



SOUTH NATION
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South Nation River Conservation Authority (SNC)

Request for Quotation (RFQ)

Navan Wetland Restoration

2016-09 RFQ

Closing Date

Date: October 3, 2016

Time: 12:00 p.m. EST

Location: South Nation River Conservation Authority
38 rue Victoria Street
Finch, Ontario
K0C 1K0

Attn: Karen Paquette
Project Lead
kpaquette@nation.on.ca

Late bids will not be accepted.

SNC reserves the right to accept or reject all or part of any Quotation and also reserves the right to accept other than the lowest Quotation and to cancel this Call for Quotation at any time.

Our Local Environment. We're in it Together. Notre environnement. Nous le partageons.



1. Purpose and Introduction

South Nation River Conservation Authority (SNC) is seeking quotes for the construction of three (3) shallow ponds located in Navan, Ontario.

SNC has partnered with the City of Ottawa (“the City”) to undertake this project in support of improving the health of local creeks by reducing sedimentation and restoring the project site to a biodiverse wetland habitat.

In this RFQ, the successful Bidder shall be referred to as the “**Vendor**”

1.1 Appendices

‘Appendix A’ – Acknowledgements

‘Appendix B’ – Specifications

‘Appendix C’ – Quotation Form

2. Closing Time

The RFQ Quotation Document (Appendix C) is to be submitted via email to Karen Paquette, Project Lead, **prior to 12:00 p.m. on Monday October 3, 2016 (the “Closing”)**.

Time registered on email will be considered the official time used to determine exact time of the submission.

Submissions received after the Closing will not be accepted.

3. Review of Submissions

All Submissions received on time will be reviewed after **12:00 p.m. on Monday October 3, 2016**.

4. Contact Information and Questions

4.1. Contacts

Bidders may only contact Karen Paquette, Project Lead **in writing only**, by email to kpaquette@nation.on.ca related to this Request for Quotations.

Karen Paquette is SNC’s official contact person for this RFQ. All other SNC employees and Board Members are not permitted to discuss this RFQ process with a potential Bidder

from the time the RFQ is issued until such time as an award report has been prepared and submitted to the appropriate approval authority.

Bidders are cautioned therefore, to deal exclusively with the SNC contact person referenced in this section.

4.2. Errors, Omissions and Questions

SNC accepts no legal liability for any errors or omissions in any part of this RFQ.

Bidders with questions related to this RFQ, finding errors in, or omissions from the Document, or having doubt as to the meaning or intent of any part of this Document, must contact the SNC contact listed in Section 4.1, **before 12:00 p.m. on September 27, 2016**. [To allow sufficient time to respond to or prepare and distribute an addendum as necessary, and to allow time for Bidders to receive any new information.]

Bidders should accurately reference the numbered item of the solicitation to which the enquiry relates. Care should be taken by the Bidders to explain each question in sufficient detail in order to enable SNC to provide an accurate answer. No questions will be accepted **after 12:00 p.m. on September 27, 2016**.

There will be no consideration of any claim after submission of the Quotation, that there is any misunderstanding respecting conditions imposed by the RFQ.

5. Instructions to Bidders

5.0.1 Construction Timeframe

Projects must be completed no later than by November 30, 2016.

5.0.2 Mandatory Site Visit

Interested Bidders are required to attend a mandatory site visit hosted by SNC on **Friday, September 23, 2016 at 10:00 a.m.** Please email Karen Paquette to express interest by **12:00 p.m. on September 22, 2016** and to obtain important meeting location information.

5.0.3 Risks

Bidders are expected to satisfy themselves as to the nature of the work to be done, and must visit the site (per section 5.0.2) and view the facilities to estimate any foreseeable difficulties prior to submitting the requested Quotation.

5.0.4 Permits and Locates

SNC will obtain the permit required under the Conservation Authorities Act as well as provide a review of the Fisheries and Oceans self-assessment criteria. The Vendor agrees to verify the location of any underground utilities prior to commencement of work.

5.1 Addenda

The RFQ may be amended only by an addendum in accordance with this section. If SNC, for any reason, determines that it is necessary to provide additional information relating to the Request for Quotations, such information will be communicated to all Bidders through the SNC Contact by addenda. Each addendum forms an integral part of the RFQ.

SNC will issue all written addenda to the RFQ by e-mail to each Bidder who has provided an e-mail address.

Such addenda may contain important information, including significant changes to the RFQ. It is the Bidder's responsibility to ensure all addenda have been received and are reflected in their quotes submission.

5.2 Quotation Submission

The Submission shall be sent prior to the Closing via email only and shall include all requirements of this RFQ, as set out in **Section 8.0 "To Include in Quotation"**. The Bidder should submit **one (1) copy** of all submission requirements in pdf or MS Word formats.

Submission email subject line needs to include "2016-09 RFQ Navan Wetland Restoration".

Offers made in the Submission will be considered by SNC to be binding and irrevocable and shall remain open for acceptance by SNC for a period of ninety (90) days from the Quotation closing.

Hand-delivered, mailed, courier or faxed submissions will not be accepted.

5.3 Adjustments to Submissions

Adjustments to submissions by telephone, fax or in-person will not be considered.

5.3.1 Request to Adjust a Submission Before Closing

A Bidder wishing to make adjustments to a Submission must supersede it with a later Submission, which must be received by the closing time.

5.3.2 Request to Withdraw a Submission Before Closing

A Bidder who has submitted a Quotation may request that their Submission be withdrawn before the closing time. The request must be provided in writing, on company letterhead, and include contact information for verification. Authenticity of the request may be confirmed by SNC. Submissions withdrawn under this procedure cannot be reinstated.

5.3.3 Request to Withdraw a Submission During Quotes Opening

No request for withdrawal of a Submission shall be permitted during, or at any time after, the reviewing process.

5.4 Insurance

5.4.1 General Liability Insurance

The Vendor shall procure and maintain Comprehensive General Liability Insurance:

- a) Having a limit of liability of not less than **two million dollars (\$2,000,000)** inclusive for any one occurrence;
- b) Including insurance against liability for bodily injury and property damage caused by vehicles or equipment owned by the Vendor;
- c) Being endorsed to provide that the policies will not be altered, cancelled, or allowed to lapse without thirty (30) days prior written notice to SNC;
- d) Name SNC as an additional insured party; and
- e) Contain a cross-liability clause.

The Vendor shall pay for all premiums and expenses incurred for the insurance.

Should any claim(s) arise, the Vendor shall be financially responsible for paying for any amount(s) up to and including the deductible amount under their policy.

5.4.2 Professional Indemnity Insurance (Errors and Omissions)

The Vendor shall maintain Professional Indemnity Insurance in the amount of **two million dollars (\$2,000,000)**.

The Vendor shall pay for all premiums and expenses incurred for the insurance.

Should any claim(s) arise, the Vendor shall be financially responsible for paying for any amount(s) up to including the deductible amount under their policy.

5.4.3 Proof of Insurance

The Bidder shall provide proof of insurance required in Items 5.4.1 and 5.4.2 with their Quotation.

In the event that satisfactory proof of insurance cannot be provided, a letter from the Bidder's insurance company confirming that the Bidder will be able to obtain the required insurance will suffice. The insurance company must be satisfactory to SNC.

5.4.4 Certificate of Insurance

Within ten (10) working days of notification of award of this RFQ and prior to the start of any work, the Vendor shall file with SNC, together with the signed Contract, a Certificate of Insurance, clearly stating that all the insurance coverage required complies with all requirements listed in **Item 5.4.1 and 5.4.2**.

If the Vendor fails to file the Certificate of Insurance with SNC within ten (10) working days of notification of award of this RFQ, SNC reserves the right to cancel the award.

5.5 Workplace Safety and Insurance Act and Employment Insurance

The Bidder must submit with their Quotation a valid and current “Clearance Certificate” from the Workplace Safety and Insurance Board (“WSIB”), or a letter from the WSIB confirming their exemption. This information is available to the Bidder on-line at **wsib.on.ca**.

The Vendor, within ten (10) working days of notification of award of this RFQ and prior to the start of any work, shall provide SNC with a valid and current Clearance Certificate from the WSIB.

If the Vendor does not provide a valid and current Clearance Certificate as herein requested, or proof of exemption, or proof of application for exemption, SNC reserves the right to cancel the award.

The Vendor shall be responsible for providing Worker’s Compensation coverage for their employees, and no extras will be allowed for such items.

The Vendor clearly understands and agrees that they are not, nor is anyone hired by them, covered by SNC under the **Workplace Safety Insurance Act, Employment Insurance Act**, or any other act, whether provincial or federal, in respect of themselves, their employees and operations, and shall, upon request, furnish SNC with satisfactory evidence that they have complied with the provisions of any such acts.

5.6 Contract

Once the RFQ is awarded, the Vendor shall enter into and sign a formal Contract that is satisfactory to SNC, within ten (10) working days of notification of award of the RFQ. This RFQ and all issued addenda shall constitute part of the terms and conditions of the contract award.

Failure to execute the Contract or to file any of the required documentation required in this RFQ, within the specified time period, shall be just cause for the cancellation of the award.

6. General Terms and Conditions

The following terms and conditions are deemed accepted by all Bidders in response to this RFQ and are deemed incorporated into every contract resulting from this RFQ:

6.1 Freedom of Information

All information obtained by the Bidder in connection with the preparation of this RFQ is the property of SNC and must be treated as confidential. It may not be used for any purpose other than for replying to this RFQ, and for fulfillment of any subsequent contract. Any Bidder who requires that the information in its Quotation be kept confidential must explicitly advise SNC of that fact.

The Bidder may declare confidentiality of their Quotation; however, SNC is required by law to adhere to the requirements of the Municipal Freedom of Information and Protection of Privacy Act, as amended from time to time.

6.2 The Occupational Health and Safety Act

The Vendor shall comply with all conditions and regulations of the Occupational Health and Safety Act 1990 and amendments thereto, any other Federal or Provincial statute or local bylaw concerning safety or any other phase of work on this contract.

6.3 Compliance with Codes, Regulations and By-Laws

The Vendor agrees to obey all government, municipal and underwriters codes and regulations, etcetera and perform all work in accordance with the requirements of bylaws in force in the area where the work is to be carried out. All permits or licenses are the responsibility of the Bidder.

6.4 Required Warranties

Each Bidder expressly declares and warrants that;

- a) This quotation submission is in all respects fair and without collusion or fraud.
- b) There has been no violation of copyrights or patent rights in manufacturing, producing or selling the materials and/or services shipped or ordered as a result of this quotation, and the vendor agrees to hold SNC harmless from any and all liability, loss, expense, action or suit occasioned by any such violation.
- c) All materials and/or services proposed to be supplied to SNC conform in all respects to the standards set forth by Federal and Provincial agencies.
- d) The Bidder of the quotation is:
 - a) competent to perform the work described in this RFQ;
 - b) has the necessary qualifications, including knowledge, skill and experience to perform the services, together with the ability to use those qualifications effectively for that purpose;
 - c) shall supply everything necessary for the performance of the work;
 - d) shall carry out the work in a diligent and efficient manner;
 - e) ensure the work is of proper quality, material and workmanship; is in full conformity with the specifications; and meets all other requirements of this RFQ and any subsequent contract.

6.5 No Obligation to Contract

The Bidder's RFQ submission does not constitute the acceptance of a contract with SNC. Submissions constitute offers which SNC may or may not accept in its sole discretion.

SNC further reserves the right to accept or reject any or all quotations or parts of quotations, or to accept any quotations considered in SNC's best interest, and to request re-submission on the required materials and/or services. SNC also reserves the right to waive irregularities and technicalities and to do so in its sole discretion.

SNC also reserves the right to cancel and reissue the RFQ as deemed necessary and in the best interest of SNC.

SNC reserves the right not to accept a Quotation from any person or corporation which includes all non arms length corporations who, or which, has a claim or legal proceeding against SNC or against whom SNC has a claim or legal proceeding with respect to any previous contracts, bid submissions, or business transactions who is listed as either the Bidder or sub-contractor within the submitted Quotation.

The Bidder's RFQ submission is deemed an irrevocable offer which may be accepted, at the sole option of SNC with or without negotiation, only by entering into a formal contract upon such acceptance the terms, responsibilities, and specifications as required by SNC including but not limited to those set out herein.

SNC reserves the right to reject an offer to supply goods and services presented in response to SNC's procurement processes where SNC determines that the person making the offer is in any way indebted to SNC and in its sole discretion is of the opinion that it is in SNC's best interests that the offer be rejected.

6.6 Assignment

The Vendor shall not assign the Contract or any portion thereof without prior written consent of SNC. Such consent shall not release or relieve the Vendor from any of their obligations or liabilities under this Contract.

6.7 Costs Incurred

SNC will not, under any circumstances, be responsible for any costs incurred by the Bidder in the preparation of the quotation submission, including, but not limited to: costs to prepare documentation; travel; attendance at any site meetings; or interviews (if required).

6.8 Pricing and Taxes

The quotation submission amount must include: all applicable excise taxes; customs, freight; exchange and all other charges. HST is extra.

6.9 Terms of Payment

Invoices will be paid net thirty (30) days from date of invoice and verification that goods/services listed have been provided to the satisfaction of SNC.

6.10 Rights of South Nation River Conservation Authority (SNC)

SNC retains the right to ensure that an acceptable standard of use, service, and operation is maintained. SNC also reserves the right to communicate with one or more Bidders (following the RFQ closing date) to clarify elements of the submission.

6.11 SNC's Right to Terminate Contract Under Certain Conditions

SNC has the right to terminate the Contract immediately and without penalty, with written notice to the Vendor, if:

- a) The Vendor makes an assignment for the benefit of creditors or becomes bankrupt or insolvent, or an order is made for the winding-up of the Vendor, or if a receiver is appointed on account of the Vendor's insolvency; or
- b) The Vendor refuses or fails to supply sufficient properly skilled employees or proper materials at all times to perform the Work in the manner and to the standards required under this Contract, or the vendor fails to observe and comply with any provisions of law, including, without limiting the generality of the foregoing, all requirements of all governmental authorities including federal, provincial, and municipal legislative enactments, by-laws and other regulations now or hereafter in force which pertain to or affect the services or the conduct of the Vendor's business; or
- c) The Vendor fails to institute appropriate corrective action within three (3) days after verbal notification by SNC (which will be confirmed subsequently in writing), of any failure on the part of the Vendor to comply with the terms and specifications of the Contract; or
- d) The Work performed is not satisfactory; or
- e) Delivery requirements are not met.

SNC reserves the right to terminate this contract at anytime without cause with thirty (30) days written notice.

Immediately following, the termination of the Contract, for any reason, the Vendor shall provide to SNC all of their financial records specific to this Contract, concerning the conduct of the operations and a statement of all outstanding accounts.

6.12 Remedies for Non-Performance

In the event that the Vendor fails to perform any obligations hereunder, SNC shall be entitled to exercise any one or more of the following remedies:

- a) SNC may with-hold any payment due hereunder until the Vendor has remedied their failure;
- b) SNC shall be entitled, in the event that the Vendor does not remedy their default within three (3) working days of a request, SNC be entitled to engage other vendors to complete the work of the Vendor and to deduct the cost of obtaining such other vendors from any amounts owing to the Vendor hereunder;
- c) SNC may terminate this Agreement if the Vendor does not remedy their default within three (3) working days of a request that they do so from SNC in writing; and,
- d) SNC may exercise any other right available to it in law or equity.

A failure of SNC to exercise any of the foregoing remedies, or the granting of any extension or indulgence, shall not be prejudicial to the right of SNC to subsequently obtain such remedies.

6.13 Failure to Execute Contract

Failure to execute the Contract or failure to file any of the required documentation required in this RFQ within the specified time period is cause for the cancellation of the award.

6.14 Indemnification

The Vendor shall indemnify and save harmless SNC, from and against all claims, actions, losses, expenses, costs or damages of every nature and whatsoever which SNC, its employees, officers or agents may suffer, to the extent the Vendor is legally liable as a result of the negligent acts of the Vendor, their employees, officers or agents in the performance of this Contract.

6.15 Ownership of Documents

All information and data developed and used by the Vendor in connection with this Contract will be wholly owned by SNC.

6.16 Governing Law

This RFQ and subsequent contract shall be governed by the law of the Province of Ontario.

6.17 Venue for Litigation

The Vendor and SNC agree that the venue for any litigation shall be Ottawa, Ontario.

6.18 Force Majeure

Neither party shall be held responsible for any remedy arising from delay or failure to perform obligations under this RFQ or the Services to be provided when such delay or failure is due to fires, strikes, floods, acts of God or the Queen's enemies, lawful acts of public authorities, or delays or defaults caused by common carriers, which cannot reasonably be foreseen or provided against.

6.19 Confidentiality

The Vendor recognizes that it will, by the nature of the goods and services being provided to SNC, have access to confidential information. It is understood and agreed that the Vendor, its employees, agents, representatives and officers, (the "Vendor") shall hold all information,

whether confidential or not, in the strictest confidence. The Vendor shall not disclose, nor permit by any act or failure to act, the disclosure of any information to any third party at any time during or after the term of its contract with SNC. Nor will the Vendor use any information however obtained as a result of performing duties for SNC for its own commercial, financial, or personal advantage.

The Vendor also acknowledges that it may be held both criminally and civilly responsible for any breach of confidentiality.

6.20 Employees

In the performance of this contract, the Vendor shall be an independent Vendor. Neither the Vendor nor any of their employees shall be deemed to be employees of SNC.

7. Specifications

The Bidder will review the Specifications listed in '**Appendix B**' as part of the Quotation Submission.

8. To Include in RFQ

8.1 Acknowledgement

The Bidder shall complete and submit '**Appendix A**'.

8.2 Specifications

The Bidder shall review in detail prior to bidding all items contained in '**Appendix B**' to ensure that all specifications are listed as part of the Quotation Submission.

8.3 Pricing

The Bidder will complete and submit the Quotation Form ('**Appendix C**')

8.4 Other

- All addenda issued; and
- Quotation submission as per **Section 5.2**

9. Award and Approval

This RFQ will be awarded based on the following:

- a) Proper Completion of all submission requirements (Section 8);
- b) Ability to complete work before November 30, 2016.

- c) Compliance to specifications as listed in specification form (Appendix B); and
- d) Price (as a clarification, should all other evaluations appear equal, at the sole discretion of SNC, lowest Total Price shall govern award).

SNC reserves the right to reject any Quotation if the evidence submitted by, or investigation of such Bidder, fails to satisfy SNC that the Bidder is qualified to carry out the obligations of the contract.

The decision of South Nation River Conservation Authority shall be final.

The Bidder shall not make any claims for additional costs or expenses due to the delay in, or cancellation of the award of this RFQ, due to the approval process.



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‘APPENDIX A’

ACKNOWLEDGEMENTS

I/WE ACKNOWLEDGE that this Quotation is made without any connection, knowledge, comparison of figures or arrangements with any other company, firm or person submitting a Quotation for the same goods/services and is in all respects fair and without collusion or fraud.

I/WE ACKNOWLEDGE that all matters stated in the said Quotation are, in all respects, true.

I/WE ACKNOWLEDGE that, having read and understood the 2016-09 RFQ Document, I/WE have satisfied ourselves as to the terms, conditions and specifications and do hereby submit a Quotation for the materials, equipment and labour required to complete the works which comprise the Navan Wetland Restoration.

I/WE ACKNOWLEDGE that it is the Bidder's responsibility to ensure all addenda issued have been received.

I/WE ACKNOWLEDGE that acceptance of this Quotation and the execution of an Agreement shall be considered a binding Contract upon both parties. If specified at any time by SNC, it is agreed that the terms and conditions and the representations made in reference to this Request for Quotations shall be incorporated in the Contract to be executed by the parties once SNC has formally accepted the Quotation.

Dated at _____ this _____ day of _____, 2016.

Firm or Organization Name

Signing Authority

Street Address

Signature

City

Postal Code

Telephone and Fax Number

‘APPENDIX B’

Specifications

Scope of work is detailed in the following reports:

1. Project Design - Navan Wetland Restoration – 8 pages

‘APPENDIX C’

Quotation Form

Unit Price Table

The unit prices or lump sum bid for each item shall be full compensation for all labour, materials and equipment incidental and necessary to complete the supply, installation and construction of each item as specified in the Request for Quotation.

The listing of units in the Unit Price Table and the associated description of work in the Request for Quotation are for convenience only and not intended to be a full and complete description of all work. It is the Bidder’s responsibility to ensure that the individual bid prices and the total Quotation sum cover all costs to complete all of the Work based upon the whole of the Request for Quotation.

Unit Price Table

Item #	Description	Navan Wetland Restoration
		<i>Unit Price</i>
1	Materials	\$
2	Labour	\$
3	Equipment	\$
Subtotal		\$
HST		\$
Total Quotation Amount		\$

Project Design – Navan Wetland Restoration

- A. **Project Purpose:** SNC has partnered with the City of Ottawa (“the City”) to undertake this project in support of improving the health of local creeks by reducing sedimentation and restoring the project site to a biodiverse wetland habitat.
- B. **Project Location:** Project is located at 999 Smith Road, Navan, ON. The general location of the project site is below (see Figure 1).

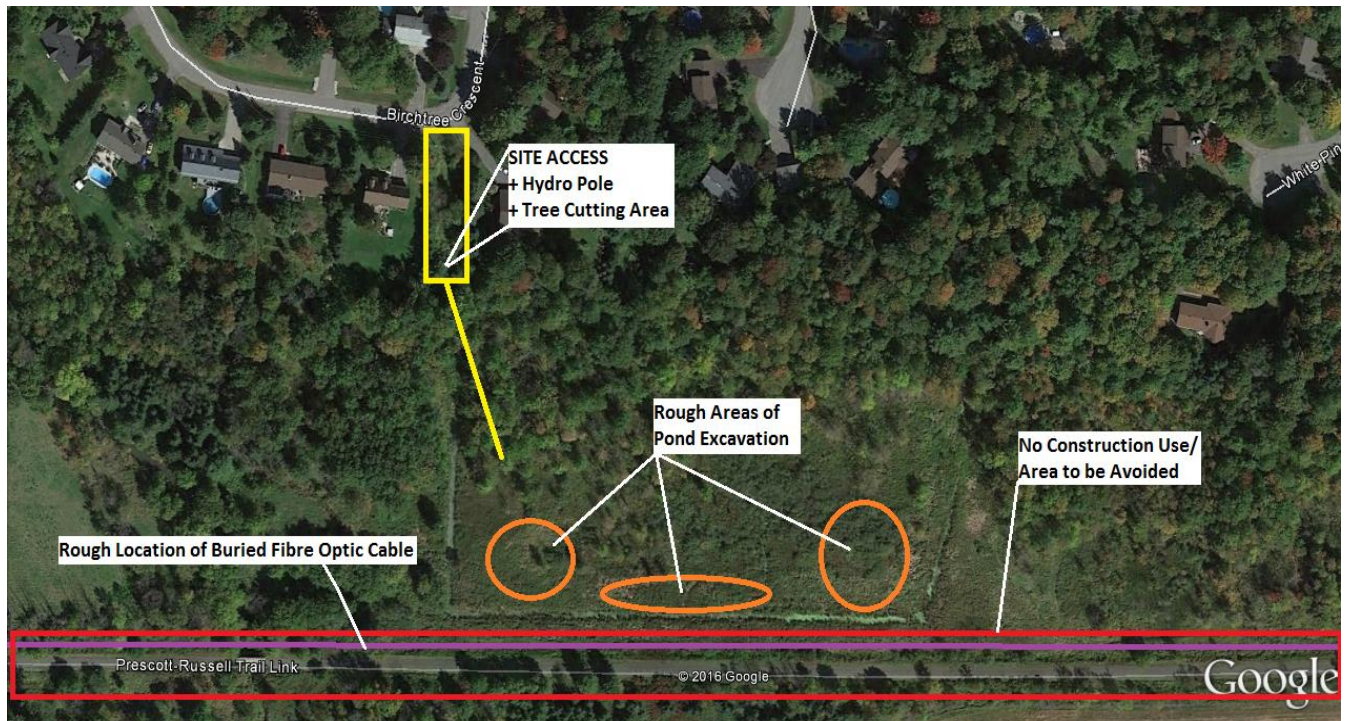


Figure 1 - Project Location within 999 Smith Road, Navan, ON

- C. **Site Access Overview:**
There is only one access point to and from the site, as shown in Figure 1. Site access will only occur via the right of way corridor located off Birchtree Crescent in Navan, ON. The mandatory site visit will provide important information prior to bidding to determine that equipment can access the site and excavation areas.
- D. **Sediment and Erosion Control Measures**
SNC will obtain the necessary permits and approvals required to undertake this work. The Vendor is required to follow the permit requirements and will be responsible for all sediment and erosion control measures as per permit. This includes proper installation, maintenance and removal.
- E. **Project Site Details:**

Existing Prescott-Russell Recreational Trail

There is a well utilized recreational trail (old railway line) along the southern extent of the project site's property line. The Vendor agrees this area (shown in Figure 1) will not be accessed (other than for survey benchmark) or used for construction purposes and further that the structural integrity of the rail bed will not be compromised.

Buried Infrastructure

There is a buried fibre optic cable running parallel to the north side of the existing recreational trail. The Vendor agrees to verify the location of all buried infrastructure prior to commencement of work and to ensure that it is not damaged during the construction. Should damage occur it is the Vendors responsibility to at their expense return it to pre-construction condition.

Overhead Infrastructure

There is a hydro pole and some existing overhead cables at the entrance of the site access. The Vendor agrees to verify the location of all overhead infrastructures prior to the commencement of work and to ensure that it is not damaged during the construction. Should damage occur it is the Vendors responsibility to at their expense return it to pre-construction condition.

Public Safety

The project site is located in a public area. The Vendor agrees to install and maintain visible public safety signage at the construction site at all times throughout the work.

Species at Risk

An environmental assessment screening has been carried out by SNC at the project site. However, in the event that a species at risk is discovered during the construction, the Vendor agrees that all work will stop until SNC gives the go ahead to continue.

Wet Site Conditions

The site has generally wet features. The Vendor agrees to use swamp mats during construction to protect the ecological integrity and aesthetics of the site.

F. Project Design Description:

The Navan Wetland Restoration project site was surveyed in early August 2016. The resulting topographic information indicated the option to restore wetland habitat through excavation.

Bench mark = 50 M Located on the decking of bridge on trail line (southeast corner).

The work involves the restoration of the site by excavating three wildlife ponds as shown in Figure 2. All three pond edges will be flagged by SNC staff prior to construction.

Site Access: The Vendor agrees the only access to (and from) the site for work relevant to this RFQ will be via the right of way hydro corridor (as shown in Figure 1). Sloped site access may require grading and culvert installment. SNC will provide the Vendor with the permit to install the culvert.

The Vendor is responsible for the cost of the culvert and the proper installation as per permit requirements.

Future plans for this right of way corridor will include a pathway through this right of way. The Vendor agrees to leave the culvert properly installed, the access right of way graded and clean upon completion of the job.

To maximize the length of time the three excavated areas remain wet, they are strategically located along the south edge of the proposed wetland location as this is the lowest and therefore wettest area. The purpose of these excavated basins is to hold water throughout the summer period which would enhance wildlife habitat and viewing opportunities for trail users.

Shape: The three ponds must have an irregular shoreline configuration, as per Figures 2 and 4. This irregular shape will optimize the “edge community”, providing a maximum length of land to water interface important to an abundance of aquatic and semi-aquatic wildlife. An irregular shoreline configuration may result in small bays and points of land, adding to the overall aesthetics of the pond and its attractiveness to wildlife.

Slope Gradients: The three ponds must have side slopes, which may vary, from 2:1 to 3:1. Gentle slopes provide shallows and encourage a transition of aquatic emergent plant communities depending on the plant species tolerance to water depth. These plant communities provide shelter and food resources for wildlife, stabilize the pond slope, and may filter sediments and pollutants as they enter the pond from the surrounding lands, especially during rainfall events. Steep or near vertical slopes will not be acceptable, as these do not support the greater range of values that the pond can provide. Steep slopes can be dangerous; making escape difficult should a person or domestic animal fall into the pond. Similarly, wildlife can more readily enter and exit a pond with gentler slopes.

Variable Depths: The three ponds must be excavated with variable depths between 1.2 and 0.2 m (each) to maximize the diversity of wetland vegetation (see Figure 3). A range of depths throughout each the pond is crucial to achieving the pond’s potential for plant community and, subsequently, wildlife diversity. Plant communities will respond to different depths according to species. A diversity of plant species and communities will lead to a diversity of animal life, from the lowest invertebrate species to the higher order amphibians, birds and mammals. The deeper areas of the pond will maintain an open surface, though aquatic, sub-merged plants will likely pioneer into much of the open water zones.

Mandatory Ranges to Achieve Variable Depths

<u>Depth Range</u>	<u>Percent of Pond</u>
0m (0”) to 0.3m (12”)	20%
0.3m (12”) to 0.6m (24”)	25%

0.6m (24") to 1.0m (3 feet +)	30%
1.0m (3 feet +) to 1.2m (3.9 feet)	25%

The above percentages are mandatory depth ranges and must be followed for all three ponds. While it will not be practical given the limitations of excavation equipment and the economies of time and scale to attain these percentages exactly; depth ranges in reasonable proximity to these guidelines will result in the evolution of a biologically diverse pond ecosystem.

Spoil Placement: The earth, or spoil, excavated to form the three ponds must be placed and stabilized so as to prevent re-entry back into the ponds or the sedimentation of nearby waterways. To prevent future erosion or sedimentation problems, and maintain acceptable site appearances, the spoil must be properly placed, shaped, graded and seeded by the Vendor (Seed mixture will be provided to the Vendor by SNC). Excavated spoil should be placed a minimum of six meters (20 feet) from all edges of the pond (as shown in Figure 4). It will be at least partially leveled, then shaped and graded in a fashion that fits the contour and appearance of the surrounding landscape. A minimum of 0.1 meters (4 inches) of topsoil will be placed on the graded spoils.

Topsoil: Topsoil is a valuable commodity and will be preserved on-site within reasonable efforts. The areas where the three ponds will be excavated will be stripped of topsoil. The areas where the excavated spoils will be placed will be stripped as well. Any remaining topsoil from these areas will be stockpiled (for decomposition and future use) on site in a location determined by SNC staff during the construction.

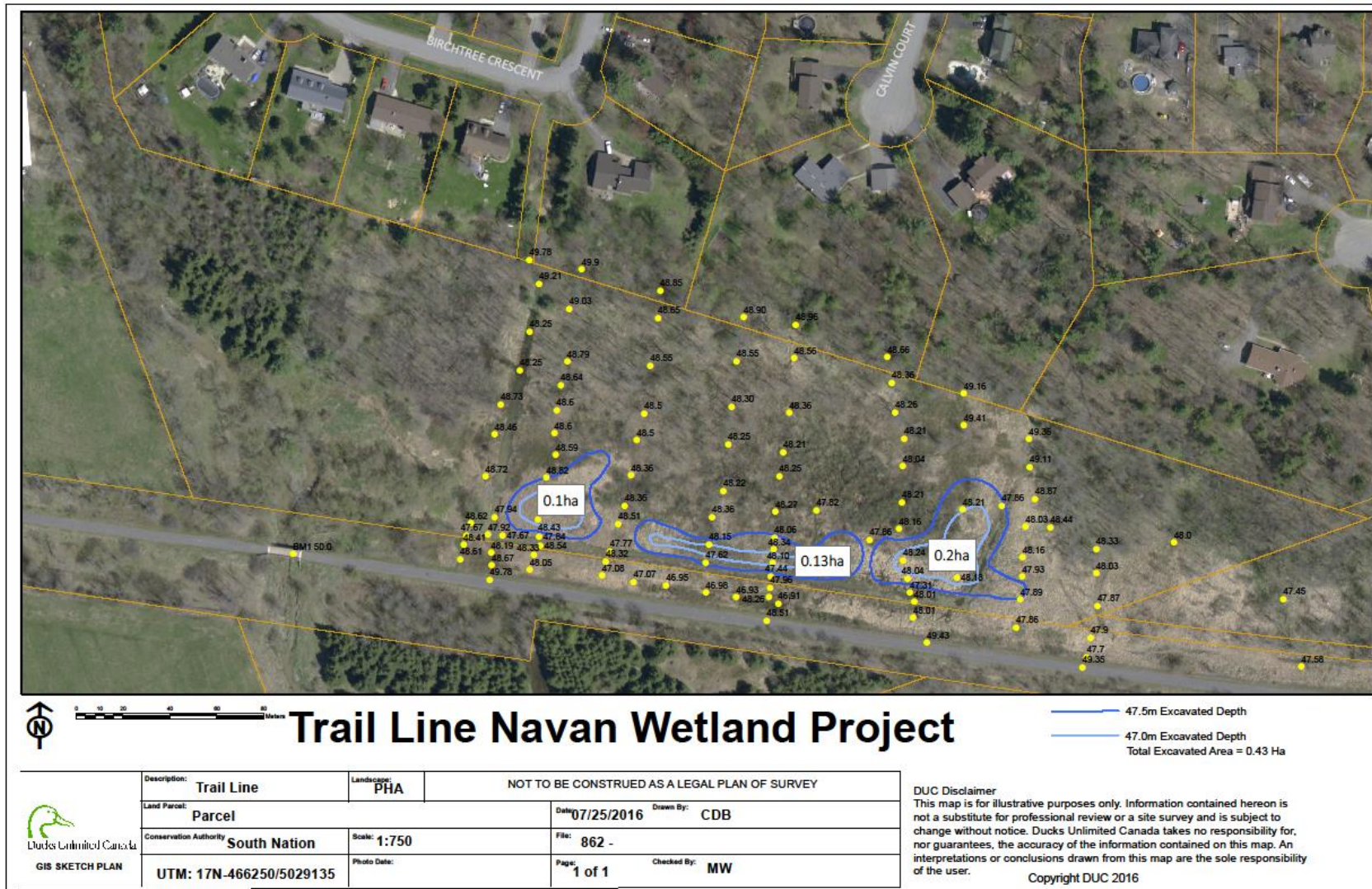


Figure 2: Site Location and Project Design

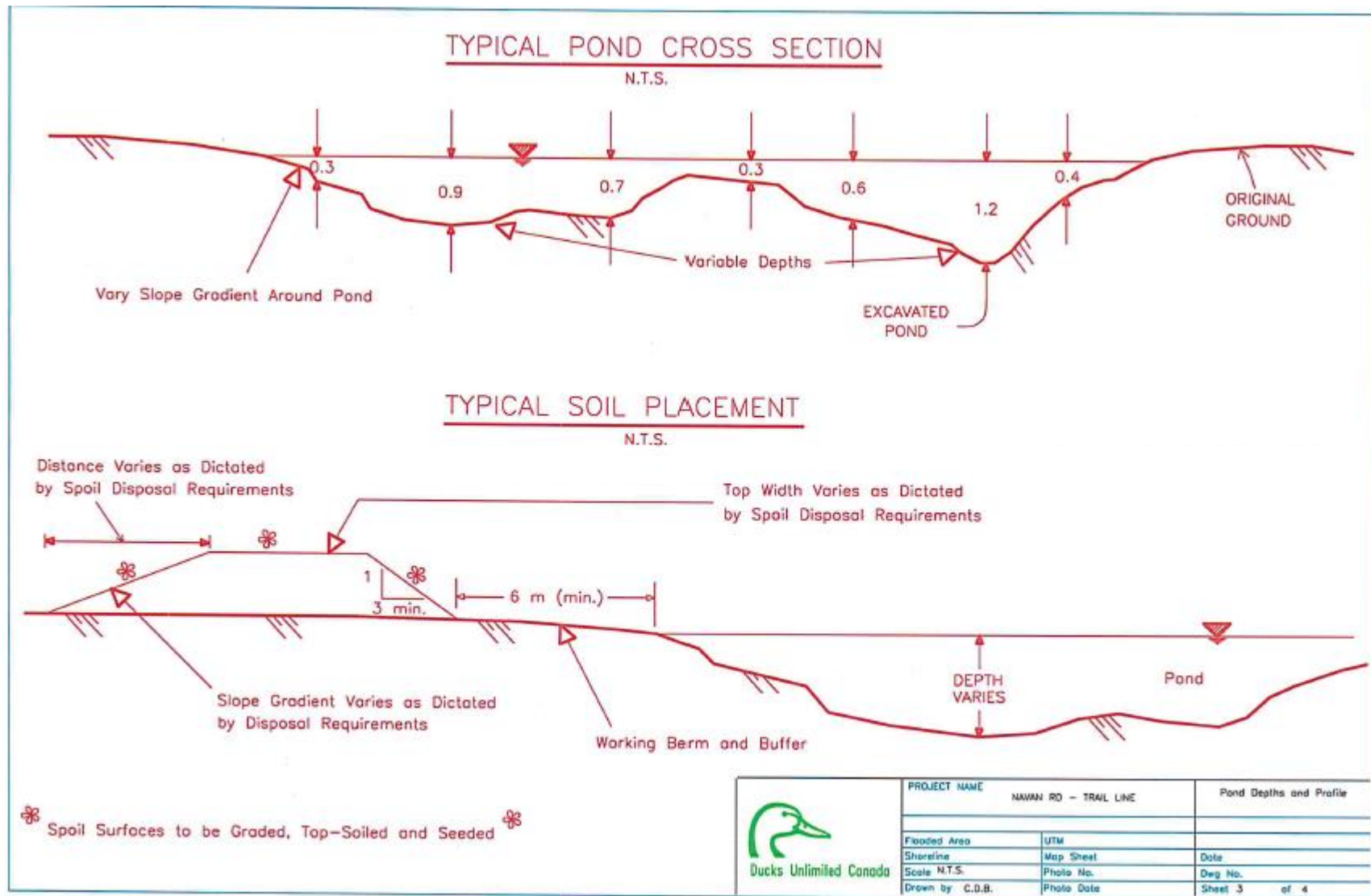


Figure 3: Typical Cross Section View

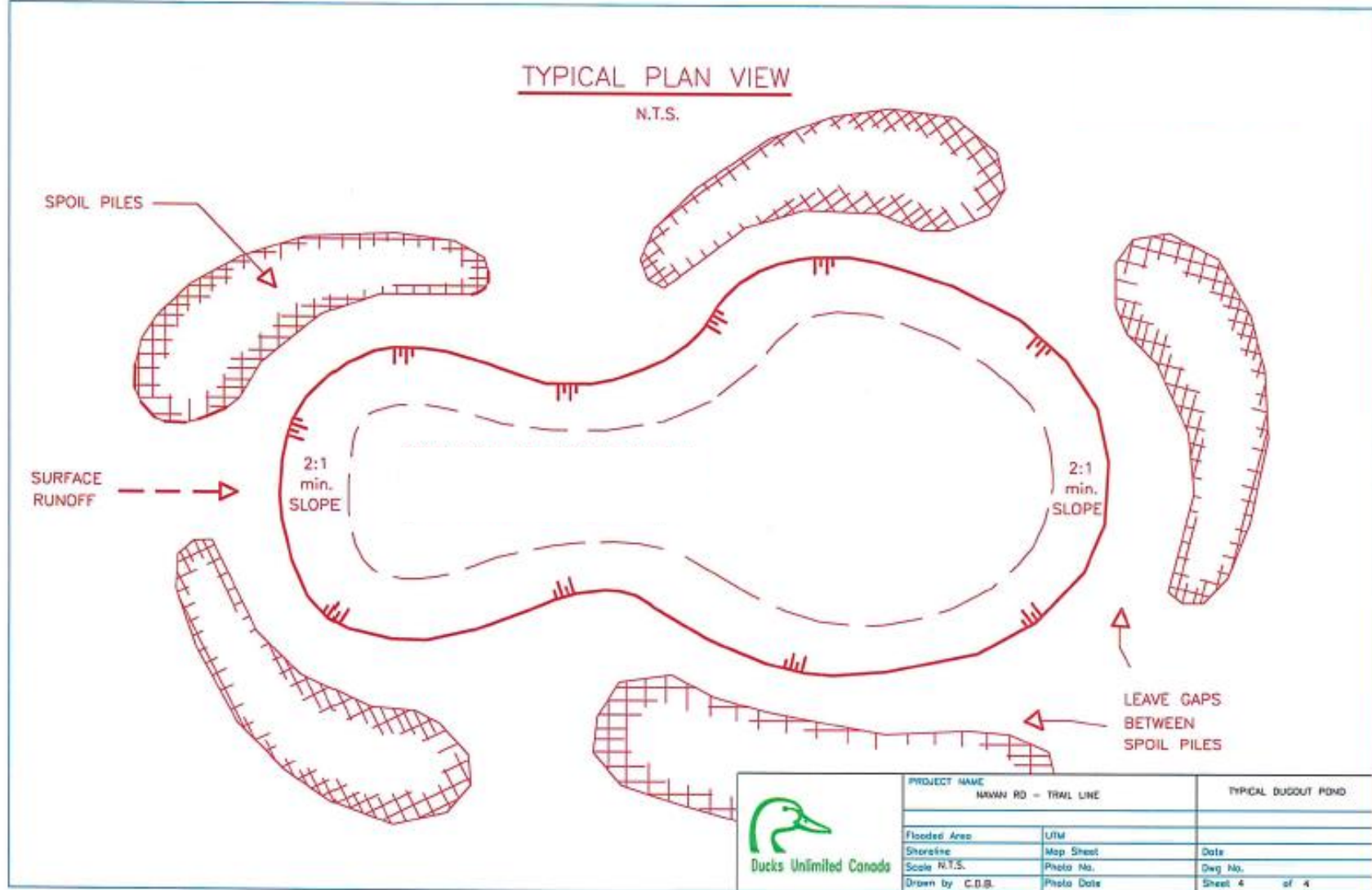


Figure 4: Typical Plan View

G. Other Project Details:

- 1) SNC staff will be onsite during the construction process.
- 2) The Vendor agrees to protect existing vegetation to the maximum extent possible, yet still allow room for construction equipment.
- 3) The Vendor agrees that vehicular refueling and maintenance shall be conducted away from the watercourse.
- 4) The Vendor agrees to have absorbent materials and working spill kits on site at all times.
- 5) The Vendor is responsible for all seeding (with a native wildflower mix provided by SNC).
- 6) **Trees and Natural Areas Protection By-Law:** The City of Ottawa Trees and Natural By-Law applies to this project. SNC has consulted with City of Ottawa Forestry Services to obtain approval for minimal tree cutting for the purpose of site access and wetland excavation and will avoid large trees. When possible, consideration will be given to trimming trees as opposed to removal. The Vendor is responsible for all trimming, removal, and attending a required site visit with City of Ottawa Forestry Services Staff prior to the commencement of work. This meeting will be arranged by SNC staff.