



<p>RETURN BIDS TO: RETOURNER LES SOUMISSIONS À:</p> <p>Bid Receiving - Environment Canada / Réception des soumissions – Environnement Canada</p> <p>BID SOLICITATION DEMANDE DE SOUMISSIONS</p> <p>PROPOSAL TO: ENVIRONMENT CANADA</p> <p>We offer to perform or provide to Canada the services detailed in the document including any attachments and annexes, in accordance with the terms and conditions set out or referred to in the document, at the price(s) provided.</p> <p>SOUSSION À: ENVIRONNEMENT CANADA</p> <p>Nous offrons d'effectuer ou de fournir au Canada, aux conditions énoncées ou incluses par référence dans le document incluant toutes pièces jointes et annexes, les services détaillés dans le document, au(x) prix indiqué(s).</p>	<p>Title – Titre Bay of Fundy Estuary Characterization</p>	
	<p>EC Bid Solicitation No. /SAP No. – N° de la demande de soumissions EC / N° SAP <i>5000019604</i></p>	
	<p>Date of Bid solicitation (YYYY-MM-DD) – Date de la demande de soumissions (AAAA-MM-JJ)</p>	
	<p>Bid Solicitation Closes (YEAR-MM-DD) - La demande de soumissions prend fin (AAAA-MM-JJ)</p> <p>at – à 2pm on – le 2016-03-14</p>	<p>Time Zone – Fuseau horaire</p> <p><i>AST</i></p>
	<p>F.O.B – F.A.B</p>	
	<p>Address Enquiries to - Adresser toutes questions à <i>Isabelle.macdonald2@canada.ca</i></p>	
	<p>Telephone No. – N° de téléphone 902-426-5897</p>	<p>Fax No. – N° de Fax</p>
	<p>Delivery Required (YEAR-MM-DD) – Livraison exigée (AAAA-MM-JJ)</p> <p><i>2017-03-31</i></p>	
	<p>Destination - of Services / Destination des services See herein</p>	
	<p>Security / Sécurité <i>There is no security requirement associated with this contract</i></p>	
<p>Vendor/Firm Name and Address - Raison sociale et adresse du fournisseur/de l'entrepreneur</p>		
<p>Telephone No. – N° de téléphone</p>	<p>Fax No. – N° de Fax</p>	
<p>Name and title of person authorized to sign on behalf of Vendor/Firm: (type or print) / Nom et titre de la personne autorisée à signer au nom du fournisseur/de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</p>		
<p>Signature</p>	<p>Date</p>	

PART 1 – GENERAL INFORMATION

1. Security Requirement

1.1 There is no security requirement associated with this requirement.

2. Statement of Work

The Work to be performed is detailed under Annex A, Statement of Work of the resulting contract.

3. Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days of receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

PART 2 – BIDDER INSTRUCTIONS

1. Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the PWGSC *Standard Acquisition Clauses and Conditions Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 2014-09-25 Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

The standard instructions 2003 are modified as follows:

Under “Text” at 02:

Delete: “Procurement Business Number”

Insert: “Deleted”

At Section 02 Procurement Business Number

Delete: In its entirety

Insert: “Deleted”

At Section 05 Submission of Bids, Subsection 05 (2d):

Delete: In its entirety

Insert: “send its bid only to Environment Canada (EC) as specified on page 1 of the bid solicitation or to the address specified in the bid solicitation;”

At Section 06 Late Bids:

Delete: “PWGSC”

Insert: “Environment Canada”

At Section 07 Delayed Bids:

Delete: "PWGSC"

Insert: "Environment Canada"

At Section 08 Transmission by Facsimile, Subsection 08 (1):

Delete: In its entirety

Insert: "Bids may be submitted by facsimile if specified in the bid solicitation."

At Section 12 Rejection of Bid, Subsection 12 (1) a. and b.:

Delete: In their entirety

Insert: "Deleted"

At Section 17 Joint Venture, Subsection 17 (1) b.:

Delete: "the Procurement Business Number of each member of the joint venture,"

Insert: "Deleted"

At Section 20 Further Information, Subsection 20 (2):

Delete: In its entirety

Insert: "Deleted"

2. Submission of Bids

2.1 Bids must be submitted to Environment Canada (EC) at the address and by the date, time and place indicated on page 1 of the bid solicitation.

Submit bids to: isabelle.macdonald2@canada.ca

3. Former Public Servant – Competitive Bid

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPS, bidders must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the bid non-responsive.

Definitions

For the purposes of this clause, "former public servant" is any former member of a department as defined in the *Financial Administration Act*, R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- a. an individual;
- b. an individual who has incorporated;
- c. a partnership made of former public servants; or

- d. a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the *Public Service Superannuation Act* (PSSA), R.S., 1985, c.P-36, and any increases paid pursuant to the *Supplementary Retirement Benefits Act*, R.S., 1985, c.S-24 as it affects the PSSA. It does not include pensions payable pursuant to the *Canadian Forces Superannuation Act*, R.S., 1985, c.C-17, the *Defence Services Pension Continuation Act*, 1970, c.D-3, the *Royal Canadian Mounted Police Pension Continuation Act*, 1970, c.R-10, and the *Royal Canadian Mounted Police Superannuation Act*, R.S., 1985, c.R-11, the *Members of Parliament Retiring Allowances Act*, R.S., 1985, c.M-5, and that portion of pension payable to the *Canada Pension Plan Act*, R.S., 1985, c.C-8.

Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension? **Yes () No ()**

If so, the Bidder must provide the following information, for all FPS in receipt of a pension, as applicable:

- a. name of former public servant;
- b. date of termination of employment or retirement from the Public Service.

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with Contracting Policy Notice: 2012-2 and the Guidelines on the Proactive Disclosure of Contracts.

Work Force Adjustment Directive

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive? **Yes () No ()**

If so, the Bidder must provide the following information:

- a. name of former public servant;
- b. conditions of the lump sum payment incentive;
- c. date of termination of employment;
- d. amount of lump sum payment;
- e. rate of pay on which lump sum payment is based;

- f. period of lump sum payment including start date, end date and number of weeks;
- g. number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

For all contracts awarded during the lump sum payment period, the total amount of fees that may be paid to a FPS who received a lump sum payment is \$5,000, including Applicable Taxes.

4. Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than 4 calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated and the enquiry can be answered to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

5. Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Nova Scotia

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the bidders.

6. Basis for Canada's Ownership of Intellectual Property

Environment Canada has determined that any intellectual property rights arising from the performance of the Work under the resulting contract will belong to Canada, on the following grounds:

- (6.4.1) the main purpose of the contract, or of the deliverables contracted for, is to generate knowledge and information for public dissemination;
- (6.4.2) the main purpose of the contract, or of the deliverables contracted for, is to augment an existing body of Canada's background information as a prerequisite to the transfer of the augmented background to the private sector, through licensing or assignment of ownership (not necessarily to the original contractor), for the purposes of commercial exploitation;

PART 3 – BID PREPARATION INSTRUCTIONS

1. Bid Preparation Instructions

Canada requests that bidders provide their bid in separately bound sections as follows:

Section I: one (1) soft copy (electronic copy) emailed to the contracting officer

Section II: one (1) soft copy (electronic copy) emailed to the contracting officer

Section III: Certifications one (1) soft copy (electronic copy) emailed to the contracting officer

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

Section I: Technical Bid

In their technical bid, bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will carry out the Work

Section II: Financial Bid

1. Bidders must submit their financial bid in accordance with the Basis of Payment in Annex C. The total amount of Applicable Taxes must be shown separately.

1.1 Price Breakdown

In their financial bid, the bidders are requested to provide a detailed breakdown of the price for the following elements for each milestone as outlined in the Statement of Work, as applicable:

- (a) Professional fees: For each individual and (or) labour category to be assigned to the Work, the bidders should indicate: i) the firm hourly rate or the firm daily rate, inclusive of overhead and profit; and ii) the estimated number of hours or days, as applicable. The bidders should indicate the number of hours in one working day.
- (b) Equipment (if applicable): The bidders should specify each item required to complete the Work and provide the pricing basis of each one, Canadian customs duty and excise taxes included, as applicable.
- (c) Materials and Supplies (if applicable): The bidders should identify each category of materials and supplies required to complete the Work and provide the pricing basis. The Bidder should indicate, on a per category basis, whether the items are likely to be consumed during the performance of any resulting contract.

- (d) Travel and Living Expenses (if applicable): The bidders should indicate the number of trips and the number of days for each trip, the cost, destination and purpose of each journey, together with the basis of these costs without exceeding the meal, private vehicle and incidental expenses provided in Appendices B, C and D of the *National Joint Council Travel Directive* and with the other provisions of the directive referring to "travellers", rather than those referring to "employees".
- (e) Subcontracts (if applicable): The bidders should identify all of the proposed subcontractors and provide in their financial bid for each one a price breakdown.
- (f) Other Direct Charges (if applicable): The bidders should identify all of the categories of other direct charges anticipated, such as long distance communications and rentals, providing the pricing basis for each and explaining the relevance to the work described in the resultant contract in part 6 of the bid solicitation.
- (g) Applicable Taxes: The bidders should indicate the Applicable Taxes separately.

1.2 Bidders should include the following information in their financial bid:

- (a) Their legal name; and
- (b) The name of the contact person (including this person's mailing address, phone and facsimile numbers and email address) authorized by the Bidder to enter into communications with Canada with regards to their bid; and any contract that may result from their bid.

Section III - Certifications

1. Certifications Required Precedent to Contract Award

Bidders must provide the required certifications Part 5.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

1. Evaluation Procedures

Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical evaluation criteria.

1.1 Technical Evaluation

Except where expressly provided otherwise, the experience described in the bid must be the experience of the Bidder itself (which includes the experience of any companies that formed the Bidder by way of a merger but does not include any experience acquired through a purchase of assets or an assignment of contract). The experience of the Bidder's affiliates (i.e. parent, subsidiary or sister corporations), subcontractors, or suppliers will not be considered.

1.2 Technical Evaluation

1.2.1 Mandatory Technical Criteria

See Annex B - mandatory technical evaluation criteria

1.2.2 Point Rated Technical Criteria

See Annex B - point rated technical evaluation criteria

1.3 Financial Evaluation

Bidder to complete Annex C – Basis of Payment

1.3.2 Evaluation of Price

The price of the bid will be evaluated in Canadian dollars, the Applicable Taxes excluded,

2. Basis of Selection

Highest Compliant Combined Technical and Financial Score

To be declared responsive, a bid must:

- (i) comply with all the requirements of the bid solicitation; and
 - (ii) meet all mandatory technical evaluation criteria; and
 - (iii) obtain the required minimum points for the technical evaluation criteria which are subject to point rating.
- (b) Bids not meeting (i) or (ii) or (iii) will be declared non-responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

PART 5 - CERTIFICATIONS

Bidders must provide the required certifications and associated information to be awarded a contract.

The certifications provided by bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a contractor in default in carrying out any of its obligations under the Contract, if any certification made by the Bidder is found to be untrue whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority may render the bid non-responsive or constitute a default under the Contract.

1. Certifications Required Precedent to Contract Award

1.1 Integrity Provisions - Associated Information

By submitting a bid, the Bidder certifies that the Bidder and its Affiliates are in compliance with the provisions as stated in Section 01 Integrity Provisions - Bid of Standard Instructions 2003. The associated information required within the Integrity Provisions will assist Canada in confirming that the certifications are true.

2. Additional Certifications Required Precedent to Contract Award

The certifications listed below should be completed and submitted with the bid but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to comply with the request of the Contracting Authority and to provide the certifications within the time frame provided will render the bid non-responsive.

2.1 Status and Availability of Resources

The Bidder certifies that, should it be awarded a contract as a result of the bid solicitation, every individual proposed in its bid will be available to perform the Work as required by Canada's representatives and at the time specified in the bid solicitation or agreed to with Canada's representatives. If for reasons beyond its control, the Bidder is unable to provide the services of an individual named in its bid, the Bidder may propose a substitute with similar qualifications and experience. The Bidder must advise the Contracting Authority of the reason for the substitution and provide the name, qualifications and experience of the proposed replacement. For the purposes of this clause, only the following reasons will be considered as beyond the control of the Bidder: death, sickness, maternity and parental leave, retirement, resignation, dismissal for cause or termination of an agreement for default.

If the Bidder has proposed any individual who is not an employee of the Bidder, the Bidder certifies that it has the permission from that individual to propose his/her services in relation to the Work to be performed and to submit his/her résumé to Canada. The Bidder must, upon request from the Contracting Authority, provide a written confirmation, signed by the individual, of the permission given to the Bidder and of his/her availability. Failure to comply with the request may result in the bid being declared non-responsive.

2.2 Education and Experience

SACC Manual clause A3010T 2010-08-16 Education and Experience

3. Certifications Required with the Bid

Bidders must submit the following duly completed certifications as part of their bid.

Former Public Servant – see page 4

PART 6 - RESULTING CONTRACT

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation

1. Security Requirement

1.1 There is no security requirement applicable to this Contract.

2. Statement of Work

The Contractor must perform the Work in accordance with the Statement of Work at Annex A

3. Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the PWGSC *Standard Acquisition Clauses and Conditions Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

3.1 General Conditions

2010B 2014-09-25 General Conditions - Professional Services (Medium Complexity), as modified below, apply to and form part of the Contract.

General conditions 2010B is modified as follows:

At Section 12 Transportation Costs

Delete: In its entirety

Insert: "Deleted"

At Section 13 Transportation Carriers" Liability

Delete: In its entirety.

Insert: "Deleted"

At Section 18, Confidentiality:

Delete: In its entirety

Insert: "Deleted"

Insert Subsection: "35 Liability"

"The Contractor is liable for any damage caused by the Contractor, its employees, subcontractors, or agents to Canada or any third party. Canada is liable for any damage caused by Canada, its employees or agents to the Contractor or any third party. The Parties agree that no limitation of liability or indemnity provision applies to the Contract unless it is specifically incorporated in full text in the Articles of Agreement. Damage includes any injury to persons (including injury resulting in death) or loss of or damage to property (including real property) caused as a result of or during the performance of the Contract."

A. For professional services requirements where the deliverables are copyrightable works:

At Section 19 Copyright

Delete: In its entirety

Insert:

1. In this section:
"Material" means anything that is created or developed by the Contractor as part of the Work under the Contract, and in which copyright subsists.
"Background Information" means all Intellectual Property that is not Foreground Information that is incorporated into the Work or necessary for the performance of the Work and that is proprietary to or the confidential information of the Contractor, its subcontractors or any other third party;
"Foreground Information" means all Intellectual Property first conceived, developed, produced or reduced to practice as part of the Work under the Contract;

2. Material that is created or developed by the Contractor as part of the Work under the Contract belongs to Canada. The Contractor must incorporate the copyright symbol and either of the following notices, as appropriate: © Her Majesty the Queen in right of Canada (year) or © Sa Majesté la Reine du chef du Canada (année).
3. At the request of the Contracting Authority, the Contractor must provide to Canada, at the completion of the Work or at such other time as the Contracting Authority may require, a written permanent waiver of moral rights as defined in the [Copyright Act](#), R.S., 1985, c. C-42, in a form acceptable to the Contracting Authority, from every author that contributed to the Work. If the Contractor is an author, the Contractor permanently waives the Contractor's moral rights.
4. All Intellectual Property Rights in the Material belongs to Canada as soon as they come into existence. The Contractor has no right in or to any such Intellectual Property except any right that may be granted in writing by Canada.
5. The Contractor also grants to Canada a non-exclusive, perpetual, irrevocable, worldwide, fully-paid and royalty-free license to use the Background Information to the extent that this information is required by Canada to exercise its rights to use the Material. This license cannot be restricted in any way by the Contractor providing any form of notice to the contrary, including the wording on any shrink-wrapped license attached to any deliverable.

4. Term of Contract

4.1 Period of the Contract

The period of the Contract is from date of Contract to 31st March 2017 inclusive

5. Authorities

5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Ginny Girard
Title: Contracting Officer
Environment Canada
Procurement and Contracting
Address: 45 Alderney Drive
Dartmouth, NS
B2Y 2N6

Telephone: 902-426-9940
E-mail address: gabby.girard@canada.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

5.2 Technical Authority

The Technical Authority for the Contract is: to be provided at contract award

The Technical Authority named above is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority, however the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

6. Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a Public Service Superannuation Act (PSSA) pension, the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with Contracting Policy Notice: 2012-2 of the Treasury Board Secretariat of Canada.

7. Payment

7.1 Basis of Payment

The Contractor will be reimbursed for the costs reasonably and properly incurred in the performance of the Work as determined in accordance with the Basis of Payment in Annex C to a limitation of expenditure of **\$45,000.00** Customs duties and Applicable Taxes are extra.

Limitation per fiscal year:

FY 15/16 \$5,000

FY 16/17 \$30,000

FY 17/18 \$10,000

7.2 Limitation of Expenditure

- (a) Canada's total liability to the Contractor under the Contract must not exceed \$45,000.00 Applicable Taxes are extra.
- (b) No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Work, will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been approved, in writing, by the Contracting Authority before their incorporation into the Work. The Contractor must not perform any work or provide any service that would result in Canada's total liability being exceeded before obtaining the written approval of the Contracting Authority. The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:
 - (i) when it is 75 percent committed, or

- (ii) four (4) months before the contract expiry date, or
- (iii) as soon as the Contractor considers that the contract funds provided are inadequate for the completion of the Work,

whichever comes first.

- (c) If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority a written estimate for the additional funds required. Provision of such information by the Contractor does not increase Canada's liability.

7.3 PWGSC SACC Manual clauses

A9117C 2007-11-30 T1204 - Direct Request by Customer Department

8 Invoicing Instructions

8.1 Milestone Payments

- (a) Canada will make milestone payments in accordance with the Schedule of Milestones detailed below and the payment provisions of the Contract if:
 - (i) an accurate and complete claim for payment and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
 - (ii) all such documents have been verified by Canada;
 - (iii) all work associated with the milestone and as applicable any deliverable required have been completed and accepted by Canada.

8.2 Schedule of Milestones

The schedule of milestones for which payments will be made in accordance with the Contract is as follows:

Contract disbursements will be based on the completion, receipt and approval (by the Departmental Representative) of tasks and deliverables listed above. Invoicing and payments will be conducted as follows:

Invoicing Dates:

On or before March 31, 2016; Deliverables 1a and 2a (est. \$5,000)
On or before September 30, 2016: Deliverables 1b, 1c, 2b, 2c and 3a (est. \$15,000)
On or before March 31, 2017; Deliverables 3b, 4a, and 5a (est. \$15,000)
On or before May 31st 2017; Deliverables 4b, 5b, 6a and 6b (est. \$10,000)

9. Certifications

9.1 Compliance

Compliance with the certifications provided by the Contractor in its bid is a **condition** of the Contract and subject to verification by Canada during the term of the Contract. If the Contractor does not comply with any certification or it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

10. Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Nova Scotia

11. Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) Modified 2010B General Conditions - Professional Services (Medium Complexity) 2013-06-27
- (c) Annex A, Statement of Work;
- (d) Annex B, Basis of Payment;
- (e) Annex ____, Security Requirements Check List (*if applicable*);
- (f) the Contractor's bid dated _____, (*insert date of bid*) (*If the bid was clarified or amended, insert at the time of contract award: "as clarified on _____" or "as amended on _____" and insert date(s) of clarification(s) or amendment(s).*)

ANNEX A

STATEMENT OF WORK

Bay of Fundy Estuary Characterization

Purpose:

The purpose of this contract is to compile a geodatabase of existing data, develop and conduct an estuary characterization, and create profiles of estuaries located within the Bay of Fundy (Canadian portion of the Gulf of Maine).

Background:

As part of Environment and Climate Change Canada's (ECCC) Gulf of Maine Initiative (GMI), ECCC is building knowledge on the Gulf of Maine ecosystem – watershed and coast – to better understand its current condition, identify stressors and threats, and use this information to inform decisions that will support a balance between long-term conservation, human use and responsible development.

Estuaries are an important feature of the Gulf of Maine, both from an ecosystem and human use perspective. Estuaries provide key habitat in the life cycles of many species, including commercially valuable species. Many cities and communities along the Gulf of Maine shoreline have been built around estuaries and estuaries also support numerous social and cultural activities (e.g. recreation, medicinal plants), as well as being a focal point for current and future economic development (e.g. aquaculture, tourism, marine transportation). Estuaries are also the receiving waters for much of the run-off from land-based activities (e.g. waste water treatment, agricultural run-off). Decisions are being made every day which can affect the health of these estuaries, the availability and quality of the resources and activities they support, and ultimately their long-term viability and use. Unfortunately, most of these decisions are made without the benefit of consolidated and readily accessible information on existing natural resources, human infrastructure, the interactions between these, and the environmental consequences which might and have resulted.

Based on discussion with a number of Canadian federal and provincial contacts, consolidated and readily accessible digital information on estuary characteristics, natural resources, and human use and activities for estuaries in the Bay of Fundy does not currently exist today. It was also agreed that this type of consolidated and readily accessible digital information could form the foundation for other more issue specific analysis or classification, and inform decisions on conservation and responsible development.

The purpose of this contract is therefore to create a geodatabase which compiles and consolidates existing geospatial data layers on the physical, biological, natural and human use features for estuaries and adjacent land within the Bay of Fundy, as well as compile or determine estuary characteristics for these estuaries. Information from the geodatabase will also be summarized into brief profiles (e.g. fact sheets) for key estuaries.

An estuary is defined as semi-enclosed coastal body of brackish water where one or more rivers flow into open marine water. It is the transition zone between a freshwater fluvial environment and salt water marine environment, and is subject both to fluvial (e.g. freshwater and sediment input) and marine influences (e.g. tides, waves, and the influx of salt water). In the Bay of Fundy, with its macro tidal range, the marine influence could reach far inland depending on natural and/or anthropogenic barriers (e.g. waterfall, dam/causeway). For the purpose of this contract, the landward boundary of an estuary is defined by the head of tide or where the system is terminated by man-made structures and the seaward boundary of an estuary is defined by where the system becomes open marine water. In addition to the estuary itself, the project should capture available, relevant information on land-based features, uses and activities directly adjacent to the estuary. The contractor is invited to provide other options for delineation of estuaries that they feel may be more applicable or a more current and accepted approach to the intent of this contract.

A. STATEMENT OF WORK

The contract will involve 5 tasks (an optional Task is provide for the contractor's consideration):

1. Compile an inventory of existing geospatial data and information relevant to estuary characterization for the Bay of Fundy

In consultation with the Departmental Representative and with federal and provincial government contacts (initial contacts will be provided to the contractor by the Departmental Representative), the contractor will compile information in a spreadsheet or similar format on existing data from federal and provincial government sources (see Task 2 and Task 3 for relevant data items). The framework and final list of inventory fields will be determined between the Departmental Representative and contractor at the start of the contract. The contractor should also develop and submit a draft inventory to the Departmental Representative for review. The Departmental Representative and team of federal and provincial contacts will review the draft inventory and provide feedback to the contractor. The contractor will revise the inventory based on this review and submit a final inventory to the Departmental Representative. As part of the final inventory, the contractor should also include a small summary which identifies limitations encountered and data gaps.

Federal and provincial contacts have already been engaged by the Departmental Representative and have agreed to support the contractor in identifying organizational data sources to help compile the inventory. The contractor may also want to draw on other federal and provincial data contacts from their own network of contacts.

The inventory should include metadata on (but is not limited to*):

- Theme
- Feature
- Name
- Data creator
- Data owner
- Date collected
- Raw or analyzed data
- Availability (e.g. digital, paper)
- Open access or restrictions on use
- Geographic coverage (e.g. entire Bay of Fundy, particular estuaries)

- Format
- Type
- Scale
- Projection
- Datum
- Other notes

*An inventory framework and final list of inventory fields will be confirmed between the Departmental Representative and contractor at the start of the contract.

2. Provide recommendations and develop a framework or scheme to characterize estuaries in the Bay of Fundy.

The contractor will review existing frameworks and schemes for estuary characterization and provide recommendations on a framework for the Bay of Fundy. An initial list of existing frameworks and schemes from the Atlantic and New England regions will be provided to the contractor by the Departmental Representative. The contractor will also identify other frameworks and schemes to consider. The intent is to assess existing frameworks and schemes and to develop an approach that will ensure the Bay of Fundy estuary characterization is compatible/consistent with other regional approaches.

Based on review of existing frameworks and schemes, and input from the Departmental Representative and a team of federal and provincial government issue experts (contacts for experts will be provided to the contractor by the Departmental Representative), the contractor will develop and submit an initial draft framework on estuary characterization for the Bay of Fundy to the Departmental Representative for review. The Departmental Representative and team of federal and provincial experts will review the framework and provide feedback to the contractor. The contractor will revise the framework based on this review and submit a final draft to the Departmental Representative.

Federal and provincial issue experts have already been engaged by the Departmental Representative and have agreed to provide advice and feedback to the contractor on developing an estuary characterization framework. The contractor may also want to draw on other federal and provincial issue experts from their own network of contacts.

3. Develop a geodatabase design and populate the geodatabase with existing data

ArcGIS is a standard with most government agencies; therefore an ESRI File Geodatabase and the file format compatible with ESRI ArcGIS (Version 10.1) shall be used. Metadata should be maintained or created using Government of Canada metadata standards (<https://www.tbs-sct.gc.ca/hgw-cgf/oversight-surveillance/itpm-itgp/im-gi/metadata-metadonnees-eng.asp>), but all data layers shall be converted to a common projection, preferably Lambert Conic Conformal (unless indicated otherwise).

The contractor will develop and submit a draft geodatabase design to the Departmental Representative for review. The design should divide datasets of spatially or thematically related feature classes and compile a geodatabase of features and characteristics for estuaries. The contractor will revise the design based on review and submit a final draft to the Departmental Representative.

Once the geodatabase design has been approved by the Departmental Representative, the contractor will populate the geodatabase with existing and available data identified in Task 1. The initial federal and provincial contacts identified for Task 1 have agreed to continue to support the contractor in accessing the data from their respective organizations. The contractor may also want to draw on other federal and provincial data contacts developed as part of Task 1.

The geodatabase should include the most current versions of the following themes and features (where data is available and accessible):

- Basic base mapping information for the Bay of Fundy including:
 - a. Bay of Fundy boundary
 - b. Topography (DEM if/where available)
 - c. Major rivers
 - d. Shoreline
 - e. Bathymetry
 - f. Geology
- Physical and biological features of each estuary including:
 - a. Basin/watershed boundary
 - b. Topography (DEM if/where available)
 - c. Major rivers
 - d. Estuary boundary
 - e. Intertidal boundary
 - f. Shoreline
 - g. Bathymetry
 - h. Surficial geology (land, benthic)
- Natural resources features of each estuary including:
 - a. Important habitat for key fauna (e.g. birds, marine mammals)
- Human use and land use features of each estuary including:
 - a. Communities and cities
 - b. Roads
 - c. Municipal and industrial infrastructure (e.g. wastewater treatment facilities, commercial wharves)
 - d. Land use by sector (e.g. urban/residential, agriculture, forestry)
 - e. Resource development and activities (e.g. aquaculture, shipping port, marinas, energy, resources extraction, manufacturing)
 - f. Protected areas
 - g. Shoreline protection structures (e.g. dykes, jetties, breakwaters)
 - h. Impervious surface (NS only)
- Characteristics of each estuary including:
 - a. Geographic location
 - b. Basin/watershed area
 - c. Basin/watershed perimeter
 - d. Drainage characteristics
 - e. Freshwater input - mean annual discharge
 - f. Freshwater input - mean total annual discharge
 - g. Flushing time
 - h. Estuary area
 - i. Intertidal area
 - j. Shoreline length
 - k. Length/width of estuary

- l. Width of mouth
- m. Mean depth
- n. Tidal range
- o. Tidal type
- p. Estuary volume (at high tide)
- Estuary characterization for priority estuaries (see Task 4).

4. Conduct a characterization of priority estuaries.

Priority estuaries for characterization will be provided to the contractor by the Departmental Representative. Approximately 10 estuaries will be characterized and could include estuaries in/around St. Croix, Passamaquoddy Bay, Lepreau, Musquash, Saint John Harbour, Chignecto Bay, Shepody Bay, Petitcodiac River, Cumberland Basin, Minas Basin, Annapolis Basin, St. Mary's Bay or Lobster Bay.

Characterization of the priority estuaries will be based on the framework developed in Task 2 and the data compiled in Task 3. Data availability for particular estuaries may impact characterization so characterization should be conducted with the best available information with gaps or limitations noted.

A test characterization, for an agreed upon estuary, will be developed and provided to the Departmental Representative and the team of federal and provincial issues experts (from Task 2) for review and approval prior to proceeding with characterization of the remaining priority estuaries. Based on feedback from this review, slight modification of the framework for estuary characterization developed in Task 2 may be required at this time.

Results of the estuary characterizations shall be incorporated into the geodatabase created in Task 3.

5. Create a profile for each priority estuary.

The contractor will summarize the information above into profiles for each of the priority estuaries. Information in the profile will include maps and text providing an overview of the geography, environment and human use of the estuary

A design layout and draft table of contents for the profiles will be provided to the Departmental Representative for review and approval prior to proceeding with profiles for the remaining priority estuaries. The profiles will be completed and provided in commonly used text/graphic software format(s) agreed upon by the Departmental Representative.

Optional Task (pending approval of the Departmental Authority and availability of resources)

Estuary Profile Web Mapping Application (viewer/atlas)

The contractor will create a web mapping application (viewer/atlas), viewable by non-GIS users, to enable on-line dissemination of the estuary profiles generated in Task 5. The profiles should be available in a web mapping application (viewer/atlas) accessible to non-GIS users and text/graphic format.

DELIVERABLES

Contract deliverables are based on and listed by the five (5) contract tasks. A final meeting is also included as part of the deliverables. Deliverables include:

1. Inventory of existing geospatial data and information, as well as identified limitations and data gaps, relevant to estuary characterization for the Bay of Fundy
 - a. Final inventory framework with metadata fields (on or before March 31, 2016)
 - b. Draft inventory of existing geospatial data and information (on or before June 30, 2016)
 - c. Final inventory of existing geospatial data and information, including summary with identified limitations and gaps (on or before August 31, 2016)
2. Framework or scheme for estuary characterization in the Bay of Fundy
 - a. Recommendations on frameworks or schemes to consider for conducting an estuary characterization (on or before March 31, 2016)
 - b. Draft framework or scheme for conducting an estuary characterization (on or before May 31, 2016)
 - c. Final draft framework or scheme for conducting an estuary characterization (on or before August 31, 2016)
3. Geodatabase of features and characteristics for estuaries in the Bay of Fundy
 - a. Geodatabase design for datasets (on or before August 31 2016)
 - b. Populated geodatabase compiling the features and characteristics for estuaries in the Bay of Fundy (on or before January 31, 2017)
4. Characterization of priority estuaries
 - a. Test estuary characterization for agreed upon estuary pilot estuary (on or before February 28, 2017)
 - b. Characterization of remaining priority estuaries (on or before April 28, 2017)
5. Estuary profiles for each priority estuaries
 - a. Design layout, table of contents and web-mapping application mock-up (on or before February 28, 2017)
 - b. Final profiles for each priority estuary (on or before April 28, 2017)
6. Final project report
 - a. Provide and host a meeting (webinar format accepted) to summarize the project and provide information on methods, results, gaps and next steps (on or before May 31, 2017)
 - b. Written report summarizing the project, process, standards/methods, geodatabase design, challenges or limitations encountered, and results (on or before May 31, 2017).

Optional deliverable (pending approval of the Departmental Authority and availability of funding)

Web mapping application (viewer/atlas) for dissemination of estuary profiles (on or before June 30, 2017)

ANNEX B Evaluation Criteria

Proposals will be evaluated in accordance with the following criteria. Bidders are advised to address these criteria in sufficient depth in their proposals.

The highest compliant combined technical and financial score

Estuary Characterization Proposal Evaluation

Proposals will be evaluated in accordance with the following criteria. Bidders are advised to address these criteria in sufficient depth in their proposals.

Mandatory Requirements

The contractor should have training in the use of ESRI ArcGIS and/or at least 5 years' experience using the software.

ESRI ArcGIS software must be compatible with Version 10.1

Technical Criteria

The following are the technical criteria upon which the proposals will be rated. The total maximum score will be **90 points** and each criterion will be scored to a maximum of the points indicated.

1. Experience researching and developing frameworks to analyze ecosystems (Max. score: 20 points)

The proposal should indicate and list projects or publications that demonstrate your knowledge and experience in conducting projects of a similar nature to what is being requested in the request for proposals. Note: where appropriate, bidders can use the same publication or project for more than one of the rated criteria

Points awarded:

- *No projects: 0 points*
- *1-3 projects: 5 points*
- *4-6 projects: 10 points*
- *7 or more projects: 15 points*

- *Projects specifically related to estuaries or coastal ecosystems: 5 points*

2. Experience conducting scientific analysis or characterization of ecosystems (Max. score: 25 points)

The proposal should indicate and list projects or publications that demonstrate your knowledge and experience in conducting projects of a similar nature to what is being requested in the request for proposals. Note: where appropriate, bidders can use the same publication or project for more than one of the rated criteria

Points awarded:

- *No projects: 0 points*
- *1-3 projects: 5 points*
- *4-6 projects: 10 points*
- *7 or more projects: 20 points*

- *Projects specifically related to estuaries or coastal ecosystems: 5 points*

3. Experience designing and populating geodatabases (Max. score: 20 points)

The proposal should indicate and list projects or publications that demonstrate your knowledge and experience in conducting projects of a similar nature to what is being requested in the request for proposals. Note: where appropriate, bidders can use the same publication or project for more than one of the rated criteria.

Points awarded:

- *No projects: 0 points*
- *1-5 projects: 5 points*
- *6-10 or more projects: 10 points*
- *10 or more projects: 15 points*

- *Projects specifically incorporating data from a variety of sources (i.e. data generators and holders): 5 points*

4. Experience developing communication or outreach materials to convey scientific information to non-scientists (Max points: 10 points)

- *No projects: 0 points*
- *1-3 projects: 5 points*
- *4 or more projects: 10 points*

5. Organization and clarity of the proposal (Max. score: 15 points)

The proposal should be easy to read, understand and evaluate. It should clearly address all requirements outlined in the statement of work.

Points awarded:

- *Very Good: 11-15 points (The proposal provides detailed and specific explanations of how the work will be conducted, including methodology/approach to be used and its rationale, and includes innovative approaches that add value to the project. Proposal exceeds expectations)*
- *Good: 6-10 points (The proposal provides detailed and specific explanations of how the work will be conducted, including the methodology/approach to be used and its rationale. Proposal meets expectations)*
- *Acceptable: 1-5 points (The proposal only provides a basic and general explanation of how it will be conducted. Proposal just meets expectations).*
- *Unacceptable: 0 points (The proposal indicates specific deficiencies and problems with explanations of how it will be conducted. Proposal does not meet expectations)*

Total maximum score: 90 points

Bidders must score a minimum of 55 points out of the possible 90 points.

Basis of Selection

The technically responsive proposal that obtains the highest combined rating of technical merit (70% and Financial 30% (e.g. adding the technical score with the financial score to result in a total score) will be recommended for award of a contract.

Where two or more proposals achieve the identical highest combined technical 70 points and financial 30 points the proposal with the lowest total price meeting all requirements of the solicitation will be recommended for the award of a contract.

For each proposal:

Calculation of Technical Score: the technical score is calculated by prorating the technical score obtained by the proposal against the total possible score of 70 points.

Example:

Company A : Technical proposal 65 points/90 points x 70 = 0.72 x 70 = 50.55 points

Company B: Technical proposal 90 points/90 points x 70 = 1 x 70 = 70 points

Calculation of Financial Score: the technical score is calculated by prorating the technical score obtained by the proposal against the total possible score of 30 points.

Example:

Company A: \$30,000 (lowest bid)/ Company A bid of \$35,000 x 30 = 0.85 x 30 = 25.71points

Company B: \$30,000 (lowest bid)/Company B bid of \$30,000 x 30 = 1 x 30 = 30 points

Company A total score = 76.26

Company B total score = 100

ANNEX C
BASIS OF PAYMENT

To be completed by bidder:

Based upon the statement of work and associated deliverables for the contract period ending 31st March 2017.

Milestone Payment	Deliverable Numbers	Date	Per diem Rate	Number of days	Fee amount
1	Deliverables 1a and 2a	31 Mar 2016			
2	Deliverables 1b, 1c, 2b, 2c, and 3a	30 Sept 2016			
3	Deliverables 3b, 4a, and 5a	31 Mar 2017			
4	Deliverables 4b, 5b, 6a, and 6b	31 May 2017			

TOTAL FEES \$ _____ (TAXES ARE EXTRA)

Optional Task

Bidders are asked to submit a separate cost estimate for the optional task. The cost estimate for the optional task will not be taken into consideration for evaluation purposes.

Estimated cost for Option _____