

ADDENDUM
REGULAR COMMITTEE OF THE WHOLE MEETING
SHAW AUDITORIUM, 80 COMMERCIAL STREET, NANAIMO, BC
MONDAY, 2016-FEB-22, AT 4:30 P.M.

7. **CORPORATE SERVICES:** **PAGES**
- (c) **Colliery Dam Update**
- Purpose: To provide an update on the Colliery Dam auxiliary spillway construction and estimated costs for completion of the project.*
- Staff Recommendation: That Council receive for information the *Pg. 2-6*
 Colliery Dam Update.
8. **COMMUNITY SERVICES:**
- (a) Remove Social Development Grants.
- (b) Syrian Refugee Update - Add delegation Mr. Feras Saedam.
9. **CORRESPONDENCE (not related to a Report to Council):**
- (a) Add email dated 2016-FEB-17 to Mayor and Council from Ms. Lisa *Pg. 7-8*
 Slakov, Bike Right Campaign Coordinator, requesting a letter of support
 be sent to the Province to encourage the development and funding of a
 province-wide child and youth cycling education program and
 permission to use the City of Nanaimo's logo on their webpage of
 supporters.
11. **OTHER BUSINESS:**
- (b) **Governance Review Update**

DATE OF MEETING February 22, 2016

AUTHORED BY GEOFF GOODALL, DIRECTOR, ENGINEERING & PUBLIC WORKS
TOBY SEWARD, SENIOR DIRECTOR, STRATEGIC OPERATIONS

SUBJECT COLLIERY DAM UPDATE

OVERVIEW

Purpose of Report

To provide an update on the Colliery Dam auxiliary spillway construction and estimated costs for completion of the project.

Recommendation

Council receive this report.

BACKGROUND

On 2015-FEB-17, a Colliery Dam Update news release was issued and placed on the City's website (copy attached).

The Update provided a review of the project, contractors/engineers retained by the City, initial estimate of project costs, final estimated costs and money budgeted for the project.

The estimated project cost was \$2.8 - \$4.6 million, which was based on a conceptual design, as design of the project did not commence until six weeks prior to start of the project. For budgeting purposes, the City allocated \$4.2 million for the project. The estimated cost of the project is \$4,545,000.

Final construction costs for the project are estimated at \$3,317,500, total engineering costs are estimated at \$1,202,000 and other costs estimated at \$25,500.

Engineering costs are considerably higher than originally estimated due to ongoing engineering supervision/environmental monitoring during the seven-month construction period and the following issues encountered during the design and construction of the project:

- Subcontractor drilling/soil testing
- Over excavation due to weak soils
- Temporary bridge/creek mitigation
- Secant wall design/supervision
- Harewood Creek hydrology review
- Lower reservoir protective boom
- Landscape architecture
- Environmental permits/reporting
- Phased design/reporting to DSS
- Seismic monitoring of Lower Dam core holes
- Emergency fuse plug removal

Final project cost will be determined at the completion of the project and a report to Council will be generated, including funding options if additional monies are required for completion of the project.

In addition to completing the auxiliary spillway, the City is reviewing the Middle Colliery Dam. Further information will be available in the next 4 – 6 months regarding the Middle Dam.


SUMMARY POINTS

- The estimated final cost of the auxiliary spillway is \$4,545,000, which is at the high end of the original cost estimate.
- Engineering costs were considerably higher than originally estimated, due to engineering supervision/environmental monitoring costs and site conditions encountered during design and construction of the project.
- Review of the Middle Colliery Dam is underway, with further information available in the next 4 – 6 months.


ATTACHMENTS

Colliery Dam Update, 2016-FEB-15.

Submitted by:


for Geoff Goodall
Director, Engineering & Public Works

Concurrence by:


Toby Seward
Senior Director, Strategic Operations



Colliery Dam Update – 2016-Feb-15

Construction of the Lower Colliery Dam Auxiliary Spillway commenced in September 2015 and is scheduled to be completed in April 2016. Construction of the spillway is being undertaken by Copcan Civil Ltd. of Nanaimo, following award of contract to Copcan 2015-Sep-03.

Copcan Civil Ltd. was the successful bidder for a cost plus contract for the construction. Payment is based on actual work performed based on the following:

Labour:	Paid at hourly rates provided. No additional markup.
Equipment:	Paid at Blue Book Equipment Rates. No additional markup.
Materials:	Paid at actual cost proven by invoice plus 10%.
Subcontractors:	Paid at actual cost proven by invoice plus 10%.

Any purchase over \$25,000 is reviewed by the City and typically procured with Copcan issuing an invitational tender.

Copcan used Nanaimo/Island based companies for the majority of subcontracts and material supply. As of 2015-Dec, only two lower mainland companies were used. One was a specialty bridge material supplier and the other was the secant pile wall subcontractor who was the lowest price on a competitive bid process that included an Island based company.

Engineering design and supervision of the spillway is being undertaken by Golder Associates. The City retained Herold Engineering to provide structural design, field review and survey services. Golder and Herold commenced design of the spillway 2015-Jul-21.

Due to the limited timeframe to construct the spillway, Golder's design and Copcan's construction has proceeded in various phases, as detailed design drawings/specifications were developed while construction was underway. As the design was not completed prior to construction starting, actual design and construction costs were undetermined, and were estimated in the range of \$2.8 - 4.6 million. For budgeting purposes, the City allocated \$4.2 million for the project. If the budget exceeds \$4.2 million, as projected, staff will provide a report to Council with options to address the shortfall.

The City now has costs of the project to 2015-Dec-31 and has worked with engineers and contractors to estimate remaining costs to the completion of the project.

Cost to 2015-Dec-31, remaining estimated costs, and total estimated costs are documented in the table below. Engineering costs are considerably higher than the original estimate. Costs increased due to engineering supervision/environmental monitoring during the seven-month construction schedule and additional engineering/consultant analysis relating to site conditions noted below.

- Subcontractor drilling/soil testing
- Over excavation due to weak soils
- Temporary bridge/creek mitigation
- Secant wall design/supervision
- Harewood Creek hydrology review
- Lower reservoir protective boom
- Landscape architecture
- Environmental permits/reporting
- Phased design/reporting to DSS
- Seismic monitoring of Lower Dam core holes
- Emergency fuse plug removal

Next Steps

Cost estimates will be updated monthly and placed on the Colliery Dam website until work is completed. When the precast concrete bridge over the Auxiliary Spillway is complete and handrails are installed, a schedule for reopening the trail will be published. Final landscaping installation will extend into the spring, pending completion of the design, weather, contracting, etc. Once the Auxiliary Spillway is completed and operational, flood warning signage will be removed from the area below the Colliery Dams.

Overall Project Costs

Design/Construction	Cost to 2015-Dec-31	Estimated Cost to Completion	Estimated Total Cost
Golder – Geotechnical Design	\$549,004	\$114,500	\$663,504
Golder – Geotechnical Field Services	\$175,344	\$142,609	\$317,953
Allowance – Seismic Monitoring	-	\$50,000	\$50,000
Herold – Structural Design	\$125,972	\$9,028	\$135,000
Herold – Structural Field Services	\$5,453	\$10,425	\$15,878
Herold – Survey	\$17,396	\$2,604	\$20,000
Copcan – Construction	\$1,325,936	\$1,801,564	\$3,127,500
Allowance – Landscaping	-	\$190,000	\$190,000
Other	\$22,472	\$3,292	\$25,764
Totals	\$2,221,576	\$2,324,023	\$4,545,599

From: Lisa Slakov

Date: February 17, 2016 at 4:31:41 PM CST

To: Mayor&Council <Mayor&Council@nanaimo.ca>

Cc: Deborah Beck <Deborah.Beck@nanaimo.ca>, Amir Freund <Amir.Freund@nanaimo.ca>, "Gord.Foy@nanaimo.ca" <Gord.Foy@nanaimo.ca>

Subject: Child Cycling Education and Bike Right

Dear Mayor McKay and Council,

On behalf of [Bike Right](#), I am writing to request a letter of support to the Province of BC for our campaign to encourage the Province to *develop and fund a province-wide child and youth cycling education program*. Recognizing the work that the City of Nanaimo has done to encourage active transportation for your citizens through programs such as cycling courses and Bike to Work Week, we believe that you will appreciate the significance of provincial support to enable communities across BC to provide ongoing, excellent cycling education to our children. In addition, I understand that you will be considering Nanaimo's bike infrastructure needs shortly; it has been shown that bike infrastructure without education and promotion isn't nearly as effective at getting people out biking.

Bike Right has been building cross-sectoral support to ensure that we nurture future generations of cyclists in towns and cities across BC. Young people are increasingly not learning to, nor being encouraged to bike for pleasure, let alone for transportation purposes. Unless we jump in and help get our children cycling, we stand to lose a generation or more of people biking! At the same time, we know that riding a bicycle is a great way to learn traffic safety skills, improve personal fitness, reduce transportation congestion and take action on climate change. Formalized cycling-skills education needs to be consistent, accessible and engaging for children and youth. We believe that the health, safety, environmental, community and economic benefits of a province-wide cycling education program has a strong rationale for investment.

We know that individual organizations, municipalities and school districts in BC have supported cycling education efforts in the past – *but it is now time to request consistent, standardized cycling education for children and youth funded through the Province of BC*. As such, Bike Right has launched a call out for organizations, community leaders and local governments to endorse Bike Right BC. We have already garnered support for this initiative from organizations such as: ICBC, Fraser Health, Translink, the BC School Trustees Association and the Cities of Vancouver and Vernon. A number of other municipalities and organizations are currently considering this endorsement request.

Nanaimo can *show its support through a written letter to the Premier and relevant Provincial Ministers*. For your convenience we have provided a template attached for your reference. We would also love to *add the City of Nanaimo's logo to our [webpage](#) of supporters*.

The time for advocacy is now. In September 2016 the City of Vancouver will host the international Pro Walk Pro Bike Pro Place Conference. This event will be an opportunity for communities and agencies to showcase their support and encourage the province to take action. Help us build the momentum to shift-gears when it comes to child cycling education in BC. Thank you for your consideration of this request and please contact me for any further information.

Best regards,

Lisa Slakov

Bike Right Campaign Coordinator

<http://www.bikerightbc.ca/>

bikerightbc@gmail.com

Committee of the Whole
2016-FEB-22

To:
premier@gov.bc.ca
JAG.Minister@gov.bc.ca;
Minister.Transportation@gov.bc.ca
hlth.minister@gov.bc.ca
ENV.Minister@gov.bc.ca
educ.minister@gov.bc.ca
MCF.Minister@gov.bc.ca
CSCD.minister@gov.bc.ca

Cc:
bikerightbc@gmail.com

Dear Premier Clark and Ministers

On behalf of _____, I am pleased to provide this letter of support for the [Bike Right](#) Provincial Youth Cycling Framework, as proposed by the Bike Right coalition, which represents a broad range of stakeholders and communities across British Columbia.

Establishing a provincial standard for youth cycling education is consistent with our community's long-term transportation and health goals and objectives.

_____ is committed to safe, green and healthy transportation, and providing communities and individuals with opportunities to adopt an active transportation lifestyle that results in long-term behaviour changes, healthier citizens and safer communities. Providing effective and accessible youth bicycle and traffic safety education across the province based on best practices and successful modelling will have a positive impact on the health, well-being and development of all children in British Columbia.

_____ supports the effort to initiate and establish a cost-effective provincial cycling education standard and framework that will provide young people with the ability, awareness and confidence to choose cycling as a fun and healthy transportation option. We urge you to move forward on this initiative immediately.

Sincerely,

Supporters: City of Vancouver, City of Vernon, BC School Trustees Association, TransLink, Fraser Health, ICBC, The Lung Association BC, Society for Children and Youth of BC, Cycling BC, Cycling in Cities at UBC, Vancouver School Board, New Westminster School District, Comox Valley School District, Hub for Active School Travel (HASTE), North Shore Safe Routes Advocates, Thinkfirst Canada, smartTRIPS Central Okanagan, Alta Planning and Design, BC Cycling Coalition, HUB Cycling, Comox Valley Cycling Coalition, Greater Victoria Cycling Coalition, WeBike, Kelowna Area Cycling Coalition, Pedalheads, LIFEcycle, Bike Re-Psych, Pedal