

ATLANTIC FIRST NATIONS WATER AUTHORITY

REQUEST FOR PROPOSALS

(RFP)



Engineering Services for Design
of Water and Wastewater
Metering Facilities

ISSUE DATE:
September 29, 2022

CLOSING DATE:
October 14, 2022

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REQUEST FOR PROPOSALS

Engineering Services for Design of Water and Wastewater Metering Facilities

1. PURPOSE

AFNWA is a First Nations owned non-profit organization incorporated under the Canada Not-for-Profit Corporations Act on July 18, 2018.

AFNWA will be responsible for the operation, maintenance, and capital upgrades of all water and wastewater assets in participating First Nations communities. The design of master metering facilities for potable/drinking water and wastewater systems will be an important step to support their operations.

2. BACKGROUND

Atlantic First Nations Water Authority Inc.

Delivered by a regional water authority and owned and operated by First Nations, the Atlantic First Nations Water Authority Inc. (AFNWA) is a progressive, innovative, and long-term solution for water and wastewater management for Atlantic First Nations communities.

With the inclusion of traditional knowledge and culture, environmental stewardship, the spiritual aspects of water and Two-Eyed Seeing, the AFNWA provides safe, clean drinking water and wastewater for participating First Nations communities in Atlantic Canada.

3. PROBLEM STATEMENT AND/OR GOALS

The AFNWA will be positioned to provide drinking water and wastewater services for AFNWA's participating communities by December 2022. In keeping with progressive water & wastewater utilities, the AFNWA will endeavour to optimize its operations by implementing inflow and infiltration [I&I] and water loss control programs, to reduce extraneous flows and leakage that are impacting the treatment and collection/distribution systems.

The community names and locations that have expressed an interest in exploring membership in AFNWA are shown in Schedule "A".

The AFNWA is seeking Engineering services to design water and wastewater flow metering facilities within the First Nations communities considering membership in AFNWA. This project is the first phase of a planned wastewater Infiltration & Inflow (I&I) and Water Loss Control programs for AFNWA.

The current Phase 1 work includes:

- Planning level study of each community to select appropriate location(s) for water and wastewater metering for optimal data collection for future phase I&I and Water Loss Control analysis.
- Design of permanent facilities to monitor wastewater flows at Wastewater Treatment Facilities (WWTFs) for each community. For WWTFs with existing wastewater flow monitoring, the work would be limited to reviewing the installation, calibration, and accuracy of the equipment.
- Design of master metering facilities for drinking water distribution systems.

Future phases of this program, **outside the scope of this current assignment**, includes:

- Data collection and analysis
- Development and implementation of I&I and water loss reduction measures
- Long-term monitoring

4. SCOPE OF SERVICES

Available Documentation: AFNWA will provide existing information from the Asset Management Plan project recently completed and other background reports for all communities, as available. AFNWA will provide detailed mapping (PDF and GIS) of water and wastewater systems. The selected consultant will be responsible for the following:

Task 1: Site Assessments

Visit communities to verify existing information and to gather other pertinent information for the following purposes:

- Identify suitable locations for installation of new flow meters and associated chambers.
- Identify instrumentation requirements for connection to the existing or future SCADA system.
- Identify requirements for electrical power supply for the field devices and associated panels.
- Where flow meters are currently in place, inspect and ascertain the type of devices, effectiveness in monitoring flows, and accuracy of the instruments.

Task 2: Conceptual Design

- Review community water and wastewater infrastructure to understand system flow and control patterns.
- Review of industry best practices for metering associated with I&I reduction and water loss control programs for small systems
- Identify optimal wastewater metering location(s) to capture I&I flow data for collection system. Metering should be upstream of system pumping or treatment systems where equalization may

buffer the peak flows. For wastewater treatment facilities (WWTFs), it is intended that one flow meter will be installed per wastewater treatment facility to measure the system influent. Where flow meters are already in place at some facilities, the proposer will assess the installation for proper configuration, condition, accuracy and suitability of continued use. The proposer should assess and select the type of field devices (e.g., weirs or flumes for open channel or magnetic meters for full pipe flow) based on the site conditions, space availability and accuracy.

- Identify optimal water master meter locations to measure system flows and manage water loss within separate zones as established by separate pumping, pressure reduction or system size. Assume three locations in three larger communities, and an average of two locations in the remainder of the communities, to be adjusted upon review of distribution system mapping.
- Prepare Design Report on findings and recommendations for flow metering systems for water and wastewater. Report shall include a Class D estimate of costs for construction including commissioning.
- Design documents shall conform to the Water and Wastewater Guidelines as issued by the Atlantic Canada Water & Wastewater Association.
- AFNWA is in the process of completing development of SCADA standards which govern design and implementation of SCADA related work. All instrumentation and control work shall be undertaken in accordance with these standards, provided by AFNWA.

Task 3: Detailed Design

- Prepare detailed design documents for flow meters including Issued for Approval specifications and drawings for civil, structural, process, electrical and instrumentation disciplines.
- The specifications and drawings for drinking water meter chambers should be standardized (i.e., the same specifications and drawings to be used for all communities with provisions to customize for site conditions and pipe sizes). AFNWA intends to use these water meter chamber standard specification and details for future installation.
- AFNWA has selected the Nova Scotia Roadbuilders Standard Specification for Municipal Services (latest edition) which can be purchased through the Joint Committee on Contract Documents (<https://www.standardspec.ca/>) for construction contract documents.
- Prepare a Class C estimate of costs for construction including commissioning.

Task 4: Tender and Construction Services

- Prepare Issued for Tender documents for the metering systems including assistance with tendering, issuance of Addenda as needed, evaluation of bids and recommendations for award.
- Provide Construction Services during the construction including commissioning of equipment.

Future Phase of I&I Reduction and Water Loss Control Programs (not in this contract)

The current project scope as detailed above shall be undertaken with the overall long-term development and implementation of a formal I&I Reduction and Water Loss Control Program in mind. The future will focus on data collection and analysis followed by the development of comprehensive field programs I&I reduction for wastewater systems and loss control for drinking water systems for prioritized communities based on the data analysis and program development. The future phase(s) will be subject to a separate procurement process with AFNWA following completion of this first phase of the project.

5. CRITERIA SELECTION COMMITTEE

The AFNWA will have a select group of experienced individuals participate on the selection committee.

6. OWNERSHIP OF PROGRAM MATERIALS (if applicable)

The AFNWA will have complete and full ownership and use of all reports and materials (“works”) produced by the contract under this project and shall have copyright therein. In consideration of entering into the agreement, the contractor must agree, in writing, to waive all moral rights (as defined by the *Canadian Copyright Act*) in any works in which copyright subsists.

7. REQUEST FOR PROPOSAL PROCESS

7.1 Closing Date

Each proposal must be received no later than 4:00 pm on October 14, 2022.

The anticipated start date of the services is early November 2022.

Proposals may be sent by e-mail or hard copy (mail or courier).

Proposals that are submitted by mail must also be submitted with one electronic copy (Word or PDF Format).

If delivery is made by courier service, the proposal must be received at the correct location by the time and date specified. It is the responsibility of the proposer to see that the delivery is made as required in this RFP.

The following email address shall be used for submission of the electronic copy of proposals:

Wanda.Ralph@afnwa.ca

The following address shall be used for submission of the hard copy of proposals:

Atlantic First Nations Water Authority
6 Louise Street
Truro, NS
B2N 3K2
Attention: Wanda Ralph, Procurement Officer

Receipt of proposal submissions will be acknowledged via e-mail upon receipt, provided a valid e-mail accompanies the proposals.

Proposers will be responsible to check the AFNWA website for addenda or notifications about the RFP process.

7.2 Late Proposals

Late proposals will not be accepted and will be returned to the proposer.

7.3 Evaluation and Selection

The AFNWA will review proposals received and determine responsiveness in accordance with the evaluation criteria specified for this RFP. The preliminary result may cause the AFNWA to shortlist those proposers that best meet the criteria. Shortlisted proposers may be invited to submit clarifications and/or make a presentation following specific requirements. In considering references, the AFNWA may seek information and references from projects and organizations that are not expressly listed on the proposal as a reference.

AFNWA may request best and final offers from all or the shortlisted proposers. The evaluation committee will recommend the proposer that meets the goals of the RFP and the requirements to successfully perform the services. Best value is determined by balancing the price and the quality of the proposal based on the best interests of AFNWA.

The proposals will be evaluated based on the following criteria, whereas scoring is based on the maximum values totaling 100%.

- Proposed Project Staff – 30%
- Cost - 20%
- Work Outline and Methodology – 30%
- Qualifications and Demonstrated Experience – 20%

The following Bid Value Reductions may be applied:

Indigenous owned (>50% beneficial ownership) and commitment to environmental stewardship:
Up to 10% Bid Value Reduction

If non-indigenous owned, historical evidence of commitment to source from or employ
Indigenous businesses or people: Up to 5% Bid Value Reduction

Demonstrable commitment towards minimizing environmental impact through environmental

policies and procedures that either proactively/pre-emptively reduce carbon emissions, or that neutralize unavoidable environmental impact with activities that benefit the future of our planet:
Up to 5% Bid Value Reduction

7.4 Evaluation Criteria

Responsive proposals will be evaluated in accordance with the following criteria totaling 100%, as indicated in the previous section.

7.4.1. Proposed Project Staff

The proposal shall identify responsible professionals in all disciplines, the managers, the technical experts, and others contributing to the project. This should include staff in-house and those who are sub-consultants. Work shall be undertaken by registered and licensed staff to practice in Nova Scotia, New Brunswick, and Prince Edward Island.

Extra points will be awarded for Indigenous team members, with higher points for more senior Indigenous staff involvement.

7.4.2. Cost and Timing

The proposal shall include a schedule to identify the time required to complete various project milestones.

The proposer should demonstrate the availability of proposed team members and that the required technology and/or contracts can be in place to produce the deliverables in the time required.

The proposer shall provide a fixed fee for this Phase of work. In addition, the proposal shall provide a Time-Task matrix showing the number of hours allocated and hourly rates for each staff for each task/subtask, and estimated expenses.

Hourly rates will be utilized for any additional work approved during execution of the project.

7.4.3. Work Outline and Methodology

A response to this RFP must outline the methods for accomplishing the proposed work. Describe what, where, when, how, and in what sequence work will be carried out during the contract term. Consider how each task may be carried out; what services or interaction the Client representative requires. Identify any distinct and substantive qualifications for undertaking the proposed contract, such as availability of specialized equipment or unique approaches or concepts relevant to the required expectations.

The evaluation committee will score the proposal based on their perception of its clarity, completeness, and presentation. This criterion is not used to rate colour, graphics, or other visual techniques but only for content.

7.4.4. Qualifications and Demonstrated Experience

Responses shall describe previously completed projects with direct involvement by Project Team members that are related in size and scope to this project. Describe the dollar amount of the contract and a brief narrative of the successes encountered. Address how the experience will help you perform under this contract and provide references for each project. Indicate which of the proposed firms and project staff were involved in each referencing project.

The AFNWA reserves the right to investigate references projects, contract references and research other projects the respondent has worked on.

8. DEBRIEFING

At the conclusion of the RFP process, the successful proposer will be notified. A debriefing of unsuccessful proposers will be provided if requested.

9. ESTIMATED TIME FRAMES AND PROCESS

The following timetable outlines the anticipated schedule for the RFP and contract process. The timing and the sequence of events resulting from the RFP may vary and shall ultimately be determined by AFNWA and the Criteria Selection Committee.

Request for Proposals issued: September 29, 2022

Request for Proposals closes: October 14, 2022

Anticipated date for Proposals evaluation to be completed: October 21, 2022

Anticipated date for contract to be awarded: October 28, 2022

10. REQUEST FOR PROPOSAL PREPARATION

10.1 Signed Proposals

Each proposer must ensure that the proposal is signed by a person authorized to sign on behalf of the company/institution in response to this request for a proposal.

The proposer shall not replace or add subcontractors without the express written approval of the authorized contracting official.

10.2 Notification and Correspondence

All notices and correspondence will be sent to the principal proposer unless a request is made for the AFNWA to correspond with someone other than the principal proposer.

Questions: Questions may be addressed by e-mail to John.Lam@afnwa.ca or by phone 902-830-9646

However, in the interest of fairness, all questions will be answered in writing and sent to all responsive proposals via addenda.

10.3 Changes to Proposal Wording

The proposer will not change the wording of its proposal after closing and no words or comments will be added to the proposal unless requested by the AFNWA for purposes of clarification.

10.4 Working Language of the AFNWA

The working language for the purposes of this RFP is English and all responses to the RFP must be in English

10.5 Proposers' Expenses

Proposers are solely responsible for their own expenses in preparing a proposal and for subsequent negotiations with AFNWA, if any. If AFNWA elects to reject all proposals, AFNWA will not be liable to any proposer or its team for any claims, whether for costs or damages incurred by the proposer in preparing the proposal, loss of anticipated profit in connection with any final contract, or any other matter whatsoever.

10.6 Proposal Validity

Proposals will be open for acceptance for at least 90 days after the closing date.

10.7 Firm Pricing

Prices will be firm for the entire contract period unless this RFP specifically states otherwise.

10.8 Currency and Taxes

- Prices quoted must be: In Canadian dollars.
- The AFNWA is HST exempt, and the successful proposer will be provided a copy of its HST exemption letter.

11. Definition of Contract

Notice in writing to the successful proposer and the subsequent full execution of a written contract will constitute a contract for the goods or services and no proposer or its team shall acquire any legal or equitable rights or privileges relative to the goods or services until the occurrence of both such events.

12. Liability for Errors

While the AFNWA has used considerable efforts to ensure an accurate representation of information in this RFP, the information contained in this RFP is supplied solely as a guideline for proposers. The information is not guaranteed or warranted to be accurate by AFNWA, nor is it necessarily comprehensive or exhaustive. Nothing in this RFP is intended to relieve proposers from forming their own opinions and conclusions with respect to the matters addressed in this RFP.

13. Modification of Terms

The AFNWA reserves the right to modify the terms of this RFP at any time in its sole direction. This includes the right to cancel this RFP at any time prior to entering a contract with the successful proposer.

14. Ownership of Proposals and Freedom of Information

All documents, including proposals, submitted to the AFNWA, become the property of AFNWA. They will be received and held in confidence by AFNWA.

15. Use of Request for Proposals

This document, or any portion thereof, may not be used for any purpose other than the submission of proposals.

16. Confidentiality of Information

Information pertaining to the AFNWA obtained by the proposer, as a result of participation in this project, is confidential and must not be disclosed without written authorization from the AFNWA. The successful consultant will be requested to sign a Non-Disclosure Agreement and comply with OCAP (Ownership Control Access and Possession) requirements.

17. Insurance

After the proposal has been selected, the successful consultant shall provide proof of coverage for the following insurance:

1. Workers Compensation
2. Professional liability insurance
3. General liability insurance

Schedule A - Communities Exploring Membership with AFNWA

The locations of First Nation communities that have expressed an interest in exploring membership in AFNWA are shown in Figure 1 and listed in Table 1 below.

Figure 1: Locations of the First Nation communities

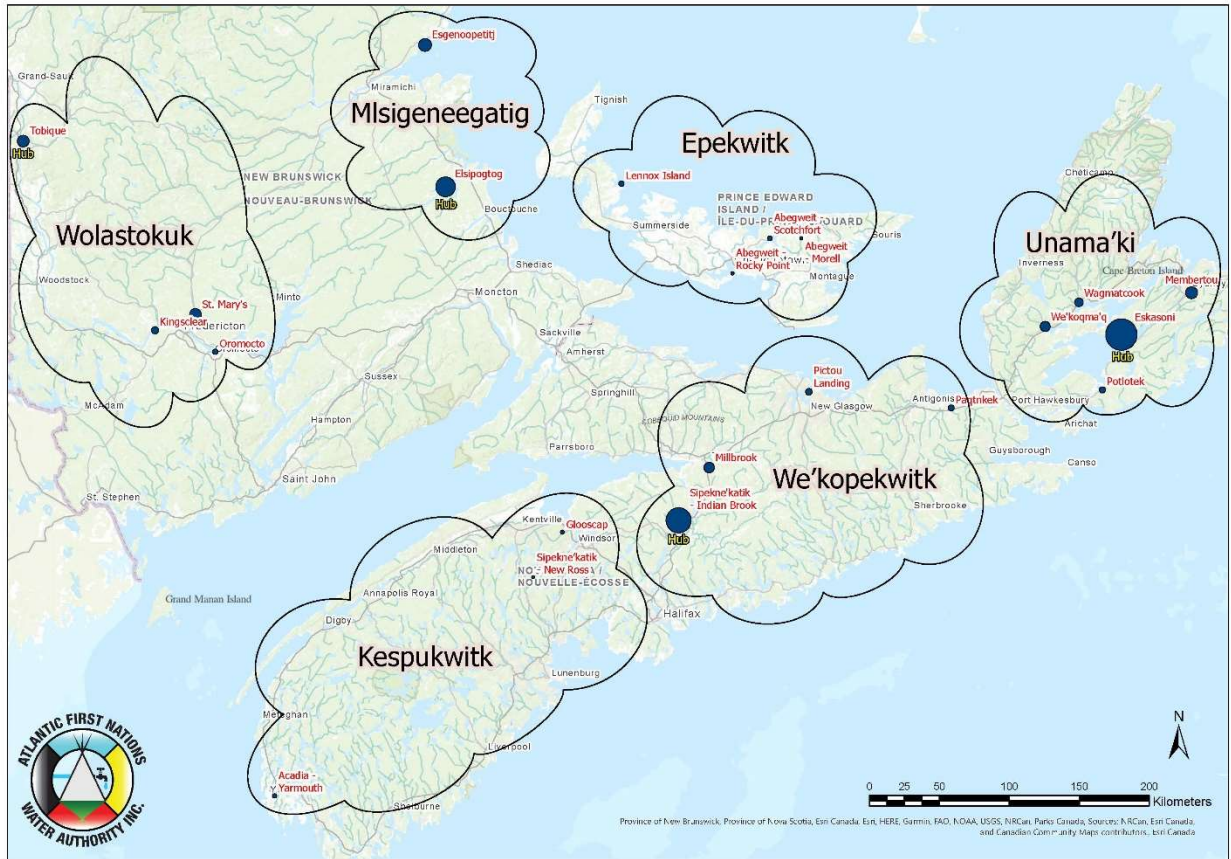


Table 1: First Nations communities included in the study

Nova Scotia	New Brunswick	PEI
Acadia (MTSA, Yarmouth community only)	Elsipogtog	Abegweit (3 satellite communities)
Eskasoni	Esgenoopetitj	Lennox Island
Glooscap (MTSA, water system only)	Kingsclear	
Membertou	Oromocto (MTSA)	
Millbrook (MTSA)	St. Mary's (MTSA)	
Paqtnkek	Tobique	
Pictou Landing		
Potlotek		
Sipekne'katik (Indian Brook only)		
Wagmatcook (2 WWTFs)		
We'koqma'q (MTSA for WW)		

MTSA: Municipal Type Service Agreement