



# Alberni-Clayoquot Regional District

## SPECIAL BOARD OF DIRECTORS MEETING

WEDNESDAY, JULY 12, 2017, 1:30 pm

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

### AGENDA

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	PAGE #
1. <b><u>CALL TO ORDER</u></b>	
<b>Recognition of Traditional Territories.</b>	
2. <b><u>APPROVAL OF AGENDA</u></b> <i>(motion to approve, including late items required 2/3 majority vote)</i>	
3. <b><u>DECLARATIONS</u></b> <i>(conflict of interest or gifts exceeding \$250 in value as per section 106 of the Local Government Act)</i>	
4. <b><u>ADOPTION OF MINUTES</u></b>	
5. <b><u>REQUEST FOR DECISIONS &amp; BYLAWS</u></b>	
a. <b>REQUEST FOR DECISION</b> Alberni Valley Regional Airport – Northwest OLS Roads tender	2-9
<i>THAT the ACRD Board of Directors award the tender for the Northwest OLS Roads at the Alberni Valley Regional Airport to Bowerman Excavating (removing provisional items 3.04b &amp; 3.05b) for \$1,099,629.20 plus GST.</i>	
<i>THAT the ACRD Board of Directors direct staff to prepare a Request for Decision to the Electoral Area Directors Committee that requests funding from the Community Works Funding (Gas Tax).</i>	
<i>THAT the ACRD Board of Directors direct staff to apply for additional funding from the Alberni Valley Community Forest Legacy Fund for completion of the Alberni Valley Regional Airport Expansion project.</i>	
6. <b><u>QUESTION PERIOD</u></b>	
7. <b><u>ADJOURN</u></b>	



## REQUEST FOR DECISION

**To:** Board of Directors

**From:** Mark Fortune, Airport Superintendent  
Teri Fong, CPA, CGA, Manager of Finance  
Andrew McGifford, CPA, CGA, Manager of Environmental Services

**Meeting Date:** July 12, 2017

**Subject:** Alberni Valley Regional Airport – Northwest OLS Roads tender

**Recommendation:**

***THAT the ACRD Board of Directors award the tender for the Northwest OLS Roads at the Alberni Valley Regional Airport to Bowerman Excavating (removing provisional items 3.04b & 3.05b) for \$1,099,629.20 plus GST.***

***THAT the ACRD Board of Directors direct staff to prepare a Request for Decision to the Electoral Area Directors Committee that requests funding from the Community Works Funding (Gas Tax).***

***THAT the ACRD Board of Directors direct staff to apply for additional funding from the Alberni Valley Community Forest Legacy Fund for completion of the Alberni Valley Regional Airport Expansion project.***

**Desired Outcome:**

To relocate the forestry access roads situated to the northwest of the Alberni Valley Regional Airport (AVRA) runway to facilitate clearance requirements for the airports obstacle limitation surface (OLS).

**Northwest OLS Roads tender:**

The Alberni Valley Regional Airport Expansion project saw a great deal of time and effort from staff and elected officials over the past few years. The relocation of the Northwest OLS Roads tender and project is one of the final components of the extension process. The Northwest OLS Roads is being relocated as the current location is height restricted due to the expanded runway length. This work must proceed in order to provide full utilization of the runway expansion and lighting.

***Tenders received were as follows without provisional items:***

Rank	Contractor	Submitted price	GST (5%)	Total price
1	Bowerman Excavating	\$1,099,629.20	\$54,981.46	\$1,154,610.66
2	Stalker Excavating	\$1,209,833.20	\$64,541.66	\$1,274,374.86

***Tender received were as follows with provisional items:***

Rank	Contractor	Submitted price	GST (5%)	Total price
1	Bowerman Excavating	\$1,594,343.20	\$79,717.16	\$1,674,060.36
2	Stalker Excavating	\$2,317,248.20	\$115,862.41	\$2,433,110.61

Tetra Tech prepared the Northwest OLS Road design in late spring 2016 and investigations and discussions began immediately on multiple options for its layout, location, and structural designs. In May 2016 Tetra Tech submitted a Class D cost estimate for two of the proposed options. The one most similar to the present final design was the 'Inside Route' and the estimate at that time was \$594,032.

The AVRA Runway Extension project experienced substantial erosion control issues with the rains that occurred in winter of 2016, these issues led to increased costs for remediation and prevention of further damage. Based on an assessment by a Fisheries Biologist the armoring of the ditch bottoms was enhanced to prevent further sediment release into the environment. This experience with the AVRA site led to modifications of the Northwest OLS Road design to ensure sedimentation issues do not result due to construction of the road. These modifications therefore resulted in increased costs.

Once the new location of the road was identified, a geotechnical investigation was undertaken and the results of the soil testing has impacted the design. This was reflected in the adjusted quantities when Tetra Tech amended the design and cost estimates in the spring of 2017. As a result there was an increased cost to complete this portion of the project – Tetra Tech estimated an increase of \$546,700 and Bowerman's tender is within 1.1% of this value. The "Tender Evaluation and Breakdown of Increase in Estimate – NW OLS Roads Alberni Valley Regional Airport" prepared by Tetra Tech has been attached for your information.

Other impacts to the project cost estimates were the provisional items not included in the original Class 'D' Estimate. The tender included three substantial provisional items that dealt with the rock excavation/blasting that is required to further meet the OLS requirements for an approach surface on Runway 12. These were items added in order to explore the possible cost savings on the material required to be used on the North West Road construction, unfortunately this did not occur based on the tenders received.

The existing industrial road is a Statutory Right-of-Way held by Island Timberlands and has been maintained by the ACRD. Multiple users rely on this road as well as the ACRD Crown Grant land to access their lands. The ACRD must provide access to MOTI to permit travel to their gravel reserve for as long as is required.

Tetra Tech recommends the submitted Tender from Bowerman Excavating of \$1,154,610.66 be accepted at this time.

**Financial:**

The AVRA Runway Expansion project has a maximum borrowing of \$6 million dollars. The budget included \$565,000 for the relocation of the Northwest OLS road (excluding engineering). Based on the results of the tender the project is approximately \$535,000 over budget. The financial implications of this overage are significant and staff feel there are a few options that should be investigated as other funding sources.

The AVRA capital reserve was to be used as the contingency for the expansion project when the Board decided to proceed with the lighting project making the project budget equal to the borrowing capacity based on the AAP. The AVRA capital reserve is estimated to have \$800,000 remaining at the end of 2017. Although this may seem like a significant amount there are many capital expenditures planned over the coming years to support the airport operations. The debt servicing that will be required moving forward will also limit the amount that can be contributed to the capital reserve fund annually. The 2017-2021 five-year financial plan budgeted \$80,000 per year as a contribution to the capital reserve fund putting the requisition near the maximum allowable by the establishing bylaw. As a result, staff want to explore other funding opportunities to assist in covering the extra \$535,000 required for the road relocation.

Besides the AVRA capital reserve, another option for funding part of the \$535,000 is the Federal Gas Tax Funds that are allocated by the Electoral Area Directors Committee. Based on the 2017-2021 Financial Plan and the recent \$625,000 commitment by the Board of Directors to the Cherry Creek Waterworks District there is an estimated \$375,000 of Community Works Funding available for allocation. The allocation of Community Works Funds is a decision of the Electoral Area Directors and therefore staff recommend that this project be an item for discussion at the next Electoral Area Directors meeting.

The final option for funding that staff would like to consider is the Alberni Valley Community Forest Legacy Fund. The ACRD did receive \$185,750 from the fund in 2015 for the AVRA GPS Enhancement and Runway Extension project. It is the understanding of staff that there may be future opportunities to apply for funding from the Alberni Valley Community Forest to assist with the costs of the northwest OLS road relocation.

The second two options are going to take time, and in order to not delay the construction staff have recommended that Board proceed with the project using the capital reserve fund but then request funding from these other sources.

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

The decision to proceed with the project is timely as the proposed construction window is 2.5 months pushing the completion date to the end of September. It is important to complete the road before the weather conditions change this fall and therefore this decision cannot wait to see if other funding sources are available.

A significant amount of staff time will be required for the oversight of this project.

#### **History & Background:**

In 2014, the Board of Directors of the Alberni-Clayoquot Regional District provided directed staff to pursue a runway expansion at AVRA with the completion of the detail design, business case and an application for funding to the Build Canada Fund that was made in 2015 and was not successful and electoral approval was required to fully finance the project.

The AVRA expansion project was based on a pre-design report prepared by Tetra Tech, which outlined four options for the expansion, the direction was to proceed with an option whereby the runway would be extended by approximately 500' off of either end and widened by 25' for the full length to provide for a 100' X 5,000' runway. The runway was to be provided with lighting and GPS capability. This would include the associated groundwork and fencing required for the expanded operation. The cost estimate of the predesign was \$6.2 million.

The detailed design included an accurate survey of the airport and surrounding lands, preliminary results from the survey determined that the best option for expansion was constructing the works off of the east end, rather than off both ends of the runway. It also determined that there is substantial clearing and groundwork to be completed to satisfy the OLS of the new runway and anticipated aircraft to be using such a facility. The detailed design has been completed on the basis of this configuration; it has enabled a Class "A" estimate of costs - \$8.3 million.

The ACRD Board of Directors proposed to borrow up to a maximum of \$6 Million for the construction of an expanded runway at the Port Alberni Airport (known as the Alberni Valley Regional Airport) and selected the Alternative Approval Process (AAP) to gain consent of the electorate to proceed with the project.

The Regional District has concluded the AAP for the proposed AVRA Expansion. Less than 10% of the electors (303 = 1.48%) within the service area stated their opposition within the prescribed timeframe to the adoption of the required bylaws for the project. Electorate consent was obtained through the AAP process and the ACRD Board

of Directors adopted bylaws associated with the required financing to proceed with the expansion.

### ***Runway Expansion Tender results***

When the tenders were received for the AVRA Runway 30 Extension project they were very favorable to the ACRD. Staff provided the Board an estimate for cost at that time and was as follows (March 23, 2016, Request for decision): *"If the expansion proceeds with the lowest tender from Bowerman Excavating as recommended the AVRA service has the financial capabilities to undertake the complete AVRA expansion project as tendered for both Part A and part B (provisional items). The ACRD staff have estimated the costs associated with the AVRA expansion to be in the \$4.9 million range with a contingency for outstanding and unconfirmed costs to this point."*

The original expansion project was well within the financial capabilities of the service area and borrowing limits as approved through the AAP process.

### ***Runway Lighting***

In early 2016 the possibility of the British Columbia Air Access Program (BCAAP) grant funding to complete the runway lighting project within the current borrowing limits for the runway expansion was explored, although it would bring expenditures very close to the financial limits for the AVRA service area.

There was a desire and staff were advised there was a possibility that BCAAP funding could be available and applied for the medium intensity lighting project in February of 2016. The ACRD was successful and received the BCAAP which provided 50% funding of the medium intensity lighting project up to a maximum of \$729,215.

The Board was provided an information report in July of 2016 to advise that the medium intensity lighting project would bring the known costs at the time to \$5,996,664. The financial limits of the service area was identified at that time and any estimate or overrun would be a challenge. At that time the estimated cost for the Northwest OLS Roads was budgeted for \$560,000. There was also some indication that the materials in the area could provide cost savings for the Northwest OLS Roads construction, when test pitting was conducted it was found that the materials at the site to be of no value to the construction.

As a result of added the lighting project the contingency for cost overruns became the capital reserve account for the AVRA.

### **Options considered:**

#### ***Option 1: Proceed with the full tendered project***

If the Bowerman Excavating tender was selected (lowest tender and qualified for this work) and if the ACRD selected all provisional items of the tender it would cost \$1,594,343. The current capital reserve could not undertake all items tendered in the Northwest Road OLS tender. Other sources of funding would need to be provided in order to proceed the full tender from Bowerman.

Staff do not feel this is an option to consider at this time due to funding limits for the AVRA service area and will explore completing these works at a later date or assessing other options available to the ACRD.

#### ***Option 2: Proceed with the required portions of the project and proceed with 3.04b & 3.05b at a later date***

If the provisional items 3.04b & 3.05b are removed there is the financial ability to undertake the tendered work.

Staff are recommending that the Board of Directors approve the project and proceed with the tender with the removal of options 3.04b and 3.05b of the tender submission. The project can proceed within the current capital reserve funds, although the impact will delay other capital expenditures.

Staff are also recommending that the Electoral Area (EA) directors consider and allocation of Community Works Funding towards the medium intensity lighting project. Staff have been advised by BCAAP that this project could use Community Works funding as the 50% matching component. It is also recommended that the ACRD approach the Alberni Valley Community Forest to investigate an option for additional funding for the AVRA projects.

Provisional items 3.04b & 3.05b were added addendums in the North West Road tender in the hopes to provide opportunity to use rock in the Northwest OLS Road construction. The rock blasting and OLS surface are not items related to the construction of the Northwest Road and are items that are required in the future.

With these provisional removed from the Northwest OLS Road tender work, the Bowerman quote came to \$1,099,629.20 which can be undertaken at this time without additional funding but would impact the future capital reserve abilities. The weather window to complete these works is now and waiting beyond the summer of 2017 would delay a full opening of the AVRA runway.

**Option 3: Not to proceed with work**

This is not an option because, in order to use the runway as designed the ACRD must proceed with the Northwest OLS Road construction. Without the relocation, the AVRA runway would not be able to be used to its full length that it has been designed for.



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

Andrew McGifford, CPA, CGA, Manager of Environmental Services



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

Wendy Thomson, Acting Chief Administrative Officer

July 6, 2017

ISSUED FOR USE  
FILE: C31103399-05

Alberni-Clayoquot Regional District  
3008, 5 Avenue  
Port Alberni, BC V97 8M5

**Attention:** Mr. Mark Fortune  
Airport Superintendent

**Subject:** Tender Evaluation and Breakdown of Increase in Estimate– NW OLS Roads  
Alberni Valley Regional Airport

## 1.0 INTRODUCTION

Quotations were solicited from contractors to provide general construction services for the NW obstacle limitation surface (OLS) Roads project, on behalf of the Alberni Clayoquot Regional District (ACRD), at the Alberni Valley Regional Airport (AVRA). The tender period was from June 8, 2017 to June 22, 2017. A review of the tender submissions received is detailed below, including a summary of Tetra Tech Canada's (Tetra Tech) findings, a recommendation for award based on these findings, and detailed breakdown of cost estimate increases resulting from design requirements.

## 2.0 TENDERS RECEIVED

A total of two submissions were received and all on time. Of the two submissions, both were deemed compliant by Tetra Tech.

The tender included three substantial provisional items that dealt with the rock excavation/blasting that is required to further meet the OLS requirements for an approach surface on Runway 12. In Addendum 3, we provided to the bidders the stipulation that the provisional items would not be considered for contract award due to the late nature of the provisional items inclusion.

The tenders submitted, without the provisional items included, are summarized below:

Contractor	Corrected Submitted Price (without GST)	5% GST	Corrected Price (includes GST)	Rank
Stalker Excavating	\$1,209,833.20	\$64,541.66	<b>\$1,274,374.86</b>	2
Bowerman Excavating	\$1,099,629.20	\$54,981.46	<b>\$1,154,610.66</b>	1

## 3.0 LOW BIDDER EVALUATION – BOWERMAN EXCAVATING LTD.

Bowerman Excavating Ltd. (BE) submitted the lowest compliant bid on this tender.

Tetra Tech has reviewed their submitted tender and found that they included all of the required documentation and bonding to satisfy this tender call.

There were no rounding errors in Bowerman's bid, so an adjustment will not be made at the time of potential award.

Tetra Tech has been working with BE and has had a good working relationship on the present construction project at AVRA. There are no current issues.

We are unaware of any quality issues or legal issues associated with BE or their subcontractors at this time.

## 4.0 COST ESTIMATE INCREASES DURING DESIGN

The ACRD approached Tetra Tech for a road design in late spring 2016 and investigations and discussions began immediately on multiple options for its layout, location, and structural designs. On May 30, 2016, the Project Manager, Mr. Bill Klunder, in conjunction with Tetra Tech engineers, submitted a Class D cost estimate for two of the proposed options. The one most similar to the present final design was the 'Inside Route' and the estimate at that time was \$594,032.00.

### 4.1 AVRA Runway Extension Project Erosion Control Issues

During the road design towards 60% in October 2016, the runway extension project encountered multiple erosion control issues when experiencing above seasonal rains. These issues led to large cost increases for damage control and specifically to armor the ditch bottoms as to prevent further sediment release into the storm water and eventually into the protected water habitats surrounding the airport.

### 4.2 Geotechnical Investigation of the Proposed Road Alignment

The Tetra Tech road design team were made aware of these issues and proposed to the ACRD that a geotechnical investigation along the proposed alignment of the road be conducted to predict whether we should expect the same issues as the extension project. In early January 2017, the ACRD directed Tetra Tech's geotechnical team to proceed with eight testpits, which were dug and tested.

The results from the investigation showed that there was the same silty sand layer present approximately 1.5 – 2 m below the surface that was encountered on the runway extension project. This material was the cause of the majority of sediment released in the ditches of the runway extension project and would need to be dealt with in a similar way: armoring the ditches with a geo-fabric and rip-rap solution.

The report also noted that the silty sand layer created a subsurface barrier for ground water flow and would directly impact road construction, specifically the slopes of cut road and ditch banks. Due to this it was decided that an interceptor ditch would be required to capture this groundwater flow coming from the northwest to prevent the side slopes from eroding and also releasing sediment to the streams.

### 4.3 Hydrologist Review

During the mid-design phase the Tetra Tech roads engineer requested a review by a hydrologist to increase confidence in the design. The road design requires deep cuts, approaching 5 m deep, in some lengthy sections. Given the large amounts of rainfall experienced in Port Alberni, these cuts require through drainage design review in order to prevent flooding and damage to the road. The hydrologist's reviews ultimately increased the size of the ditches and required a long ditch to be cut towards the airport to allow for proper drainage of the road system.



## 4.4 Resultant Estimate Increase

Due to the reasons above, the design at 90% had significantly changed in quantities and requirements from that of the 2016 preliminary designs. In particular, three quantities had increased or been added that inflated the cost estimate:

Item	Previous Estimate	Final Estimate	Change in Estimated Cost (\$)
Common Excavation	35,570m <sup>3</sup>	125,000 m <sup>3</sup>	\$447,000
Interceptor Ditch and Manhole	N/A	360m	\$72,690
Armouring of Ditch Bottoms	N/A	1,900m <sup>2</sup>	\$26,809
<b>TOTAL</b>			<b>+\$546,700</b>

Tetra Tech made the ACRD aware that these increases were coming and on May 26, 2017, Mr. Bill Klunder, provided the latest cost estimate for 100% design that put the project at an estimated \$1,168,000 (+1.1% above lowest bidder).

## 5.0 SUMMARY

Although the cost for the NW OLS Roads project has nearly doubled from the estimate provided over a year ago, Tetra Tech feels that the bid provided by Bowerman excavating reflects an appropriate value for the design as provided to them.

Tetra Tech recommends the submitted Tender from Bowerman Excavating of **\$1,154,610.66** be accepted at this time as a project allowance. We feel that with the provisional items removed, adjustments will need to be made by Bowerman Excavating that may result in cost savings. If savings are found we would set aside the remaining budget as a contingency that would be used in construction circumstances beyond our control.

## 6.0 CLOSURE

We trust you will find this evaluation and summary meets your present needs. If you require additional information, please do not hesitate to contact the undersigned.

Respectfully submitted  
Tetra Tech Canada Inc.



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