



# Alberni-Clayoquot Regional District

## ALBERNI VALLEY & BAMFIELD SERVICES COMMITTEE FINANCIAL PLANNING MEETING

WEDNESDAY, FEBRUARY 15, 2017, 10:00 AM

Regional District Board Room, 3008 Fifth Avenue, Port Alberni, BC

### AGENDA

|    |   | PAGE # |
|----|---|--------|
| 1. | <b><u>CALL TO ORDER</u></b>   |        |
|    | Recognition of Traditional Territories.   |        |
| 2. | <b><u>ELECTION OF CHAIRPERSON FOR 2017</u></b>  |        |
| 3. | <b><u>APPROVAL OF AGENDA</u></b><br><i>(motion to approve, including late items requires 2/3 majority vote)</i>   |        |
| 4. | <b><u>ADOPTION OF MINUTES</u></b>   |        |
|    | a. <b>Alberni Valley &amp; Bamfield Services Committee Meeting held November 8, 2016</b>  | 4-6    |
|    | <i>THAT the minutes of the Alberni Valley Committee meeting held on November 8, 2016 be received.</i>   |        |
| 5. | <b><u>REQUEST FOR DECISIONS &amp; BYLAWS</u></b>  |        |
|    | a. <b>REQUEST FOR DECISION</b><br>Alberni Valley Landfill Operations Contract Amendment<br>(Referred from December 9, 2016 Board of Directors Meeting)  | 7-9    |
|    | <i>THAT the Alberni-Clayoquot Regional District Board of Directors approve the following amendments to the Alberni Valley Landfill Operations Contract – October 1, 2014 to September 30, 2019:</i> |        |
|    | <i>a. Amend Article 16 – Line of Credit – Agreement to allow for the use of a performance bond instead of a line of credit.</i>   |        |
|    | <i>b. Remove Article 17 – Builders Liens– Agreement that currently requires a holdback.</i>   |        |
|    | b. <b>REQUEST FOR DECISION</b><br>Alberni Landfill Gas Generation Report  | 10-27  |

*THAT the Alberni Valley and Bamfield Services Committee receive the Alberni Landfill Gas Generation Report and recommended that to the Alberni-Clayoquot Regional District Board of Directors approve the report and direct staff to implement solid waste diversion initiatives that reduce the creation of landfill gas for inclusion in the 2017-2021 Financial Plan.*

- c.        **REQUEST FOR DECISION** **28-37**  
              2017-2021 Financial Plan – Alberni Valley & Bamfield Waste  
              Management

*THAT the Alberni Valley Committee recommend the Alberni Valley and Bamfield Waste Management budget be included in the first reading of the 2017-2021 Alberni-Clayoquot Regional District Financial Plan.*

- d.        **REQUEST FOR DECISION** **38-42**  
              2017-2021 Financial Plan – Alberni Valley Emergency Plan

*THAT the Alberni Valley Committee recommend the Alberni Valley Emergency Planning proposed budget to be included in the first reading of the 2017-2021 Alberni-Clayoquot Regional District Financial Plan.*

- e.        **REQUEST FOR DECISION** **43-46**  
              2017-2021 Financial Plan – Alberni Valley Regional Airport

*THAT the Alberni Valley Committee recommend the Alberni Valley Regional Airport proposed budget to be included in the first reading of the 2017-2021 Alberni-Clayoquot Regional District Financial Plan.*

- f.        **REQUEST FOR DECISION** **47-49**  
              2017-2021 Financial Plan – Regional Water

*THAT the Alberni Valley Committee recommend the Alberni Valley Regional Water – proposed service budget be included in the first reading of the 2017-2021 Alberni-Clayoquot Regional District Financial Plan.*

- g.        **REQUEST FOR DECISION** **50-51**  
              2017-2021 Financial Plan – Custom Transit

*THAT the Alberni Valley Committee recommend the Custom Transit proposed budget be included in the first reading of the 2017-2021 Alberni-Clayoquot Regional District Financial Plan.*

- h.        **REQUEST FOR DECISION** **52-54**  
              2017-2021 Financial Plan – Sproat Lake Marine Patrol

*THAT the Alberni Valley Committee recommend the Sproat Lake Marine Patrol proposed budget be included in the first reading of the 2017-2021 Alberni-Clayoquot Regional District Financial Plan.*

i. **REQUEST FOR DECISION**

- 2017 Grant In Aid – Alberni Valley Hospice Society **55-57**  
(referred from February 8, 2017 Committee-of-the-Whole Meeting)
- Correspondence – Further Information on GIA - Alberni Valley Hospice Society **58-59**

*Committee Direction Requested*

6. **REPORTS**

- a. **Administrative Memorandum** **60**  
**Alberni Valley Landfill – Annual Reports 2014 and 2015**

*THAT the Administrative Memorandum regarding Alberni Valley Landfill Annual Reports 2014 and 2015 be received.*

- b. **Report - Strategic Planning for Alberni-Clayoquot Regional District Airports (P. Deakin)** **61-79**  
**(Referred from January 25, 2017 Committee-of-the-Whole Meeting)**

*Committee Direction Requested*

- c. **Discussion on Service Levels – R. Dyson (Verbal)**

*THAT this verbal report be received.*

7. **LATE BUSINESS**

8. **ADJOURN**



## Alberni-Clayoquot Regional District

### MINUTES OF THE ALBERNI VALLEY & BAMFIELD SERVICES COMMITTEE MEETING HELD ON TUESDAY, NOVEMBER 8, 2016, 11:00 AM

Regional District Board Room, 3008 Fifth Avenue, Port Alberni, BC

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**DIRECTORS PRESENT:** John McNabb, Chair, Electoral Area "E" (Beaver Creek)  
Mike Kokura, Director, Electoral Area "B" (Beaufort)  
Penny Cote, Director, Electoral Area "D" (Sproat Lake)  
Lucas Banton, Director, Electoral Area "F" (Cherry Creek)  
Mike Ruttan, Mayor, City of Port Alberni  
Jack McLeman, Councillor, City of Port Alberni  
Wilfred Cootes, Councillor, Uchucklesaht Tribe Government  
Josie Osborne, ACRD Chair, Mayor, District of Tofino (via teleconference)

**REGRETS:** Keith Wyton, Director, Electoral Area "A" (Bamfield)  
John Jack, Councillor, Huu-ay-aht First Nation

**STAFF PRESENT:** Russell Dyson, Chief Administrative Officer  
Andrew McGifford, Manager of Environmental Services  
Teri Fong, Manager of Finance  
Mike Irg, Manager, Planning & Development  
Wendy Thomson, Manager of Administrative Services  
Heather Adair, Planner

#### 1. CALL TO ORDER

The Chairperson called the meeting to order at 11:00 am.

The Chairperson recognized the meeting today is being held in the Tseshaht First Nation and the Hupacasath First Nation Traditional Territories.

#### 2. APPROVAL OF AGENDA

*MOVED: Director Kokura*

*SECONDED: Director Cote*

*THAT the agenda be approved as circulated with addition of a request from the Alberni-Clayoquot Transportation Committee.*

**CARRIED**

#### 3. ADOPTION OF MINUTES

a. **Alberni Valley & Bamfield Services Committee Meeting held October 5, 2016**

*MOVED: Director Cootes*  
*SECONDED: Director Kokura*

*THAT the minutes of the Alberni Valley & Bamfield Services Committee meeting held on October 5, 2016 be received.*

**CARRIED**

**4. IN CAMERA**

*MOVED: Director Cootes*  
*SECONDED: Director Ruttan*

*THAT the meeting be closed to the public to discuss matters relating to:*

- i. Negotiations and related discussions respecting the proposed provision of a regional district service that are at their preliminary stages and that, in the view of the committee, could reasonably be expected to harm the interests of the regional district if they were held in public.*

**CARRIED**

The meeting was closed to the public at 11:01 am

The meeting was opened to the public at 11:32 am

**5. RECOMMENDATIONS FROM IN-CAMERA**

**6. LATE BUSINESS**

**a. Recommendation from the Alberni-Clayoquot Transportation Committee**

*MOVED: Director McLeman*  
*SECONDED: Director Banton*

*THAT the Alberni Valley & Bamfield Services Committee recommend that the Alberni-Clayoquot Regional District Board of Directors request a meeting with the Minister of Transportation and Infrastructure as soon as possible to discuss the Horne Lake Connector Business Case Final Report, October 2016.*

**CARRIED**

**7. ADJOURN**

*MOVED: Director McLeman*  
*SECONDED: Director Kokura*

*THAT the meeting be adjourned at 11:44 am.*

**CARRIED**

Certified Correct:

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John McNabb,  
Chairperson

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Russell Dyson,  
Chief Administrative Officer



## MEMORANDUM

**To:** Alberni Valley and Bamfield Services Committee

**From:** Andrew McGifford, CPA, CGA, Manager of Environmental Services

**Meeting Date:** February 15, 2017

**Subject:** AVLF Operations Contract Amendment

**Addition information to consider:**

At the December 9, 2016 board meeting the Board of Directors referred the attached Request for Decision to the Alberni Valley and Bamfield Waste service committee to discuss the request. The processing of the holdback each 55 days after the completion of the contract is deemed unnecessary and staff would like to see this removed. The contractor has proven the work undertaken is of high quality and this has been the case for many years.

Staff would prefer to remove the 55-day holdback but an alternative motion is presented to hold an equivalent deposit to reduce staff time tracking the 55-day holdback releases.

**Alternative motion to consider:**

***THAT the Alberni Valley and Bamfield Services Committee recommend that the Alberni-Clayoquot Regional District Board of Directors approve the following amendments to the Alberni Valley Landfill Operations Contract – October 1, 2014 to September 30, 2019:***

- a. Amend Article 16 – Line of Credit – Agreement to allow for the use of a performance bond instead of a line of credit.***
- b. Amend Article 17 – Builders Liens– Agreement to replace the 55-day holdback with an equivalent deposit in the amount of \$12,700.***

Submitted by: \_\_\_\_\_  
Andrew McGifford, CPA, CGA, Manager of Environmental Services

## REQUEST FOR DECISION

**To:** Alberni-Clayoquot Regional District Board of Directors

**From:** Andrew McGifford, CPA, CGA, Manager of Environmental Services

**Meeting Date:** December 9, 2016

**Subject:** AVLF Operations Contract Amendment

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### Recommendation:

**That the Alberni-Clayoquot Regional District Board of Directors approve the following amendments to the Alberni Valley Landfill Operations Contract – October 1, 2014 to September 30, 2019:**

- a. **Amend Article 16 – Line of Credit – Agreement to allow for the use of a performance bond instead of a line of credit.**
- b. **Remove Article 17 – Builders Liens– Agreement that currently requires a holdback.**

### Desired Outcome:

To allow the use of a performance bond instead of a line of credit for contract security and to remove the 10% holdback provision that is currently included in the contract with respect to monthly payments.

### Summary:

The line of credit and builder's liens requirements were originally included in the contract document when it went to tender in 2014 because of the public tender process that was used and the Regional District required a control function for the performance of the contractor, if necessary. The Regional District has a long established a relationship with the operator and the line of credit is not deemed necessary at this time.

In 2012 there was a request received from same contractor for the West Coast Landfill, Berry & Vale Contracting Ltd. The request that the proposed amendments be made within the WCLF operations contract were approved by the ACRD Board of Directors at that time. Staff would like to streamline the payment processing and be consistent with the two landfill contracts.

### Time Requirements – Staff & Elected Officials:

There will be a minimal amount of time required to amend the contract. Currently the holdback procedures require extra Accounts Payable time for processing the payment and the subsequent release of the holdback. The removal of the holdback would streamline this payment process.

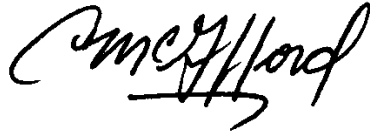
### Financial:

There is no financial impact to this recommendation. The performance bond only changes the type of security we require and the holdback only affects the timing of the payment not the amount.



**Policy or Legislation:**

Performance bonds are used to secure other Regional District contracts such as the West Coast Landfill Operations contract.



Submitted by: \_\_\_\_\_  
Andrew McGifford, CPA, CGA, Manager of Environmental Services



Approved by: \_\_\_\_\_  
Russell Dyson, Chief Administrative Officer



## REQUEST FOR DECISION

**To:** Alberni Valley and Bamfield Services Committee

**From:** Andrew McGifford, CPA, CGA, Manager of Environmental Services

**Meeting Date:** February 15, 2017

**Subject:** Alberni Landfill Gas Generation Report

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### Recommendation

***THAT the Alberni Valley and Bamfield Services Committee receive the Alberni Landfill Gas Generation Report and recommended that to the Alberni-Clayoquot Regional District Board of Directors approve the report and direct staff to implement solid waste diversion initiatives that reduce the creation of landfill gas for inclusion in the 2017-2021 Financial Plan.***

### Desired Outcome

To provide information on future landfill gas (LFG) management and possible material bans at the Alberni Valley Landfill (AVLF) to the Alberni Valley and Bamfield Services committee and the Alberni-Clayoquot Regional District (ACRD) Board of Directors to enable an informed decision on the next steps required to provide an efficient and cost effective waste service program for the Alberni Valley.

### Summary

The ACRD operates the AVLF under the *British Columbia Waste Management Act* Operational Certificate Number MR-00524, issued June 29, 2004. The Ministry of Environment (MOE) regulations under which the AVLF operates have seen progressive regulations and guidelines developed to improve the emittance of methane gas from sanitary landfills in the province of BC. The standards and regulations are based "*BC Landfill Gas Management Regulation*" and the second edition which was recently updated in 2016 has not seen any significant changes in requirements for LFG.

Landfills are estimated to be responsible for five percent of BC's greenhouse gas (GHG) emissions due to the anaerobic decay of organic matter, which results in the production of methane. Reduction of methane emissions from landfills by reducing the landfilling of organic waste or by capturing methane from landfills for destruction or alternate use will reduce BC's overall GHG emissions.

The *Landfill Gas Management Regulation*, under the *Greenhouse Gas Reduction (Emissions Standards) Statutes Amendment Act*, became effective as of January 1, 2009 and established province-wide criteria for landfill gas capture from municipal solid waste (MSW) landfills. The regulation requires that MSW landfills with 100,000 or more tonnes of waste in place or a waste disposal rate exceeding 10,000 tonnes per year undergo a landfill gas generation assessment. This standard does not provide a mechanism to defer the landfill gas management requirements and is purely based on the volumes landfilled at the site. The LFG Management Regulation describes requirements for estimating GHG emissions from landfills and establishes landfill size and capacity criteria for landfill gas capture, there are no credits or deferrals for a well-managed landfill.

The amount of material landfilled during 2016 was approximately 20,248 tonnes, bringing the total estimated quantity of solid waste at the AV Landfill to approximately 761,483 tonnes.

*BC's Greenhouse Gas Reduction (Emissions Standards) Statutes Amendment Act* states that owners of waste management facilities must manage greenhouse gases produced from handling wastes at the facility. The LFG Regulation describes requirements for estimating GHG emissions from landfills and establishes landfill size and capacity criteria for LFG capture.

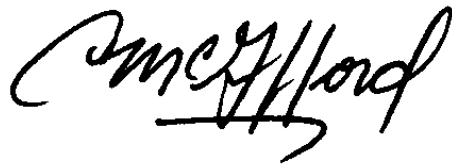
A LFG collection system is generally composed of the following:

- 1) Vertical extraction wells and horizontal collection trenches
- 2) Collection piping
- 3) LFG extraction plant (include condensate traps, blowers, and storage capacity)
- 4) LFG method for either using the gas collected or flaring it off.

The cost of installing the LFG system totals \$13,870,000 over the lifetime of the landfill. The diversion initiatives will provide an extended life to the landfill and reduce the creation of methane gases. There is a possibility that the ACRD can avoid a LFG system for the lifetime of the AVLF through a progressive diversion strategy that will ban wood, construction/demolition, & organics waste.

The report provides suggested diversion material classes that could be implemented within the year such as construction/demolition waste from both residential and commercial activity with some modest capital expenditures and ongoing operational costs. These costs will be included in the Alberni Valley and Bamfield Waste services 2017-2021 Capital Financial Plan for consideration. The operation needs will require that the contractor has a tipping attendant at all times to ensure materials are diverted correctly.

Looking forward the ACRD would need to investigate an organics diversion strategy within three years to avoid LFG management infrastructure costs. This option will provide the complete deferral of the LFG management system for the lifetime of the landfill if undertaken within three years. The landfill engineer and staff will continue to investigate the transfer station and organics grant fund opportunities as there is funding directed to these initiatives.



Submitted by: \_\_\_\_\_  
Andrew McGifford, CPA, CGA, Manager of Environmental Services



# ALBERNI-CLAYOQUOT REGIONAL DISTRICT

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## ALBERNI VALLEY LANDFILL LANDFILL GAS GENERATION REPORT

October 2015

(Finalized February 2017)



Prepared by:  
McGill & Associates Engineering Ltd.  
Port Alberni, B.C.

Project Ref. 2931

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## 1. EXECUTIVE SUMMARY

The Alberni Valley Landfill (AVL) is approaching the point where it will be required by the Province to either install a methane gas collection and processing plant system or remove methane gas producing materials from the solid waste stream. This report provides an approximated time frame for the Board to consider, and possible alternatives to defer and/or eliminate, the need for a landfill gas collection system with the introduction of Bans on materials accepted at the landfill.

A gas collection design may be required in 2018. If Bans are implemented gas collection system may not be required for the duration of the landfill life.

The report has the following recommendations.

1. The Board reviews the need for gas collection versus Bans at the AVL.
2. The Board support the review of Ban alternatives with the PMAC and implement Bans in a sequential manner to maintain compliance with MOE regulations on methane gas.
3. Progressive bans on materials can delay major capital expenditures and continue to meet MOE requirements for methane gas management until beyond the year 2050.

A Landfill Gas Collection System is not recommended for the following reasons:

1. The gradual implementation of Bans will remove the need for a methane gas collection system for at least half of the remaining landfill life.
2. A LFG system will require the expenditure of \$13,870,000 (including capital, operations/maintenance, and closure costs) in funds.
3. If there are significant population changes from those projected, the Ban system should provide the flexibility to absorb these changes without the installation of a gas collection system.
4. Landfill gas collection systems will have to operate for a twenty to thirty period after the landfill is closed with steadily decreasing volumes of gas being collected during that period.

If the Board decides to implement Bans to reduce methane gas production, a review of the waste stream entering the landfill should be done to prioritize materials to be banned.

## 2. INTRODUCTION

The Alberni-Clayoquot Regional District (ACRD) operates the Alberni Valley Landfill (AVL) under the British Columbia Waste Management Act Operational Certificate Number MR-00524, issued June 29, 2004. The operational certificate provides the conditions for which the AVL is authorized to manage recyclable material and waste from the ACRD. The known areas disposing of waste at the AVL include the City of Port Alberni, ACRD Electoral Areas within the Alberni Valley and Bamfield and First Nations communities Tseshah, Hupacasath, Huu-ay-aht and Uchucklesaht.

The AVL has operated as a landfill since the early 1970's. It is located approximately 5 km west of Port Alberni. The landfill accepts various forms of solid waste including municipal solid waste, residential and commercial demolition materials (including roofing and gyproc), compost and stumps, and limited quantities of asbestos and contaminated soils. The landfill also accepts recyclables that are subsequently transferred from the landfill by Suncoast Waste Services for recycling.

Currently, the ACRD is attempting to obtain tenure of the southern portion of the landfill from the crown. Once this is achieved the landfill can be continued to be used for 50 to 80 years.

The City of Port Alberni and Beaver Creek Electoral Area now have curbside recycling programs and recycling depots are located in the City of Port Alberni and at the AVL.

There is currently no formal organics waste diversion program within the ACRD or City of Port Alberni. Backyard composting of organic waste is encouraged through distribution of backyard composters and educational material on the ACRD website.

The AVL accepts yard waste compost free of charge. The compost is stored onsite and subsequently removed by an outside contractor. The 2007 SWMP recommends several organic waste diversion programs such as establishing a yard waste depot within the City of Port Alberni, setting up a yard waste composting facility at the AVL or an alternate location, and completing a composting feasibility study. None of these programs have been implemented yet.

### 3. HISTORY OF LANDFILL GAS MANAGEMENT (LFG) REPORTS

To comply with the regulatory requirements a number of LFG assessments have been done including:

R.D. Cameron – “*ALBERNI VALLEY LANDFILL- REPORT ON LANDFILL GAS*” assessed the landfill in the early 2008 and projected that LFG collection would not be required until 2023 under the regulations in place at that time.

BC Hydro – evaluated the potential for LFG collection and commercial value. They did not proceed with developing an LFG collection system based on their evaluation, as the volume generated would not provide sufficient economic benefit to pay for the infrastructure required.

In December 2008, the Province enacted a new regulation, requiring landfills that produce more than 1000 tonnes of methane gas a year to design a gas collection system.

Each year since 2010 annual reports to Ministry of Environment 2010-2013 have included a gas assessment. The methane gas levels have been near but less than the 1000 tonnes per year for this period.

### 4. LANDFILL GAS LEGISLATION, REGULATIONS & GUIDELINES

The Ministry of Environment has, since 2008, progressively developed regulations and guidelines for the management of gas produced within landfills. Some of these documents are listed below:

- *BC Landfill Gas Management Regulation*, Dec 2008
- *Landfill Gas Generation Assessment Procedures Guidelines*, March 2009
- *Technologies and Best Management Practices for Reducing GHG Emissions from Landfill Guidelines*, June 2011

### 5. 2<sup>nd</sup> EDITION OF LANDFILL CRITERIA FOR MUNICIPAL SOLID WASTE

In June 2016, the BC Ministry of Environment published updated landfill design criteria. The assessment and design criteria for assessing methane gas remain similar to the previous regulations.



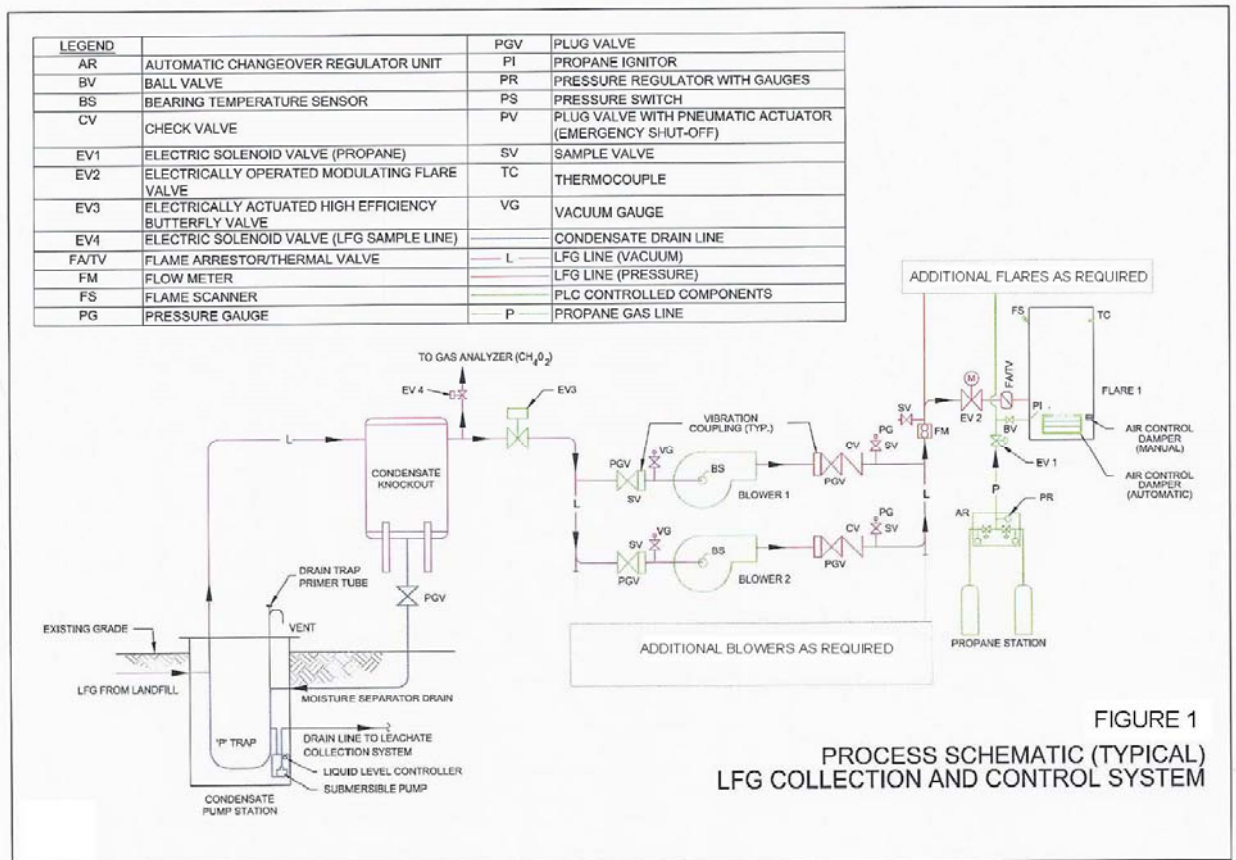


## 6. LANDFILL GAS COLLECTION

A LFG collection system is generally composed of the following:

1. Vertical extraction wells and horizontal collection trenches
2. Collection piping
3. LFG extraction plant (include condensate traps, blowers, and storage capacity)
4. LFG method for either using the gas collected or flaring it off.

A typical landfill control system is shown system is shown in Figure 1, below. The collection system can be either vertical wells at 40 to 120 metre c-c or horizontal trenches at 12 metres c-c, or a combination of both.



## 7. SOLID WASTE QUANTIFICATION AND LANDFILL CAPACITY

Since the 2007 Solid Waste Management Plan (SWMP) was prepared, several programs have been implemented to reduce the amount of solid waste entering the landfill. Some of these programs include a composting program and curbside recycling program.

Throughout 2016, the AVL accepted waste and charged tipping fees according to ACRD Bylaw No. R1027. The weight of solid waste entering the landfill in 2016 is summarized in Table 1 below.

Table 1: Measured Weight of Solid Waste Entering the AVL in 2016

| Item                          | Weight (tonnes) |
|-------------------------------|-----------------|
| Residential Mixed Solid Waste | 8,989           |
| Commercial Mixed Solid Waste  | 6,081           |
| Tires (# of tires)            | 213             |
| Compost                       | 64              |
| Outgoing Steel                | 368             |
| Incoming Cover Material       | 726             |
| Asbestos                      | 271             |
| Land Clearing                 | 22              |
| Roofing                       | 1,017           |
| Gyproc                        | 250             |
| Mixed Construction Demolition | 2,608           |
| Contaminated Soil             | 938             |
| Animal Carcasses              | 1               |
| Service Road Cleanup          | 7               |

The Multi-Material British Columbia (MMBC) recycling program was implemented in 2014. Under this province wide program, recyclable materials are collected and separated (cans, glass, newspaper, cardboard, plastic and steel) and stockpiled at the AV Landfill transfer station. The recyclable materials are subsequently removed by a commercial recycling company funded by the MMBC program. Asbestos from large building demolitions is buried in a designated area. Asbestos from small renovation projects is buried in the daily landfill area. Compost material is stockpiled onsite and removed by a private composting company. With minor variations these figures reflect the waste being placed in the landfill over the last 5 years.



The amount of material landfilled during 2016 was approximately 20,248 tonnes, bringing the total estimated quantity of solid waste at the AV Landfill to approximately 761,483 tonnes.

The waste composition has been separated into three categories to assess its potential for generating methane gas. The categories are:

1. Relatively inert
2. Moderately decomposable
3. Decomposable

As no solid waste categorization studies have been completed, the solid waste composition was based on a combination of scale records and the *British Columbia's Solid Waste Flow Report, 2006 Summary Report* prepared for MoE by BC Stats in February 2010. We have also made an allowance for new MMBC program, where applicable.

## 8. FUTURE SOLID WASTE PROJECTIONS

A high and low range of population projections have been provided to us by the ACRD Planning Department, in the planning department. These are plotted in Figure 2, below. We have also included a line showing the projected landfill growth based on our experience at the landfill over the last five years. This allows for an annual growth of 0.3%. While there will likely be a population increase in future years, it is anticipated that the reduction of solid waste material being delivered to the landfill will offset this, if not decrease it. Therefore, an annual filling rate of 18,400 (the average filling rate from the last three years) and an annual 0.3% increase in weight delivered to the AVL is used as a basis for future projections of annual tonnages. The implementation of Multi Material BC is in its third year of operation. The MMBC program has had a noticeable impact on the waste stream entering the AVL. It could take several years until the full impact is understood, however, it is expected that there will be an overall decrease in the waste being placed in the landfill, with manufacturers and commercial producers looking toward more environmentally friendly packaging.

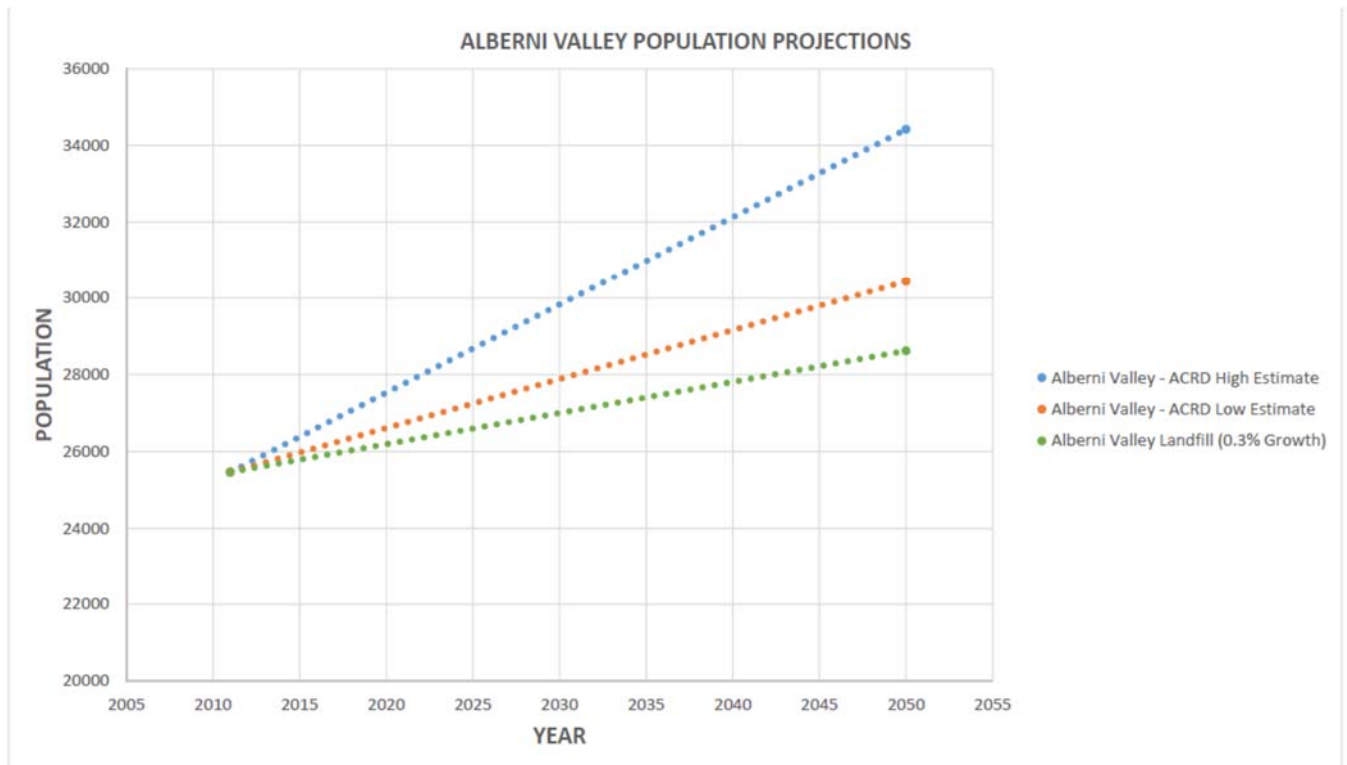


FIGURE 2



## 9. LANDFILL GAS GENERATION MODEL

The Province has developed a model for estimating gas generation at the landfill. It is based on the Scholl Canyon model which uses a first order kinetic equation to evaluate LFG production and emission rates.

The Scholl Canyon formula is as follows:

$$Q_T = \sum_{t+1,n} 2 L_o k M_t e^{-kt}$$

Where:

$Q_T$  = total LFG emissions (50 percent CH<sub>4</sub> and 50 percent CO<sub>2</sub> by volume)

$K$  = LFG generation constant (year<sup>-1</sup>)

$L_o$  = methane general potential (m<sup>3</sup> CH<sub>4</sub>/tonne of waste)

$M$  = mass of waste (tonnes) placed in year  $t$

$T$  = time in years



## 10. LANDFILL GAS PROJECTIONS

Using the Scholl Canyon model for assessing current and future landfill gas production, with Bans and without, we have determined the methane gas production until 2070. There are a number of materials which impact methane gas production. We have selected some of the more prominent ones to evaluate their impact on extending the landfill life without constructing a LFG collection system. The following cases were reviewed to determine the impact of reducing methane gas production by implementing bans.

1. No Bans
  - a. If no Bans are implemented it is possible that a LFG collection system would have to be designed in 2018. Construction of the LFG system would have to be completed within 4 years after a one year design period.
  - b. Residential –Wood-Paper-Bans ban would include the removal of residential non-food waste from the waste stream. It is estimated that this can defer the planning construction of a LFG system until between 2020 and 2025. The variability is based on possible differences in the waste stream resulting from recycling and the MMBC program.
2. Construction/Demolition - Wood & Paper Ban
  - a. Construction and demolition waste has a 70 to 80% wood composition by weight. The removal of this type of waste would defer the need of a LFG system until between 2020 and 2025.
3. Residential - Wood - Paper, & C/D Waste Bans.
  - a. This combines two of the above and would defer LFG planning until 2023 and 2027.
4. Organics Bans
  - a. ICI Bans
    - i. A ban on ICI waste materials could defer a LFG collection system until 2093.
  - b. City of Port Alberni Food & Yard Waste Bans
    - i. A LFG system can be deferred until 2033 if food waste is collected with a 50% recovery rate. Currently yard and garden waste is

accepted at the landfill but not incorporated into the fill. An outside contractor removes it from the landfill site. Therefore, there will be no methane gas reduction as it is not generating gas from yard waste at this time.

c. Alberni Valley Food & Yard Waste

- i. This estimate includes all contributors to the Alberni Valley Landfill including the City. It is based on a 50% removal of food wastes from the waste stream. The LFG system could be deferred until 2052.

d. ICI Ban

- i. This Ban includes all Industrial, Commercial and Institutional sources contributing to the AVL waste stream. It is assumed that there will be a 90% diversion of organic materials from these types of sources. The removal of this type of waste would remove the requirement for a LFG system for the duration of the site.

5. Ban of Wood, Construction / Demolition, & Organics Waste

- a. Bans on all of the above materials will enable the landfill to reach its full capacity without requiring a LFG collection system.

If no bans are implemented it is possible that the AVL will require a plan for a landfill gas collection system by 2018 -2019. The LFG system would have to be constructed in the four years following development of a plan. By initiating a gradual banning of materials acceptable at landfill this date can be pushed forward and permanently deferred.

## 11. LFG COST

The capital costs provided, herein, are based on generally accepted design criteria for landfill gas collection systems. Construction of a gas collection system will be done in three stages as the filling process continues over the next 70 years.

In addition to the capital cost there will be ongoing Operation & Maintenance costs and the cost for continuing operation during the landfill closure period.

The costs breakdown as follow:

|                              |               |
|------------------------------|---------------|
| Capital Cost                 | \$ 5,500,000  |
| Operation & Maintenance Cost | \$ 5,600,000  |
| Landfill Closure Cost        | \$ 750,000    |
| Total Estimated Cost         | \$ 13,870,000 |

As Bans are introduced they will reduce the quantity of waste being charged for and consequently the revenue generated from the landfill.

The following table provides an approximation on what the loss of revenue for the Bans indicated above.

|  |            |
|--|------------|
| Residential – Wood-Paper Ban           | -\$73,600  |
| Construction & Demolition Ban          | -\$48,000  |
| Residential & C/D Combined Ban         | -\$121,600 |
| Organics Ban                           |            |
| City of Port Alberni Food & Yard Waste | -\$71,800  |
| Alberni Valley Food & Yard Waste       | -\$114,700 |
| ICI Ban                                | -\$295,000 |



## 12. CONCLUSIONS

1. In accordance with the provincial regulations and guidelines, a gas collection and utilization or combustion system for the control of methane gas is not needed at this landfill at the present time. Under current landfill criteria, planning and design stage for such a system would not be needed until at least the year 2018.
2. A LFG collection system could be deferred past 2050 and possibly for the duration of the landfill life, with the implementation of Bans on materials accepted at the landfill. The review of waste materials to be banned from the AVL should be comprehensive and include the entire waste stream entering the AVL and their impact on methane gas production.
3. The financial impact of Bans on the cost of operating the landfill is not expected to be proportionate to the reduction of waste being delivered to it and may in fact require the raising of tipping rates to offset the loss in revenue brought about by handling less waste.
4. There will be a significant capital cost for the construction of a gas collection system, together with significant ongoing cost to extend the system as the landfill grows vertically and horizontally.

### 13. ACTION PLAN

1. The ACRD board approve the concept to implement Bans to remove the need to construct a LFG collection facility at the AVL.
2. The PMAC review Bans at the AVL and make recommendations on the sequential development of Bans.
3. The board review and develop bylaws to enforce the proposed Bans in 2017.

### 14. RECOMMENDATIONS

1. The Board review the need for gas collection versus Bans at the AVL.
  - a. Progressive bans on materials can delay major capital expenditures and continue to meet MOE requirements for methane gas management until beyond the year 2050 and can extend to the end of the landfill life.
2. The Board support the Action Plan to implement Bans at the AVL.
3. A Landfill Gas Collection System is not recommended for the following reasons:
  - a. The gradual implementation of Bans will remove the need for a methane gas collection system for at least half of the remaining landfill life.
  - b. It will require the expenditure of significant capital funds.
  - c. There will be an ongoing expenditure for operation and maintenance of the LFG system.
  - d. There will be ongoing capital expenditures for collection of the gas as the landfill expands vertically and horizontally.
  - e. If there are significant population changes from those projected, the Ban system should provide the flexibility to absorb these changes without the installation of a gas collection system.
  - f. Landfill gas collection systems will have to operate for a twenty to thirty period after the landfill is closed with steadily decreasing volumes of gas being collected during that period.
4. If the Board decides to implement Bans to reduce methane gas production, a review of the waste stream entering the landfill should be done to prioritize materials to be banned.



## 15. LIMITATIONS

This document was prepared by McGill & Associates Engineering Ltd. for the Alberni-Clayoquot Regional District. Its material, recommendations and conclusions represent the best material available to McGill & Associates Engineering Ltd. at the time of the report preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. McGill & Associates Engineering Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

Yours truly,

for McGill & Associates Engineering Ltd.



Alan McGill, P. Eng.

Reviewed by Brad West, P.Eng

AJM/wm



## REQUEST FOR DECISION

**To:** Alberni Valley and Bamfield Services Committee

**From:** Teri Fong, CPA, CGA, Manager of Finance  
Andrew McGifford, CPA, CGA, Manager of Environmental Services

**Meeting Date:** February 15, 2016

**Subject:** Alberni Valley & Bamfield Waste Management

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### Recommendation:

***THAT the Alberni Valley Committee recommend the Alberni Valley and Bamfield Waste Management budget be included in the first reading of the 2017-2021 Alberni-Clayoquot Regional District Financial Plan.***

### 2016 Highlights:

The Alberni Valley & Bamfield Waste Management service is a significant operation for the Regional District. The following information and notes are provided to assist the committee to better understand the financial details provided in the actual 2016 financial results:

- Line 9 - The Canada 150 Grant that provided \$55,100 for 3<sup>rd</sup> Avenue depot has work still to be completed and will be concluded once the sprinkler system is in place. All works are to be completed by March 31, 2017. The ACRD will receive the additional \$10,000 after the claim is submitted.
- Line 13 to 16 – Bamfield transfer station – The operating costs for the Bamfield Waste services have steadily increased from 2012. ACRD staff have been looking at options to reduce cost and deliver a more economically service for the Bamfield residents. The details of the 2016 expenses include:
  - The cost of operating the West Side dock garbage bin (transported by Lady Rose boat services) is approximately 25% of the cost of the total contracted services in Bamfield.
  - ACRD started to explore a unified solid waste program with Huu-ay-aht and Bamfield Marine Sciences Centre to reduce overall costs for all stakeholders.
  - Bamfield has had an increase in activity over the past couple of years and thereby increased the solid waste transport costs.
  - \$60,000 was the tax requisition for 2016 and total contractor cost and tipping for Bamfield waste services was \$79,326.
- Line 25 – Advertising & promotion – The ACRD partnered with the City of Port Alberni and provided \$3,000 to assist with the installation of a water dispenser at the Alberni Valley Multiplex. The ACRD also continued their partnership with the Alberni Valley Bulldogs to assist in the advertising of our programs including display ads in the Alberni Valley Multiplex as well as feature game nights that focus on our recycling initiatives and waste reduction.
- Line 36 - Solid Waste management Plan initiatives – ACRD staff were unable to commit time to complete this project during 2016. Staff did complete a Build Canada grant application in the spring of 2016 that would provide funding to construct infrastructure that would support diversion initiatives. The successful applicants have yet to be announced which further held up action on the transfer station development. The grant announcement should be made by March 31, 2017.
- Line 45 – Water monitoring – this expense covers the monitoring of the leachate monitor wells and provides

confirmation that the infrastructure that has been installed to divert leachate from the landfill is working correctly.

- Line 46 – The wood waste grinding did not occur, volume of material did not warrant this work to be completed in 2016.
- Line 59 - Access road repaving – this capital project was virtually completed by year-end 2016. There still is line painting and crack sealing to be completed in 2017. It may be beneficial to repaint the whole access road, engineer to follow up with costing information.
- Line 71 – 3<sup>rd</sup> Avenue depot Capital work continued as per work plan from 2015. The only outstanding item is the sprinkler system at end of 2016.

### **Upcoming for 2017:**

The plan for 2017 includes:

- Line 5 – Tipping fees - Diversion and disposal bans will be initiated in 2017 and there will be additional costs and lower revenues as a result. Staff will be proposing an increase from \$95 to \$120 per tonne for residential waste in April of this year to offset the increased costs of diversion. Future rate increases need to be structured to provide incentives to divert waste. Further details and class of material fees to be provided later this spring.
- Lines 12 - 15 - The Bamfield transfer station operation will continue to determine whether a partnership with Huu-ay-aht First Nations and the Bamfield Marine Station may be of benefit to all parties. This was part of the 2016 work plan and a first nation facilitation grant from FCM with assist the completion of this initiative.
- Line 27 – Illegal Dumping - When disposal bans and increases in tipping fees are undertaken, the possibility of increased illegal dumping may occur. Evaluation of how best to deal with illegal dumping within the Alberni Valley will be a priority - improve signage, public education and reporting tools will be explored. The budget has been increased provide more resources moving forward.
- Line 32 – Disposal Bans – there is a plan to further expand the material bans at the landfill for gyproc, clean wood waste, and construction waste for 2017, funds within this line item reflect possible cost.
- Line 37 – SWMP Initiatives - Provides funds to address any initiatives that would come out of the organics diversion program once approved. Work with the commercial and residential haulers for solutions to reduce the organics being landfilled at AVLf.
- Line 47 – Wood Waste Grinding & Handling - alternatives to deal with wood waste will be reviewed. Stock piling of large amounts of wood waste cause operational issues and fire risk at the landfill site.
- The capital expenditure budget has been developed with assistance from McGill and Associates Engineering. McGill Engineering will discuss projects details at the meeting.
- Line 62 – Gyproc recycling will start in 2017 and infrastructure must be installed to enable the process to start. The estimated cost is \$115,000.
- Line 64 – Landfill gas management – these are the expected costs that must be incurred if no action is taken with certain material bans as provided in the report. If diversion is undertaken, these costs may be removed.
- Line 65 – Leachate Interception - expansion to the southeast must occur within the next year, if this does not occur the landfill would be required to start filling on top of the current footprint. This would have a significant cost implications.
- Line 67 – Lot 105 needs to be prepared for cover material and certain steps for removal are required before the ACRD can begin. Natural watercourses must be maintained and vegetation planning should be undertaken.
- Line 71 – 3<sup>rd</sup> Avenue depot – the report provided on October 5 is attached for 2017 detailed plans. This will include the sprinkler system, line painting and security improvements.
- Line 72 – SCADA Control System - IT will work with the landfill engineer to continue work on the monitoring improvements with the SCADA program, this is an ongoing project.

### **Background:**

This budget was developed with input from the following people:

- The ACRD Environmental Services department
- Alberni Valley Landfill contractor – Berry and Vale Contracting Ltd
- Alberni Valley Landfill engineer – McGill and Associates Engineering

**Financial:**

The residential tax rates are as follows:

- Bamfield 2017 - \$0.386 2016 - \$0.296 per \$1,000 of assessed value.
- All other areas 2017 - \$0.000 2016 - \$0.000 per \$1,000 of assessed value.

The tax rate for Bamfield is different from the other areas because of the Alberni Valley Committee's direction in prior years was for the Bamfield Transfer Station costs to be covered by that Electoral Area only.

**Policy or Legislation:**

The Ministry of Environment sets the regulations for items such as closure/post closure plans, solid waste management plans, landfill criteria for municipal solid waste, operational certificates and annual reporting requirements.

**Disclosure:**

The prior year actual balances may yet change as 2016 invoices are still trickling in and year-end adjustments are still being completed.



Submitted by: \_\_\_\_\_

Teri Fong, CPA, CGA, Manager of Finance



Submitted by: \_\_\_\_\_

Andrew McGifford, CPA, CGA, Manager of Environmental Services

## REQUEST FOR DECISION

**To:** Alberni Valley and Bamfield Services Committee

**From:** Andrew McGifford, CPA, CGA, Manager of Environmental Services

**Meeting Date:** October 5, 2016

**Subject:** 3<sup>rd</sup> Avenue Depot update and required upgrades

### Recommendation:

***THAT the Alberni Valley and Bamfield Services Committee receive the following report and confirm support for capital expenditures at the 3<sup>rd</sup> Avenue Depot to be completed within the \$160,000 budget in 2016 and allocate \$140,000 for further capital upgrades in the 2017-2021 Financial plan.***

### Desired Outcome:

To provide an update for the Alberni Valley and Bamfield Services Committee in order to inform and aid in current and future Financial Plan discussions.

### Summary:

The 3<sup>rd</sup> Avenue Depot was purchased by the ACRD in 2013 for the value \$185,718. When acquired the building required many improvements that would be done over a period of time. The original quotes and estimates have varied and other opportunities have developed since purchase. The 3<sup>rd</sup> Avenue Depot Capital Plan budgets have never gone over the allocated budgeted amounts and the intention is to ensure this does not occur in 2016.

The depot is a very busy facility and with the changes in the Multi Material British Columbia (MMBC) recycling program has increased the activity as certain material are no longer accepted at curbside. Additional product care programs are being added and we continue to pursue a convenient "one stop" drop off recycling centre.

Costs have increased due to City of Port Alberni standards for fire and the development of the trail at the rear of the building. Also, as opportunities have occurred the ACRD has worked to take advantage of these opportunities and they have often come at a cost (leased land as an example). Estimates are coming in higher than quoted as the original estimates were done sometimes two years prior and in combination with small additions, final costs have increased.

### ***Siding Project***

The building was in a very poor state visually and the structure required protection. This project occurred in 2014. The cost of this project was \$78,925 and began the improvements for the depot.

### ***Structure and Electrical upgrades***

The building had approximately \$25,800 in 2014 for improvements that secured the building access points

(doors and windows) and ensured the electrical service was adequate for recycling equipment and any future development operated at the depot.

### ***Depot Roof***

The roof has been a concern since the time of purchase, two roof repairs occurred totaling \$3,500 and an estimate was supplied to repair in the meantime for \$20,000 in 2014, with full replacement to occur in the future. The Canada 150 application included a submission with the \$20,000 estimate for repair and was submitted in the Spring of 2015. Repair was not feasible once a full review of the roof was completed in the fall of 2015 and staff proceeded to acquire quotes to replace the whole roof which was approved by the Board in October 2015. The total cost of the roof upgrade was \$93,203.

### ***Lease and improvements of the Western Forest Products (WFP) land***

The land leased from WFP started in November of 2015, with this increased space the ACRD could expand the depot footprint for safer public access and improved services. The original plan was to clear the land and then use gravel to bring the base up for vehicle and forklift traffic. This was not done for safety reasons (forklift travel and tripping hazards would be introduced) and the installation of concrete with special oil catchment drainage works (as required by the City of Port Alberni) were approved by the Board in April of 2016. The cost of these works totaled \$36,200.

Another additional cost not budgeted for was the need to change the concrete sidewalk for the new access point for the depot. The City of Port Alberni charged \$3,300 for this to be completed. Municipal Insurance Association (MIA) has identified the need to paint delineation lines in the depot parking lot. The expense for these works will be paid by the MIA annual grant funds.

### ***Fence upgrades and repairs***

The fence upgrade to enclose the new depot was \$8,322. This includes repairs to the existing fence and gates that were also completed.

### ***Other minor capital items***

The quotes for some minor capital work are coming in at higher than originally budgeted, these small projects were budgeted at \$15,000 and the actual quotes are coming in at approximately \$27,000. These are items within the Canada 150 grant application and would be completed to receive grant funds. This includes the chemical storage room, lockable storage for landfill testing equipment and bathroom improvements.

### ***Sprinkler System***

When the building was purchased the City of Port Alberni Fire Department toured the facility and advised that given the products stored in the facility and the size of the fire load it required a sprinkler system. The costs associated with the sprinkler system have increased significantly over the original estimated cost of \$65,000. Additional work by an engineer to provide structure drawings cost \$4,675, after the drawings were completed the cost of the same system quoted is now estimated to be \$80,000.

It was also pointed out the system quoted would be a wet system and the need to ensure an internal temperature above zero to ensure the sprinkler system would not freeze. The estimated cost to heat the building to maintain this temperature could cost \$5,000 per year. The cost of going to a dry system with a compressor to charge the system would be \$20,000 more for a sprinkler system cost of \$100,000. Upgrade to the water connection in order to supply adequate water pressure will cost \$7,000, a cost not factored



in the original budget. Staff recommends moving to a dry sprinkler system in order to avoid long term operating costs associated with heating the building.

***Break-ins and Theft at the Depot***

Since the installation of the new trail in the rear of the building the depot has been broken into almost nightly to check the metal bins and use the shelter. Drug use paraphernalia, lighters and matches are often found and there some very flammable materials in the area. The back wall is just nailed sheets of plywood and particle board that is rotten or weathered and is being ripped off to gain entry. A quote to re-sheet and prepare the back wall to have the metal siding installed is \$6,500, this includes a concrete curb. The siding for the rest of the building is another \$9,000 to \$10,000. This will secure the site from easy entry and completely side the building.

Lighting has been installed to counter attack the break-ins, these funds have come from our Municipal Insurance. A surveillance system should be installed in order to detour break-ins and provide evidence to the RCMP if these break-ins continue to occur. Staff is looking into the costs of such a system.

**Time Requirements – Staff & Elected Officials:**

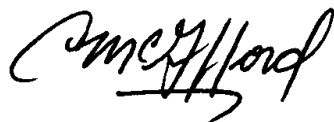
Staff time to organize and secure services to get remaining work completed and investigate leasing options.

**Financial:**

The capital budget of \$160,000 will not be exceeded in 2016 and with all the remaining projects. That the budget for 2017 include \$140,000 for 3<sup>rd</sup> Avenue Depot upgrades in the 2017-2021 Capital Financial Plan. The ACRD has received grants totaling \$55,100 from Canada 150 for capital improvements, these works are required to be complete by March 31, 2017.

In order to operate the depot, the ACRD receives MMBC incentives for operation and volume of materials received. The Alberni Valley waste disposal service is fully funded through landfill tipping fees, which also supports the operation of the 3<sup>rd</sup> Avenue depot.

In order to generate revenue on the site staff will investigate the ability to lease out the upstairs as it is currently vacant. The ability to lease this space will require that parking is secured.



Submitted by: \_\_\_\_\_  
Andrew McGifford, CPA, CGA, Manager of Environmental Services



Approved by: \_\_\_\_\_  
Russell Dyson, Chief Administrative Officer



ALBERNI-CLAYOQUOT REGIONAL DISTRICT  
 2017-2021 FINANCIAL PLAN  
 ALBERNI VALLEY & BAMFIELD WASTE MANAGEMENT  
 PARTICIPANTS: PORT ALBERNI, ELECTORAL AREAS 'A', 'B', 'D', 'E', and 'F'

Draft  
 For Discussion

| Line                | History             |                     |   | Budget              |                     |                     |                     |                     | Line |
|---------------------|---------------------|---------------------|---|---------------------|---------------------|---------------------|---------------------|---------------------|------|
|                     | 2016<br>ACTUAL      | 2016<br>PLAN        |   | 2017                | 2018                | 2019                | 2020                | 2021                |      |
| <b>REVENUE</b>      |                     |                     |   |                     |                     |                     |                     |                     |      |
| 1                   | \$ 517,609          | \$ 524,275          | Surplus (deficit) from prior years        | \$ 382,032          | \$ -                | \$ -                | \$ -                | \$ -                | 1    |
| 2                   | 60,000              | 60,000              | Tax requisition                           | 76,328              | 405,970             | 421,986             | 458,815             | 480,162             | 2    |
| 3                   |                     |                     | <i>Fees &amp; charges</i>                 |                     |                     |                     |                     |                     | 3    |
| 4                   | 8,640               | 8,000               | Curbside recycling                        | 8,640               | 8,640               | 8,640               | 8,640               | 8,640               | 4    |
| 5                   | 1,688,140           | 1,700,000           | Tipping fees                              | 1,765,000           | 1,800,000           | 1,800,000           | 1,800,000           | 1,800,000           | 5    |
| 6                   | 1,696,780           | 1,708,000           | Total fees & charges                      | 1,773,640           | 1,808,640           | 1,808,640           | 1,808,640           | 1,808,640           | 6    |
| 7                   | 2,864               | 1,000               | Grant in lieu of taxes                    | 1,000               | 1,000               | 1,000               | 1,000               | 1,000               | 7    |
| 8                   | 336,914             | 300,000             | Multi Materials BC funding                | 310,000             | 300,000             | 300,000             | 300,000             | 300,000             | 8    |
| 9                   | 45,100              | 55,100              | Federal grant - conditional               | 10,000              | -                   | -                   | -                   | -                   | 9    |
| 10                  | 59,561              | 10,000              | Other sources                             | 12,000              | 10,000              | 10,000              | 10,000              | 10,000              | 10   |
| 11                  | <b>\$ 2,718,827</b> | <b>\$ 2,658,374</b> | <b>TOTAL REVENUE</b>                      | <b>\$ 2,565,000</b> | <b>\$ 2,525,610</b> | <b>\$ 2,541,626</b> | <b>\$ 2,578,455</b> | <b>\$ 2,599,802</b> | 11   |
| <b>EXPENDITURES</b> |                     |                     |   |                     |                     |                     |                     |                     |      |
| 12                  | \$ 60,000           | \$ 60,000           | Administration charge                     | \$ 62,000           | \$ 62,000           | \$ 62,000           | \$ 62,000           | \$ 62,000           | 12   |
| 13                  |                     |                     | <i>Bamfield transfer station</i>          |                     |                     |                     |                     |                     | 13   |
| 14                  | 74,509              | 63,000              | Garbage - hauling & tipping fees          | 75,000              | 76,500              | 78,000              | 79,600              | 81,200              | 14   |
| 15                  | 4,817               | 10,000              | Recycling - depot operations              | 5,000               | 5,100               | 5,200               | 5,300               | 5,400               | 15   |
| 16                  | 79,326              | 73,000              | Total Bamfield transfer station           | 80,000              | 81,600              | 83,200              | 84,900              | 86,600              | 16   |
| 17                  | 735,983             | 720,874             | Capital fund contribution                 | 660,000             | 650,000             | 650,000             | 650,000             | 650,000             | 17   |
| 18                  | 135,314             | 120,000             | Closure & post closure fund contribution  | 120,000             | 120,000             | 120,000             | 120,000             | 120,000             | 18   |
| 19                  |                     |                     | <i>Labour &amp; related costs</i>         |                     |                     |                     |                     |                     | 19   |
| 20                  | 2,966               | 5,000               | Convention/professional development       | 5,000               | 5,000               | 5,000               | 5,000               | 5,000               | 20   |
| 21                  | 59,116              | 66,000              | Labour & benefits                         | 69,000              | 70,400              | 71,800              | 73,200              | 74,700              | 21   |
| 22                  | 579                 | 2,000               | Vehicle operation                         | 2,000               | 2,000               | 2,000               | 2,000               | 2,000               | 22   |
| 23                  | 62,661              | 73,000              | Total labour & related costs              | 76,000              | 77,400              | 78,800              | 80,200              | 81,700              | 23   |
| 24                  |                     |                     | <i>Promotion &amp; education</i>          |                     |                     |                     |                     |                     | 24   |
| 25                  | 25,809              | 33,000              | Advertising & promotion                   | 30,000              | 30,000              | 30,000              | 30,000              | 30,000              | 25   |
| 26                  | -                   | 2,500               | Bear-human conflict management            | 2,500               | 2,500               | 2,500               | 2,500               | 2,500               | 26   |
| 27                  | 450                 | 20,000              | Illegal dumping prevention/waived tipping | 20,000              | 20,000              | 20,000              | 20,000              | 20,000              | 27   |
| 28                  | 4,877               | 10,000              | School program                            | 10,000              | 10,000              | 10,000              | 10,000              | 10,000              | 28   |
| 29                  | 31,136              | 65,500              | Total promotion & education               | 62,500              | 62,500              | 62,500              | 62,500              | 62,500              | 29   |



ALBERNI-CLAYOQUOT REGIONAL DISTRICT  
 2017-2021 FINANCIAL PLAN  
 ALBERNI VALLEY & BAMFIELD WASTE MANAGEMENT (continued)  
 PARTICIPANTS: PORT ALBERNI, ELECTORAL AREAS 'A', 'B', 'D', 'E', and 'F'

| Line | History             |                     |   | Budget              |                     |                     |                     |                     | Line |
|------|---------------------|---------------------|---|---------------------|---------------------|---------------------|---------------------|---------------------|------|
|      | 2016<br>ACTUAL      | 2016<br>PLAN        |   | 2017                | 2018                | 2019                | 2020                | 2021                |      |
|      |                     |                     | <b>EXPENDITURES (continued)</b>             |                     |                     |                     |                     |                     |      |
| 30   |                     |                     | <i>Recycle, reduce, reuse</i>               |                     |                     |                     |                     |                     | 30   |
| 31   | \$ 8,100            | \$ 8,000            | Backyard composting program (offset)        | \$ -                | \$ 8,000            | \$ -                | \$ 8,000            | \$ -                | 31   |
| 32   | -                   | 20,000              | Disposal bans                               | 20,000              | 20,000              | 20,000              | 20,000              | 20,000              | 32   |
| 33   | 82,955              | 85,000              | Recycling depots - Alberni Valley           | 85,000              | 86,700              | 88,400              | 90,200              | 92,000              | 33   |
| 34   | 208,363             | 212,000             | Residential recycling pickup                | 216,000             | 220,300             | 224,700             | 229,200             | 233,800             | 34   |
| 35   | -                   | -                   | Share sheds                                 | -                   | 5,000               | 1,000               | 1,000               | 1,000               | 35   |
| 36   | 2,940               | 100,000             | SWMP initiatives                            | 100,000             | 30,000              | 30,000              | 30,000              | 30,000              | 36   |
| 37   | -                   | 30,000              | Yard waste depot                            | 30,000              | 30,600              | 31,200              | 31,800              | 32,400              | 37   |
| 38   | 302,358             | 455,000             | Total recycle, reduce & reuse               | 451,000             | 400,600             | 395,300             | 410,200             | 409,200             | 38   |
| 39   |                     |                     | <i>Residual waste management</i>            |                     |                     |                     |                     |                     | 39   |
| 40   | 55,669              | 75,000              | Cover material sourcing                     | 75,000              | 75,000              | 75,000              | 75,000              | 75,000              | 40   |
| 41   | 756,418             | 758,000             | Operations contract                         | 765,500             | 780,810             | 796,426             | 812,355             | 828,602             | 41   |
| 42   | 45,146              | 150,000             | Other operating costs                       | 100,000             | 102,000             | 104,000             | 106,100             | 108,200             | 42   |
| 43   | 13,960              | 30,000              | Professional fees                           | 30,000              | 30,000              | 30,000              | 30,000              | 30,000              | 43   |
| 44   | 14,003              | 18,000              | Utilities                                   | 18,000              | 18,700              | 19,400              | 20,200              | 21,000              | 44   |
| 45   | 44,821              | 40,000              | Water monitoring                            | 45,000              | 45,000              | 45,000              | 45,000              | 45,000              | 45   |
| 46   | -                   | 20,000              | Wood waste grinding/handling                | 20,000              | 20,000              | 20,000              | 20,000              | 20,000              | 46   |
| 47   | 930,017             | 1,091,000           | Total residual waste management             | 1,053,500           | 1,071,510           | 1,089,826           | 1,108,655           | 1,127,802           | 47   |
| 48   | <b>\$ 2,336,795</b> | <b>\$ 2,658,374</b> | <b>TOTAL EXPENDITURES</b>                   | <b>\$ 2,565,000</b> | <b>\$ 2,525,610</b> | <b>\$ 2,541,626</b> | <b>\$ 2,578,455</b> | <b>\$ 2,599,802</b> | 48   |
| 49   | \$ 382,032          | \$ -                | <b>FINANCIAL PLAN BALANCE</b>               | \$ -                | \$ -                | \$ -                | \$ -                | \$ -                | 49   |
| 50   | 871,297             | 840,874             | Add: Transfer to reserves                   | 780,000             | 770,000             | 770,000             | 770,000             | 770,000             | 50   |
| 51   |                     | 115,000             | Deduct: Estimated amortization not included | 115,000             | 115,000             | 115,000             | 115,000             | 115,000             | 51   |
| 52   | 517,609             | 524,275             | Surplus from previous year                  | 382,032             | -                   | -                   | -                   | -                   | 52   |
| 53   | <b>\$ 735,720</b>   | <b>\$ 201,600</b>   | <b>ANNUAL SURPLUS/(DEFICIT)</b>             | <b>\$ 282,968</b>   | <b>\$ 655,000</b>   | <b>\$ 655,000</b>   | <b>\$ 655,000</b>   | <b>\$ 655,000</b>   | 53   |

(for Financial Reporting purposes)



ALBERNI-CLAYOQUOT REGIONAL DISTRICT  
 2017-2021 FINANCIAL PLAN  
 ALBERNI VALLEY & BAMFIELD WASTE MANAGEMENT (continued)  
 PARTICIPANTS: PORT ALBERNI, ELECTORAL AREAS 'A', 'B', 'D', 'E', and 'F'

Draft  
 For Discussion

| Line | History             |                     | Budget                             |                     |                     |                     |                     | Line |
|------|---------------------|---------------------|------------------------------------|---------------------|---------------------|---------------------|---------------------|------|
|      | 2016<br>ACTUAL      | 2016<br>PLAN        | 2017                               | 2018                | 2019                | 2020                | 2021                |      |
|      | <b>CAPITAL FUND</b> |                     |                                    |                     |                     |                     |                     |      |
| 54   | \$ 3,427,821        | \$ 3,427,821        | \$ 3,645,072                       | \$ 2,649,572        | \$ 1,239,072        | \$ 1,853,672        | \$ 2,419,672        | 54   |
| 55   | 660,874             | 665,774             | 660,000                            | 650,000             | 650,000             | 650,000             | 650,000             | 55   |
| 56   | 45,100              | 55,100              |                                    | -                   | -                   | -                   | -                   | 56   |
| 57   | 30,009              | 21,800              | 23,500                             | 14,500              | 11,600              | 16,000              | 13,100              | 57   |
| 58   |                     |                     | <i>Less - capital expenditures</i> |                     |                     |                     |                     | 58   |
| 59   | 252,977             | 325,000             | 10,000                             | -                   | -                   | -                   | -                   | 59   |
| 60   | -                   | 5,000               | 5,000                              | -                   | -                   | -                   | -                   | 60   |
| 61   | -                   | 5,000               | -                                  | -                   | -                   | -                   | -                   | 61   |
| 62   | 5,736               | 115,000             | 115,000                            | -                   | -                   | -                   | -                   | 62   |
| 63   | 5,789               | 93,725              | 94,000                             | -                   | -                   | -                   | -                   | 63   |
| 64   | 1,639               | 25,000              | 25,000                             | 25,000              | 25,000              | 100,000             | 2,000,000           | 64   |
| 65   | 9,703               | 100,000             | 200,000                            | 2,000,000           | -                   | -                   | -                   | 65   |
| 66   | 1,181               | 50,000              | 55,000                             | 50,000              | 22,000              | -                   | -                   | 66   |
| 67   | 933                 | 35,000              | 200,000                            | -                   | -                   | -                   | -                   | 67   |
| 68   | 18,175              | 54,000              | 54,000                             | -                   | -                   | -                   | -                   | 68   |
| 69   | -                   | 102,700             | 103,000                            | -                   | -                   | -                   | -                   | 69   |
| 70   | 51,402              | 250,000             | 206,000                            | -                   | -                   | -                   | -                   | 70   |
| 71   | 141,482             | 160,000             | 160,000                            | -                   | -                   | -                   | -                   | 71   |
| 72   | 29,715              | 70,000              | 82,000                             | -                   | -                   | -                   | -                   | 72   |
| 73   | -                   | 20,000              | -                                  | -                   | -                   | -                   | -                   | 73   |
| 74   | -                   | 250,000             | 250,000                            | -                   | -                   | -                   | -                   | 74   |
| 75   | -                   | 20,000              | 20,000                             | -                   | -                   | -                   | -                   | 75   |
| 76   | -                   | 88,000              | 100,000                            | -                   | -                   | -                   | -                   | 76   |
| 77   | 518,732             | 1,768,425           | 1,679,000                          | 2,075,000           | 47,000              | 100,000             | 2,000,000           | 77   |
| 78   | <b>\$ 3,645,072</b> | <b>\$ 2,402,070</b> | <b>\$ 2,649,572</b>                | <b>\$ 1,239,072</b> | <b>\$ 1,853,672</b> | <b>\$ 2,419,672</b> | <b>\$ 1,082,772</b> | 78   |



ALBERNI-CLAYOQUOT REGIONAL DISTRICT  
 2017-2021 FINANCIAL PLAN  
 ALBERNI VALLEY & BAMFIELD WASTE MANAGEMENT (continued)  
 PARTICIPANTS: PORT ALBERNI, ELECTORAL AREAS 'A', 'B', 'D', 'E', and 'F'

**CLOSURE & POST CLOSURE FUND**

|    |                     |                     |                                  |                     |                     |                     |                     |                     |    |
|----|---------------------|---------------------|----------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----|
| 79 | \$ 1,720,495        | \$ 1,583,618        | Balance, beginning of year       | \$ 1,855,810        | \$ 1,990,210        | \$ 2,125,610        | \$ 2,262,010        | \$ 2,399,410        | 79 |
| 80 | 120,000             | 120,000             | Contribution from operating fund | 120,000             | 120,000             | 120,000             | 120,000             | 120,000             | 80 |
| 81 | 15,315              | 12,300              | Interest earnings                | 14,400              | 15,400              | 16,400              | 17,400              | 18,400              | 81 |
| 82 | -                   | -                   | Less - closure costs             | -                   | -                   | -                   | -                   | -                   | 82 |
| 83 | <u>\$ 1,855,810</u> | <u>\$ 1,715,918</u> | <b>BALANCE, END OF YEAR</b>      | <u>\$ 1,990,210</u> | <u>\$ 2,125,610</u> | <u>\$ 2,262,010</u> | <u>\$ 2,399,410</u> | <u>\$ 2,537,810</u> | 83 |



## REQUEST FOR DECISION

**To:** Alberni Valley Committee

**From:** Teri Fong, CPA, CGA, Manager of Finance  
Russell Dyson, Chief Administrative Officer

**Meeting Date:** February 15, 2017

**Subject:** Alberni Valley Emergency Planning 2017-2021 Financial Plan

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### Recommendation:

***THAT the Alberni Valley Committee recommend the Alberni Valley Emergency Planning proposed budget to be included in the first reading of the 2017-2021 Alberni-Clayoquot Regional District Financial Plan.***

### 2016 Highlights and Upcoming for 2017:

The main highlight from 2016 was the ACRD and City of Port Alberni's participation in Exercise Coastal Response. The Exercise Coastal Response draft report provides recommendations for a five-year plan for the Alberni Valley emergency program. While the recommendations are the result of an exercise involving a major earthquake and tsunami, the recommendations are meant to improve emergency response for any number of events – (chemical spill, wild fire etc).

The draft report has been refined and edited, there are now 48 recommendations as outlined in the attached table. The impact of the recommendations vary, some items are one-time actions without expense, other items are one-time expenses and some items will result in ongoing annual costs. Increased staff time from both the City and Regional District will be required to complete many of these tasks and the funds budgeted account for compensation to reflect that time.

The recommendations have been developed with fiscal restraint in mind – trying to live within our means in order to incur no increase to the tax requisition. The level of service that will be provided reflects this funding level and the recommendations lead to a better level of preparedness with a modest capacity to respond to catastrophic events. Central to the recommendations is to maintain the capacity of the organization across the ACRD and CPA as developed through ECR.

The other significant item that occurred in 2016 was the installation of the generator at the ACRD office building in order to provide a backup power source to the Emergency Operations Center.

### Background:

This budget was developed with input from the Emergency Planning Coordinator.

### Time Requirements – Staff & Elected Officials:

Staff time is required to participate in training events for the Emergency Operations Center (EOC). Many Regional District staff are involved in the EOC and time is spent ensuring that training is up to date. Staff time is also required to

Members: City of Port Alberni, District of Ucluelet, District of Tofino, Yuulu?ii?ath Government, Huu-ay-aht First Nations, Uchucklesaht Tribe and Toquaht Nation  
Electoral Areas "A" (Bamfield), "B" (Beaufort), "C" (Long Beach), "D" (Sproat Lake), "E" (Beaver Creek) and "F" (Cherry Creek)

supervise the Emergency Planning Coordinator and in supporting the Emergency Planning Committee. A significant amount of time was spent by staff in 2016 preparing for and participating in Exercise Coastal Response and the five year plan has been created to try to create momentum from the valuable training experience that the exercise provided.

**Financial:**

The costs associated with the actions in the attached table have been included in line 10 – emergency planning costs together with normal operating costs of \$10,000 per annum for such things as internet, phone lines, and janitorial expenses.

The residential tax rate has dropped back down to the 2015 level of \$0.031 per \$1,000 of assessed value after being increased in 2016 for the activities associated with Exercise Coastal Response.

**Policy or Legislation:**

Emergency Management BC is the regulatory body for this service.

**Disclosure:**

The prior year actual balances may yet change as 2016 invoices are still trickling in and year-end adjustments are still being completed.



Submitted by: \_\_\_\_\_

Teri Fong, CPA, CGA, Manager of Finance



Approved by: \_\_\_\_\_

Russell Dyson, Chief Administrative Officer

## Recommendations from Exercise Coastal Response

| Action  | 2017    | 2018    | 2019  | 2020   | 2021  |
|---|---------|---------|-------|--------|-------|
| 1. Backup EOC   | \$1,000 | \$1,000 | 1,000 | 1,000  | 1,000 |
| 2. Agreements for food and water  | 500     | 500     | 500   | 500    | 500   |
| 3. Cargo container for external storage   |         |         | 6,000 |        |       |
| 4. Logistics to coordinate EOC.   | 500     | 500     | 500   | 500    | 500   |
| 5. Tsunami risk assessment for City Works   |         | 1,000   |       |        |       |
| 6. Risk assessments on all key government infrastructure  |         | 5,000   | 5,000 | 5,000  | 5,000 |
| 7. Inventory of the critical facilities within the community,                                   | 1,000   | 1,000   | 1,000 | 1,000  | 1,000 |
| 8. Satellite (SAT) phone  | 5,000   | 500     | 500   | 500    | 500   |
| 9. EOC computers and photocopiers   | 4,000   | 1,500   | 1,500 | 1,500  | 1,500 |
| 10. Detailed, wall maps for various sections  | 500     | 500     | 500   | 500    | 500   |
| 11. iPads (12) with wireless hot spots  | 8,000   |         | 2,000 | 2,000  | 2,000 |
| 12. Emergency mapping software  |         |         |       |        |       |
| 13. Oceans Networks Canada and tsunami modelling tools  |         |         |       |        |       |
| 14. Tabletop exercise every second year   | 4,000   |         | 4,000 |        | 4,000 |
| 15. 24-hour exercise every second year  |         | 14,000  |       | 14,000 |       |
| 16. Regular meetings among Directors EOC sections   | 5,000   | 5,000   | 5,000 | 5,000  | 5,000 |
| 17. Quarterly Communications meetings   | 500     | 500     | 500   | 500    | 500   |
| 18. Task Planning with developing Rapid Damage Assessment                                       | 1,200   | 500     | 500   | 500    | 500   |
| 19. Public Information Officers & strategic communications plan                                 | 1,000   | 1,000   | 1,000 | 1,000  | 1,000 |
| 20. Risk management for EOC   | 500     | 500     | 500   | 500    | 500   |
| 21. Public works representatives in the Operations  |         |         |       |        |       |
| 22. Annual training open to all EOC personnel   | 2,000   | 2,000   | 2,000 | 2,000  | 2,000 |
| 23. Position specific training  |         | 1,000   | 1,000 | 1,000  | 1,000 |
| 24. Liaison contacts and resources  | 500     | 500     | 500   | 500    | 500   |
| 25. Regularly update contact information for emergency personnel                                | 500     | 500     | 500   | 500    | 500   |
| 26. Exempt staff remuneration during an EMBC task number  |         |         |       |        |       |
| 27. ConnectRocket public emergency notification system  | 3,000   |         |       |        |       |
| 28. Coordinate ACRD and coastal communities to align emergency planning and response procedures |         |         |       |        |       |
| 29. Supplement Reception Centre kits  | 500     | 500     | 500   | 500    | 500   |
| 30. Supplement Group Lodging kits   | 500     | 500     | 500   | 500    | 500   |
| 31. Supplement Rapid Damage Assessment kits   | 500     | 500     | 500   | 500    | 500   |
| 32. Communications templates and brand standards  |         | 2,000   |       |        |       |
| 33. Support personal preparedness in community  | 5,000   | 5,000   | 5,000 | 5,000  | 5,000 |
| 34. Foster community capacity by supporting key organizations                                   |         |         |       |        |       |
| 35. Review current emergency bylaws   |         |         |       |        |       |
| 36. Create a policy for spending and assignment of authority among organizations                |         |         |       |        |       |



| Action   | 2017            | 2018            | 2019            | 2020            | 2021            |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| 37. Adopt new organizational structure   |                 |                 |                 |                 |                 |
| 38. Oversee strengthened communications process in EOC,  |                 | 2,000           | 500             | 500             | 500             |
| 39. In advance of an actual event, develop meeting schedules and agendas for EOC operating periods | 500             | 500             | 500             | 500             | 500             |
| 40. Develop and fine tune strategic communications and media plans                                 | 750             | 750             | 750             | 750             | 750             |
| 41. Develop deeper understanding of amateur radio communications                                   |                 |                 |                 |                 |                 |
| 42. Develop alternatives for field communications  |                 |                 | 2,000           | 2,000           | 2,000           |
| 43. Create improved situational awareness  |                 |                 | 2,000           | 2,000           | 2,000           |
| 44. Plan for the receipt and administration of equipment and supplies                              | 500             | 500             | 500             | 500             | 500             |
| 45. Develop ESS plan for all three levels  |                 |                 |                 |                 |                 |
| 46. Conduct a hazard assessment of the Alberni Valley  | 10,000          |                 |                 |                 |                 |
| 47. Write business continuity plans for ACRD   |                 |                 |                 | 2,000           |                 |
| 48. Partner with the Chamber of Commerce   |                 |                 |                 |                 | 2,000           |
| <b>TOTALS</b>  | <b>\$56,950</b> | <b>\$49,250</b> | <b>\$46,750</b> | <b>\$52,750</b> | <b>\$42,750</b> |



ALBERNI-CLAYOQUOT REGIONAL DISTRICT  
 2017-2021 FINANCIAL PLAN  
 ALBERNI VALLEY EMERGENCY PLANNING  
 PARTICIPANTS: PORT ALBERNI, ELECTORAL AREAS 'B', 'D', 'E', and 'F'

Draft  
 For Discussion

| Line                | History           |                    |  | Budget            |                   |                   |                   |                   | Line |
|---------------------|-------------------|--------------------|--|-------------------|-------------------|-------------------|-------------------|-------------------|------|
|                     | 2016<br>ACTUAL    | 2016<br>PLAN       |  | 2017              | 2018              | 2019              | 2020              | 2021              |      |
| <b>REVENUE</b>      |                   |                    |  |                   |                   |                   |                   |                   |      |
| 1                   | \$ 108,006        | \$ 108,006         | Surplus (deficit) from prior years           | \$ 51,225         | \$ -              | \$ -              | \$ -              | \$ -              | 1    |
| 2                   | 153,894           | 153,894            | Tax requisition                              | 129,275           | 173,600           | 170,700           | 176,800           | 166,900           | 2    |
| 3                   | 4,354             | -                  | EMBC funding - response & recovery           | -                 | -                 | -                 | -                 | -                 | 3    |
| 4                   | 60,000            | 30,000             | Provincial grant - Exercise Coastal Response | -                 | -                 | -                 | -                 | -                 | 4    |
| 5                   | 2,705             | -                  | Other sources                                | -                 | -                 | -                 | -                 | -                 | 5    |
| 6                   | 1,024             | 500                | Grant in lieu of taxes                       | 500               | 500               | 500               | 500               | 500               | 6    |
| 7                   | <b>\$ 329,983</b> | <b>\$ 292,400</b>  | <b>TOTAL REVENUE</b>                         | <b>\$ 181,000</b> | <b>\$ 174,100</b> | <b>\$ 171,200</b> | <b>\$ 177,300</b> | <b>\$ 167,400</b> | 7    |
| <b>EXPENDITURES</b> |                   |                    |  |                   |                   |                   |                   |                   |      |
| 8                   | \$ 17,000         | \$ 17,000          | Administrative charge                        | \$ 26,000         | \$ 26,000         | \$ 26,000         | \$ 26,000         | \$ 26,000         | 8    |
| 9                   | 41,890            | 42,000             | Emergency planning coordinator               | 42,000            | 42,000            | 42,000            | 42,000            | 42,000            | 9    |
| 10                  | 24,266            | 30,000             | Emergency planning costs                     | 67,000            | 60,000            | 57,000            | 63,000            | 53,000            | 10   |
| 11                  | 60,000            | 60,000             | Exercise - Coastal Response costs            | -                 | -                 | -                 | -                 | -                 | 11   |
| 12                  | 4,354             | -                  | Emergency response & recovery                | -                 | -                 | -                 | -                 | -                 | 12   |
| 13                  | 21,667            | 30,000             | ESS capacity building                        | 30,000            | 30,000            | 30,000            | 30,000            | 30,000            | 13   |
| 14                  | 10,000            | 10,000             | Facility rent                                | 10,000            | 10,000            | 10,000            | 10,000            | 10,000            | 14   |
| 15                  | 2,279             | 5,000              | Labour & benefits                            | 6,000             | 6,100             | 6,200             | 6,300             | 6,400             | 15   |
| 16                  | 97,302            | 98,400             | Generator for EOC                            | -                 | -                 | -                 | -                 | -                 | 16   |
| 17                  | <b>\$ 278,758</b> | <b>\$ 292,400</b>  | <b>TOTAL EXPENDITURES</b>                    | <b>\$ 181,000</b> | <b>\$ 174,100</b> | <b>\$ 171,200</b> | <b>\$ 177,300</b> | <b>\$ 167,400</b> | 17   |
| 18                  | \$ 51,225         | \$ -               | <b>FINANCIAL PLAN BALANCE</b>                | \$ -              | \$ -              | \$ -              | \$ -              | \$ -              | 18   |
| 19                  | 108,006           | 108,006            | Deduct: Surplus from previous year           | 51,225            | -                 | -                 | -                 | -                 | 19   |
| 20                  | <b>-\$ 56,781</b> | <b>-\$ 108,006</b> | <b>ANNUAL SURPLUS/(DEFICIT)</b>              | <b>-\$ 51,225</b> | <b>\$ -</b>       | <b>\$ -</b>       | <b>\$ -</b>       | <b>\$ -</b>       | 20   |

(for Financial Reporting purposes)



## REQUEST FOR DECISION

**To:** Alberni Valley Committee

**From:** Teri Fong, CPA, CGA, Manager of Finance  
Andrew McGifford, CPA, CGA, Manager of Environmental Services

**Meeting Date:** February 15, 2017

**Subject:** Alberni Valley Regional Airport 2017-2021 Financial Plan

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### **Recommendation:**

***THAT the Alberni Valley Committee recommend the Alberni Valley Regional Airport proposed budget to be included in the first reading of the 2017-2021 Alberni-Clayoquot Regional District Financial Plan.***

### **Summary:**

It was an incredibly busy and exciting year for the Alberni Valley Regional Airport (AVRA) as the runway extension project was a significant undertaking for the ACRD. The project was halted in the fall due to abnormally wet weather and will be completed as soon as the weather warms up. The project timeline is for substantial completion by April 15, 2017.

During 2016 the ACRD was awarded a grant for up to \$729,215 for the installation of runway lighting at the AVRA. This project has been awarded to a contractor and will commence when the weather cooperates, hopefully near the end of February. The timeline for the project indicates completion in August of this year.

These two projects will consume a significant amount of staff time and resources and will be the main focus of the service this year.

### **Background:**

This budget was developed with input from the Airport Superintendent and Chief Administrative Officer.

### **Time Requirements – Staff & Elected Officials:**

A significant amount of staff time across all departments has been utilized to assist in the runway extension project. It is anticipated that this support will continue to be required in 2017. Other activities that require staff time for this service include lease management, fuel system operations, general airport operations, water system and insurance matters.

### **Financial:**

The residential tax rate is the same as the previous year at \$0.1145 per \$1,000 of assessed value.

### **Policy or Legislation:**

The Port Alberni Airport Extended Service Area Amendment Bylaw No. 791-2, 2015 sets the maximum annual allowable requisition at \$0.1483 per taxable value of land and improvements. The authorization to borrow is provided under Port Alberni Airport Runway Extension Loan Authorization Bylaw No. F1120. The ability to borrow must be within the financial limits in Bylaw No 791-2.

**Disclosure:**

The prior year actual balances may yet change as 2016 invoices are still trickling in and year-end adjustments are still being completed.



Submitted by: \_\_\_\_\_

Teri Fong, CPA, CGA, Manager of Finance



Submitted by: \_\_\_\_\_

Andrew McGifford, CPA, CGA, Manager of Environmental Services



ALBERNI-CLAYOQUOT REGIONAL DISTRICT  
 2017-2021 FINANCIAL PLAN  
 ALBERNI VALLEY REGIONAL AIRPORT  
 PARTICIPANTS: PORT ALBERNI, ELECTORAL AREAS 'B', 'D', 'E', and 'F'

| Line                | History           |                     |   | Budget              |                   |                   |                   |                   | Line |
|---------------------|-------------------|---------------------|---|---------------------|-------------------|-------------------|-------------------|-------------------|------|
|                     | 2016<br>ACTUAL    | 2016<br>PLAN        |   | 2017                | 2018              | 2019              | 2020              | 2021              |      |
| <b>REVENUE</b>      |                   |                     |   |                     |                   |                   |                   |                   |      |
| 1                   | \$ 2,763          | \$ 2,763            | Surplus (deficit) from prior years          | \$ 18,074           | \$ -              | \$ -              | \$ -              | \$ -              | 1    |
| 2                   | 449,987           | 449,987             | Tax requisition                             | 480,426             | 482,600           | 469,500           | 470,400           | 471,300           | 2    |
| 3                   | 62,300            | 1,500,000           | Government and other grants                 | 704,065             | -                 | -                 | -                 | -                 | 3    |
| 4                   | 5,165             | -                   | Grant in lieu of taxes                      | -                   | -                 | -                 | -                 | -                 | 4    |
| 5                   | 52,831            | 50,000              | Fuel sales                                  | 80,000              | 80,000            | 80,000            | 80,000            | 80,000            | 5    |
| 6                   | 32,005            | 28,000              | Leases and other sources                    | 28,000              | 28,000            | 42,000            | 42,000            | 42,000            | 6    |
| 7                   | <b>\$ 605,051</b> | <b>\$ 2,030,750</b> | <b>TOTAL REVENUE</b>                        | <b>\$ 1,310,565</b> | <b>\$ 590,600</b> | <b>\$ 591,500</b> | <b>\$ 592,400</b> | <b>\$ 593,300</b> | 7    |
| <b>EXPENDITURES</b> |                   |                     |   |                     |                   |                   |                   |                   |      |
| 8                   | \$ 15,000         | \$ 15,000           | Administration charge                       | \$ 19,000           | \$ 15,000         | \$ 15,000         | \$ 15,000         | \$ 15,000         | 8    |
| 9                   | 8,091             | -                   | Debt repayment                              | 90,000              | 327,000           | 327,000           | 327,000           | 327,000           | 9    |
| 10                  | 21,712            | 15,000              | Consulting, legal & legislation costs       | 15,000              | 3,000             | 3,000             | 3,000             | 3,000             | 10   |
| 11                  | 47,911            | 42,250              | Fuel system operation                       | 70,000              | 70,000            | 70,000            | 70,000            | 70,000            | 11   |
| 12                  | -                 | 5,000               | GPS maintenance/weather station             | 7,000               | 7,000             | 7,000             | 7,000             | 7,000             | 12   |
| 13                  | 2,799             | 3,500               | Insurance                                   | 3,500               | 3,500             | 3,500             | 3,500             | 3,500             | 13   |
| 14                  | 44,888            | 45,000              | Labour & benefits                           | 67,000              | 38,000            | 38,800            | 39,600            | 40,400            | 14   |
| 15                  | 12,000            | 14,000              | Operation contracts                         | 14,000              | 14,000            | 14,000            | 14,000            | 14,000            | 15   |
| 16                  | 3,298             | 10,000              | Other operating                             | 10,000              | 10,000            | 10,000            | 10,000            | 10,000            | 16   |
| 17                  | 7,357             | 20,000              | Repairs & maintenance                       | 18,000              | 10,000            | 10,000            | 10,000            | 10,000            | 17   |
| 18                  | 2,385             | 1,000               | Travel & accomodation                       | 3,000               | 3,000             | 3,000             | 3,000             | 3,000             | 18   |
| 19                  | 6,495             | 7,000               | Utilities                                   | 7,000               | 7,100             | 7,200             | 7,300             | 7,400             | 19   |
| 20                  | 1,657             | 3,000               | Water system operation                      | 3,000               | 3,000             | 3,000             | 3,000             | 3,000             | 20   |
| 21                  | 413,384           | 1,850,000           | Capital fund contribution                   | 984,065             | 80,000            | 80,000            | 80,000            | 80,000            | 21   |
| 22                  | <b>\$ 586,977</b> | <b>\$ 2,030,750</b> | <b>TOTAL EXPENDITURES</b>                   | <b>\$ 1,310,565</b> | <b>\$ 590,600</b> | <b>\$ 591,500</b> | <b>\$ 592,400</b> | <b>\$ 593,300</b> | 22   |
| 23                  | \$ 18,074         | \$ -                | <b>FINANCIAL PLAN BALANCE</b>               | \$ -                | \$ -              | \$ -              | \$ -              | \$ -              | 23   |
| 24                  | 413,384           | 7,850,000           | Add: Transfer to reserves                   | 984,065             | 80,000            | 80,000            | 80,000            | 80,000            | 24   |
| 25                  |                   | 30,000              | Deduct: Estimated amortization not included | 30,000              | 30,000            | 30,000            | 30,000            | 30,000            | 25   |
| 26                  | 2,763             | 2,763               | Surplus from previous year                  | 18,074              | -                 | -                 | -                 | -                 | 26   |
| 27                  | <b>\$ 410,621</b> | <b>\$ 7,817,237</b> | <b>ANNUAL SURPLUS/(DEFICIT)</b>             | <b>\$ 935,991</b>   | <b>\$ 50,000</b>  | <b>\$ 50,000</b>  | <b>\$ 50,000</b>  | <b>\$ 50,000</b>  | 27   |



ALBERNI-CLAYOQUOT REGIONAL DISTRICT  
 2017-2021 FINANCIAL PLAN  
 ALBERNI VALLEY REGIONAL AIRPORT (continued)  
 PARTICIPANTS: PORT ALBERNI, ELECTORAL AREAS 'B', 'D', 'E', and 'F'

| Line | History                            |                   |                                   | Budget            |                   |                   |                   |                   | Line |
|------|------------------------------------|-------------------|-----------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------|
|      | 2016<br>ACTUAL                     | 2016<br>PLAN      |                                   | 2017              | 2018              | 2019              | 2020              | 2021              |      |
|      | <b>CAPITAL FUND</b>                |                   |                                   |                   |                   |                   |                   |                   |      |
| 28   | \$ 225,842                         | \$ 225,842        | Balance, beginning of year        | \$ 102,179        | \$ 779,949        | \$ 544,849        | \$ 575,049        | \$ 594,449        | 28   |
| 29   | 350,000                            | 350,000           | Contribution from operating fund  | 280,000           | 80,000            | 80,000            | 80,000            | 80,000            | 29   |
| 30   | 3,000,742                          | 6,000,000         | MFA Borrowing                     | 2,999,258         | -                 | -                 | -                 | -                 | 30   |
| 31   | 37,150                             | 1,500,000         | Grants and other contributions    | 704,065           | -                 | -                 | -                 | -                 | 31   |
| 32   | 1,084                              | -                 | Interest earnings                 | -                 | 4,900             | 4,200             | 4,400             | 4,600             | 32   |
| 33   | <i>Less - capital expenditures</i> |                   |                                   |                   |                   |                   |                   |                   | 33   |
| 34   | -                                  | 10,000            | Drainage improvements & ditching  | 10,000            | 5,000             | 5,000             | 5,000             | 5,000             | 34   |
| 35   | -                                  | 6,000             | Equipment shelter                 | 6,000             | 200,000           | -                 | -                 | -                 | 35   |
| 36   | 3,692                              | 30,000            | Fencing & access                  | 30,000            | 50,000            | -                 | 5,000             | -                 | 36   |
| 37   | -                                  | -                 | GPS system                        | 20,000            | -                 | -                 | -                 | 10,000            | 37   |
| 38   | -                                  | 10,000            | Infrastructure                    | 10,000            | 30,000            | 20,000            | 20,000            | 20,000            | 38   |
| 39   | -                                  | 20,000            | Landscaping                       | -                 | 20,000            | -                 | 20,000            | -                 | 39   |
| 40   | -                                  | 8,500             | Line painting & crack sealing     | 8,500             | 5,000             | 5,000             | 5,000             | 5,000             | 40   |
| 41   | 58,994                             | 1,500,000         | Navigational aids*                | 1,141,006         | -                 | -                 | -                 | -                 | 41   |
| 42   | -                                  | 60,000            | Road construction                 | -                 | -                 | -                 | -                 | -                 | 42   |
| 43   | 3,449,953                          | 6,000,000         | Runway extension                  | 2,060,047         | -                 | -                 | -                 | -                 | 43   |
| 44   | -                                  | -                 | Runway extension study and design | -                 | -                 | -                 | -                 | -                 | 44   |
| 45   | -                                  | 5,000             | Signage improvements              | 20,000            | -                 | -                 | -                 | -                 | 45   |
| 46   | -                                  | 1,000             | Sweeper                           | -                 | -                 | 4,000             | -                 | 4,000             | 46   |
| 47   | -                                  | -                 | Tree clearing/brushing*           | -                 | 10,000            | 20,000            | 10,000            | 10,000            | 47   |
| 48   | 3,512,639                          | 7,650,500         | Total capital expenditures        | 3,305,553         | 320,000           | 54,000            | 65,000            | 54,000            | 48   |
| 49   | <b>\$ 102,179</b>                  | <b>\$ 425,342</b> | <b>BALANCE, END OF YEAR</b>       | <b>\$ 779,949</b> | <b>\$ 544,849</b> | <b>\$ 575,049</b> | <b>\$ 594,449</b> | <b>\$ 625,049</b> | 49   |

\*Must be from grant funding or others sources



## REQUEST FOR DECISION

**To:** Alberni Valley Committee  
**From:** Teri Fong, CPA, CGA, Manager of Finance  
**Meeting Date:** February 15, 2017  
**Subject:** Alberni Valley Regional Water Proposed Service 2017-2021 Financial Plan

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### **Recommendation:**

***THAT the Alberni Valley Committee recommend the Alberni Valley Regional Water – proposed service budget be included in the first reading of the 2017-2021 Alberni-Clayoquot Regional District Financial Plan.***

### **Summary:**

The Alberni Valley Regional Water Proposed service is in the initial investigation stage of examining the possibility of developing a water supply from Sproat Lake in order to receive a filtration deferral from Island Health. The supply would potentially provide water to the City of Port Alberni, Beaver Creek and Cherry Creek. McElhanney Engineering have been contracted to assist in this process and are currently finalizing a report regarding the terms of reference for developing the concept and costing. Catalyst have cooperated in this process as the concept is to utilize their works to transfer water from the lake to a treatment facility. The report has been shared with Catalyst and is being edited before presentation to the three water purveyors of the Alberni Valley in a joint meeting during 2017.

The Board of Directors did not identify this proposed service as a high priority for 2017 and therefore the amount of staff time allocated to this project has been reduced for the year. The plan is to begin developing a project budget and identifying the process required to establish the service but not to proceed with any further analysis or water testing. Essentially the plan for 2017 is just to keep the ball rolling.

### **Financial:**

The residential tax rate for 2017 is minimal at \$0.003 per \$1,000 of assessed value.

### **Policy or Legislation:**

This is a proposed service and once the preliminary information is determined, an establishing bylaw will need to be created including receiving appropriate approvals.

### **Disclosure:**

The prior year actual balances may yet change as 2016 invoices are still trickling in and year-end adjustments are still being completed.



Submitted by:

Teri Fong, CPA, CGA, Manager of Finance



Approved by:

Russell Dyson, Chief Administrative Officer





ALBERNI-CLAYOQUOT REGIONAL DISTRICT  
 2017-2021 FINANCIAL PLAN  
 ALBERNI VALLEY REGIONAL WATER - PROPOSED SERVICE  
 PARTICIPANTS: PORT ALBERNI, ELECTORAL AREAS 'E', and 'F'

Draft  
 For Discussion

| Line                | History          |                  |   | Budget            |             |             |             |             | Line |
|---------------------|------------------|------------------|---|-------------------|-------------|-------------|-------------|-------------|------|
|                     | 2016<br>ACTUAL   | 2016<br>PLAN     |   | 2017              | 2018        | 2019        | 2020        | 2021        |      |
| <b>REVENUE</b>      |                  |                  |   |                   |             |             |             |             |      |
| 1                   | \$ 1,822         | \$ 1,822         | Surplus (deficit) from prior years                                    | \$ 11,202         | \$ -        | \$ -        | \$ -        | \$ -        | 1    |
| 2                   | -                | -                | Grants and other contributions  | -                 | -           | -           | -           | -           | 2    |
| 3                   | 42,178           | 42,178           | Tax requisition   | 9,798             | -           | -           | -           | -           | 3    |
| 4                   | -                | -                | Grant in lieu of taxes  | -                 | -           | -           | -           | -           | 4    |
| 5                   | <b>\$ 44,000</b> | <b>\$ 44,000</b> | <b>TOTAL REVENUE</b>  | <b>\$ 21,000</b>  | <b>\$ -</b> | <b>\$ -</b> | <b>\$ -</b> | <b>\$ -</b> | 5    |
| <b>EXPENDITURES</b> |                  |                  |   |                   |             |             |             |             |      |
| 6                   | \$ 15,000        | \$ 15,000        | Administrative charge   | \$ 9,000          | \$ -        | \$ -        | \$ -        | \$ -        | 6    |
| 7                   | -                | -                | Alberni Valley Water Study  | -                 | -           | -           | -           | -           | 7    |
| 8                   | 10,296           | 17,000           | Labour & benefits   | -                 | -           | -           | -           | -           | 8    |
| 9                   | 7,502            | 12,000           | Operating costs   | 12,000            | -           | -           | -           | -           | 9    |
| 10                  | <b>\$ 32,798</b> | <b>\$ 44,000</b> | <b>TOTAL EXPENDITURES</b>   | <b>\$ 21,000</b>  | <b>\$ -</b> | <b>\$ -</b> | <b>\$ -</b> | <b>\$ -</b> | 10   |
| 11                  | \$ 11,202        | \$ -             | <b>FINANCIAL PLAN BALANCE</b>   | \$ -              | \$ -        | \$ -        | \$ -        | \$ -        | 11   |
| 12                  | 1,822            | 1,822            | Deduct: Surplus from previous year                                    | 11,202            | -           | -           | -           | -           | 12   |
| 13                  | <b>\$ 9,380</b>  | <b>\$ 1,822</b>  | <b>ANNUAL SURPLUS/(DEFICIT)</b><br>(for Financial Reporting purposes) | <b>-\$ 11,202</b> | <b>\$ -</b> | <b>\$ -</b> | <b>\$ -</b> | <b>\$ -</b> | 13   |



## REQUEST FOR DECISION

**To:** Alberni Valley Committee

**From:** Teri Fong, CPA, CGA, Manager of Finance

**Meeting Date:** February 15, 2017

**Subject:** Custom Transit Service 2017-2021 Financial Plan

**Recommendation:**

***THAT the Alberni Valley Committee recommend the Custom Transit proposed budget be included in the first reading of the 2017-2021 Alberni-Clayoquot Regional District Financial Plan.***

**Summary:**

The Custom Transit Service is provided by BC Transit who oversees our local operator, Diversified Transportation. The proposed budget is based on the final year of a three-year plan provided by BC Transit. Fuel has been identified by BC Transit as the most volatile component of the operating costs and has been conservatively budgeted by them at \$1.28 per litre.

Due to the commercially confidential information contained in the budget document, the detailed budget provided by BC Transit is subject to protection afforded by the *Freedom of Information and Protection of Privacy Act*. A summary of the information is as follows:

|                           |           |
|---------------------------|-----------|
| Revenues                  | \$35,513  |
| Total Operating Costs     | \$475,928 |
| Total Costs               | \$545,955 |
| Total ACRD Share of Costs | \$165,419 |

**Time Requirements – Staff & Elected Officials:**

A minimal amount of staff time is spent on this service each year reviewing the budget documentation provided by BC Transit and entering into the annual operating agreement with BC Transit and Diversified Transportation.

**Financial:**

The 2017 residential tax rate is \$0.044 per \$1,000 of assessed value. This is a slight increase from the 2016 rate of \$0.042 per \$1,000.

Submitted by: \_\_\_\_\_  
Teri Fong, CPA, CGA, Manager of Finance



ALBERNI-CLAYOQUOT REGIONAL DISTRICT  
 2017-2021 FINANCIAL PLAN  
 CUSTOM TRANSIT  
 PARTICIPANTS: PORT ALBERNI, ELECTORAL AREAS 'B', 'D', 'E', and 'F'

| Line                | History           |                   |   | Budget            |                   |                   |                   |                   | Line |
|---------------------|-------------------|-------------------|---|-------------------|-------------------|-------------------|-------------------|-------------------|------|
|                     | 2016<br>ACTUAL    | 2016<br>PLAN      |   | 2017              | 2018              | 2019              | 2020              | 2021              |      |
| <b>REVENUE</b>      |                   |                   |   |                   |                   |                   |                   |                   |      |
| 1                   | \$ 31,896         | \$ 31,896         | Surplus (deficit) from prior years                                    | \$ 14,974         | \$ -              | \$ -              | \$ -              | \$ -              | 1    |
| 2                   | 162,104           | 162,104           | Tax requisition   | 186,026           | 205,700           | 210,500           | 215,400           | 220,400           | 2    |
| 3                   | 1,079             | 1,000             | Grant in lieu of taxes  | 1,000             | 1,000             | 1,000             | 1,000             | 1,000             | 3    |
| 4                   | 32,412            | 35,000            | Sales of services   | 35,000            | 35,000            | 35,000            | 35,000            | 35,000            | 4    |
| 5                   | 257,364           | 325,000           | Provincial Government grant   | 310,000           | 316,200           | 322,500           | 329,000           | 335,600           | 5    |
| 6                   | <b>\$ 484,855</b> | <b>\$ 555,000</b> | <b>TOTAL REVENUE</b>  | <b>\$ 547,000</b> | <b>\$ 557,900</b> | <b>\$ 569,000</b> | <b>\$ 580,400</b> | <b>\$ 592,000</b> | 6    |
| <b>EXPENDITURES</b> |                   |                   |   |                   |                   |                   |                   |                   |      |
| 7                   | \$ 1,000          | \$ 1,000          | Administrative charge   | \$ 1,000          | \$ 1,000          | \$ 1,000          | \$ 1,000          | \$ 1,000          | 7    |
| 8                   | 468,881           | 554,000           | Operating costs   | 546,000           | 556,900           | 568,000           | 579,400           | 591,000           | 8    |
| 9                   | <b>\$ 469,881</b> | <b>\$ 555,000</b> | <b>TOTAL EXPENDITURES</b>   | <b>\$ 547,000</b> | <b>\$ 557,900</b> | <b>\$ 569,000</b> | <b>\$ 580,400</b> | <b>\$ 592,000</b> | 9    |
| 10                  | \$ 14,974         | \$ -              | <b>FINANCIAL PLAN BALANCE</b>   | \$ -              | \$ -              | \$ -              | \$ -              | \$ -              | 10   |
| 11                  | 31,896            | 31,896            | Deduct: Surplus from previous year                                    | 14,974            | -                 | -                 | -                 | -                 | 11   |
| 12                  | <b>-\$ 16,922</b> | <b>-\$ 31,896</b> | <b>ANNUAL SURPLUS/(DEFICIT)</b><br>(for Financial Reporting purposes) | <b>-\$ 14,974</b> | <b>\$ -</b>       | <b>\$ -</b>       | <b>\$ -</b>       | <b>\$ -</b>       | 12   |



## REQUEST FOR DECISION

**To:** Alberni Valley Committee

**From:** Teri Fong, CPA, CGA, Manager of Finance  
Andrew McGifford, CPA, CGA, Manager of Environmental Services

**Meeting Date:** February 15, 2017

**Subject:** Sproat Lake Marine Patrol 2017-2021 Financial Plan

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### Recommendation:

***THAT the Alberni Valley Committee recommend the Sproat Lake Marine Patrol proposed budget be included in the first reading of the 2017-2021 Alberni-Clayoquot Regional District Financial Plan.***

### 2016 Highlights:

Some of the highlights of the 2016 SLMP season include:

- Received an extremely great deal on a second hand boat from the Alberni Valley Rescue Squad to replace the zodiac that was well beyond its useful life
- Provided Boating Safety Education to 450 students
- Provided assistance to many boaters in launching their boats at the Sproat Lake Provincial Park
- Assisted boaters by providing 15 jump starts and 5 boat tows
- Loaned out over 65 life jackets
- Performed 45 Pleasure Craft Courtesy Checks on boats
- Assisted at the Sproat Lake Boat Regatta
- Located and inspected abandoned docks on the lake
- Assisted a photographer for the Hawaii Mars
- Performed weekly water temperature and clarity testing
- Transport Canada provided a grant of \$22,675 to support the program

### Upcoming for 2017:

The Transport Canada grant that has been received for the past three years to support this service and expired in 2016. Staff have applied for an additional three-year grant but will not be advised as to whether we are successful until after the budget is adopted. Therefore, a grant has not been included in the proposed budget and the service will require a tax requisition to support its operations this year. As a result of the tax limit on the establishing bylaw the school program component of the service has been removed for 2017. If the grant is successful the budget could be amended to reflect the increased revenue and increase the hours of the SLMP staff to deliver the education portion.

The new SLMP boat was a great addition to the service in 2016. Due to the increased size of the boat it is recommended that a new motor is purchased to better power the vessel. Therefore, \$20,000 has been budgeted for 2017 to purchase a second hand motor. Staff will look at the best option and ensure best value for money when selecting a new motor.

**Time Requirements – Staff & Elected Officials:**

Each summer 4 SLMP members are hired to perform the duties of the marine patrol service as described in the 2016 highlights.

Other staff time is required each year to hire the patrol members and supervise their activities. Additional time is necessary to prepare and maintain the boat. Finally, staff time is utilized to apply for and administer the Transport Canada grant.

**Financial:**

The 2017 residential tax rate is \$0.0077 per \$1,000 of assessed value. There was no tax requisition required in 2016 and therefore this is a significant increase. If the Transport Canada grant is received this requisition will provide funding for a couple of years.

**Policy or Legislation:**

The Sproat Lake Marine Patrol service was established in 2014 with bylaw E1057.

**Disclosure:**

The prior year actual balances may yet change as 2016 invoices are still trickling in and year-end adjustments are still being completed.



Submitted by: \_\_\_\_\_

Teri Fong, CPA, CGA, Manager of Finance



Submitted by: \_\_\_\_\_

Andrew McGifford, CPA, CGA, Manager of Environmental Services



ALBERNI-CLAYOQUOT REGIONAL DISTRICT  
 2017-2021 FINANCIAL PLAN  
 SPROAT LAKE MARINE PATROL  
 PARTICIPANTS: PORT ALBERNI, ELECTORAL AREAS 'B', 'D', 'E', and 'F'

Draft  
 For Discussion

| Line                | History           |                   |   | Budget           |                  |                  |                  |                  | Line |
|---------------------|-------------------|-------------------|---|------------------|------------------|------------------|------------------|------------------|------|
|                     | 2016<br>ACTUAL    | 2016<br>PLAN      |   | 2017             | 2018             | 2019             | 2020             | 2021             |      |
| <b>REVENUE</b>      |                   |                   |   |                  |                  |                  |                  |                  |      |
| 1                   | \$ 14,130         | \$ 14,130         | Surplus (deficit) from prior years                                    | \$ 749           | \$ -             | \$ -             | \$ -             | \$ -             | 1    |
| 2                   | -                 | -                 | Tax requisition   | 32,251           | 33,000           | 33,000           | 33,000           | 33,001           | 2    |
| 3                   | 22,675            | 22,370            | Government grants   | -                | -                | -                | -                | -                | 3    |
| 4                   | 1,055             | -                 | Other revenue   | -                | -                | -                | -                | -                | 4    |
| 5                   | <b>\$ 37,860</b>  | <b>\$ -</b>       | <b>TOTAL REVENUE</b>  | <b>\$ 33,000</b> | <b>\$ 33,000</b> | <b>\$ 33,000</b> | <b>\$ 33,000</b> | <b>\$ 33,001</b> | 5    |
| <b>EXPENDITURES</b> |                   |                   |   |                  |                  |                  |                  |                  |      |
| 6                   | \$ 500            | \$ 500            | Administrative charge   | \$ 3,000         | \$ 3,000         | \$ 3,000         | \$ 3,000         | \$ 3,000         | 6    |
| 7                   | 3,071             | 3,000             | Boat operations   | 3,000            | 3,000            | 3,000            | 3,000            | 3,000            | 7    |
| 8                   | 1,055             | -                 | Capital fund contribution   | -                | 1,000            | 1,000            | 1,000            | 1,000            | 8    |
| 9                   | 27,703            | 28,000            | Labour & benefits   | 23,000           | 22,000           | 22,000           | 22,000           | 22,000           | 9    |
| 10                  | 4,782             | 5,000             | Other operating costs   | 4,000            | 4,000            | 4,000            | 4,000            | 4,000            | 10   |
| 11                  | <b>\$ 37,111</b>  | <b>\$ 36,500</b>  | <b>TOTAL EXPENDITURES</b>   | <b>\$ 33,000</b> | <b>\$ 33,000</b> | <b>\$ 33,000</b> | <b>\$ 33,000</b> | <b>\$ 33,000</b> | 11   |
| 12                  | \$ 749            | \$ -              | <b>FINANCIAL PLAN BALANCE</b>   | \$ -             | \$ -             | \$ -             | \$ -             | \$ 1             | 12   |
| 13                  | 1,055             | -                 | Add: Transfer to reserves   | -                | 1,000            | 1,000            | 1,000            | 1,000            | 13   |
| 14                  | 14,130            | 14,130            | Deduct: Surplus from previous year                                    | 749              | -                | -                | -                | -                | 14   |
| 15                  | <b>-\$ 12,326</b> | <b>-\$ 14,130</b> | <b>ANNUAL SURPLUS/(DEFICIT)</b><br>(for Financial Reporting purposes) | <b>-\$ 749</b>   | <b>\$ 1,000</b>  | <b>\$ 1,000</b>  | <b>\$ 1,000</b>  | <b>\$ 1,001</b>  | 15   |
| <b>CAPITAL FUND</b> |                   |                   |   |                  |                  |                  |                  |                  |      |
| 16                  |                   |                   |   |                  |                  |                  |                  |                  |      |
| 17                  | \$ 30,000         | \$ 30,000         | Balance, beginning of year  | \$ 23,735        | \$ 3,735         | \$ 4,735         | \$ 5,735         | \$ 6,735         | 17   |
| 18                  | 1,004             | -                 | Contribution from operating fund                                      | -                | 1,000            | 1,000            | 1,000            | 1,000            | 18   |
| 19                  | 51                | -                 | Interest earnings   | -                | -                | -                | -                | 100              | 19   |
| 20                  |                   |                   | <i>Less - capital expenditures</i>                                    |                  |                  |                  |                  |                  | 20   |
| 21                  | 7,320             | 20,000            | Patrol boat   | 20,000           | -                | -                | -                | -                | 21   |
| 22                  | 7,320             | 20,000            | Total capital expenditures  | 20,000           | -                | -                | -                | -                | 22   |
| 23                  | <b>\$ 23,735</b>  | <b>\$ 10,000</b>  | <b>BALANCE, END OF YEAR</b>   | <b>\$ 3,735</b>  | <b>\$ 4,735</b>  | <b>\$ 5,735</b>  | <b>\$ 6,735</b>  | <b>\$ 7,835</b>  | 23   |

Grant-in-Aid  
Application Form



|  |               |
|--|---------------|
| Name of Organization: <u>ALBERNI VALLEY HOSPICE SOCIETY</u>          |               |
| Mailing Address: <u>3088 3RD AVE, PORT ALBERNI, B.C.<br/>V9Y 2A5</u> |               |
| Contact Name: <u>GRACHEW CARLSON</u>                                 | Phone Number: |
| Email Address: <u>GRACHEW@ALBERNIHOSPICE.CA</u>                      |               |

|  |   |   |
|--|---|---|
| Grant Requested:<br><u>IN KIND REQUESTS.</u> | <input type="checkbox"/> Grant Assistance | <input checked="" type="checkbox"/> In-Kind Assistance  |
|  | Amount \$ _____                           | Details: <u>* 4 BIG TENTS * GARBAGE PICK-UP</u><br><u>* PORTA POTTY'S</u><br><u>* TRAFFIC BARRERS</u> |

- Is your organization non-profit?  yes  no
- Is your organization a registered non-profit society in BC  yes  no

If yes, please provide your Society Registration Number: 5-54106

3. Please describe the services and benefits that your organization provides to the Alberni-Clayoquot Region:

AVHS PROVIDES END OF LIFE SERVICES TO THE VALLEY AND BEYOND.

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4. Which of the following areas in the Alberni-Clayoquot Region receive a benefit from the services your organization provides:
- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Entire Regional District          | <input checked="" type="checkbox"/> City of Port Alberni              |
| <input type="checkbox"/> District of Tofino                           | <input type="checkbox"/> District of Ucluelet                         |
| <input checked="" type="checkbox"/> Electoral Area "A" (Bamfield)     | <input checked="" type="checkbox"/> Electoral Area "B" (Beaufort)     |
| <input type="checkbox"/> Electoral Area "C" (Long Beach)              | <input checked="" type="checkbox"/> Electoral Area "D" (Sproat Lake)  |
| <input checked="" type="checkbox"/> Electoral Area "E" (Beaver Creek) | <input checked="" type="checkbox"/> Electoral Area "F" (Cherry Creek) |

5. Please describe how the services provided by your organization fill a need in the community:

AVAS IS ABLE TO PROVIDE OUR REGION WITH THE ONLY SPECIALIZED END OF LIFE SERVICES AVAILABLE FREE OF CHARGE. WE PROVIDE COUNSELLING, SUPPORT GROUPS, EDUCATION, INTEGRATIVE HEALTH SERVICES, END OF LIFE BEDS AND MANY OTHER END OF LIFE SUPPORTS.

6. Please list all other grants received and/or applied for from other Governments or Service Organizations:

WE HAVE APPLIED FOR THE COMMUNITY GAMING GRANT AS WELL AS A WELLNESS GRANT THAT WE HAVE NEVER APPLIED FOR IN THE PAST.

7. Has your organization received a Grant-in-Aid in the past from the Regional District?

yes     no

If yes, complete the following:

Year: 2016    Amount: 1500  
 Year: 2015    Amount: 1500

8. Please include with your application, copies of the following:

- (a) **Annual Report;**
- (b) **A copy of your organizations current year budget and latest financial statement;**
- (c) **A brief report outlining what the Grant-in-Aid would be used for.**

6. Submit your completed Grant-in-Aid Application, including the above documentation to:

**Corporate Secretary  
 Alberni-Clayoquot Regional District  
 3008 Fifth Avenue  
 Port Alberni, BC V9Y 2E3**

The **Deadline** to Submit Grant-in-Aid Applications is **January 31<sup>st</sup>** of each year.

Late applications will not be accepted and returned to the applicant.

If you have any questions regarding this application or the information required, please call (250) 720-2700.

  
 Signature of Applicant

Dec 8, 2016  
 Date

| For Office Use Only |                |                      |
|---------------------|----------------|----------------------|
| Amount Awarded:     | Date Approved: | Participating Areas: |



8 c) THIS IN KIND DONATION  
 WOULD BE VERY APPRECIATED BY  
 AUNHS. WE HAVE A COMMUNITY  
 EVENT PLANNED FOR JUNE 17<sup>TH</sup>, 2017  
 THE BUTTERFLY RELEASE WAS  
 A REALLY FUN EVENT THAT HAD  
 A NUMBER OF FUN INTERACTING  
 COMPONENTS ... ARTS, CRAFTS, SCIENCE,  
 NATIVE PLANTS, SPIRITUAL & CULTURAL  
 ASPECTS OF THE BUTTERFLY TRANSFORMATION  
 WITH FIRST NATIONS, LIFE CYCLE, FOOD,  
 FACE PAINTING, MUSIC, DANCERS ...  
 THIS YEARS EVENT WILL BE EVEN  
 BIGGER SO WE NEED TO BE  
 PREPARED WITH TENTS, BARRIERS, GARBAGE  
 REMOVAL, BATHROOMS, & FIRST-AID.

THANK YOU



Good Morning from Alberni Valley Hospice Society,

Feb 9<sup>th</sup>, 2017

I apologize for the confusion around our application sent in to ACRD. Being fairly new in this role I have missed an important deadline and now trying my best to utilize the application that is in already.

The application holds a number of requests all around a community event that we are putting on this summer. The event will take place in June hopefully at the canal beach. We are just waiting to hear back from the city to confirm that the Canal Beach will have grass and be ready to go. The event is one of great energy that will embrace our community with love. The Butterfly Effect is an opportunity to remember those we have lost but also a celebration of transformation. We held this event last year and it was an overwhelming successes. In order for us to be able to put this on again we need some help in the form of materials. Tents are the number one cost involved but I have priced the other items out as well.

Tents from city are \$370 each but alas they are all reserved so Fantastic Events is able to supply three sizable tents for the event at \$650 each and that includes set up and take down.

|                          |        |
|--------------------------|--------|
| \$650 times three        | \$1950 |
| 10 Large fold out tables | \$200  |
| 100 Chairs               | \$300  |
| Porta Potties are \$150  | \$300  |
| Traffic Barriers         | \$500  |
| Extra Garbage Bins       | \$150  |

Generators (it would be so beneficial if we had our own to use for events like this and moving forward)

\$1500

Total amount request for the event is **\$4900**

WE are also creating a community party in the Rotary Arts District including live music, art stations, food, First nations Elder blessing the ceremony, vendors and the main attraction is a butterfly chainsaw carved butterfly bench. I would like to request the same supplies for this big community party.

Total for each event would be \$4900

Total amount requested from the ACRD is \$9800

Thank you so much for your support around these community events and public assets.

Bless You,

Gretchen Carlson

Executive Director AVHS

t



## MEMORANDUM

**To:** Alberni Valley and Bamfield Services Committee

**From:** Andrew McGifford, CPA, CGA, Manager of Environmental Services

**Meeting Date:** February 15, 2017

**Subject:** Alberni Valley Landfill – Annual reports 2014 & 2015

### Summary:

These reports are provided to the Alberni Valley and Bamfield Services Committee for your information.

The Alberni-Clayoquot Regional District (ACRD) operates the Alberni Valley Landfill (AVLF) under Operational Certificate MR-00524. The *Landfill criteria for Municipal Solid Waste* and the *Guidelines for Environmental Monitoring at Municipal Solid Waste Landfills* require that the reports completed annually to ensure a monitoring program is conducted in accordance with the monitoring guidelines and best practices are being followed for landfilling in British Columbia. The landfill engineer and water monitoring engineers have prepared the reports and have been submitted to the Ministry of Environment. The ACRD will share these reports with the Tseshaht First Nation.

The report must include:

- 1) An executive summary;
- 2) Tonnage of each type of waste discharged to the landfill for the year;
- 3) Remaining life and capacity;
- 4) Review of the preceding year of operation, plans for the next year and any new information of proposed changes relating to the facilities and plans;
- 5) Comparison of the monitoring data with the performance criteria in section 4 of the *Landfill Criteria for Municipal, Solid Waste Landfills*, interpretation trends, recommendations, and any proposed changes to the monitoring

The AVLF has been in operation since 1975 and with the future expansion to the southeast section is estimated to reach capacity in 2090 (per 2015 annual report). This capacity year will increase over time with diversion.

The reports are located on the ACRD website for review and available to the public the links are:

[2014 Annual AVLF report](#)

[2015 Annual AVLF report](#)

Submitted by: \_\_\_\_\_  
Andrew McGifford, CPA, CGA, Manager of Environmental Services



# CITY OF PORT ALBERNI

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## ECONOMIC DEVELOPMENT MANAGER REPORT

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TO: ACRD West Coast Committee  
ACRD Alberni Valley Committee  
Long Beach Airport Advisory Committee

FROM: Pat Deakin, City of Port Alberni Economic Development Manager

DATE: January 27, 2017

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**SUBJECT: STRATEGIC PLANNING for ACRD AIRPORTS**

Background:

For each of the last seven years, the City of Port Alberni's Economic Development Manager (EDM) has appeared before the Alberni-Clayoquot Regional District Board to make a request for a grant in aid of economic development work that benefits the ACRD.

The amount of the grant in aid in 2016 was \$28,833. The City's EDM invested that in work related to the Alberni Valley Regional Airport, the agriculture and aquaculture sectors, regional tourism destination development strategic planning, business retention and attraction and paid for workshops that are now being delivered on the West Coast by Innovation Island.

At the Regional District's Committee of the Whole Meeting on January 25, 2017, the EDM suggested that, in 2017, the ACRD invest all economic development funding that might be forthcoming in an Airport Strategic Development Plan for the Long Beach and Alberni Valley airports AND contract a specific company, Explorer Solutions, to do that work. A Phase 1 Service Offer from that company is attached.

*After considerable discussion, the Committee of the Whole passed a resolution to refer the proposal for the development of an Airport Strategic Development Plan for the AVRA and LBA to the Alberni Valley Committee, West Coast Committee and Long Beach Airport Advisory Committee for consideration and report back to the ACRD Board of Directors with input/recommendations.*

Discussion:

My rationale for suggesting that this be the Regional District's 2017 economic development focus is threefold:

1. The ACRD will have invested a total minimum of \$12.5 million in the airports within a very short period of time and should look to maximize the Return on Investment.
2. Airports are essential to a community's economic well-being and the competition among airports for attracting aerospace businesses is becoming increasingly stiff; in other words, I believe time is of the essence.
3. The 2005 InterVISTAS Strategic Business Plan for the two airports is dated.

My rationale for recommending Explorer Solutions is:

1. Their new VP of Airports was an InterVISTAS employee, knows our communities and has done a business plan for two prior Alberni Valley Regional Airport grant applications.



## CITY OF PORT ALBERNI

2. Of the many consulting groups I have become familiar with in my years in the economic development field, this one has the most unique approach I have seen and seems to be having a great deal of success with that

The Committee of the Whole has many reservations about the suggestion including but not limited to:

1. Their experience with hundreds of consulting groups who rarely deliver exceptionally good products
2. Their contention that, as a community, we are totally capable of identifying what we want at each airport and landing it (no pun intended) with a budget less than what the consultants would charge
3. The cost of the work with this group is significant; Phase 1 alone would be about \$85,000 and the group normally takes an airport through a 3-phased process (phases 2 and 3 are less expensive)
4. \$85,000 is more than three times greater than they have invested in the economic development function in any one year over the last ten years
5. The cost exceeds local sole-source guidelines and the inter-provincial TILMA accord
6. No significant regional effort has been made to tap the interests, ideas, expertise and connections that some of our residents might have in the aerospace and air transportation industries
7. Our airports may not be amenable to the cluster approach that Explorer Solutions takes; accordingly we should only consider a contract after they have done an assessment of both airports and are certain they could do what they claim they can achieve.

With respect to costs, it was acknowledged a strategic plan would likely be eligible for some matching funding from elsewhere. As I was writing this report, the head of economic development for one of the Nuu-Chah-Nulth First Nations contacted me to ask if the time was right for a conversation about air transportation service to and from Port Alberni and the Barkley Sound and the potential in the aerospace industry. This would seem to support the Committee of the Whole's contention that the time may be right for a broader community conversation about our airports and efforts to attract businesses to them.

### Some Options for Consideration by the 3 ACRD Committees This Has Been Referred To:

- A. Begin discussions with Explorer Solutions about a strategic plan for both airports
- B. Issue an RFP for a strategic plan for both airports
- C. Consult the community about airport and aerospace development
- D. Continue the approach to development that both airports are currently taking

As mentioned earlier, your input and recommendations to the ACRD Board are desired.

Pat Deakin, Economic Development Manager

# **Service Offer Airport Strategic Positioning Initiative Phase 1**

## **Alberni Valley Regional Airport (YPB) and Tofino-Long Beach Airport (YAZ)**

**January 25<sup>th</sup>, 2017**



### **Notice of confidentiality**

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The recipient also promises not to use, modify, translate, adapt, convert or exploit the content of the present service offer, and not to permit access to competitors of Explorer Solutions, without written consent from Explorer Solutions.

2000-1066 West Hastings Street  
Vancouver, BC V6E 3X2



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# 1. Introduction and company overview

Explorer Solutions Inc. is a team of consultants specialized in airport planning & development, economic development and aviation & aerospace. We are pleased to have the opportunity to present our Phase 1 Airport Strategic Positioning Initiative services and solutions to the Alberni Valley Regional Airport (YPB) and Tofino-Long Beach Airport (YAZ) (the client).

For this project, we have assembled a team of experienced senior consultants with core competencies in economic development, airports, aerospace and aviation. This team will be supported by strong analysts and dedicated administrative personnel. Our expert consultants are very dedicated, and provide quality professional work in line with requirements, and can input their vision and strategic analysis to enhance the final product. Explorer Solutions has more than 150 years of combined experience in management and consulting services to airports and aerospace manufacturers.

Explorer Solutions was created in 1995, with two offices; one located in Montreal (Canada), the other in Toulouse (France). In 2009, we opened a US company “Explorer Solutions Inc.,” today headquartered in Plattsburg (NY). We have also added an office in Peterborough (ON) and Vancouver (BC). Explorer Solutions offers a range of consulting services tailored to meet your requirements. The added value of our services stems from our ability to develop and deliver real solutions adapted to your reality and objectives.

From our various mandates, we are in constant contact with a host of small to large aerospace manufacturers and services providers, aviation-related companies, as well as airports.

Our work is based upon business models that are viable, enduring, and profitable for our clients. We have built our reputation on the value and scope of our ideas and deliverables, as well as on the depth of our involvement. Not only will we provide you with the highest quality work, but we will present the results in a useable and easily understandable format. You will benefit from a series of down to earth business solutions that can be developed and implemented in the short term.

Over the years, Explorer Solutions has developed a unique methodology to improve and accelerate economic development, investment attraction and supply chain development at airports and within communities. We have branded this strategy our “Airport Strategic Positioning Initiative.” This methodology is presently being used to develop airparks and aerospace clusters at various airports in North America.

Our methodology covers the research and identification of aerospace niche projects and clusters that match airport and regional assets and infrastructure, recruitment of companies and investors interested in joining the cluster, and the development of marketing activities such as web site and marketing tool preparation as well as business development activities to help launch the cluster.



## Award

In 2012, Explorer Solutions and its client, the “Upper Michigan Green Aviation Coalition” (UMGAC) were recognized by the International Economic Development Council (IEDC) during its Annual Conference Awards Ceremony. Under the leadership of senior partner Christian Perreault, Explorer Solutions was instrumental in the formation of UMGAC, a regional aerospace cluster that has joined industry partners to develop the green aviation supply chain in Michigan’s Upper Peninsula.

During the same ceremony, UMGAC and Explorer Solutions received two awards. First a Silver Award for the creation of the cluster under the “Regionalism and Cross-border Collaboration category” - Population 200,000-500,000, and a Gold Award for the “Michigan Green Aviation Conference Series” in the “Special Event category” - Population 200,000-500,000. The conference series hosted guest speakers from Boeing, Bombardier, Lockheed Martin, Northrup Grumman, Academia and a host of Tier 1 and Tier 2 companies. The conference was instrumental in developing business ties and contracts between Upper Peninsula companies and aerospace Tier-1 and OEMs.

## Cluster development

Over the last ten years, our firm has been involved with the development of multiple aerospace and aviation clusters at local, regional and international airports. Explorer Solutions has been involved with clusters linked to aircraft maintenance (turbo prop, narrow body, wide-body), aircraft refinishing and interior manufacturing, aircraft dismantling & recycling, unmanned aerial systems, aircraft management, light weighting of military aircraft and ground vehicles, airport security, automation of airport ground handling services, green aircraft manufacturing and numerous others (see “Among our clients” section 6).

## Aerospace manufacturing

Our firm also provides direct services and is closely networked with aerospace manufacturers throughout North America and Europe. We provide these manufacturers with business Intelligence & Networking services as well as business strategies and market development. Our team supports building the right relationships (identification of suppliers), business development and marketing, bid and proposal writing and coaching, contract negotiation and senior management coaching.

For Explorer Solutions,



Christian Perreault  
Senior Partner

Date: January 25<sup>th</sup>, 2017



Sound advice, Real solutions

## 2. Our Vision

Explorer Solutions has been helping airport authorities create strategic positioning, niche industrial clusters and value added concepts for over 10 years. With airports in almost every provinces and US state trying to develop airparks and aviation related clusters, competition is fierce. Most airport and economic development executives are targeting the same companies and programs such as business aviation, MRO activities, cargo & logistics, defense programs and large manufacturers. To attract major aerospace and aviation industries, airport authorities need to create a strategic environment (facilities, incentives, R&D labs, networks) and work on targeted industry sub-sectors.

At Explorer Solutions, we have developed a unique expertise and methodology to address such mandates and objectives. We can access an international network of contacts and provide you with strategic business intelligence. We can create innovative niche clusters and airparks fostering business development strategies and attracting investors. We have teams of aerospace engineers, risk and finance managers and expert consultants who follow the daily developments in the aerospace/aviation industry and provide us with up-to-the-minute targeted and strategic business information and knowledge.

We feel our team is perfectly suited for this mandate. We fully understand the process and the methodology, and we have travelled down similar paths many times over the past ten years.

## 3. Scope of work

To reach and meet the objectives of this mandate, we suggest using Phase 1 of our Airport Strategic Positioning Initiative methodology. Phase 1 will focus on identifying potential, targeted and validated niche clusters, matching the strengths and weaknesses of YAZ-YPB, Vancouver Island and British Columbia. Multiple steps will lead to the identification of three such clusters; other steps will help Airport leaders to choose the most promising niche cluster. We will also validate the niche cluster with industry and academia to support the choice of the committee.

To achieve this phase, Explorer Solutions will devote its resources, and make use of its international network of aerospace contacts, in-depth research capabilities, cluster development skills and experience. More precisely, we will undertake the following tasks:

Our Phase 1 work is divided into (3) three main groups of activities. Each group will generate key deliverables and meetings with the client.

### 3.1. Group 1 - Research and identify innovative sustainable aerospace, aviation and defense concepts and niche projects.

3.1.1 The mandate will begin with a kick-off meeting with the client. The purpose for this first meeting is to discuss and ensure that both the client and Explorer Solutions fully understand the objectives of the mission, as well as the scope of the information and documents to be provided. We will also discuss the nature of the documents and tasks we will require from the client. The meeting will enable us to gain a better understanding of the strategic and political issues surrounding the airport/region, as well as to obtain additional relevant information.

3.1.2 Review strengths, weaknesses, opportunities and threats (SWOT) of YAZ-YPB and the region (this part of the mandate will be completed through interviews with pre-identified individuals and corporations, but also by reviewing/reading existing studies, reports and strategic plans prepared for either the airports, the local/regional economic development offices, labor organizations and/or the province of BC. Our review will be completed by web research.

3.1.3 We will organize a minimum of (2) two focus groups and (25-30) twenty-five to thirty private (one-on-one) interviews with local industry leaders, strategic partners (economic development agencies, venture capital, state or federal agencies), as well as with the airport and community leaders (these numbers can be increased if more people/companies need to be involved). The purpose of these focus groups and interviews is to help identify local and regional strategic activities, regional clusters and major economic assets.

3.1.4 Through our international network of contacts, we will research and validate world market trends, niche clusters and opportunities that match our analysis of the SWOT identified within the community, and at the airport. We will also consider niche clusters that are viable with current airport facilities, infrastructure and assets.

3.1.5 From the work already undertaken, we will identify and recommend three niche clusters. For each of these niche clusters, we will conduct a market analysis of each niche cluster offering background information to the client on why this niche cluster would have a chance to grow and succeed within the region and how it could impact local/regional companies. We will consider other clusters located in the province and region in an effort to not duplicate other existing clusters.

3.1.6 Our team will prepare a preliminary report (PowerPoint presentation) based on the (3) three niche clusters previously chosen and offering the best growth potential for the airports and the community.

**Note:** As discussed both Airports (YAZ-YPB) are considered to be one client. Our team will provide three niche clusters total not three per airport.

## **3.2 Group 2 - Presentation and selection of niche clusters**

3.2.1 We will organize a draft report presentation meeting with our client to introduce the results. The presentation will include the (3) three niche clusters, the market analysis of each niche cluster, and the framework for the development of each cluster including the objectives of each, the assets and added value activities to the client and local companies, for the airports and communities, the targeted clientele and market of each cluster, as well as the proposed legal and business models.

3.2.2 We will help the client study the niche clusters through guidance and follow-up information. In the end, we will ask our client to list the (3) three niche clusters in order of preference.

### 3.3 Group 3 - Validation of the chosen niche cluster

3.3.1 Our team will perform a validation of the selected cluster with aerospace, aviation and defense industry leaders and strategic partners, at the provincial, national and international levels. Through meetings and conference calls held with at least (20) twenty pre-defined aerospace companies and/or strategic partners, we will introduce the niche cluster, and discuss with them the concept and assess their interest to follow and become involved with the development cluster.

3.3.2 We will collect the comments received from the companies and include them in the final version of the Phase 1 report. This final report will be presented and discussed with the client.

## 4. Phase 1 Deliverables, Milestones and work process

- a) Explorer Solutions will provide agendas and minutes for all meetings
- b) Our team will prepare for the launch meeting, a list of potential invitees and targeted executives for the focus groups and one-on-one interviews. This list will be discussed and validated with the client.
- c) The client will provide support toward the identification of companies to be invited to the focus groups and one-on-one meetings.
- d) The client will have the choice of sending the invitation letters or our team can do it.
- e) Explorer Solutions will provide a draft invitation letter for the focus groups to be discussed and validated by the client.
- f) Explorer Solutions will present a preliminary benchmarking report for discussion on week 7 plus a summary of the comments and ideas coming out of the focus groups and interviews.
- g) Our team will present a preliminary report with market analysis of (3) three identified niche clusters around week 12 of the work schedule, also including the final benchmarking report.
- h) Explorer Solutions will present a final report on/around Week 16 of the work schedule.

Four meetings between Explorer Solutions and the client are scheduled during Phase 1:

| Activities                                | Location                                  | Date    |
|---|---|---------|
| Kick-off meeting                          | At the client's office                    | Week 2  |
| Focus groups and one-on-one interviews    | At the Airport and visiting the companies | Week 7  |
| Update meeting 1 with the client          | At the client's office                    | Week 7  |
| Draft Report Phase 1 Presentation meeting | At the client's office                    | Week 12 |
| Final Report Phase 1 meeting              | At the client's office                    | Week 16 |

## 5. Among our clients

The following are cluster projects we have worked on over the last few years in the US, Canada and Europe.

### Clermont-Ferrand Airport (Auvergne Economic Development Agency (France))

Cluster name: AIRSET

**Cluster focus:** Aircraft Asset Management and Maintenance

**Targeted clientele:** Business jet and Regional jet owners

**Contact:** Ms Sarah Chatellier

**Phone:** 33 0 4 73 31 84 42

Duration of mandate: 2004 – 2006



Details:

The Agency was seeking help to attract investment to the airport. Our Airport Strategy Positioning Initiative was offered and retained with the purpose of identifying aerospace niche markets and attracting investors. The Clermont-Ferrand Airport (Auvergne) is a regional airport offering daily flights to ten destinations in France and Europe. The positioning adopted was aircraft asset management and associated services (maintenance, storage, paint, modification, completion, and certification). Project started full operations in 2006.

### Alma Airport Authority (Quebec)

**Cluster name:** CED Alma (Drones Centre of Excellence)

**Cluster focus:** Unmanned Aerial Systems (drones)

**Targeted clientele:** Commercial UAS market

**Contact:** Mr. Nicol Minier or Mr. Marc Moffatt

**Phone:** 418 669-5104

Duration of mandate: 2008 – 2012



**Details:** The Alma Airport was seeking help to develop the airport. Our Airport Positioning Strategy Initiative was offered and retained with the purpose of identifying aerospace niche markets and attracting investors. Alma is a small local airport with general aviation and helicopter services provider. The final branding is an Unmanned Aerial System (UAS) Center of Excellence. The project encompasses flight testing activities, research and development on UVS, pilots and operation personnel training, aerial operations and a think tank on doctrine and future evolution of UVS. Project started full operations in 2011

**Web site:** <http://www.cedalma.com/en/>

### Sawyer International Airport and Telkite Technology Park (Michigan, USA)

**Cluster name:** AEROTECH + UMGAC

**Cluster focus:** Aircraft Dismantling and Recycling

**Targeted clientele:** Commercial airlines & leasing companies

**Contact:** Ms Vikki Kulju, Executive Director

**Phone:** 906-346-3333 Ext 15

Duration of mandate: 2008 – 2011



**Details:** The Sawyer Airport Authority, Marquette County and the Telkite Technology Park were seeking help to develop the airport and adjacent technology park. Sawyer Airport is a former US air force strategic bomber command airport closed in 1995. The branding is AERO-TECH Recycling; the positioning is aircraft dismantling, recycling, maintenance of parts and components and sales and distribution of the recertified parts. The R & D side of the project is underway and the main dismantler never signed the leasing agreement and a new dismantler is on the verge of coming on board.

A spin-off of the AEROTECH work is the Upper Michigan Green Aviation Coalition (UMGAC). The Upper Michigan Green Aviation Coalition is a group of private and public sector stakeholder members of an industry cluster surrounding the concept of green aviation. The membership is comprised of companies and industry experts from around the world including Switzerland, France, Canada and the United States.

**Web site:** <http://www.migreenaviation.com/>

### Houghton County Memorial Airport and MTEC Smart Zone (MI, USA)

**Cluster name:** GREENFORCES

**Cluster focus:** Greener aircraft (light & durable parts)

**Targeted clientele:** Military aircraft and ground vehicles

**Contact:** Mr Glen Simula

**Phone:** 906.482.1235

Duration of mandate: 2010 – 2013



**Details:**

Greenforces is an industry and academia cluster. The mission of the cluster is to support business development activities and find contracts for its members. The objective is to develop and manufacture durable, stronger, greener and lighter advanced materials, parts & components and technology solutions for the Aerospace and Defense industry. The cluster hired its CEO in October of 2013. **Web site:** <http://www.greenforcesllc.com/>



Michigan Advanced Aerial System Consortium (Alpena County Regional Airport, MI)

Cluster name: MIAASC

**Cluster focus:** Unmanned Aerial System

**Targeted clientele:** Military and Commercial UAS

**Contact:** Ms Billi McRoberts

**Phone:** (989) 354-2907 ext 221

Duration of mandate: 2011 – 2013



Details:

This mandate started for the Alpena County Regional Airport and expanded to the Michigan Advanced Aerial System Consortium (MIAASC), a Michigan state-wide Unmanned Aerial Systems (UAS) cluster grouping UAS manufacturers, training schools and colleges, R &D partners and academia, government agencies, maintenance groups and flight test activities. MIAASC drives two business units: a) the flight test center and b) an industry consortium. The cluster was officially launched on August 8<sup>th</sup> 2013.

**Web site:** <http://www.michiganuasflighttestcenter.com/>

Thunder Bay International Airport Authority (TBIAA) ON

Cluster name: Turbo Pro

**Cluster focus:** Aircraft Maintenance and Pilot Training

**Targeted clientele:** Turbo Prop aircraft operators

**Contact:** Mr Ed Schmidtke, Business Development Director

**Phone:** (807) 473-2602

Duration of mandate: 2011 – 2013



Details:

The project focused on the development of a turbo prop aircraft one stop shop for maintenance and pilot training (potentially also mechanics/technicians training). The project involved up to 15 companies but a leading group of 7 companies were to be involved in the launch. These companies were specialized in aircraft maintenance, painting, engine MRO, avionics, landing gears and training. The cluster was to set up a marketing office to promote the services of the cluster members and attract maintenance contracts to the airport. In June of 2013, TBIAA chose to halt the project due to in-feuding between two airport tenants over the control and leadership of the cluster.

## 6. Resources

The team for this project will be composed of (3) three senior consultants, a project manager and support staff. Rob Beynon will act as the lead.

**Christian Perreault**, MMI, BSc – Senior Partner, Airport Strategic Positioning and Development



Christian Perreault holds a Bachelor of Science and a Master's degree in International Management from the University of Québec, in Montreal. Christian has been involved with airport planning/marketing and economic development for over twenty years. He's been heading the Explorer Solutions' team since 2006, and is the founder of the company's unique methodology to support investment attraction at airports; branded the "Airport Strategic Positioning Initiative." He previously was Vice-President – International Business Development for the Longueuil Economic Development, and CEO of the Haut-Richelieu Economic Council.

Christian's work has led to the creation of many aerospace clusters, such as the Upper Michigan Green Aviation Coalition, the Unmanned Aerial System Center of Excellence - Alma (Qc), and the Green Military Aircraft and Vehicle Research and Test Center (Houghton, MI). He was the driving force behind many aerospace-related projects, such as the Canadian GNSS Institute, the Longueuil Innovation Alliance Technology Park, and is actively involved in the Canadian and US airport and aerospace scene. He's an active member of the Aerospace Industries Association of Canada, the Canadian Association of Defence and Security Industries, the Michigan Association of Airport Executives, the Wisconsin and Minnesota Airport Associations, the Association of Unmanned Vehicle Systems International, the Airport Management Council of Ontario, as well as the Quebec Airport Council.

**Rob Beynon** – Vice-President Airports



Rob Beynon is an Executive with 25 years of senior management consulting experience in Western Canada, North America, and internationally. He was a Vice President Planning with InterVISTAS Consulting Inc. for eight years before joining Explorer Solutions. He has worked on projects to support airports, municipalities, governments, First Nations and companies with analysis, and operations, program and infrastructure development. He has completed over 30 major business plans, and his analysis has supported hundreds of millions of dollars in infrastructure investment. He has also supported airport planning in Canada, the U.S. and Europe. This has included project managing master plans, land use plans, governance and specialty planning projects.

He has also supported airport planning in Canada, the U.S. and Europe. This has included project managing master plans, land use plans, and specialty planning projects. He was a Vice President Planning with InterVISTAS Consulting Inc. for eight years before setting up Operations Economics Inc. He has worked on numerous relevant projects in Northern B.C. Rob has focused on economic, planning and transportation analysis to develop plans into infrastructure and operations. This has included applying quantitative and qualitative methods,

and creating and managing interdisciplinary teams of professionals, including engineers, architects, HR specialists, economists, planners, accountants, and others.

**Normand Landry** – Vice-President Aerospace and Technology



Normand Landry is a leader and team builder, specializing in Project and Program Management, Business Planning, Business Development, Risk Management, Project Financing and government relations. He's a 28-year military veteran, with a Bachelor's degree in Engineering from the Royal Military College of Canada, and holds a Master's degree in Aeronautics, from Cranfield University, UK.

Normand has extensive knowledge and experience in the management of large-scale aviation programs. He has successfully managed multi-national programs over his career, both in the military and as a civilian. His experience includes technical, R&D and program partnerships with military and civilian organizations located in the United States, Australia, Finland, and Switzerland. The success of these partnerships rests clearly on his ability to bring together groups of people to work towards a common goal; recognizing the technical and project risks, and ensuring mitigation was put in place to proceed to a successful completion.

**Alexandre-Thierry Girard** – Director Project Management



Alexandre-Thierry holds a Master's degree in International Management from HEC Montréal. He is a passionate of innovation strategy, technological cluster creation, business development and management. Former sales and operations forecasting Leader at Aveos Fleet Performance, and commercial and business development Analyst at Skyservice Business Aviation, he managed several key business projects, developed new financial tools to assess the profitability, and improved the budget process and Key Performance Indicators of several business units. He also has a solid experience in sales and maintenance planning, FBO management, charter

operations and aircraft management solutions. His great leadership, analytical capacities and business acumen allow him to manage and deliver in timely manner complex projects with a high standard of quality while respecting scope, time and budget. He joined Explorer Solutions in 2011 as Director, Project Management.

**Kevin Valdelièvre** – Market Analyst



Kevin holds a master's degree in International Business from HEC Montréal and in Entrepreneurship from the University of Aberdeen, which allowed him to develop multidisciplinary skills. Passionate about innovation and technology, he has worked for several years in the aerospace sector, in companies such as Thales UK. More recently, he has worked at Mosaic - HEC Montréal in a project on intergenerational knowledge management in the aerospace sector, in partnership with Emploi-Québec and Aéro Montréal. Devoted to helping small and medium enterprises and being of an entrepreneurial spirit, Kevin has consulted with the city of Montreal's Parcours

PME and C2MTL to support companies and entrepreneurs in need of turning innovative and creative ideas into viable business propositions.

Within Explorer Solutions, Kevin is actively involved in developing multidisciplinary opportunities within organizations, through benchmarking and analysis of innovation trends in various industries.

### **Etienne Lemieux – Market Analyst**



Etienne holds a master's degree in International Business from the University of Sherbrooke. He has developed multidisciplinary skills and knowledge regarding strategic planning, marketing and project management. Etienne is a member of the Project Management Institute (PMI) and a Certified Associate in Project Management (CAPM) since 2016. This certification allows Etienne to have a comprehensive understanding of the project management processes and businesses strategic alignment.

Recently, Etienne worked as an account manager in the IT sector with customers across Canada to promote document management and geomatics solutions. This job gave him the opportunity to develop great communication skills as well as the understanding of the entire sale process. As part of his Master degree, Etienne worked with Zodiac Aerospace France to develop a market study to prioritize their expansion in the African market. At Explorer Solutions, Etienne is actively involved in developing multidisciplinary opportunities within organizations, through benchmarking and analysis of innovation trends in various industries.

## **7. Implementation Period**

See Annex A for the complete work plan and associated timeline and milestones.

## **8. Budget**

### **8.1 Fixed price compensation:**

Our professional fees for Step 1 are set at \$79,700 CDN plus applicable taxes. This amount includes all administration fees and travel expenses up to \$ 5,000 CDN. Any other travel costs/expenses, will be charged to the client at cost price and payable within the 30 days following receipt of the invoice.

### **8.2 Invoicing and payment:**

The fixed professional fees are payable in five installments of \$15,940 CDN. The first installment is payable on Week 1 of the project. The second installment is payable on Week 5, the third installment on Week 9, the fourth one upon the delivery of the draft report, followed-by the final installment, payable upon the delivery of the Phase 1 final report; presented to the client.

## 9. Confidentiality

Explorer Solutions undertake to consider and treat as strictly confidential all information that will be communicated to it as such by the Client and Contracting Authority in the scope of executing the present Contract, particularly manufacturing or business secrets, industrial, commercial or financial specifications relating directly or indirectly to the Client of the services covered in the proposal.

We shall as a result refrain throughout the duration of the present Contract, and without limitation in duration after its termination, for whatever reason, unless the above mentioned information comes into common knowledge, from divulging the said information, in whatever form, for any reason and to any person whatsoever.

We shall make all efforts in relation to the Client and Contracting Authority of the services to ensure fulfilment of these confidential undertakings by the members of its personnel who will be involved with the Client in performance of the present contract. All parties shall make all efforts to protect each other's Intellectual Property which may be disclosed to each other directly, or indirectly, as a result of work performed under this contract.

## 10. Signature

For Explorer Solutions,



Christian Perreault  
Senior Partner

Date: January 25<sup>th</sup>, 2017

## 11. ANNEX A

Phase 1 timetable and milestones (these dates can be changed to accommodate the client's timeline)

**Burgundy** boxes represent on-going work – **Blue** boxes represent meetings and milestones

| YAZ and YPB - Phase 1 Work Timetable   |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |      |    |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------|----|
| Tasks  | February |          |          |          | March    |          |          |          | April    |          |          |          | May      |          |          |      |    |
|  | 6        | 13       | 20       | 27       | 6        | 13       | 20       | 27       | 3        | 10       | 17       | 24       | 1        | 8        | 15       | 22   | 29 |
| <b>Phase 1</b>   |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |      |    |
| Kick-off meeting   | Burgundy | Blue     |          |          |          |          |          |          |          |          |          |          |          |          |          |      |    |
| Review strengths, weaknesses, opportunities and threats (SWOT) of the airport and the communities                      |          | Burgundy | Burgundy | Burgundy | Burgundy | Burgundy | Blue     |          |          |          |          |          |          |          |          |      |    |
| Identify local and regional priority strategic opportunities and assets through focus groups and one-on-one interviews |          | Burgundy | Burgundy | Burgundy | Burgundy | Burgundy | Blue     |          |          |          |          |          |          |          |          |      |    |
| Update report  |          |          |          |          |          |          | Blue     |          |          |          |          |          |          |          |          |      |    |
| Research world market trends, niche projects and opportunities   |          |          |          |          |          |          | Burgundy | Burgundy | Burgundy | Burgundy | Burgundy | Blue     |          |          |          |      |    |
| Market research on the targeted niche projects   |          |          |          |          |          |          | Burgundy | Burgundy | Burgundy | Burgundy | Burgundy | Blue     |          |          |          |      |    |
| Prepare first draft of three (3) concepts/niche projects   |          |          |          |          |          |          |          | Burgundy | Burgundy | Burgundy | Burgundy | Blue     |          |          |          |      |    |
| Present the concepts and niche projects for discussion and selection   |          |          |          |          |          |          |          |          |          | Burgundy | Burgundy | Blue     |          |          |          |      |    |
| Validate the chosen project with industry leaders and strategic partners   |          |          |          |          |          |          |          |          |          |          |          | Burgundy | Burgundy | Burgundy | Burgundy | Blue |    |
| Prepare and present the full scope of the project  |          |          |          |          |          |          |          |          |          |          |          |          | Burgundy | Burgundy | Burgundy | Blue |    |

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