

CENTRAL PEACE REGIONAL WATER SUPPLY SYSTEM PHASES 1 & 2

PROJECT OVERVIEW

February 22, 2023

ENGINEERING OVERVIEW

1. Status of preliminary engineering includes the following:
 - .1 Senior Geotechnical Engineer is working on the foundation design for the river intake structure along with the excavation design and the shoring soil anchor design for the 27 m (90 ft) deep raw water pumping station wet well. The previously completed geotechnical report for the river intake and raw water pumping station is being referenced by the other members of the Project Team.
 - .2 Support for the regulatory approval applications remains on-going for the Public Lands Act and Water Act Approvals. The most recent meeting between the Project Team and Alberta Environment was held on February 13, 2023. Responses to the information requests from Alberta Environment from that meeting have been, and are being, compiled by MPE Engineering. The next meeting with Alberta Environment is scheduled for March 06, 2023.
2. **Raw Water Pumping Station Land Acquisition:** Subdivision approval process which starts with Birch Hills County (also requires approval by Alberta Transportation because of proximity to the Highway) remains on-going for the final land transfer of the Raw Water Pumping Station parcel. Birch Hills County administration had provided a conditional approval to Saddle Hills County, but we are still waiting for the finalized approval before the Legal Surveyor can file the subdivision with Alberta Land Titles for final registration. A Subdivision Approving Authority package to support the approval finalization has been sent to Birch Hills this week by Saddle Hills County. Alberta Transportation has reviewed the subdivision and have verbally advised that they will approve the raw water pumping station subdivision. Alberta Transportation has signed off on the Publics Works Plan Form to accommodate the access road plan registration on their land. The TransAlta Utility Right of Way agreement for the pipeline portion across their lands has previously been registered at Land Titles.
3. **Municipal Consent for Land Acquisition:** The consents that have been acquired by Saddle Hills County from the other Municipalities include:
 - From M.D. of Fairview, to acquire the lands required for the River intake structures within the municipal boundaries of the M.D. of Fairview
 - From Birch Hills County, to acquire the lands required for the Raw Water Pumping Station facility within the municipal boundaries of Birch Hills County
 - From M.D. of Spirit River, to acquire the lands related to the future Regional Hub Water Treatment Plant site within the municipal boundaries of the M.D.

For the next Municipal Consents, Saddle Hills County will require consents from the M.D. of Spirit River for the executed Utility Right of Ways acquired by the County for the raw water pipeline from the private landowners along the alignment. This Municipal Consent will be procured from the M.D. when the substantial portion of the private land Utility Right of Way agreements have been obtained.

4. **Regional Hub Water Treatment Plant Site Land:** Concern over the potential cost for wetlands compensation identified preliminarily by the Environmental Consultant's report for the Regional Hub purchased land parcels had been noted by the County. Although the final classification of the wetlands will not be determined until the field survey is completed at the site during spring 2023, Fiera Biological Consulting advised that the wetlands would more than likely be categorized in the lower compensation classifications for wetlands (meaning lower cost of compensation to construct at the site). Any high value compensation designation for the wetland areas is unlikely.
5. **Public Lands Act Dispositions:** The disposition application packages required for the permanent occupation of Crown land by the River Intake systems and the Raw Water Pipeline previously submitted in July 2022 are in review by the Province. The Land Management Specialist at Alberta Environment has been following up with the various referrals sent out to the other specialists that are responsible for reviewing the applications. Additional information requested by Alberta Environment at the last meeting are being compiled and submitted. This included a request from Alberta Environment to have a non-routine supplement added to the application to clarify the construction procedures around the sharp-tailed grouse nesting area on the Peace River valley hill. The requested re-submission of the non-routine supplement has been completed.
6. **Pipeline Revised Alignment Land Agreements:** The Land Agent has met with the remaining affected landowners about acquiring the right of ways across their properties for the revised pipeline alignment from the top of the River valley to Spirit River and Rycroft. In total there are two title holders that are remaining and yet to sign. One of the remaining title holders has reviewed the agreement documents with his lawyer and has informed the Land Agent of his opposition to the pipeline right of way on his land. Representatives from Saddle Hills County are meeting with the other landowner next week to go over his concerns.
7. **Geotechnical Investigation – Subconsultant:** The Geotechnical Subconsultant for the Peace River valley hill, Thurber Engineering, is providing the geotechnical support for the HDD installation of the steel pipe section of the pipeline alignment that climbs out of the Peace River valley. The finalized Thurber geotechnical report is included as an appendix for the steel pipe HDD contract.
8. **Environmental Assessments - Terrestrial:** County concerns over the potential wetland compensation costs for the Regional Water Treatment Plant sites was reviewed with the Terrestrial Biologist, Fiera Biological Consulting, and the compensation scale will likely be on the lower end of wetland compensation classifications. Final valuations will be provided by Fiera following their field surveys that will be completed after spring runoff this year. Fiera is providing support for any of the supplemental environmental information requests raised by the Water Act Approval application review for the project. This includes providing the wetland boundaries along the pipeline alignment requested by Alberta Environment at a recent meeting. Fiera will also provide any follow up disposition support for the environmentally sensitive areas along the steel pipe HDD installation route up the Peace River valley hill. Coordination to facilitate winter construction for the steel pipe installation on the hill that respect the hard dates for the Restricted Activity Periods (RAP) will require support from Fiera to avoid the period for the construction RAP window stipulated by Alberta Environment.

9. **Environmental Assessments - Aquatic:** Following the January project meeting with Alberta Environment, the Department's Senior Fisheries Biologist had forwarded a formal supplemental information request following his review of the previously submitted Fish and Habitat environmental assessment report, related to monitoring of the possibility for fish entrainment by the river intake system. The formal inquiry was referred to our Aquatic Biological Subconsultant and his response was forwarded to Alberta Environment. A similar inquiry has now been received from the Federal Department of Fisheries and Oceans (DFO) following our meeting with them this week, which is now being reviewed. The Fish and Habitat environmental assessment report completed by the Mainstream Aquatics was the primary supporting documentation for the Provincial Water Act Approval as well as the Federal DFO application. The Principal Biologist for Mainstream Aquatics has retired as of July 31, 2022. The new supporting Aquatic Biological Subconsultant for the project for subsequent work shall be Ridge Environmental Planning Ltd.
10. **River Engineering:** The Hydraulic Subconsultant for the River Intake, Northwest Hydraulic Consultants (NHC), continues to provide engineering support related to the intake and pumping station design. Most recently, the River Engineer had provided the river level information at the site for establishing the elevation of the intermediate platform to be located in the pumping station wet well structure. The submitted report by the Hydraulic Subconsultant comprises a major document in support of the application package for the Water Act Approval, and NHC is assisting to provide some of the supplemental information that has been requested by Alberta Environment in the follow up to the original application submission. A recent information request from the Alberta Environment River Engineer was reviewed by NHC and NHC's response has been provided back to Alberta Environment.
11. **DFO Approval Application:** The application for the River intake was previously submitted to the Department of Fisheries and Oceans for approval in March 2022 and was subsequently forwarded by the Department to the Fisheries Protection Program Regulatory Review unit in Winnipeg for site specific review. A scheduled meeting on the application was held with DFO on October 20, 2022, to review the Approval application and we were awaiting further comments from the Department. Upon reaching out to DFO again, another meeting was scheduled, which was held with the Department on February 21, 2023. Additional questions from the DFO review were received following the meeting that are now being reviewed for response.
12. **Water Act Approval Applications:** The Water Act applications for the Approval to Construct for the River Intake systems and the Water Diversion licence for withdrawal of water from the Peace River were previously submitted and are in review by Alberta Environment. A draft version of the Water Diversion licence was received from Alberta Environment earlier this month which was reviewed by the group at the last meeting with Alberta Environment. Follow up requests for supplemental information requested by Alberta Environment have been, or are being, completed by MPE Engineering. This includes recent queries from the Alberta Environment River Engineer (response provided), and from the Alberta Environment Dam Safety group (still being reviewed). The Project Team's most recent meeting with Alberta Environment was on February 13, 2023, with next meeting scheduled for March 06, 2023.
13. **Historical Resources Act Approval Application:** The Historical Resources Impact Assessment (HRIA) stipulated by the Province was completed by the Archaeological Subconsultant, Circle CRM, and the final version of the report has been submitted to the Provincial Regulator, Alberta Culture. The report recommends to the Province that the project be granted Historical Resources Act approval.

14. **Navigable Protection Act Application:** The Notice of Works application for Navigable Waters previously submitted to Transport Canada for the river intake structure has been approved (December 06, 2022) for the temporary coffer dam during the construction and the permanent river intake.
15. **Indigenous Consultations:** The Scott Land Indigenous Consultation group has received an Adequacy Assessment Decision for the previous Consultation submissions. First Nations Consultations were coordinated by Scott Land and Lease's Indigenous Consultation department for the Consultations required by the Public Lands Act Disposition application and the Consultation stipulated by the Federal Grant requirements for the project. For the Water Act Pre-Consultation Assessment, the Aboriginal Consultation Office (ACO) confirmed adequacy and no additional consultations required. Saddle Hills County also received confirmation from the Federal Government in January 2023 that Infrastructure Canada considers the Indigenous consultation requirement for the project to have been met.
16. **Steel Pipe Design for Peace River Valley Hill:** The HDD Specialist Subconsultant, Blue Fox Engineering, has provided assistance with the steel pipe installation contract as the contract has been prepared for tender. Blue Fox has provided engineering support for the steel pipe HDD tender documents, and shall provide support for evaluation of tender submissions, and resident services during construction review. The finalized set of design drawings for the Steel Pipe HDD and the specification documents have been forwarded to the County for review in advance of tendering the contract.
17. **Pre-Qualification of Specialist HDD Contractors:** For the specialized HDD installation of the steel pipe section of the Raw Water Supply Line that climbs out of the Peace River valley, contractor pre-qualification is an option that could be completed in advance of tendering the work. A Request for Qualification (RFQ) document was developed for this contractor pre-qualification purpose by MPE Engineering with input from the HDD Specialist, Blue Fox Engineering incorporated into the RFQ document. There were some reservations from the County on whether to proceed with the RFQ process in the current market with rising construction cost due to concerns over the possibility of limiting bidder competition if some qualified contractors either did not meet the RFQ requirements, or could be caught in a timing conflict that may inhibit later decision to bid. The RFQ has since been cancelled.
18. **Electrical Service to the Pumping Station:** Quotation for servicing requested from ATCO by the Electrical Engineering Team has confirmed that the route for servicing of the Raw Water Pumping Station facility shall be from the Village of Rycroft which is the nearest connection point for the required three-phase power supply. The ballpark estimate cost quotation for the power servicing received by the County from ATCO was high in cost. Representatives from the County and MPE met with ATCO in Edmonton on February 01, 2023 to review the potential for decreasing the servicing cost for the Raw Water Pumping Station. The meeting was successful as the County was able to convince ATCO to revisit their servicing cost and provide a substantial discount. The adjusted servicing amount has not yet been received from ATCO. The question of whether fibre optic lines could also be installed on the power poles together with the electrical cables was raised by the County and the County is currently in discussions with ATCO for potentially proceeding with the fibre work.

NEXT STEPS

19. Complete the preliminary engineering and continue with the detailed design for the project including the drafting of revised plan and profile drawings for the pipeline, work with Land Agent and County Staff on procuring the balance of the landowner agreements for pipeline right of ways, complete the finalization of the Pumping Station land transfer and subdivision registration with the Land Agent, continue to hold subsequent meetings with Alberta Environment for the project and the approval submissions, continue with the river intake and pumping station design, and also wet well installation design, and excavation design with the geotechnical group, continue with Federal and Provincial regulatory approvals, proceed with tendering of steel pipe HDD contract for autumn 2023 construction, coordinate scheduling of steel pipe HDD winter construction to adhere to the hard dates imposed by Alberta Environment for the Restricted Access Period for garter snake hibernacula, provide responses to Public Lands Act and Water Act applications supplemental information requests from Alberta Environment, confirm with Archaeological Subconsultant the Historical Resources Impact Assessment approval by Alberta Culture, coordinating with ATCO for the power servicing to the Raw Water Pumping Station.

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