



Nottawasaga Valley Conservation Authority

REQUEST FOR PROPOSAL (RFP) #01/2023

**for NOTTAWASAGA VALLEY CONSERVATION AUTHORITY
PRETTY RIVER DYKE SAFETY REVIEW UPDATE 2023**

Nottawasaga Valley Conservation Authority (NVCA) is requesting proposals from qualified professional engineers for the update of the Dyke Safety Review for Pretty River Dyke.

Sealed proposals will be received by the undersigned on behalf of the NVCA as follows:

Bidders are encouraged to use electronic means for delivering proposals. Electronic proposals will be delivered in a PDF format with "Confidential – RFP #01/2023 Nottawasaga Valley Conservation Authority Pretty River Dyke Safety Review Update" in the subject line. For hard copy delivery, one (1) hard copy is to be submitted, in a sealed envelope clearly marked "Confidential – RFP #01/2023 Nottawasaga Valley Conservation Authority Pretty River Dyke Safety Review Update".

The completed quotations will be received until 4:00 p.m. local eastern standard time on October 6, 2023, by:

Chris Hibberd
Director, Watershed Management Services
Nottawasaga Valley Conservation Authority
John Hix Conservation Administration Centre
8195 8th Line, Utopia, Ontario
L0M 1T0

Proposals via fax cannot be accepted.

This time and date will be deemed to be the closing of the proposal. Late proposals will not be considered.

Please note that the lowest proposal will not necessarily be successful or accepted. The NVCA reserves the right to accept any proposal or to reject any or all proposals. NVCA reserves the right to accept more than one contract.

The selection is anticipated to take place by the second week of October with the successful bidder being notified after this time. Only the successful candidate will be notified.

For more information or for a copy of this document in an alternative format, please contact NVCA at 705-424-1479 or c.hibberd@nvca.on.ca

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Section A – Instructions to Bidders

1. FORM OF THE PROPOSAL

All proposals must be upon the Proposal Form contained herein and be signed by the bidder with their business address.

Bidders will also submit the following forms complete in all respects:

Proof of Liability Insurance

Proof of WSIB coverage

Proposal Form

References

Proof of Ability

2. COMPENSATION

Payment by the NVCA for the services will only be made after the services have been performed and accepted by authorized NVCA representatives. Itemized billings shall be submitted upon completion containing information specified by the NVCA. Monthly statements shall be submitted by the 30th of each month with a listing of all Repair Order Numbers, cost, and date identified. Payment will be made thirty (30) days after receipt of monthly statement. Discount periods must be extended if the billing invoice is returned for credit or correction.

3. PROPOSAL ADJUSTMENT

3.1 Adjustment by fax, e-mail or letter to a proposal already submitted will not be considered. A bidder desiring to make adjustment to a proposal submitted must withdraw the proposal and submit another proposal before the closing date and time, clearly noting that the proposal is 'an amended proposal' and showing an amended submission date. A proposal may be withdrawn at any time prior to the time of closing.

3.2 Should there be any error in extensions, additions or computations, the unit price shown will govern.

3.3 The proposal form must be signed in the spaces provided on the form, with the signature of the bidder or an authorized signing authority for the organization bidding.

3.4 The proposals must be clearly legible, and all blanks filled in.

4. INSURANCE

The contractor shall maintain liability insurance in the amount of not less than five million dollars (\$5,000,000.00) per occurrence. The NVCA shall be named as an additional insured. Prior to signing of the contract, the contractor shall submit proof of insurance to the NVCA. The contractor will also be required to sign a Hold Harmless agreement and provide a Certificate of Insurance.

5. LIABILITY

The Contractor shall be responsible for all injuries to persons and for damage to property caused by their operations and their employees engaged in connection with the work. The Contractor shall indemnify and save harmless the NVCA from all suits and actions for damages and costs to which the NVCA may be put by reason of injury or death to persons and damage to property of the NVCA and others resulting in the performance of the services required.

6. WORKPLACE SAFETY & INSURANCE BOARD

The successful bidder will be required to supply before commencement of the contract a certificate from the Workplace Safety and Insurance Board indicating that the bidder is in good standing with the Board before commencement of Contract and upon request will make available proof that all premiums payable are up to date.

7. CERTIFICATION/TRAINING

The successful bidder will be required to satisfy NVCA that all workers have appropriate training/certifications required to complete the works described in the proposal including, but not limited to, have *Working at Heights* training and Occupational Health and Safety training.

8. PROOF OF ABILITY

The bidders will be competent and capable of performing the scope of work specified and will provide with the proposal the following information:

Number of persons to be employed with this tender.

A brief description of how the contract would be carried out.

Three references. The NVCA reserves the right to fully investigate the qualifications of any bidder.

Any additional pertinent information may be supplied at the bidder's option.

It is not the intent of the NVCA to award this contract to anyone who does not furnish satisfactory evidence of sufficient experience in this class of work.

9. RIGHT TO ACCEPT OR REJECT

9.1 No claims will be allowed after the submission of a proposal or award of a contract on the basis that there was a misunderstanding of the terms and conditions or specifications or for any other reason.

9.2 The NVCA reserves the right to accept or reject any or all proposals and the lowest or any proposal will not necessarily be accepted.

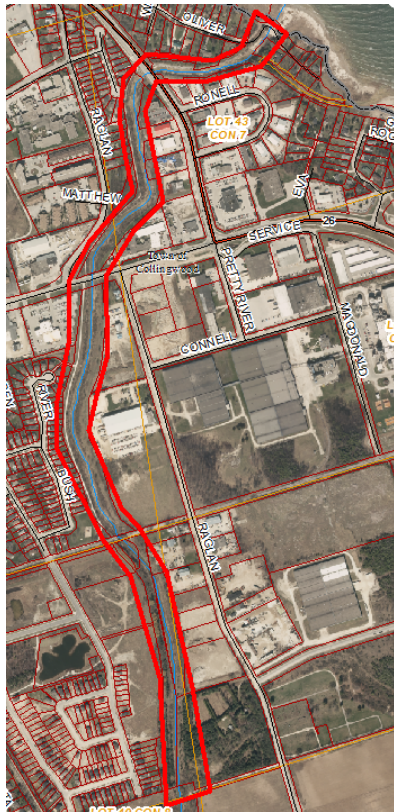
10. QUERIES REGARDING RFP

Any queries regarding the work and services required under this project should be directed to the Director, Watershed Management Services at 705-424-1479 ext. 229. E-mail enquiries will be accepted at c.hibberd@nvca.on.ca; however, the NVCA will not be responsible for any e-mail enquiries not responded to. All site visits must be pre-arranged.

Section B - Scope of Contract

Introduction

The Nottawasaga Valley Conservation Authority (NVCA) is requesting proposals for the completion of a Dyke Safety Review of the Pretty River Dyke in the Town of Collingwood. The Pretty River Dyke system extends approximately 2 kilometres from the mouth of the river at Georgian Bay to just downstream of an existing farm crossing near Peel Street (see figure below). The dyke was constructed to provide flood control for the Collingwood area. The dyke system consists of a trapezoidal channel system with berms on either side to contain flood flows and to protect existing development on either side of the Pretty River.



The objective of the study is to determine if the Pretty River Dyke is safe, and if not, to determine required safety improvements. The review will be completed in accordance with the latest version of the Ministry of Natural Resources "Best Management Practices for Dam Safety Reviews" (August 2011) and accepted industry practices. Additionally, it is expected that other applicable guidelines may be referenced such as the CDA Dam Safety Guidelines, Ontario Power Generation

Standards and US/International best practices. Compliance with the "Lakes and Rivers Improvement Act (LRIA)" and the "Lakes and Rivers Improvement Act Technical Guidelines - Criteria and Standards for Approval" and any other current applicable regulatory requirements shall be ensured.

The study shall include all components of a dam safety review which may be applicable to the context of the Pretty River Dyke, as determined by the bidder and identified in section 3.0 of the "Best Management Practices for Dam Safety Reviews".

General Requirements:

- The Dyke Safety Review shall be carried out by a qualified engineer
- The Review shall confirm that the dyke meets current Safety Standards, and will identify deficiencies, follow up actions and opportunities for improvement
- The Review shall clearly table and prioritize all of the identified follow up actions for implementation. All items should be clearly tabled for ease of presentation and for subsequent budgeting exercises
- The Review shall consist of a comprehensive inspection, an assessment of performance and a review of original design and construction records to ensure that they meet current standards

Negotiations:

The NVCA may award the RFP on the basis of proposals received without discussion; however, the NVCA reserves the right to enter into negotiations with the selected proponent(s). If the NVCA and the selected proponent cannot negotiate a successful agreement, the NVCA may terminate the negotiations and begin negotiations with another proponent. This process will continue until an agreement has been executed or all of the proponents have been rejected. No proponent shall have any rights against the NVCA arising from negotiations.

Study Components

Dyke Classification Requirement

- The consultant shall apply the Hazard Potential Classification (HPC) method as needed for the dyke on the basis of available data (e.g. characteristics of the dyke, spillway, watershed, topography, discharge facilities, downstream development, recreational activities, historical flooding, etc.) and appropriate simplified analyses.

Site Inspection Requirement

- The Review shall include an appropriately comprehensive field inspection of the dyke and appurtenant structures, and documentation thereof.

Design and Construction Review Requirement

- The Review of design and construction shall be sufficiently comprehensive to demonstrate whether the dyke and appurtenant structures meet all current safety requirements in Ontario.
- The Review of the design as it relates to the present condition of the "as-constructed" dyke should include but not be limited to the following, as applicable:
Adequacy of the derivation of extreme events, floods and earthquakes for which the dyke is designed, taking into account any extreme events that may have occurred since the commissioning of the dyke;

Stability, structural adequacy, seepage and erosion resistance of all portions of the dyke including its foundation, under normal and extreme loading conditions;

Capacity of all waterways and conduits to discharge their design flows safely, and the adequacy of these waterways to pass the inflow design flood in an emergency;

Adequacy of the as-constructed facilities to deal with special phenomena affecting safety (for example, debris, ice conditions and erosion) that may have been insufficiently considered at the time of design and construction; and

Where the dyke has deteriorated with age, field investigations should be carried out to determine critical characteristics. Where appropriate, assessment of a dyke's safety may include comparison with other similar dykes.

*Note: where design reports, Construction records, or as-constructed plans are not available to the NVCA, the consultant shall make recommendations as to how to best proceed to determine design assumptions and the adequacy of dyke and foundation materials;

- Requirements and guidelines for the evaluation of earthquake loadings, geotechnical and hydrological considerations, hydraulic and other structures (where applicable), as well as the reservoir environment shall be assessed or updated/confirmed as required.
- If additional studies beyond the Review are required, they should be identified through the Review itself, but will not be included as a part of this project due to funding limitations.

Emergency Preparedness Requirements

- The Review shall determine if the appropriate level of emergency preparedness exists and is adequately documented. The adequacy of warning systems, training and emergency response plans shall be reviewed, as well as testing and updating of plans as needed.

Arborist Report Consultation Requirement

- The Review shall provide consultation on the appropriate tree removal method or methods for the Pretty River Dyke as per the recommendations made in the 2023 arborist report. A copy of the arborist report will be provided to the successful bidder.

Dyke Safety Review Report Requirements

- Prepare an updated standalone Dyke Safety Review report (the "Report") covering all aspects of the dyke's safety per the Study Components outlined above. The final report is to be signed and sealed by a qualified Professional Engineer.
- The Report shall identify any additional steps required for the safe operation, maintenance and adequate surveillance of the dyke.
- The Report should table and quantify deficiencies in the dyke design or operating procedures and establish priorities for remedial measures which can readily be established. This should include budget-level cost estimates and recommended timelines for any required remedial works.
- The Report shall identify the date of the next recommended Pretty River Dyke Safety Review update.

Other Components as Needed

- The consultant shall consider whether the Review should include any other components based on professional judgement and experience.

Failure to Meet Requirements

- Any recommendations will need to be comprehensive and specific enough to allow Nottawasaga Valley Conservation Authority to complete the task of addressing the deficiency, and/or determining the level of effort and budget implications to address the deficiency. The following section of the guidelines is noted below:

If the dyke fails to meet the safety requirements, safety improvements shall be carried out as appropriate, including:

- A) Safety improvements of the physical facilities;
 - B) Nonstructural improvements; and
 - C) Overcoming any deficiencies in operation, surveillance, inspection or maintenance of the dyke, or emergency preparedness of its operators.
- If the emergency plans, or the operation, maintenance and surveillance of the dyke do not meet the standards (where applicable), improvements are normally required.

Contingency Items

If any updates are required to the following items, they will be contingency items and will require separate costing proposals if they become necessary to complete:

1. Dyke Break Analysis and Inundation Mapping
2. Maximum Credible Earthquake
3. Phase II Geotechnical Investigations
4. Topographical Surveys, 30 m upstream and 30 m downstream c/w GPS or as determined by the engineer
5. Development of an updated emergency plan.
6. Development of an updated operation, maintenance and surveillance plan.

Background Information Available for the Study

The following background information is available to the successful proponent to aid in completing the updated Dyke Safety Review. Please also contact the NVCA if any of the following is needed during preparation of a proposal for the required work:

- a. Pretty River Dyke scanned engineering design drawings by Ainley and Associates Ltd (1973)
- b. Pretty River Flood Control Study, Cumming Cockburn Ltd Consulting Engineers (1987)
- c. Arborist's report, SJM Arboricultural Consultant Ltd (2023)
- d. Digital (GIS) layers such as the NVCA Digital Elevation Model (DEM) if needed
- e. Various photographs from past dyke inspections by NVCA staff
- f. Watershed Hydrology Study for Nottawasaga, Pretty and Batteaux Rivers, Black Ash, Silver and Sturgeon Creeks by MacLaren Plansearch (1988)

Deliverables

The consultant will be required to provide the following information throughout the study:

- a. The final report to be submitted as a complete digital pdf. All supporting documentation such as forms, charts, graphics, field notes, photographs are to be provided digitally as well for NVCA's records.
- b. Digital photographs annotated with appropriate captions.
- c. Any mapping information generated during the study is to be in a format compatible for inclusion into NVCA's digital database and GIS system.
- d. Summary information provided to Mr. Chris Hibberd, Director of Watershed Management Services as necessary to allow appropriate input to the study progress.

Meetings

Meetings shall be held with NVCA at key points throughout the study.

Suggested Formal Meeting Allowances (2):

- Startup meeting
- Present and discuss draft Report and study findings

The consultant will be responsible for recording minutes of all meetings and distributing to the NVCA.

Proposal Submission Format

Submissions are suggested to be structured in the following format:

Section 1 – Details of the Proposed Consulting Team

Overview: A brief overview of the firm including general capabilities.

Administration: Description of the Proposed Consulting Team's structure, staff that will be assigned to the Study and their respective roles, and proposed project management. Resumes for all management and technical staff who are proposed to work on this study are to be included.

Project Experience: A summary of past studies that the firm and/or individuals have undertaken that are similar to the current study including the nature of the

assignment and specific involvement of individuals who are proposed to work on this assignment.

Sub-Consultants: Name and description of all sub-consultants, summary of past experience similar or related to this Study, and details of staff members that will be assigned to this Study.

Section 2 – Professional Services Proposed

Proposed methodology: A detailed breakdown by task outlining the proposed methodology for the study and outputs for each task.

Project Schedule: A schedule outlining the proposed starting and completion dates for the study parts, broken down by task. The timeline objective is to have the study final report completed by March 2024.

Section 3 – Pricing Details

- a) Cost breakdown by study component and estimated staff time for each individual involved
- b) Per diem rates for all staff

The project has an anticipated start date of October 16, 2023. The intent is to divide the project into two phases, with Phase 1 fully completed by December 2023 (due to funding timelines) and Phase 2 completed by March 2024 (pending funding availability). At the latest, the project must be fully completed with all deliverables and invoices provided by March 29, 2024.

All proposals must be submitted on the form provided.

Evaluation Criteria

Proposals will be evaluated on the following criteria, not necessarily in order of priority:

- Cost: The cost is reasonable for the effort proposed, is of sufficient detail to explain the cost drivers, and sufficient mechanisms are in place to control costs through the project. All costs presented must be a fixed fee for the works proposed.
- Experience: The bidder shows relevant experience on similar projects, preferably for similar types/sizes of entities.
- Approach: The bidder understands and will use appropriate tools, methods, and other approaches to ensuring the quality and timeliness of the

implementation(s). Use of the latest technologies will be considered as will acceptance of requirements for the project.

Section C - References

Provide three references to be verified for this contract.

Reference One

Individual/Company Name: _____

Contact Person: _____

Phone Number: _____

Reference Two

Individual/Company Name: _____

Contact Person: _____

Phone Number: _____

Reference Three

Individual/Company Name: _____

Contact Person: _____

Phone Number: _____

Section D – Proposal Form

Nottawasaga Valley Conservation Authority

**PROPOSAL FORM
Nottawasaga Valley Conservation Authority
Pretty River Dyke Safety Review Update 2023
RFP #01/2023**

I/We _____

having carefully examined the attached proposal information in detail including familiarizing myself/ourselves with the scope of work were the proposed work will be performed and all proposal documents relating thereto, do hereby proposal to supply all necessary labour, material and equipment to fulfil the Contract Obligations.

Deadline 4:00 p.m., October 6, 2023

Signatures

For the Company

Company Name: _____

Contact Name: _____

Phone: _____

Signature: _____

Date: _____

For the NVCA

Authorized by: _____

Authorizing Signature: _____

Title: _____

Date: _____

Hourly Rate (state if varies- business hours Monday-Friday vs evenings/weekends):

Years of Experience: _____

Licensed staff: Yes No Other: _____

Additional Details:

Schedule 1 – Proposal Form Submission Check-List

The bidder is to submit the following:

Proof of Insurance - Section A

Proof of WSIB Coverage - Section A

Brief description of how the contract is to be carried out - Section A

References - Section C

Proposal Form - Section D