Name	Date Received	Purpose
NP-DP-2017.1	LAURENCE BARRETT, CYNTHIA BARRETT **Planner:** Justine Starke	04-May-2017	7907 Trincoma Place - add carport canopy and main floor expansion away from natural boundary, plus accessory building studio / greenhouse

Planning Status

Status Date:

Development Variance Permit

File Number	Applicant Name	Date Received	Purpose
NP-DVP-2017.1	LAURENCE BARRETT, CYNTHIA BARRETT **Planner:** Justine Starke	04-May-2017	7909 Trincoma Place - construct car port with storage, expanded main floor and replace shed/greenhouse with accessory building; include existing triangular deck in DVP

Planning Status

Status Date:

Rezoning

File Number	Applicant Name	Date Received	Purpose
NP-RZ-2016.1	Mainroad South Island Contracting **Planner:** Phil Testemale	11-Jan-2016	3323 PORT WASHINGTON RD\n\nTo change from a TUP to a permanent zoning for a highway works yard.

Planning Status

Status Date: 16-May-2017

Staff Report and rec. for First Reading on May 26, 2017 LTC agenda.

Status Date: 20-Mar-2017

Waiting for direction on Waste Transfer (April 27 NPI LTC Meeting) prior to 1 st reading.

Status Date: 14-Feb-2017

Applicant has provided 2006 site profile supplemented by testing by SNC Lavolin conducted in Feb 2017. (date?)LTC agenda for First Reading.

File Number	Applicant Name	Date Received	Purpose
NP-RZ-2016.2	PORT BROWNING MARINA RESORT LTD INC.NO. BC1037734	09-May-2016	4605 OAK RD\nRezone the water lot adjacent to the current Marina

Planner: Phil Testemale

Planning Status

Status Date: 16-May-2017

Public Hearing scheduled for May 25, 2017. PPH Report for Third Reading.

Status Date: 20-Apr-2017

On LTC agenda for 2nd Reading

Status Date: 08-Apr-2017

CIM Held

File Number	Applicant Name	Date Received	Purpose
NP-RZ-2016.3	MILL BAY MARINE GROUP c/o HENSHAW	20-May-2016	4602 and 4606 and 4605 Oak Road\n\n005-636-639\nRequest that area zoned SD(a) passing through lots 3 and 4 be re-aligned to be adjacent to the westerly boundaries AND rezone the part of lot 3 that sits NE of Oak Rd to be C3(a).

Planner: Justine Starke

Planning Status

Status Date: 20-Apr-2017

Report to LTC for consideration of second reading.

Status Date: 14-Feb-2017

Bylaw Referrals sent to Agencies and FN. CIM Meeting tentative schedule for April 8, 2017

Status Date: 14-Feb-2017
Waiting for full AIA report. Resolution to endorse ITPS req'd

File Number	Applicant Name	Date Received	Purpose
NP-RZ-2016.4	PENDER ISLAND COMMUNITY SERVICE SOCIETY PICSS c/o RAE **Planner:** Phil Testemale	27-Oct-2016	4605 BEDWELL HARBOUR RD\nOCP AND LUB Amendment from Rural to Community Service Zoning

Planning Status

Status Date: 16-May-2017
Waiting for DA Info prior to 1 st Reading

Status Date: 14-Feb-2017
Preliminary Staff Report on Feb 23, 2017 Agenda.

Status Date: 13-Jan-2017
DAI letter sent to applicant.

File Number	Applicant Name	Date Received	Purpose
NP-RZ-2017.1	PENDER ISLAND PARKS AND RECREATION COMMISSION (CRD) **Planner:** Phil Testemale	24-Jan-2017	THIEVES BAY PAK/SHINGLE BAY PARK\nAMEND LUB 103 TO ADD PICNIC SELTER AS A PERMITTED USE AND STRUCTURE

Planning Status

Status Date: 02-May-2017
Bylaw 213 referred to agencies

Status Date: 27-Apr-2017
First Reading and direction to schedule a CIM and Public Hearing.

Status Date: 06-Apr-2017
Direction to Draft Bylaws

Subdivision

Applications

File Number	Applicant Name	Date Received	Purpose
NP-SUB-2012.4	Edgewood Estates c/o Graham Ross **Planner:** Phil Testemale	29-Nov-2012	2218 CLAM BAY RD \nTo create 11 lots including remainder

Planning Status

Status Date: 21-Mar-2017
PLA extension requested by applicant. Staff comments sent to MOTI stating no amendments to Island Trust conditions in PLA are required.

Status Date: 29-Sep-2015
Subdivision exempt from DPAs (PLA condition no. 3)

Status Date: 20-Aug-2015
Applicant provided Environmental Assessment on Eagle's Nest.

File Number	Applicant Name	Date Received	Purpose
NP-SUB-2016.2	PORT BROWNING MARINA RESORT **Planner:** Phil Testemale	06-Jun-2016	4605 and 4602 OAK Rd\nBoundary adjustment

Planning Status

Status Date: 16-May-2017
Pending - rezoning NP-RZ-2016.3 - Bylaws 207 and 208

Status Date: 05-Oct-2016
PLA rec'd from MoTI

Status Date: 15-Sep-2016
Waiting for PLA

File Number	Applicant Name	Date Received	Purpose
NP-SUB-2017.1	DAVID G RICHARDSON EDNA M HEMSWORTH **Planner:** Phil Testemale	16-Mar-2017	3210 ARMADALE RD - proposed subdivision to create 2 residential parcels

Planning Status

Status Date: 16-May-2017

Waiting for PLA. Required DVP Application has been submitted.

Status Date: 04-Apr-2017

Subdivision Referral Review sent to MoTI.

Status Date: 16-Mar-2017

File opened and forwarded to planner

Temporary and Industrial Use Permit

File Number	Applicant Name	Date Received	Purpose
NP-TUP-2017.1	ANN HEWLETT PAUL C STEPHENSON	02-May-2017	2705 Yawl Lane - construct alternate screening other than a vegetative screen, such as a wooden fence (to amend TUP 3n), as biologist consulted advised that vegetative screen is ecologically inappropriate, even detrimental to woodland ecosystem

Planner: Justine Starke

Planning Status

Status Date: 16-May-2017

Created file folder in LAN, scanned application package for e-file. Receipt issued, scanned (with cheque) for files; emailed scanned receipt to applicant, original mailed; cheque forwarded to Finance Clerk. Package emailed to NP LTC and Planner, hard file forwarded to Planner.

North Pender Island Local Trust Committee

POLICIES AND STANDING RESOLUTIONS

No	Meeting Date	Resolution No.	Issue	Policy
1.	January 27, 2005	NP-LTC-05-05	Advisory Planning Commission Appointments	The LTC will appoint Advisory Planning Commission members as representative of various local areas on North Pender and/or representative of various community organizations
2.	May 25, 2006	NP-LTC-80-06	Communications Policy	Policy Number NP-LTC-01-06 (Communications Policy) establishes guidance for the preparation and dissemination of routine non-statutory notices, extraordinary notices and trustee newsletters.
3.	May 25, 2006	NP-LTC-82-06	Enforcement Policy - STVR	1. THAT given finite resources available for enforcement activities and in order to ensure the most effective results for enforcement activities, STVRs that have one or more of the following characteristics will be subject to enforcement: 1. They are advertised on the internet, newspapers or other media; 2. They are not managed by the property owner; 3. More than one dwelling on the lot is simultaneously made available for STVR; 4. While the property is rented persons are also staying in tents, trailers or RVs; 5. There are issues related to health and safety; 6. There is a written complaint by owners or residents about bona fide nuisance issues such as noise or parking congestion related to the STVR; 7. The owner of the property uses more than one property on North Pender Island as a STVR. 2. THAT nothing in this enforcement policy should be interpreted as giving permission to violate the Land Use Bylaw and the North Pender Island Local Trust Committee may change this policy at any time and may give direction to expand enforcement activities at any time;
4.	August 30, 2007	NP-LTC-146-07	Special Occasion License Policy	THAT where a Liquor Control and Licensing Branch Special Occasion License referral relates to property on which North Pender Island Land Use Bylaw No. 103 permits public assembly uses, such as restaurants, community halls or church halls, and there are no issues related to parking or past complaints, staff may approve the Special Occasion License without referral to the Local Trust Committee. All other Special Occasion License referrals are to be referred to the Local Trust Committee for consideration.
5.	April 28, 2011	NP-LTC-50-11	Adopting In Camera Minutes	It was Moved and Seconded that the North Pender Island Local Trust Committee direct staff that they will adopt In Camera minutes when there are other reasons to close a meeting to the public.

6.	September 10, 2015	NP-LTC-63-15	Enforcement Policy - storage and disposal of waste and vehicles	THAT North Pender Island Local Trust Committee authorizes bylaw enforcement officers to commence bylaw investigations and enforcement without written complaint if bylaw violations related to disposal or storage of waste or recyclable materials or storage of vehicles or vehicle parts are observed by the bylaw enforcement officer while doing inspections for other issues or if it is reliably reported to the officer that such activity may be taking place.
7.				

Trust Fund Board Report to Local Trust Committees and Bowen Island Municipality April 2017

100 Protected Places

The protection of Moore Hill on Thetis Island marks a milestone of 100 protected places for the Islands Trust Fund. We hope you take a moment to reflect on your part in this achievement, as every single protected place is truly a result of collaboration, cooperation and partnership.

Property Management Strategy approved

The Trust Fund Board has approved a Property Management Strategy which will guide the management of Islands Trust Fund nature reserves and covenants. The strategy provides a framework for informed decision-making to ensure that the ecological integrity of protected areas is maintained or enhanced while making the most effective and efficient use of resources. There will soon be a page on our website providing information on this strategy.

Regional Conservation Plan consultation

Look out for the trustee survey on the Regional Conservation Plan coming your way in early May. Input from trustees will be really valuable and will help make our session at the Trust Council meeting in June more productive. In the fall, Islands Trust Fund staff will attend local trust committee meetings to discuss conservation planning for each local trust area with you. ITF is also hosting workshops for our conservation partners and First Nations in Nanaimo on May 1st and in Sidney on May 4th.

Financial Planning Committee appointment: Robin Williams

The Trust Fund Board has appointed member Robin Williams to serve as our representative on the Financial Planning Committee. We are grateful for Robin's interest.

Property Monitoring

Visits to monitor Islands Trust Fund properties and covenants will be taking place from April to July. Our monitoring is carried out by a contractor who has worked with the Islands Trust Fund for many years.

Summary of Current Island-by-Island Activities

Bowen

Bowen Island Conservancy has restored an area of the David Otter Nature Reserve, planting and caging cedar trees. The group has also been working with consultants to determine the site and design of a proposed viewing platform at Fairy Fen Nature Reserve.

Gabriola

A $10,000 grant from TD Friends of the Environment has been received towards the cost of a wooden boardwalk around the iconic large western redcedar at the Elder Cedar Nature Reserve. The raised boardwalk will allow people to get close to the majestic giant, but lessen the impact on the root zone of the tree.

Galiano

Following a presentation by the Chair of the Crystal Mountain Society Rezoning Committee with respect

to the possibility of the Society donating land to the Trust Fund Board as a nature reserve, TFB reconfirmed its agreement to hold a covenant on approximately 18 hectares of the lands owned by Crystal Mountain Society and indicated a willingness to consider a Conservation Proposal with respect to transferring of some or all of the land to the Board.

A successful restoration project was carried out at the Trincomali Nature Sanctuary involving new planting and weeding of last year's planting. Thanks to the volunteers involved!

Gambier
Restoration work at the Long Bay Wetlands Nature Reserve was successfully carried out involving volunteers from Gambier Island Conservancy and Camp Suzuki.

Keats
Islands Trust Fund has indicated support for provisions in proposed Bylaws 143 and 144 that pertain to dedicating an area as a nature reserve. If the bylaws are approved, ITF will continue to work with the owners to secure the transfer of land.

Lasqueti
TFB has approved a revised management plan for the Kwel Nature Reserve. The plan will be posted to our website soon.

Mayne
TFB has approved an Opportunity Fund grant of $5,000 towards the costs of an ecological assessment and legal fees in conjunction with Mayne Island Conservancy Society's project to acquire and conserve a property at St John Point.

North Pender
An arborist limbed a danger tree that fell over the trail at Medicine Beach Nature Sanctuary.

Salt Spring
A representative of Salt Spring Trail and Nature Club presented a proposal to Trust Fund Board members requesting the Islands Trust Fund consider releasing or amending the covenant on Lot 31, Salt Spring Island, to allow BC Parks to acquire the land as an expansion of Mount Erskine Provincial Park. Board members identified a number of issues that would have to be addressed once a formal proposal is received, including the board's over-riding responsibility to maintain ecological protection, limited staff, time and financial resources and possible legal issues.

A conservation covenant, co-held with the Salt Spring Island Conservancy, has been registered on Isabella Point. The covenant protects 2.15 hectares of forest, woodland and rocky bluffs along the shoreline.

Thetis
A covenant held by the Cowichan Community Land Trust Society is now registered on the property recently acquired on Moore Hill. Management planning will begin in the next few months.

The campaign to protect Fairyslipper Forest is in its last few months, and the push is on to raise the funds required.

Please feel free to contact members of the Trust Fund Board or Islands Trust Fund staff for more details.

Tony Law, Chair tlaw@islandstrust.bc.ca
Islands Trust Fund itfmail@islandstrust.bc.ca

REQUEST FOR DECISION

To: North Pender Island Local Trust Committee

For the Meeting of: May 25, 2017

From: Robert Kojima, Regional Planning Manager

Date Prepared: May 9, 2017

SUBJECT: 2016-2017 ANNUAL REPORT – APPROVAL OF NORTH PENDER ISLAND LOCAL TRUST COMMITTEE SECTION

RECOMMENDATION: That the North Pender Island Local Trust Committee approves the attached text for inclusion in the 2016-2017 Annual Report for approval (as amended) by Trust Council and submission to the Minister of Community, Sport and Cultural Development.

IMPLICATIONS OF RECOMMENDATION

ORGANIZATIONAL:
Preparation of the Islands Trust Annual Report is undertaken by Trust Area Services Communications staff, reporting to the Executive Committee and consistent with Trust Council's Annual Report Policy 6.10.i. To comply with the schedule indicated in the policy, the Executive Committee has adopted the following schedule for preparation of individual committee reports:

Committee reports:	Reports to be approved on the following dates:
TPC	May 29
LPC	May 24
FPC	May 31
TFB	May 30
EC	June 7
Denman	May 2 /June 6
Gambier	April 27/ May 25
Gabriola	May 11/ June 8
Galiano	June 5
Hornby	May 5
Lasqueti	April 24
Mayne	June 26
North Pender	May 25
Salt Spring Island	May 4/ June 1
Saturna	June 15
South Pender	May 30
Thetis	April 25
Ballenas-Winchelsea	April 5
Executive Islands	

Under Trust Council's Policy, all LTCs and Council committees are expected to review and approve their sections at regular meetings listed above.

FINANCIAL: None

POLICY: No implications for existing policy

IMPLEMENTATION/COMMUNICATIONS: The process for development of the Annual Report is outlined in Trust Council's Annual Report policy 6.10.i. Once each committee has approved its section, staff will create a draft Annual Report for review by the Executive Committee and consideration of Trust Council in June. Upon approval by Trust Council, staff will send the Annual Report to the Minister of Community Sport and Cultural Development and circulate it as indicated in Trust Council's policy.

OTHER: n/a

BACKGROUND

- The Executive Committee approved the format and outline of the 2016-2017 Annual Report at its meeting on February 15, 2017.

REPORT/DOCUMENT: North Pender Island Local Trust Committee input to Annual Report (draft)

KEY ISSUE(S)/CONCEPT(S): Consistent Annual Report sections from each committee

RELEVANT POLICY: This approach complies with Section 19 of the *Islands Trust Act and* Trust Council's Annual Report Policy 6.10.i.

DESIRED OUTCOME: Trust Council is able to easily approve its annual report in June 2017 without further editing from staff or trustees at the Trust Council meeting.

RESPONSE OPTIONS

Recommended: That the North Pender Island Local Trust Committee approves the attached text for inclusion in the 2016-2017 Annual Report for approval (as amended) by Trust Council and submission to the Minister of Community, Sport and Cultural Development.

Alternative: None

Prepared By: Robert Kojima
Regional Planning Manager

Reviewed By/Date: Director (Marlor, Shelest, Frater) as appropriate

North Pender Island Local Trust Committee

The North Pender Island Local Trust Committee held 9 regular business meetings in the 2016–2017 fiscal year, as well as 3 special meetings and 1 public hearing.

Work for this period focused on advancing the Local Trust Committee (LTC) priorities to address Land Use Planning for Waste Management and policies and regulations for Short Term Vacation Rentals. The LTC also initiated a project to review policies and regulations for secondary suites.

The North Pender Island Local Trust Committee received and considered applications for 2 development variance permits, 5 development permits and 4 temporary use permits. As well, the LTC considered draft bylaws which would amend the Official Community Plan and Land Use Bylaw to rezone lands for the highway contractor's yard, for the upland and water lot for Port Browning Marina, and zoning changes for community parks.

Another initiative of the North Pender Island Local Trust Committee for this period was to initiate a process of First Nations relationship building.

STAFF REPORT

File No.: NPI Bylaws 206, 207, 208, 209 & 210 (NP-RZ-2016.2 and NP-RZ-2016.3)

DATE OF MEETING: May 25, 2017

TO: North Pender Island Local Trust Committee

FROM: Phil Testemale, A/Planner 2
Victoria Office

SUBJECT: Post Public Hearing Report – Port Browning Marina OCP amendment and rezoning

Applicant: Mill Bay Marine Group and Gary Henshaw C/o Lloyd Eakins

Location: Surveyed Water Lot DL 107 and Unsurveyed Water Area, Port Browning Harbour, Pender Island, Cowichan District adjacent to 4605 Oak; AND

LOT A (DD G54184) of Section 11, Pender Island, Cowichan District, Plan 7982 (4605 Oak Road); AND

Lot 4, Section 11, Pender Island, Cowichan District, Plan 7982 (4606 Oak Road) ; AND

Lot 3, Section 11, Pender Island, Cowichan District, Plan 7982, Except Part in Plan 21227 and 1772RW (4602 Oak Road)

RECOMMENDATION

1. **That the North Pender Island Local Trust Committee Bylaw No. 206, cited as "North Pender Island Land Use Bylaw 103, 1996, Amendment No. 3, 2016", be read a third time.**
2. **That the North Pender Island Local Trust Committee Bylaw No. 207, cited as "North Pender Island Official Community Plan Bylaw No. 171, 2007, Amendment No. 3, 2016", be read a third time.**
3. **That the North Pender Island Local Trust Committee Bylaw No. 208, cited as "North Pender Island Land Use Bylaw 103, 1996, Amendment No. 4, 2016," be read a third time.**
4. **That the North Pender Island Local Trust Committee Bylaw No. 209, cited as "North Pender Island Official Community Plan Bylaw No. 171, 2007, Amendment No. 4, 2016," be read a third time.**
5. **That the North Pender Island Local Trust Committee Bylaw No. 210, cited as "North Pender Island Land Use Bylaw 103, 1996, Amendment No. 5, 2016," be read a third time.**
6. **That the North Pender Island Local Trust Committee proposed Bylaws No.206, 207, 208, 209 and 210 be forwarded to the Secretary of the Islands Trust for Executive Committee Approval.**
7. **That the North Pender Island Local Trust Committee proposed Bylaws No. 207 and 209 be forwarded to the Minister of Community, Sport and Cultural Development for approval.**

REPORT SUMMARY

The purpose of this report is to present Bylaws 206, 207, 208, 209 & 210 for consideration of Third Reading and referral to the Executive Committee of Islands Trust, and further to refer Bylaws 207 and 209 to the Minister of Community, Sport and Cultural Development for approval. Overall the objectives of the bylaws are as follows:

- Expand the area of **marina** use and allow for a sewage pump out ;
- Allow for a new floating breakwater (**attenuator**);
- Expand the area for **commercial tourist accommodation**;
- Increase **lot coverage** provisions for buildings;
- Reduce the number of commercial accommodation units (**density**);
- Increase the **maximum floor area** for any unit, while reducing **overall floor area** on site; and,
- Allow the relocation of **sewer infrastructure** for the resort and marina.

Specifically the Bylaws propose the following:

- **Bylaw 206** proposes to rezone DL 107 and an unsurveyed water area from **Water 1 (W1)** to **Water 2 (W2)**and **Water 2 (a) (W2[a])** and to make amendments to the **Water 2 (W2)** zone to permit sewage pump out facilities and limited accessory buildings and structures on docks;
- **Bylaws 207** and **208** propose to amend the OCP map and rezone a portion of 4602 Oak Road from **Rural (R)** to **Commercial 3 (C3)**, and include it in the Port Browning Resort (4605 Oak Road), which will be rezoned from **Commercial C3(a)** to **Commercial C3.**
- **Bylaws 209 and 210** propose to amend the OCP map and rezone 4602 and 4606 Oak Road to a site specific **Rural (R(d))** zone which removes the **SD** zone and allows for sewer infrastructure.

In addition, it is noted that the LTC passed the following resolution at its April 27, 2017 regular meeting of the LTC:

> **NP-2017-037**
>
> **It was MOVED and SECONDED,**
>
> That, prior to the Final Adoption of Bylaws 206, 207, and 208, the North Pender Island Local Trust Committee receive two (2) Section 219 Covenants as follows:
>
> i. A permanent covenant to protect identified archaeological resources, implementing the recommendations of the Archeological Impact Assessment (Madrone Environmental Services Ltd, March 10, 2017) and limiting maximum density; and
> ii. A temporary covenant to secure future community amenities for the upland portions of the development.
>
> **CARRIED**

In summary, the items to be incorporated in a permanent covenant are as follows:

- Protection of archaeological resources and incorporation of recommendations of the **Archaeological Impact Assessment (AIA)** report (Madrone Environmental Consultants, March 10, 2017); and
- Restricting the maximum **density** for commercial accommodation to **29** units.

In summary, the items to be incorporated in a temporary covenant are as follows:

- Preservation of the **Open Field Area** permitting only limited structures and maintenance of public access;
- Construction of a **25 metre Pool** including a cost sharing and community access agreement with the CRD;
- Agreement for continued access for the **Sailing Club** in its current location; and,
- Provision of a **Sewer Pump-Out Facility**.

The mechanism for the temporary covenant will be a prohibition on occupancy of new commercial accommodation units prior to all conditions of the covenant being fulfilled and the covenant released.

At the time of writing, a cost recovery agreement is being finalized with the applicants after which time staff will direct legal counsel to draft the covenants.

BACKGROUND

The Local Trust Committee is considering bylaws to facilitate the expansion of the Port Browning Marina and Resort including the relocation of sewer infrastructure on neighbouring properties. A public hearing is scheduled for May 25, 2017. A public hearing is a quasi-judicial process within and following which specific procedures must be followed.

Following the hearing, the LTC may choose to give further readings to a bylaw, defeat a bylaw, or alter a bylaw within certain parameters. The procedural steps following the close of the hearing are as follows:

1. Consideration of Third Reading.
2. Forwarding of the bylaw to Executive Committee for approval.
3. Forwarding of the bylaw to the Minister's office for approval (OCP amendment bylaws only).
4. Reconsideration and adoption.

Following the close of the hearing, the LTC may not hear further submissions without holding a new hearing. The principle is that if new information is considered by the LTC, all other interested parties also need to have the opportunity to consider any new relevant material and to make further representations to the LTC. The courts have clarified that this does not open the door to endless public hearings: a local government body can legitimately decide that after a hearing it wishes to hear further from staff on issues raised at the hearing.

A bylaw may be altered after the hearing, based on information received or heard by the LTC at any point prior to the close of the hearing, provided that the amendments do not alter use or increase density, or decrease density without a landowner's consent.

If the Executive Committee and Minister approve the bylaw, the next step for the LTC would be to adopt the bylaw.

Rationale for Recommendation:

The applicants have submitted all requested professional reporting and the consultation process has been concluded including preliminary engagement with First Nations, referral of the Bylaws to applicable agencies and First Nations, a Community Information Meeting and the Public Hearing scheduled for May 25, 2017. In addition, the contents of the two (2) Section 219 covenants have been clearly established. There are no further amendments proposed for the proposed bylaws.

ALTERNATIVES

1. **Make amendments to the bylaw(s)**

   The LTC may amend the bylaw(s) provided the amendments would not alter use or increase density

   Resolution:

   That the North Pender Island Local Trust Committee Bylaw No. 206, cited as "North Pender Island Land Use Bylaw 103, 1996, Amendment No. 3, 2016", be amended as follows …

   That the North Pender Island Local Trust Committee Bylaw No. 207, cited as "North Pender Island Official Community Plan Bylaw No. 171, 2007, Amendment No. 3, 2016", be amended as follows …

   That the North Pender Island Local Trust Committee Bylaw No. 208, cited as "North Pender Island Land Use Bylaw 103, 1996, Amendment No. 4, 2016," be amended as follows …

   That the North Pender Island Local Trust Committee Bylaw No. 209, cited as "North Pender Island Official Community Plan Bylaw No. 171, 2007, Amendment No. 4, 2016," be amended as follows …

   That the North Pender Island Local Trust Committee Bylaw No. 210, cited as "North Pender Island Land Use Bylaw 103, 1996, Amendment No. 5, 2016," be amended as follows …

2. **Proceed no further**

   The LTC may decide to proceed no further with Bylaws 206, 207, 208, 209 and 210.

   Resolution:

   That the North Pender Island Local Trust Committee proceed no further with Bylaw 206, 207, 208, 209 and 210

NEXT STEPS

1. Refer bylaws 206, 207, 208, 209, and 210 to the Executive Committee of Islands Trust.
2. Refer bylaw 207 and 209 to the Ministry of Community, Sport, and Cultural Development.
3. Proceed with the drafting and execution of two (2) Section 219 covenants.

Submitted By:	Phil Testemale, A/Planner 2	May 16, 2017
Concurrence:	Robert Kojima, Regional Planning Manager	May 16, 2017

ATTACHMENTS

1. Bylaw No. 206 (2nd Reading)
2. Bylaw No. 207 (2nd Reading)
3. Bylaw No. 208 (2nd Reading)
4. Bylaw No. 209 (2nd Reading)
5. Bylaw No. 210 (2nd Reading)

PROPOSED

NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 206

A BYLAW TO AMEND NORTH PENDER ISLAND LAND USE BYLAW 103, 1996

The North Pender Island Local Trust Committee, being the Local Trust Committee having jurisdiction in respect of the North Pender Island Local Trust Area under the *Islands Trust Act,* enacts as follows:

1. Citation

   This bylaw may be cited for all purposes as "North Pender Island Land Use Bylaw 103, 1996, Amendment No. 3, 2016".

2. North Pender Island Local Trust Committee Bylaw No. 103, cited as "North Pender Island Land Use Bylaw 103, 1996," is amended as follows:

   2.1 Section 1.1 – Definitions, "marina" is amended by inserting a comma and the word "marine sewage pump-out stations", after "walkways" and before "and".

   2.2 Clause 8.20.1 (1) (h) is amended by removing the word "and".

   2.3 Clause 8.20.1 (1) (i) is amended by removing the period after "buoys" and replacing it with a semi-colon and the word "and".

   2.4 Article 8.20.1 (1) is amended by inserting the following as clause 8.20.1 (1) (j):

   "(j) accessory buildings on docks for which the maximum floor area of all accessory buildings on docks is not to exceed 37 m² within any one location in the W2 zone".

   2.5 Section 8.20 Water 2 (W2) is amended by the insertion of the following as Subsection 8.20.5:

   " 8.20.5 <u>Site Specific Regulations</u>

   (1) The regulations listed in Column 3 of the following table only apply to the land identified in column 2 of the same row. These lands are identified on the zoning map by the site-specific zoning reference listed in column 1.

Column 1	*Column 2*	*Column 3*
Site-Specific Zone Reference	**Legal Description**	**Site Specific Regulations**
W2(a)	Part of District Lot 107, Cowichan District and Unsurveyed Crown Land covered by water being part of the bed of Port Browning, Cowichan District.	Despite 8.20.1(1), the only use permitted in this area are floating wave attenuators.

"

2.6 Schedule "D" – Zoning Map, is amended by changing the zoning classification of District Lot 107, Cowichan District and Unsurveyed Crown Land covered by water being part of the bed of Port Browning, Cowichan District, from Water 1 (W1) to Water 2 (W2) and Water 2 (a) (W2 [a]), as shown on Plan No. 1 attached to and forming part of this bylaw, and by making such alterations to Schedule "1" to Bylaw No. 103 as are required to effect this change.

3. Severability

If any provision of this Bylaw is for any reason held to be invalid by a decision of any Court of competent jurisdiction, the invalid provision must be severed from the Bylaw and the decision that such provision is invalid must not affect the validity of the remaining provisions of the Bylaw.

READ A FIRST TIME THIS 26th DAY OF JANUARY 2017

READ A SECOND TIME THIS 27th DAY OF APRIL 2017

PUBLIC HEARING HELD THIS _____ DAY OF _____ 20____

READ A THIRD TIME THIS _____ DAY OF _____ 20____

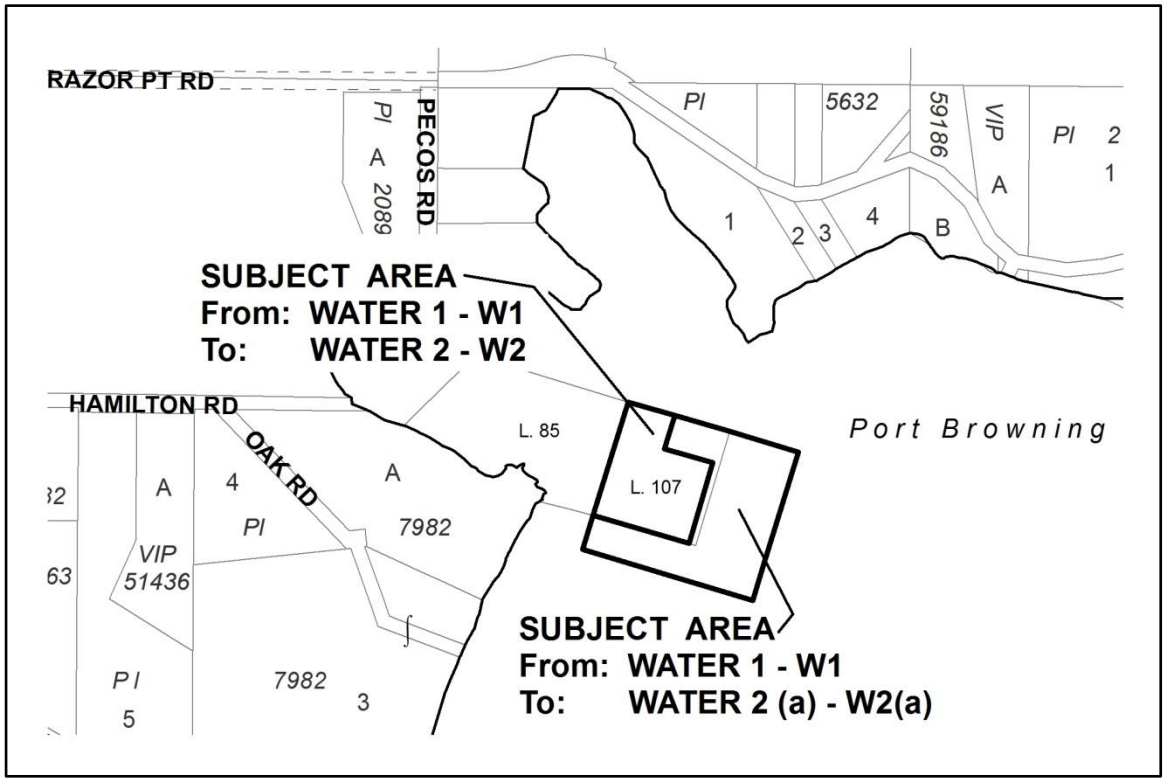
APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST THIS _____ DAY OF _____ 20____

ADOPTED THIS _____ DAY OF _____ 20____

Chair **Secretary**

NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 206

Plan No. 1



PROPOSED

NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 207

A BYLAW TO AMEND NORTH PENDER ISLAND OFFICIAL COMMUNITY PLAN BYLAW NO. 171, 2007

WHEREAS the North Pender Island Local Trust Committee is the Local Trust Committee having jurisdiction on and in respect of the North Pender Island Local Trust Area, pursuant to the Islands Trust Act;

AND WHEREAS Section 29 of the *Islands Trust Act* gives the North Pender Island Local Trust Committee the same power and authority of a Regional District under Part 14, except sections 558 to 570 and 507 to 508, of the *Local Government Act*;

AND WHEREAS the North Pender Island Local Trust Committee wishes to amend the North Pender Island Official Community Plan Bylaw No. 171, 2007;

AND WHEREAS the North Pender Island Local Trust Committee has held a Public Hearing;

NOW THEREFORE the North Pender Island Local Trust Committee enacts in open meeting assembled as follows:

1. CITATION

   This Bylaw may be cited for all purposes as “North Pender Island Official Community Plan Bylaw No. 171, 2007, Amendment No. 3, 2016”.

2. SCHEDULES

   North Pender Island Official Community Plan No. 171, 2007 is amended as shown on Schedule 1, attached to and forming part of this bylaw.

3. SEVERABILITY

   If any provision of this Bylaw is for any reason held to be invalid by a decision of any Court of competent jurisdiction, the invalid provision must be severed from the Bylaw and the decision that such provision is invalid must not affect the validity of the remaining provisions of the Bylaw.

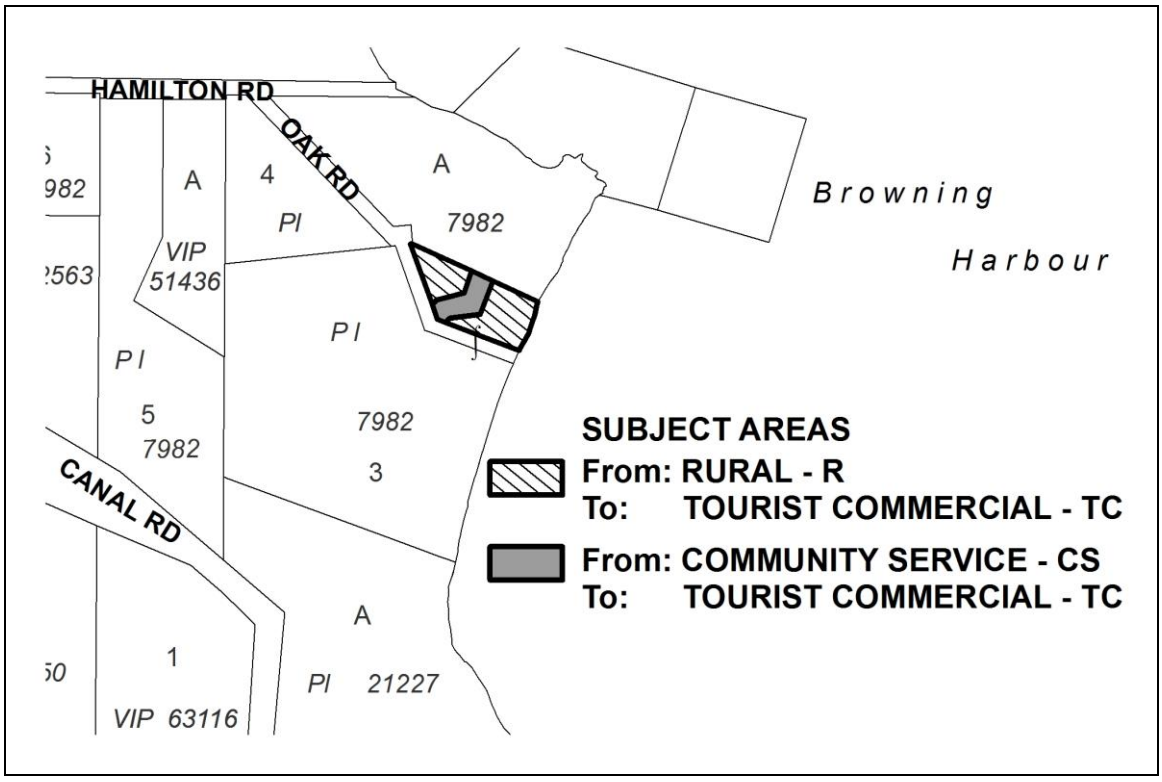
READ A FIRST TIME THIS	26th	DAY OF	JANUARY	2017
READ A SECOND TIME THIS	27th	DAY OF	APRIL	2017
PUBLIC HEARING HELD THIS	_____	DAY OF	_____	20____
READ A THIRD TIME THIS	_____	DAY OF	_____	20____
APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST THIS	_____	DAY OF	_____	20____
APPROVED BY THE MINISTER COMMUNITY, SPORT AND CULTURAL DEVELOPMENT THIS	_____	DAY OF	_____	20____
ADOPTED THIS	_____	DAY OF	_____	20____

Chair **Secretary**

NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 207

SCHEDULE 1

The North Pender Island Official Community Plan No. 171, 2007 is amended as follows:



PROPOSED

NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 208

A BYLAW TO AMEND NORTH PENDER ISLAND LAND USE BYLAW 103, 1996

The North Pender Island Local Trust Committee, being the Local Trust Committee having jurisdiction in respect of the North Pender Island Local Trust Area under the *Islands Trust Act,* enacts as follows:

1. Citation

   This bylaw may be cited for all purposes as “North Pender Island Land Use Bylaw 103, 1996, Amendment No. 4, 2016”.

2. North Pender Island Local Trust Committee Bylaw No. 103, cited as “North Pender Island Land Use Bylaw 103, 1996,” is amended as follows:

   2.1 Article 8.6.3 (1) is amended by inserting a comma and the words “manager, operator or caretaker”, after “owners” and before “of”.

   2.2 Subsection 8.6.3 is amended by inserting the following as article 8.6.3 (3):

   > “(3) The accessory dwelling for employees is to be located either within one (1) accessory dwelling unit or occupy a maximum floor area no greater than 140 m² within buildings used for commercial accommodation”.

   2.3 Article 8.6.4 (2) is deleted and replaced with, “The maximum number of commercial accommodation units permitted in the Commercial 3 zone is 29.”

   2.4Subsection 8.6.4 is amended by adding a new article (3), which reads: “Despite the definition of *commercial guest accommodation unit,* the maximum floor area of a commercial guest accommodation unit is 121 square metres, with the total floor area of all commercial guest accommodation units in the Commercial 3 zone not exceeding 1876 square metres."

   2.5 Article 8.6.5 (1) is deleted and replaced with, “Lot coverage may not exceed 15%.”

   2.6 Subsection 8.6.7 is amended by adding a new article (2), which reads: “Despite 8.6.7(1), the maximum height for a hotel is 10.7 metres.”

   2.7 Subsection 8.6.9 -– “Site Specific Regulations,” is deleted.

   2.8 Schedule “D” – Zoning Map, is amended by changing the zoning classification of a portion of the Lot 3, Section 11, Pender Island, Plan 7982 except Part in Plan 21227 and 1772RW from SD (a) (Service Zone (a)) and Rural (R), to Commercial 3 (C3), and by changing the zoning classification of Lot A (Dd G54184) Of Section 11, Pender Island, Cowichan District, Plan 7982 from Commercial 3 (a) to Commercial 3, as shown on Plan No. 1 attached to and forming part of this bylaw, and by making such alterations to Schedule “D” to Bylaw No. 103 as are required to effect this change.

3. Severability

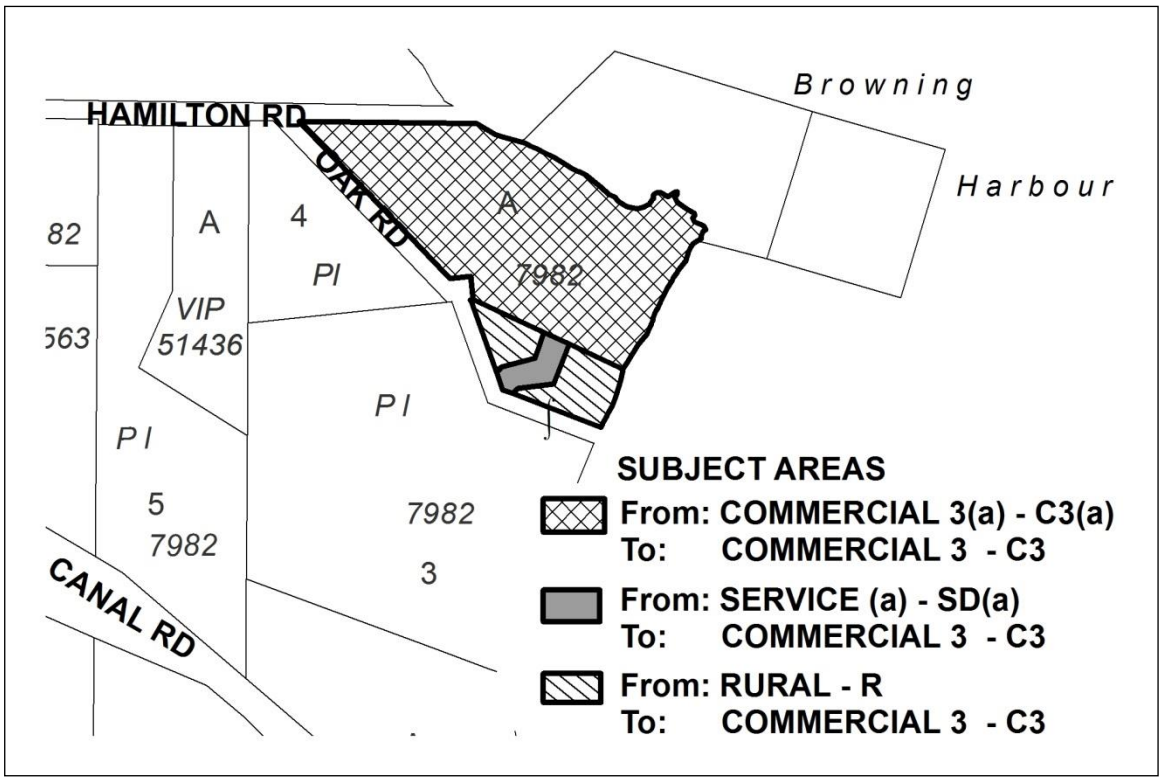
If any provision of this Bylaw is for any reason held to be invalid by a decision of any Court of competent jurisdiction, the invalid provision must be severed from the Bylaw and the decision that such provision is invalid must not affect the validity of the remaining provisions of the Bylaw.

READ A FIRST TIME THIS	26th	DAY OF	JANUARY	2017
READ A SECOND TIME THIS	27th	DAY OF	APRIL	2017
PUBLIC HEARING HELD THIS	_____	DAY OF	_____	20____
READ A THIRD TIME THIS	_____	DAY OF	_____	20____
APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST THIS	_____	DAY OF	_____	20____
ADOPTED THIS	_____	DAY OF	_____	20____

Chair **Secretary**

NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 208

Plan No. 1



PROPOSED

NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 209

A BYLAW TO AMEND NORTH PENDER ISLAND OFFICIAL COMMUNITY PLAN BYLAW NO. 171, 2007

WHEREAS the North Pender Island Local Trust Committee is the Local Trust Committee having jurisdiction on and in respect of the North Pender Island Local Trust Area, pursuant to the Islands Trust Act;

AND WHEREAS Section 29 of the *Islands Trust Act* gives the North Pender Island Local Trust Committee the same power and authority of a Regional District under Part 14, except sections 558 to 570 and 507 to 508, of the *Local Government Act*;

AND WHEREAS the North Pender Island Local Trust Committee wishes to amend the North Pender Island Official Community Plan Bylaw No. 171, 2007;

AND WHEREAS the North Pender Island Local Trust Committee has held a Public Hearing;

NOW THEREFORE the North Pender Island Local Trust Committee enacts in open meeting assembled as follows:

1. CITATION

   This Bylaw may be cited for all purposes as “North Pender Island Official Community Plan Bylaw No. 171, 2007, Amendment No. 4, 2016”.

2. SCHEDULES

   North Pender Island Official Community Plan No. 171, 2007 Schedule” B” – Land Use Map - is amended, as shown on Schedule 1, attached to and forming part of this bylaw.

3. SEVERABILITY

   If any provision of this Bylaw is for any reason held to be invalid by a decision of any Court of competent jurisdiction, the invalid provision must be severed from the Bylaw and the decision that such provision is invalid must not affect the validity of the remaining provisions of the Bylaw.

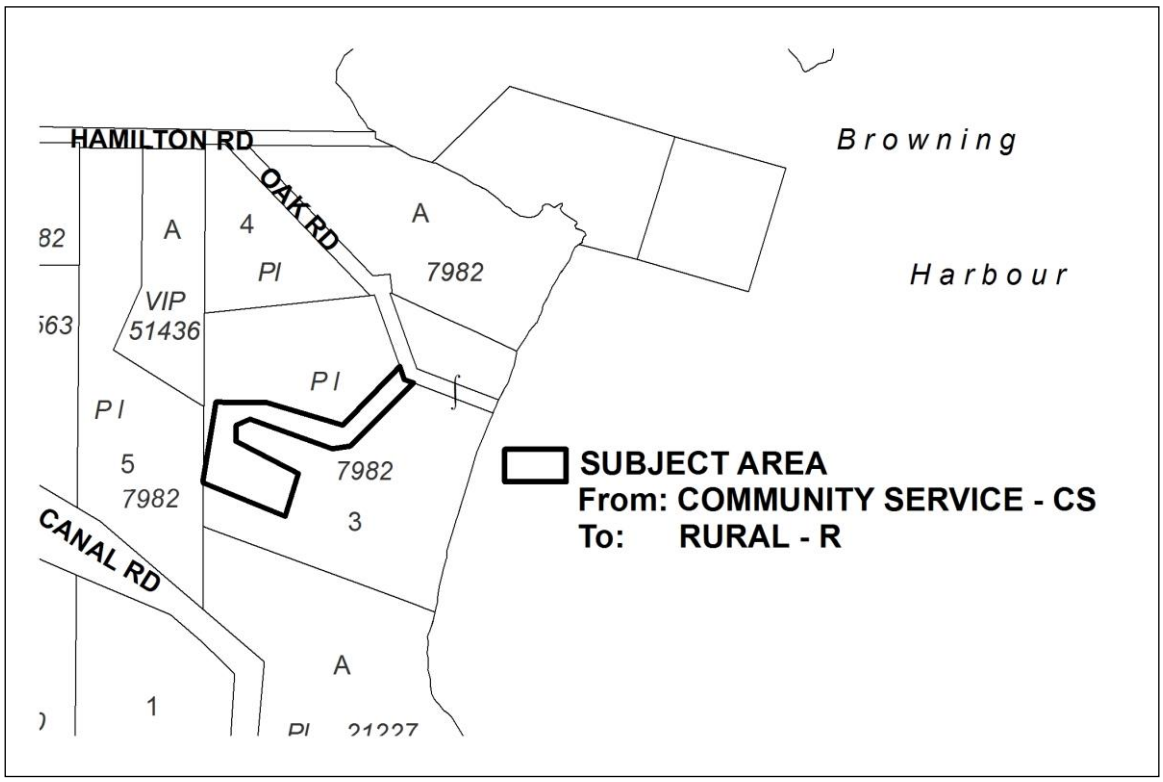
READ A FIRST TIME THIS	26th	DAY OF	JANUARY	2017
READ A SECOND TIME THIS	27th	DAY OF	APRIL	2017
PUBLIC HEARING HELD THIS	_____	DAY OF	_____	20____
READ A THIRD TIME THIS	_____	DAY OF	_____	20____
APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST THIS	_____	DAY OF	_____	20____
APPROVED BY THE MINISTER COMMUNITY, SPORT AND CULTURAL DEVELOPMENT THIS	_____	DAY OF	_____	20____
ADOPTED THIS	_____	DAY OF	_____	20____

Chair **Secretary**

NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 209

SCHEDULE 1

The North Pender Island Official Community Plan No. 171, 2007 is amended as follows:



PROPOSED

NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 210

A BYLAW TO AMEND NORTH PENDER ISLAND LAND USE BYLAW 103, 1996

The North Pender Island Local Trust Committee, being the Trust Committee having jurisdiction in respect of the North Pender Island Local Trust Area under the *Islands Trust Act,* enacts as follows:

1. Citation

   This bylaw may be cited for all purposes as "North Pender Island Land Use Bylaw 103, 1996, Amendment No. 5, 2016".

2. North Pender Island Local Trust Committee Bylaw No. 103, cited as "North Pender Island Land Use Bylaw 103, 1996," is amended as follows:

   2.1 Subsection 8.2.8 – "Site Specific Regulations", is amended by adding a new Site Specific Zone Reference R(d) as follows:

Column 1	*Column 2*	*Column 3*
Site-Specific Zone Reference	**Legal Description**	**Site Specific Regulations**
R(d)	Lot 3, Section 11, Plan 7982 except Part in Plan 21227; and Lot 4, Section 11, Pender Island, Cowichan District, Plan 7982.	(1) In addition to the uses permitted by 8.2.2 the following use is permitted: (a) the treatment and disposal of sewage generated on Lot A (DDG54184), Section 11, Plan 7982.

   2.2 Schedule "D" – Zoning Map, is amended by changing the zoning classification of Lot 3, Section 11, Plan 7982 except Part in Plan 21227 and 1772RW from SD (a) (Service Zone (a)) and Rural (R), to Rural (d) (R(d)), as shown on Plan No. 1 attached to and forming part of this bylaw, and by making such alterations to Schedule "1" to Bylaw No. 103 as are required to effect this change.

   2.3 Schedule "D" – Zoning Map, is amended by changing the zoning classification of Lot 4, Section 11, Pender Island, Cowichan District, Plan 7982 from Rural (R) to Rural (d) (R(d)), as shown on Plan No. 1 attached to and forming part of this bylaw, and by making such alterations to Schedule "1" to Bylaw No. 103 as are required to effect this change.

   2.4 And by making such consequential numbering alterations to effect this change.

3. Severability

   If any provision of this Bylaw is for any reason held to be invalid by a decision of any Court of competent jurisdiction, the invalid provision must be severed from the Bylaw and the decision that such provision is invalid must not affect the validity of the remaining provisions of the Bylaw.

READ A FIRST TIME THIS	26th	DAY OF	JANUARY	2017
READ A SECOND TIME THIS	27th	DAY OF	APRIL	2017
PUBLIC HEARING HELD THIS	_____	DAY OF	_____	20____
READ A THIRD TIME THIS	_____	DAY OF	_____	20____
APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST THIS	_____	DAY OF	_____	20____
ADOPTED THIS	_____	DAY OF	_____	20____

Chair **Secretary**

NORTH PENDER ISLAND LOCAL TRUST COMMITTEE
BYLAW NO. 210

Plan No. 1