



## **REQUEST FOR TENDER No. 22-012**

### **Kinkade Pump Station Upgrades**

#### **Addendum 1**

**Issued: January 25, 2022**

**14 pages**

**Closing Date & Time: on or before 3:00 PM Pacific Time on February 18, 2022**

This addendum shall be read in conjunction with and considered as an integral part of the Request for Tender. Revisions supersede the information contained in the original Tender or previously issued Addendum. No consideration will be allowed for any extras due to any Vendor not being familiar with the contents of this Addendum. All other terms and conditions remain the same.

#### **Tender Addendum**

1. **DELETE:** Description of Work dated January 20, 2022, Revision 0  
(4 pages)
  
- ADD:** Description of Work dated January 25, 2022, Revision 1  
(4 pages attached)

For clarity, the following items are changed in the Description of Work document.

- Removed and replaced the General Description Section 2 in the Description of Work with: "In general, the Work shall consist of replacing the electrical kiosk and coordinating with RDN Operations and Electrical/Instrumentation staff who will be installing new pumps, rails and accessories in the Wet Well at the RDN's Kinkade Pump Station."
  
- Removed and replaced the Wet Well Work Section 3 in the Description of Work with: "RDN Operations will install two (2) new RDN-supplied submersible pumps (3hp, 600V, 3PH/60Hz) and rails in the Wet Well immediately prior to installation and commissioning of the new electrical kiosk. RDN Electrical/Instrumentation staff will remove the old floats and install the new floats and ultrasonic level

transmitter in the Wet Well. The Contractor shall supply and commission the new floats and ultrasonic level transmitter. The Work shall include coordination with RDN Operations, and connection and commissioning of the two new submersible pumps, floats and ultrasonic level transmitter. Details of the new pumps are included as an appendix to this tender.”

- Added Item 5.3 to Description of Work: “Removal of old floats and installation of new floats and ultrasonic level transmitter. By RDN E/I staff.”
- Added Item 5.4 to Description of Work: “Supply, installation, programming and integration of the security system described in the Drawings and Specifications. RDN to hire Price’s Alarms. For clarity, the Contractor shall test the outputs from the multismart controller to confirm functionality prior to Price’s Alarms installation.”

2. ADD: Site Photos (6 pages attached)

### **Questions & Answers**

**Q1.** Under the description of work, it calls for:

2. General Description

In general, the Work shall consist of replacing the electrical kiosk, installing new pumps and rails in the wet well, and replacing valves at the RDN’s Kinkade Pump Station.

Do you have any drawings and specifications for the valves and piping that is to be replaced or is the RDN completing this work?

**A1.** RDN Operations will be performing the pump, rails, and accessories replacement, including any necessary piping for the new pumps. Please see the attached updated Description of Work.

**Q2.** Is the contractor or the RDN switching out the floats in the wet well?

**A2.** RDN E/I will remove the old floats and install the new floats and ultrasonic level transmitter in the wet-well. Contractor to supply and commission the new floats and ultrasonic level transmitter. The purpose of this coordination with RDN E/I is to ensure the Contractor does not need to perform a 9.22 confined space entry into the wet-well. Please see the attached updated Description of Work.

**Q3.** Does the RDN supplied pump package include the discharge 90s, rail holders, chain, floats, CAS/multismart controllers and commissioning the pumps/controllers?


**A3.** RDN Operations will supply and install the pumps, rails, associated hardware, and piping in the wet-well. The Contractor shall connect to the new pump electrical and

communication wiring, supply and install the necessary CAS/multismart controllers, and program and commission the pumps.

- Q4.** Will the owner be having prices complete the programming of their security panel?
- A4.** The RDN will hire and direct Price's Alarms to supply, install, program, and integrate the security system described in the Drawings and Specifications. The Contractor shall test the outputs from the multismart controller to confirm functionality prior to Price's Alarms installation.
- Q5.** Is the owner or contractor to carry the insurance for the owner supplied items? If so, what is the cost of the owner supplied materials?
- A5.** The Contractor is not required to provide insurance for RDN supplied items.
- Q6.** What is the pipe and manholes sizes that require plugs for the bypass pumping?
- A6.** RDN Operations will plug the manholes. No work is required in the manholes by the Contractor, other than to pump them out to maintain levels. The pipe size at the manholes is 250mm diameter PVC and the concrete manhole barrels are 1050mm diameter with standard 600mm diameter castings.
- Q7.** Does the existing forcemain have connection points for the bypass pumping? If not do you have any as-built data that can be provided for the forcemain? Are the manholes in the boulevard or roadway?
- A7.** The existing forcemain does not have connection points for bypass pumping. However, bypass pumping from the forcemain is not required. The two upstream manholes to be plugged are in the road shoulder and boulevard. Please see attached photos.
- Q8.** Will the RDN be the prime contractor from a WCB standpoint?
- A8.** The successful Contractor will be assigned the Prime Contractor and must be qualified and willing to take on this responsibility.
- Q9.** Will the owner be providing the 9.22 confined entry procedure?
- A9.** RDN Operations will provide the 9.22 confined space entry procedure for the wet-well and manhole plugging work to be performed by RDN Operations. The scope of work has been delineated to ensure the Contractor will not need to enter the wet-well or manholes being plugged.
- Q10.** What are the assumed incoming flows to each bypass manhole?
- A10.** Overall incoming flows are approximately 70,000 litres per day. The flows from each branch of the system are unknown.

- Q11.** What is the size and depth of each bypass manhole?
- A11.** Refer to Question 6 above for manhole size. The depth of each manhole is approximately 3 to 4m.
- Q12.** What is the capacity of the system side of each bypass manhole based on a 1 meter capacity?
- A12.** The Kinkade Road branch of the gravity sanitary sewer has approximately 34,000 litres of storage capacity. The McFeely Road branch of the gravity sanitary sewer has approximately 23,000 litres of storage capacity.
- Q13.** What is the elevation from each bypass manhole to the discharge of the forcemain?
- A13.** The manhole inverts are at approximately 1.0m (Kinkade) and 1.2m (McFeely) elevation. The discharge of the forcemain is at approximately 2.0m.

End of Addendum 1

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**1. Site Location**

The site of the Work is the Regional District of Nanaimo’s (RDN’s) Kinkade Pump Station at 105 Kinkade Rd (Kinkade Road and McFeely Drive), Qualicum Beach, BC.

**2. General Description**

In general, the Work shall consist of replacing the electrical kiosk and coordinating with RDN Operations and Electrical/Instrumentation staff who will be installing new pumps, rails and accessories in the Wet Well at the RDN’s Kinkade Pump Station.

**3. Definition of the Work**

The Work shall consist of supplying all materials, equipment, temporary facilities, tools, labour, supervision, overhead, and everything required to accomplish the Work described and called for in the Contract Documents.

**Electrical Kiosk Installation**

The Work shall consist of removing the existing kiosk and replacing with a new shop-assembled and tested electrical Kiosk on the existing foundation, in accordance with the project drawings. A six-foot high chain-link fence, with a four-foot wide lockable gate, shall be installed around the conduit stub-up area, as shown in the appended sketch.

The project drawings stipulate the re-use of the existing Automatic Transfer Switch (ATS). A new appropriately rated ATS, installed and fully pre-commissioned as part of the new Electrical Kiosk, is included as Optional Work.


**Wet Well Work**

RDN Operations will install two (2) new RDN-supplied submersible pumps (3hp, 600V, 3PH/60Hz) and rails in the Wet Well immediately prior to installation and commissioning of the new electrical kiosk. RDN Electrical/Instrumentation staff will remove the old floats and install the new floats and ultrasonic level transmitter in the Wet Well. The Contractor shall supply and commission the new floats and ultrasonic level transmitter. The Work shall include coordination with RDN Operations, and connection and commissioning of the two new submersible pumps, floats and ultrasonic level transmitter. Details of the new pumps are included as an appendix to this tender.

**Bypass Pumping / Flow Management**

The Work shall include implementing a flow management plan to enable the sanitary sewer system to function during installation and commissioning of the Work. The Contractor shall submit a flow management plan to the RDN for approval. The plan shall allow RDN Operations two (2) days (Monday to Friday) for removal and replacement of the submersible pumps in the wet well. The plan shall be approved prior to work commencing onsite. A suggested flow management plan follows:

1. RDN Operations to plug two upstream manholes on Kinkade Road and McFeely Drive, as shown in the appended sketch.
2. Contractor permitted to allow water levels to reach, but not exceed, 1.2m elevation at the two plugged manholes in order to use the gravity sanitary mains as short-term storage. Sewage

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can be discharged into a nearby manhole at the end of Buller Road. At minimum, the two plugged manholes must be pumped down to invert at 7am and 9pm each day.


3. RDN to remove and replace two pumps and associated hardware in pump station wet-well.
4. RDN to remove plugs at two upstream manholes to allow flow to enter pump station wet-well.
5. Contractor to continue to maintain water level, as noted above in Item 2, at pump station wet-well during electrical work and commissioning.

For reference, system flows are approximately 70,000 litres per day and the gravity sanitary mains have approximately 57,000 litres of storage capacity.

#### **4. Included in the Work**

The Work shall include the supply of all materials, labour, supervision, plant equipment, and tools necessary to complete the Work described herein and shown on the drawings and standards. It shall generally consist of, but not specifically be limited to the following:

- 4.1. Supply all equipment, materials and consumables required to accomplish the Work, unless noted otherwise.
- 4.2. Supply skilled labour and supervision with the proper qualifications to accomplish the Work in a thoroughly substantial and workmanlike manner.
- 4.3. Issue of submittals, including but not limited to equipment and prefabricated materials, to the RDN for review and approval well in advance of construction.
- 4.4. Perform field measurements and investigation as required to ensure equipment fit.
- 4.5. Conduct all work at the Kinkade Pump Station site in accordance with RDN policies and procedures, applicable local bylaws, the BC Occupational Health and Safety Regulation and other applicable provincial and federal regulations, including but not limited to:
  - 4.5.1. WorkSafeBC personal protective clothing and equipment procedures;
  - 4.5.2. WorkSafeBC confined space entry procedures to address gas and other hazards;
  - 4.5.3. WorkSafeBC fall protection procedures;
  - 4.5.4. WorkSafeBC ladders, scaffolds and temporary work platforms procedures;
  - 4.5.5. WorkSafeBC cranes and hoists procedures;
  - 4.5.6. WorkSafeBC rigging procedures;
  - 4.5.7. RDN Wastewater Services Environmental Management System Contractor-Supplier package, including training in situations where the Work could have a significant impact on the environment. See appended copy of the Contractor-Supplier package.
- 4.6. Clean up all debris on a daily basis and leave the job site in a clean manner, prior to leaving the site.

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- 4.7. Secure the construction site from access by the public and take precautions to prevent theft.
- 4.8. Provide temporary single and multi-phase electrical power supplies as required for all of the site work.
- 4.9. Receive and keep secure Owner-supplied materials. Inspect all Owner-supplied materials to verify that they are not damaged and are complete and suitable for the intended purpose. Notify the RDN if any issues are found.
- 4.10. Perform and document quality assurance inspection and testing on the completed Work in accordance with the Contractor's standards.
- 4.11. Install equipment in accordance with the manufacturer's recommendations and requirements. Where manuals are not provided with Owner-supplied equipment, request copies from the RDN.
- 4.12. Provision of a process control narrative for programming of the station.
- 4.13. Provision of red-lined project Drawings indicating as-built details, for preparation of record drawings by the Engineer.
- 4.14. Electrical lockout for safe work, where required.
- 4.15. Coordination of all necessary permitting from and work by BC Hydro and/or other applicable authorities.
- 4.16. Provision of an Operation and Maintenance (O&M) Manual for the new Electrical Kiosk and its components.
- 4.17. Provision of O&M training for RDN Operations and Electrical & Instrumentation staff.

**5. Not Included in the Work**

- 5.1. Submersible pumps and accessories supply and installation. By RDN Operations.
- 5.2. Plugging and unplugging of two manholes upstream of the pump station for flow management purposes. By RDN Operations.
- 5.3. Removal of old floats and installation of new floats and ultrasonic level transmitter. By RDN E/I staff.
- 5.4. Supply, installation, programming and integration of the security system described in the Drawings and Specifications. RDN to hire Price's Alarms. For clarity, the Contractor shall test the outputs from the multismart controller to confirm functionality prior to Price's Alarms installation.

**6. Project Schedule**

- 6.1. The Work shall be executed in accordance with the Contractor's proposed schedule, incorporating review and feedback from the RDN.

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- 6.2. At a minimum, the following milestones/hold points shall be incorporated in the Contractor's schedule, along with the other tasks required to clearly present the Contractor's execution plan:
  - 6.2.1. Kiosk panel shop Factory Acceptance Test / Inspection (provide the RDN the opportunity to perform a shop inspection or review the assembled kiosk by other reasonable means, such as photographs).
  - 6.2.2. Pre-job coordination meeting with the RDN prior to demolition.
  - 6.2.3. Field inspection by the RDN post-demolition.
  - 6.2.4. Field inspection by the RDN prior to re-energization.
  - 6.2.5. Field commissioning, training, and equipment hand-over to RDN operations.
- 6.3. The duration of the period where the pump station is out of service should be minimized.
- 6.4. Preparation work while the station is in normal operation can commence in accordance with the Contractor's proposed schedule.
- 6.5. The RDN retains the right to re-schedule this work dependent on unplanned operational requirements.
- 6.6. Substantial Completion by September 30, 2022.



Kinkade Pump Station  
Electrical Kiosk

McFeely

McFeely Manhole







McFeely Manhole





McFeely Manhole



Kinkade Pump Station



Kinkade Manhole







Kinkade Manhole





Kinkade Manhole