



## REQUEST FOR STATEMENTS OF QUALIFICATIONS (RFSQ) No. 23-015

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**DATE:** February 7, 2023

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**Project Title:** Wellington Pump Station Upgrade Design Services

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The Regional District of Nanaimo invites qualified and experienced firms to submit Statements of Qualifications to complete the detailed design for the rehabilitation and upgrade of the Wellington Pump Station including architectural, process, civil, structural, electrical, instrumentation, control, mechanical, building mechanical, and piping design & engineering. Eligible Firms must have a Permit to Practice professional engineering in BC issued by EGBC.

### **A. Intent**

This Request for Statements of Qualifications (RFSQ) is issued to determine the most qualified and experienced service provider to meet the Regional District of Nanaimo's requirements, expectations, and timeline.

The Regional District of Nanaimo will review submissions received in response to this RFSQ and enter discussions with the top-ranked Respondent to negotiate the terms, scope, timeline, and cost based on the actual scope of work required (the Work). Should these negotiations fail to result in a contract for the Work, the Regional District of Nanaimo may then elect to negotiate with the next highest-ranked service provider and so on until an agreement is reached or the process is cancelled.

In any event, the Regional District of Nanaimo shall not be bound to enter a contract with any Respondent to this RFSQ and, at its sole discretion, may elect to collapse this process.

### **B. Background**

The Wellington Pumpstation (WPS) was built in 1978 and is owned and operated by the Regional District of Nanaimo (RDN). The WPS is located at 5200 Fillinger Crescent in Nanaimo, B.C. and its force main runs south under Entwhistle Drive approximately 470m, at which point it connects to the Wellington North Slope Interceptor and flows east by gravity to the Greater Nanaimo Pollution Control Centre (GNPCC) at 4600 Hammond Bay Road for treatment.

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The pumpstation has a current firm capacity of approximately 208 L/s and provides conveyance of approximately 25% of the wastewater flows directed to GNPCC. Based on a recent hydraulic study and capacity analysis, the firm capacity of the station is insufficient to meet the current design peak wet weather flow (PWWF) requirement. Pump station internals are nearing end of life and need replacement: Piping, structural steel, wet well liner, electrical power and MCC, instrumentation, and control systems. The pump station will also require upgrades: Addition of a new stair access to remove confined space entry requirements, a new odour control system, above ground force main valve chamber, and backup power.

The pump station property is approximately 8m wide and 60m long, with the pump station itself built at the north end of the property next to the foreshore. The property and the existing stair access around the exterior of the wet well is shared as a pedestrian beach access. Siting the generator, new electrical room, valve chamber, and odour control will require a balance of practicality and maintaining the aesthetic and use of a public space.

### **C. Contemplated Scope of Services**

The general scope of services requested as part of this RFSQ includes all engineering and architectural design, management and control required to prepare a complete upgrade design package that can be effectively executed by contractors, and provide the RDN with detailed and useable records for ongoing operational and maintenance use. These services include:

- i. Project management plans and procedures to ensure project quality, cost, schedule, and risk control;
  - ii. Review all available record documents including as-built survey drawing and survey control point to anchor the design in space;
  - iii. A complete detailed design to:
    - Upgrade the electrical utility and add backup power capacity;
    - Replace the electrical system including the aging MCC;
    - Create new electrical room to accommodate a new MCC;
    - Replace internal lighting to provide better lighting inside wet well;
    - Replace the instrumentation, PLC and control system;
    - Replace degrading piping and structural steel below the wet well platform;
    - Relocate a flow meter to a new above ground valve metering station;
    - Relocate forcemain section to accommodate new facilities as required;
    - Add instrument air system to control pump discharge valves;
    - Upgrade the capacity of the WPS to meet future PWWF requirements;
    - Replace pump bases and guide rails;
    - Replace hoist and monorail;
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- Upgrade HVAC system to improve supply air flow rate, mixing inside the wet well, relocate an exhaust fan outside of the wet well, and alleviate access obstructions.
  - Upgrade odour control system to reduce impact on public;
  - Create new stair access to wet well to eliminate confined space;
  - Create new operator workstation space and toilet facility;
  - Improve site vehicle access/egress safety;
  - Create new public beach access;
  - Replace pump station inlet gate and add powered actuator;
- iv. Detailed design to include all architectural, process, civil, structural, electrical, instrumentation, controls, mechanical, building mechanical, and piping required for a complete design;
- v. Drawings, specifications, data sheets, and other documents required for a complete detailed design;
- vi. 3D model for WPS internal work to be created using Autoplant or AutoCAD Plant 3D;
- vii. Participation in a HAZOP-style Process Hazard Analysis.
- viii. Consideration of equipment access, lifting, removal, and replacement;
- ix. Identification of and procurement support for long lead equipment including specifications and datasheets, tender preparation, tender Q&A support, and tender review and recommendation. RDN to issue the tender;
- x. Participate in a value engineering session facilitated by the RDN with a third party engineering firm at preliminary design stage gate;
- xi. Procurement support for main construction contract including specifications and datasheets, tender preparation, tender Q&A support, and tender review and recommendation. RDN to issue the tender;
- xii. Commissioning, programming and integration;
- xiii. Construction services;
- xiv. Project lists, plans, and reports to allow for fully documented design, construction, commissioning, and ongoing operational reference;
- xv. All significant design calculations are to be submitted to the owner for record.

**D. Contemplated Schedule**

- i. Final agreement in place by April 7, 2023.
  - ii. Preliminary design completion by June 20, 2023.
  - iii. Value engineering exercise to take place July 5, 2023.
  - iv. Early procurement POs issued by September 6, 2023.
  - v. Detailed design completion by December 22, 2023.
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#### **E. Statement of Qualifications and Evaluation**

The statement of qualifications should be no longer than twelve (12) single-sided pages in length (not including cover page, cover letter and appendices). Please include the following:

- Qualifications and areas of expertise of the Firm and nominated Project Team. Please include CV/Resume of the key personnel of the Project Team and explain their role in the project, and an organizational chart demonstrating roles and lines of responsibility for the Project Team.
- Experience of Firm and nominated Project Team in previous relevant projects. Provide short descriptions of similar projects and assignments completed by both the Firm and nominated Project Team members. Provide project examples that demonstrate experience in congested brownfield areas, foreshore, small footprints, and shared public use projects that include nominated team members. Provide client references for two of the referenced projects. If the Firm has performed work with the RDN in the past, internal RDN references may be contacted at the RDN's discretion.
- A description of your Firm's
  - Project management processes to assure quality and project control.
  - Design submittal/review/procurement milestones.
  - Relevant supporting resources that could be drawn on should additional expertise be required to address anticipated or potential challenges to this specific project.
  - List of relevant and plant-specific engineering and design software intended to be used for this assignment including Autodesk Plant 3D.
- A statement of your firm's ability to complete the work within the timeframe described substantiated with information demonstrating a well thought out commitment (e.g. schedule, discussion, notes, concerns, available resources, etc.).
- A statement of your firm's approach to advancing equity and sustainability in corporate operations and service provision, including mention of official policies, achievements or standards met.
- A statement confirming that your Firm has a Permit to Practice professional engineering in BC issued by EGBC.

Statements of Qualifications (the "SOQ") will be initially evaluated by the Regional District of Nanaimo based on the above and assigned a qualitative score out of 50 points. Any or all SOQs will not necessarily be accepted.

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**F. Budget**

The RDN's total project budget is approximately \$3,500,000 & GST

**G. Submission Date & Time**

Statements of Qualifications should be received **BY EMAIL ONLY** on or before 3:00:00 p.m. local time on the 28<sup>th</sup> day of February, 2023. The RDN reserves the right to accept late submissions.

**H. Questions and Submissions**

Questions are requested five (5) calendar days before the closing date.

Questions and submissions should be directed to:

**James Haddou, P.Eng.**  
**Project Engineer**  
**Regional District of Nanaimo**  
**6300 Hammond Bay Road, V9T 6N2**  
**Phone: 250-390-6560**  
**Email: [jhaddou@rdn.bc.ca](mailto:jhaddou@rdn.bc.ca)**

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## **APPENDIX A: Photographs**

























ON-BOARD Mobile Control Truck Position WPS  
1. Check the status of the truck position WPS  
2. Check the status of the truck position WPS  
3. Check the status of the truck position WPS  
4. Check the status of the truck position WPS  
5. Check the status of the truck position WPS  
6. Check the status of the truck position WPS  
7. Check the status of the truck position WPS  
8. Check the status of the truck position WPS  
9. Check the status of the truck position WPS  
10. Check the status of the truck position WPS



CHECK TELEMERGENCY UNIT  
BEFORE AND AFTER OPERATING  
OR RESETTING

**DANGER**  
HIGH VOLTAGE

WPS  
5200 FILLING C

Wastewater Services  
Emergency Response Procedures

Service	Response Time	Service Area
Wastewater Services	15 minutes	Wastewater Services
Emergency Response	30 minutes	Emergency Response
Wastewater Services	45 minutes	Wastewater Services
Emergency Response	1 hour	Emergency Response
Wastewater Services	1.5 hours	Wastewater Services
Emergency Response	2 hours	Emergency Response
Wastewater Services	2.5 hours	Wastewater Services
Emergency Response	3 hours	Emergency Response
Wastewater Services	3.5 hours	Wastewater Services
Emergency Response	4 hours	Emergency Response
Wastewater Services	4.5 hours	Wastewater Services
Emergency Response	5 hours	Emergency Response
Wastewater Services	5.5 hours	Wastewater Services
Emergency Response	6 hours	Emergency Response
Wastewater Services	6.5 hours	Wastewater Services
Emergency Response	7 hours	Emergency Response
Wastewater Services	7.5 hours	Wastewater Services
Emergency Response	8 hours	Emergency Response
Wastewater Services	8.5 hours	Wastewater Services
Emergency Response	9 hours	Emergency Response
Wastewater Services	9.5 hours	Wastewater Services
Emergency Response	10 hours	Emergency Response

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Wastewater Services	3.5 hours	Wastewater Services
Emergency Response	4 hours	Emergency Response
Wastewater Services	4.5 hours	Wastewater Services
Emergency Response	5 hours	Emergency Response
Wastewater Services	5.5 hours	Wastewater Services
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Wastewater Services	6.5 hours	Wastewater Services
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**FIRE**  
EXTINGUISHER  
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**DANGER**  
CONFINED SPACE



**DANGER**  
CONFINED SPACE  
AUTHORIZED  
PERSONNEL ONLY







































