



ADDENDUM NUMBER 1

ES-013-17

FOR THE PROVISION OF A DETAILED ENGINEERED DESIGN FOR THE YOUBOU WELL #4 DEVELOPMENT, TIE IN, AND SYSTEM INTERGRATION EQUIPMENT UPGRADES

April 19, 2017

This Addendum shall be read in conjunction with and considered as an integral part of the Request for Proposals. Submitted Proposals shall include all items of this Addendum.

The Addendum is as follows:

Questions & Answers:

Q1. What is the CVRD expectation for the potable flow demand within the Youbou Water System in terms of average daily demand, maximum daily demand and peak hourly demand?

A1. A conservative estimation is given for these items in the technical memorandum by KWL, Item 2.2 available in the Sync Hyperlink Page 3 of the RFP document, in folder Arnold Road Booster/PRV.

Q2. What is the CVRD expectation for the firefighting flow?

A2. Fireflows will continue to be provide by the Youbou and Creekside reservoirs with their designed balancing storage for fire protection.

Q3. Can the well pump(s) provide enough pressure for the distribution system? Can we have the pump(s) specs?

A3. The well pumps deliver water to the Creekside reservoir and cascade to atmosphere into the tank. Arnold Road Booster Station provides boosted pressure to convey the water from Creekside to the Youbou system and then ultimately the Youbou reservoir. There would be an expectation to revisit the design of this site to optimize conveyancing capacity through Arnold Road. considering the existing equipment, redundant available equipment (Aurora Vertical Split Case pump 6x5x11) Youbou treatment site, or replacement equipment.

Q4. Has the CVRD completed any hydrogeology or groundwater engineering studies on Well #3? We would be particularly interested in a Well Head Protection Plan and any study of GUDI (groundwater under direct influence of surface water) or GARP (groundwater at risk of pathogens), but any other hydrogeology study would also be relevant. If yes, how could we get a copy of the reports?

A4. No the CVRD has no additional reports with regard to GUDI and GARP other than the initial hydrogeological reports provided by 1st Team Engineering for Well #3, and Lowen Hydrogeological Consulting for Well #4.

Available in the Sync Hyperlink page 3 of the RFP document, in folders Well #3, and #4. With source approval already given by Island Health, the expectation of Best Management Practices considered in the development of the Well #4 from this Project. With the construction permit approval, and monitoring objectives and approval for operating permit, the CVRD would expect any additional expectation from Island Health toward GUDI, or GARP to be addressed through this process, if need be.

Q5. Are the well pumps directed to the reservoir before the distribution system? We would like to understand if the well pumps are sized at 4,360 m³/d (800 Usgpm) or lower flow rate as this affects pipe diameter, chemical feed rates, and UV disinfection.

A5. The CVRD's hope is to optimize the potential of the aquifers performance. Well #3 pumps directly to the Creekside reservoir before entering the distribution system; the intent is for Well #4 to connect to the same 150mm line. With the Youbou treatment plant becoming redundant after this project, the UV Trojan Swift D06 units would be available for retro fit into the Creekside treatment building. The right sizing of pipe, flow meter, and other appurtenances is expected to accommodate this. Utilizing the Trojan D06 units would dramatically increase the conveyancing capacity of the flow from the well.

End of Addendum 1

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