

2015-NOV-20

Province of British Columbia
Ministry of Forests, Lands & Natural Resource Operations
Office of the Comptroller of Water Rights
Attention: Mr. Glen Davidson, P. Eng., Comptroller of Water Rights
Water Management Branch
P.O. Box 9340 Stn Prov Govt
Victoria BC V9W 9M1

Dear Mr. Davidson:

RE: LOWER CHASE RIVER DAM, AUXILIARY SPILLWAY

I am writing to follow up on my email dated 2015-NOV-13 advising that the City would be requesting an extension to the 2015-NOV-15 substantial completion date contained in your 2015-APR-29 order for Water Licence Nos. C061424 and C061423. The City has made our best effort to meet the November 15th deadline. Please review the information below and confirm if an extension of the substantial completion date to 2016- APR-15 can be granted.

1) To update your office on the Auxiliary Spillway progress to date:

- Golder Associates and Herold Engineering are retained to complete the designs. Bruce Downing, P.Eng is designated as the Engineer of Record for the project. Both Golder and Herold will have professional engineers supervising the construction.
- Designs for the excavation, spillway and bridge structure, and channel construction were submitted and approved by your office.
- Copcan Civil is under contract for the completion of the project.
- Copcan is mobilized on site with an all-weather haul road and temporary bridge across Harewood Creek in place. Erosion and sediment controls are in place along the reservoir edge and Harewood Creek.
- The site for the spillway and bridge structure is cleared. Top soil was stockpiled for reuse after completion of the project. The Stage 1 excavation is complete and the remaining excavation is underway.
- The secant pile cut-off wall is complete.
- Structure formwork is being prefabricated.
- The bridge girders are ordered with shop drawings and production to follow.

2) The following work is to be completed:

- Final excavation for the structure.
- Form erection, rebar, pouring and construction of the structure.
- Backfill of the structure.
- Channel excavation and rock lining.
- Removal of a portion of the secant wall fronting the spillway.
- Removal of the soil plug between the spillway and reservoir.
- Site cleanup, restoration and landscaping.

3) The project team developed a conservative preliminary construction schedule with the following milestones:

- | | |
|--------------------------|-----------------------|
| • Excavation | End of November 2015 |
| • Structure Foundation | End of December, 2015 |
| • Structure Construction | Mid-March 2016 |
| • Substantial Completion | Mid-April 2016 |

We are still reviewing ways to optimize the schedule and I will note the schedule is dependent on the weather.

4) An Interim Operation, Maintenance and Surveillance Manual and Emergency Preparedness Plan is under development. Included in this plan will be a strategy to address storm flows which could potentially overtop the dam. Included In concept:

- Prior to water levels overtopping the dam, water flow will be redirected through the construction site into Harewood Creek.
- A "fuse plug" between the reservoir and the secant pile wall has been excavated to an elevation of 73.25 metres and an approximate width of 11.6 metres.
- Reservoir levels will be monitored by City staff. If/when reservoir levels reach a critical level (currently under review by Golder); an excavator will be on site to widen the "fuse plug" if necessary to ensure water flows are accommodated.

I will forward a technical memo from Golder on the above concept next week. Following your review, the Interim Operation, Maintenance and Surveillance Manual and Emergency Preparedness Plan will be updated accordingly and submitted to your office.

You can expect a follow up letter regarding the requirements for the Middle Dam conceptual plan and implementation plan.

If you have any questions, or require further information and/or clarification, please contact me at (250) 756-5329 or stephen.ricketts@nanaimo.ca.

Yours truly,



Stephen Ricketts
Manager of Construction
ENGINEERING AND PUBLIC WORKS

SR/hd

pc: Wenda Mason, Manager, River Forecast Centre & Dam Safety Section
Scott Morgan, Head, Dam Safety Section
Robert McLean, Senior Dam Safety Engineer
Tracy Samra, City Manager
Toby Seward, Acting GM Community Development & Protective Services