Pêches et Océans Canada

Solicitation No. – N° de l'invitation : 30004382

# RETURN BIDS TO: RETOURNER LES SOUMISSIONS À :

Bid Receiving/Réception des soumissions

Procurement Hub | Centre d'approvisionnement Fisheries and Oceans Canada | Pêches et Océans Canada 200 Kent Street | 200 rue Kent Ottawa, ON, K1A 0E6

Email / Courriel:

 $\frac{DFO.Tenders\text{-}Soumissions.MPO@dfo-}{mpo.gc.ca}$ 

AND

marie-france.chretien@dfo-mpo.gc.ca

# REQUEST FOR PROPOSAL DEMANDE DE PROPOSITION

Proposal to: Fisheries and Oceans Canada

We hereby offer to sell to His Majesty the King in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods and services listed herein and on any attached sheets at the price(s) set out therefor.

Proposition à : Pêches et Océans Canada

Nous offrons par la présente de vendre à Sa Majesté le Roi du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux appendices ci-jointes, les biens et les services énumérés ici sur toute feuille ciannexée, au(x) prix indiqué(s).

Tit	ما	/ Ti	tr	۵

Hydro-sedimentary modeling study of the silting up of the access channel to Grande-Entrée-Îles-de-la-Madeleine harbour and the search for solutions to this silting of the channel

Date

October 20, 2023

Solicitation No. / Nº de l'invitation

30004382

Client Reference No. / No. de référence du client(e) 30004382

Solicitation Closes / L'invitation prend fin

At /à: 02:00 pm

EST (Eastern Standard Time / HNE (Heure Normale de l'Est)

On / le: November 29, 2023

F.O.B. / F.A.B.
Destination

Taxes
See herein — Voir ci-inclus

Duty / Droits
See herein — Voir ci-inclus
ci-inclus

Destination of Goods and Services / Destinations des biens et services

See herein — Voir ci-inclus

Instructions

See herein — Voir ci-inclus

Address Inquiries to : /

Adresser toute demande de renseignements à :

Marie-France Chrétien, Contracting Specialist

Email / Courriel: <u>DFO.tenders-soumissions.MPO@dfo-mpo.gc.ca</u>

c.c.: marie-france.chretien@dfo-mpo.gc.ca

Delivery Required / Livraison exigée See herein — Voir en ceci	Delivery Offered / Livraison proposée			
Vendor Name, Address and Representative / Nom du vendeur, adresse et représentant du fournisseur/de l'entrepreneur				
Telephone No. / No. de téléphone	Facsimile No. / No. de télécopieur			
Name and title of person authorized to sign on behalf of Vendor (type or print) / Nom et titre de la personne autorisée à signer au nom du fournisseur (taper ou écrire en caractères d'imprimerie)				
Signature	Date			

# **TABLE OF CONTENTS**

PART 1	1 - GENERAL INFORMATION	3
1.1 1.2 1.3 1.4	SECURITY REQUIREMENTS STATEMENT OF WORK. DEBRIEFINGS. TRADE AGREEMENTS	3 3
PART 2	2 - BIDDER INSTRUCTIONS	
2.1 2.2 2.3 2.4 2.5	STANDARD INSTRUCTIONS, CLAUSES AND CONDITIONS SUBMISSION OF BIDS ENQUIRIES - BID SOLICITATION APPLICABLE LAWS BID CHALLENGE AND RECOURSE MECHANISMS	4 4 4
	3 - BID PREPARATION INSTRUCTIONS	
3.1	BID PREPARATION INSTRUCTIONS	
<b>PART 4</b> 4.1 4.2	4 - EVALUATION PROCEDURES AND BASIS OF SELECTION	8
PART 5	5 - CERTIFICATIONS	10
5.1 5.2	CERTIFICATIONS REQUIRED WITH THE BIDCERTIFICATIONS PRECEDENT TO CONTRACT AWARD AND ADDITIONAL INFORMATION	
PART 6	6 - RESULTING CONTRACT CLAUSES	15
6.1 6.2 6.3 6.4 6.5 6.6 6.7 6.8 6.9 6.10 6.11 6.12 6.13 6.14 6.15 6.16	SECURITY REQUIREMENTS STATEMENT OF WORK STANDARD CLAUSES AND CONDITIONS TERM OF CONTRACT AUTHORITIES PROACTIVE DISCLOSURE OF CONTRACTS WITH FORMER PUBLIC SERVANTS PAYMENT METHODS OF PAYMENT ELECTRONIC PAYMENT OF INVOICES — CONTRACT. INVOICING INSTRUCTIONS CERTIFICATIONS AND ADDITIONAL INFORMATION APPLICABLE LAWS PRIORITY OF DOCUMENTS INSURANCE - G1005C (2016-01-28) DISPUTE RESOLUTION. ENVIRONMENTAL CONSIDERATIONS	
	( A - STATEMENT OF WORK	
	(B-BASIS OF PAYMENT	
ANNEX	( C - FVALUATION CRITERIA	51

Solicitation No. –  $N^{\circ}$  de l'invitation : 30004382

#### **PART 1 - GENERAL INFORMATION**

# 1.1 Security Requirements

There is no security requirement applicable to the Contract.

# 1.2 Statement of Work

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

# 1.3 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 from receipt of the results of the bid solicitation process. The debriefing may be in writing or by telephone.

# 1.4 Trade Agreements

The requirement is subject to the Canada-Chile Free Trade Agreement (CCFTA), Canada-Colombia Free Trade Agreement, Canada-Peru Free Trade Agreement (CPFTA), Canada-Panama Free Trade Agreement, Canada-Korea Free Trade Agreement (CKFTA), Canada-Honduras Free Trade Agreement (CHFTA) and the Canadian Free Trade Agreement (CFTA).

#### **PART 2 - BIDDER INSTRUCTIONS**

# 2.1 Standard Instructions, Clauses and Conditions

As this solicitation is issued by Fisheries and Oceans Canada (DFO), any reference to Public Works and Government Services Canada or PWGSC or its Minister contained in any term, condition or clause of this solicitation, including any individual SACC clauses incorporated by reference, will be interpreted as reference to DFO or its Minister.

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the <u>Standard Acquisition Clauses and Conditions Manual</u> (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 <u>2003</u> (2023-06-08) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Delete: 60 days Insert: 120 days

#### 2.2 Submission of Bids

Bids must be submitted by the date, time and place indicated on page 1 of the bid solicitation.

Due to the nature of the bid solicitation, bids transmitted by facsimile to DFO will not be accepted.

# 2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than seven (7) 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.

# 2.4 Applicable Laws

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

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.

# 2.5 Bid Challenge and Recourse Mechanisms

- (a) Several mechanisms are available to potential suppliers to challenge aspects of the procurement process up to and including contract award.
- (b) Canada encourages suppliers to first bring their concerns to the attention of the Contracting Authority. Canada's <a href="Buy and Sell">Buy and Sell</a> website, under the heading "Bid Challenge and Recourse Mechanisms" contains information on potential complaint bodies such as:
  - Office of the Procurement Ombudsman (OPO)
  - Canadian International Trade Tribunal (CITT)
- (c) Suppliers should note that there are **strict deadlines** for filing complaints, and the time periods vary depending on the complaint body in question. Suppliers should therefore act quickly when they want to challenge any aspect of the procurement process.

The Office of the Procurement Ombudsman (OPO) was established by the Government of Canada to provide an impartial, independent venue for Canadian bidders to raise complaints regarding the award of certain federal contracts under \$30,300 for goods and \$121,200 for services. If you have concerns regarding the award of a federal contract below these dollar amounts, you may contact OPO by e-mail at boa.opo@boa-opo.gc.ca, by telephone at 1-866-734-5169, or by web at www.opo-boa.gc.ca.

#### **PART 3 - BID PREPARATION INSTRUCTIONS**

# 3.1 Bid Preparation Instructions

Canada requests that the Bidder submit <u>all</u> its **email** bid in separately saved sections as follows and <u>prior to the bid closing date, time and location</u>:

Section I: Technical Bid (one soft copy in PDF format)
Section III: Financial Bid (one soft copy in PDF format)
Certifications (one soft copy in PDF format)

#### **Important Note:**

The maximum size per email (including attachments) is limited to 10MB. If the limit is exceeded, your email might not be received by DFO. It is suggested that you compress the email size to ensure delivery. Bidders are responsible to send their proposal and to allow enough time for DFO to receive the proposal by the closing period indicated in the RFP. Emails with links to bid documents will not be accepted.

For bids transmitted by email, DFO will not be responsible for any failure attributable to the transmission or receipt of the email bid. DFO will send a confirmation email to the Bidders when the submission is received.

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 hard copy 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.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process <a href="Policy on Green">Policy on Green</a>
<a href="Procurement">Procurement</a> (<a href="https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573">https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573</a>). To assist Canada in reaching its objectives, bidders should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

Solicitation No. –  $N^{\circ}$  de l'invitation : 30004382

# Section I: Technical Bid

In their technical bid, Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

# Section II: Financial Bid

Bidders must submit their financial bid in accordance with the Basis of Payment in Annex B.

# Section III: Certifications

Bidders must submit the certifications and additional information required under Part 5.

#### PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

#### 4.1 **Evaluation Procedures**

- a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- b) An evaluation team composed of representatives of Canada will evaluate the bids.

#### 4.1.1 **Technical Evaluation**

# 4.1.1.1 Mandatory Technical Criteria

Refer to Annex C.

#### 4.1.1.2 Point Rated Technical Criteria

Refer to Annex C.

#### **Financial Evaluation** 4.1.2

The price of the bid will be evaluated in Canadian dollars, Applicable Taxes excluded, FOB destination, Canadian customs duties and excise taxes included.

#### 4.2 **Basis of Selection**

- 1. To be declared responsive, a bid must:
  - a. comply with all the requirements of the bid solicitation; and
  - b. meet all mandatory criteria; and
  - c. obtain the required minimum of 60 points overall for the technical evaluation criteria which are subject to point rating. The rating is performed on a scale of 100 points.
- 2. Bids not meeting (a) or (b) or (c) will be declared non-responsive.
- The selection will be based on the highest responsive combined rating of technical merit and price. The ratio will be 80% for the technical merit and 20% for the price.
- 4. To establish the technical merit score, the overall technical score for each responsive bid will be determined as follows: total number of points obtained / maximum number of points available multiplied by the ratio of 80%.
- 5. To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 20%.
- 6. For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.
- 7. Neither the responsive bid obtaining the highest technical score nor the one with the lowest evaluated price will necessarily be accepted. The responsive bid with the highest combined rating of technical merit and price will be recommended for award of a contract.

Solicitation No. –  $N^{\circ}$  de l'invitation : 30004382

The table below illustrates an example where all three bids are responsive and the selection of the contractor is determined by a 80/20 ratio of technical merit and price, respectively. The total available points equals 135 and the lowest evaluated price is \$45,000 (45).

Basis of Selection - Highest Combined Rating Technical Merit (80%) and Price (20%)

			, ,	, ,
		Bidder 1	Bidder 2	Bidder 3
Overall Technical Score		115/135	89/135	92/135
Bid Evaluated	Price	55 000,00 \$	50 000,00 \$	45 000,00 \$
Calculations	Calculations	115/135 x 80 = 68.15	89/135 x 80 = 52.74	92/135 x 80 = 54.52
	Pricing Score	45/55 x 20 = 16.36	45/50 x 20 = 18	45/45 x 20 = 20
Combined Rating		84.51	70.74	74.52
Overall Rating		1 <sup>st</sup>	3 <sup>rd</sup>	2 <sup>nd</sup>

#### **PART 5 - CERTIFICATIONS**

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

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a bid non-responsive, or will declare a contractor in default 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 will render the bid non-responsive or constitute a default under the Contract.

#### 5.1 Certifications Required with the Bid

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

#### Integrity Provisions - Declaration of Convicted Offences 5.1.1

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, if applicable, the declaration form available on the Forms for the Integrity Regime website (http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html), to be given further consideration in the procurement process.

#### 5.2 **Certifications Precedent to Contract Award and Additional Information**

The certifications and additional information listed below should be submitted with the bid, but may be submitted afterwards. If any of these required certifications or additional information 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 provide the certifications or the additional information listed below within the time frame provided will render the bid non-responsive.

#### 5.2.1 **Integrity Provisions – Required Documentation**

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real procurement agreement of the Ineligibility and Suspension Policy (http://www.tpsgc-pwgsc.gc.ca/ciif/politique-policy-eng.html), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

# Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list available at the bottom of the page of the Employment and Social Development Canada (ESDC) - Labour's website.

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of contract award.

#### **Additional Certifications Precedent to Contract Award** 5.2.3

# 5.2.3.1 Status and Availability of Resources

A3005T (2010-08-16) - Status and Availability of Resources

#### 5.2.3.2 **Education and Experience**

A3010T (2010-08-16) - Education and Experience

#### 5.2.3.3 **Certifications - Contract**

A3015C (2014-06-26) - Certifications - Contract

	_ ` _ '
5.2.3.4	List of Names for Integrity Verification Form
Bidders	s must complete the List of Names for Integrity Verification form found in Attachment 1 to Part 5.
5.2.3.5	Contractor's Representative
The Co	ontractor's Representative for the Contract is:
Name: Title: Addres: Telepho Facsim E-mail:	one:ile:
5.2.3.6	Supplementary Contractor Information
under a	nt to paragraph 221 (1)(d) of the Income Tax Act, payments made by departments and agencies applicable services contracts (including contracts involving a mix of goods and services) must be d on a T4-A supplementary slip.
agrees	ble the Department of Fisheries and Oceans to comply with this requirement, the Contractor hereby to provide the following information which it certifies to be correct, complete, and fully discloses the cation of this Contractor:
a)	The legal name of the entity or individual, as applicable (the name associated with the Social Insurance Number (SIN) or Business Number (BN), as well as the address and the postal code:
b)	The status of the contractor (individual, unincorporated business, corporation or partnership:
c)	For individuals and unincorporated businesses, the contractor's SIN and, if applicable, the BN, or if applicable, the Goods and Services Tax (GST)/Harmonized Sales Tax (HST) number:
d)	For corporations, the BN, or if this is not available, the GST/HST number. If there is no BN or GST/HST number, the T2 Corporation Tax number must be shown:

#### 5.2.4 Former Public Servant

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 FPSs, 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 <u>Public Service Superannuation Act</u> (PSSA), R.S., 1985, c. P-36, and any increases paid pursuant to the <u>Supplementary Retirement Benefits Act</u>, R.S., 1985, c. S-24 as it affects the PSSA. It does not include pensions payable pursuant to the <u>Canadian Forces Superannuation Act</u>, R.S., 1985, c. C-17, the <u>Defence Services Pension Continuation Act</u>, 1970, c. D-3, the Royal Canadian Mounted Police Pension Continuation Act, 1970, c. R-10, and the <u>Royal Canadian Mounted Police Superannuation Act</u>, R.S., 1985, c. R-11, the <u>Members of Parliament Retiring Allowances Act</u>, R.S. 1985, c. M-5, and that portion of pension payable to the <u>Canada Pension Plan Act</u>, 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 FPSs 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 <a href="Contracting Policy Notice: 2019-01">Contracting Policy Notice: 2019-01</a> 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;
- 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.

# The following certification signed by the contractor or an authorized officer:

I certify that I have examined the information provided above and that it is correct and complete.		
Signature		
Print Name of Signatory		

Solicitation No. – N° de l'invitation : 30004382

# ATTACHMENT 1 TO PART 5 LIST OF NAMES FOR INTEGRITY VERIFICATION FORM

# Requirements

Section 17 of the <u>Ineligibility and Suspension Policy</u> (the Policy) requires suppliers, regardless of their status under the Policy, to submit a list of names with their bid or offer. The required list differs depending on the bidder or offeror's organizational structure:

- Suppliers including those bidding as joint ventures, whether incorporated or not, must provide a complete list of the names of all current directors.
- Privately owned corporations must provide a list of the owners' names.
- Suppliers bidding as sole proprietors, including sole proprietors bidding as joint ventures, whether incorporated or not, must provide a complete list of the names of all owners.
- Suppliers that are a partnership do not need to provide a list of names.

Suppliers may use this form to provide the required list of names with their bid or offer submission. Failure to submit this information with a bid or offer, where required, will render a bid or offer non-responsive, or the supplier otherwise disqualified for award of a contract or real property agreement. Please refer to <a href="Information Bulletin: Required information to submit a bid or offer">Information Bulletin: Required information to submit a bid or offer</a> for additional details.

List of names for integrity verification form

#### **PART 6 - RESULTING CONTRACT CLAUSES**

# 6.1 Security Requirements

There is no security requirement applicable to the Contract.

# 6.2 Statement of Work

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

# 6.3 Standard Clauses and Conditions

As this contract is issued by Fisheries and Oceans Canada (DFO), any reference to Public Works and Government Services Canada or PWGSC or its Minister contained in any term, condition or clause of this contract, including any individual SACC clauses incorporated by reference, will be interpreted as reference to DFO or its Minister.

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

# 6.3.1 General Conditions

- **6.3.1.1** 2010B (2022-12-01), General Conditions Professional Services (Medium Complexity) apply to and form part of the Contract.
- **6.3.1.2** Subsection 10 of <u>2010B</u> (2022-12-01), General Conditions Professional Services (Medium Complexity) Invoice submission, is amended as follows:

Delete: 2010B 10 (2022-12-0), Invoice submission

Insert: Invoice submission

- Invoices must be submitted in the Contractor's name to <u>DFO.invoicing-facturation.MPO@DFO-MPO.gc.ca</u> with a cc to: [to be inserted at contract award]. The Contractor must submit invoices for each delivery or shipment; invoices must only apply to the Contract. Each invoice must indicate whether it covers partial or final delivery.
- 2. Invoices must show:
  - a. Contractor's Name and remittance physical address;
  - b. Contractor's CRA Business Number or Procurement Business Number (PBN);
  - c. Invoice Date:
  - d. Invoice Number;
  - e. Invoice Amount (broken down into item and tax amounts);
  - f. Invoice Currency (if not in Canadian dollars);
  - g. DFO Reference Number (PO Number or other valid reference number);
  - h. DFO Contact Name (DFO employee who initiated the order or to whom the goods were sent. **Note:** Invoice will be return to the Contractor if that information is not provided);
  - i. Description of the goods or services supplied (provide details of expenditures (such as item, quantity, unit of issue, fixed time labour rates and level of effort, subcontracts, as applicable) in accordance with the Basis of Payment, exclusive of Applicable Taxes;
  - Deduction for holdback, if applicable;
  - k. The extension of the totals, if applicable; and
  - I. If applicable, the method of shipment together with date, case numbers and part or reference numbers, shipment charges and any other additional charges.

Solicitation No. – N° de l'invitation : 30004382

- Applicable Taxes must be specified on all invoices as a separate item along with corresponding registration numbers from the tax authorities. All items that are zero-rated, exempt or to which Applicable Taxes do not apply, must be identified as such on all invoices.
- 4. By submitting an invoice, the Contractor certifies that the invoice is consistent with the Work delivered and is in accordance with the Contract.

#### 6.4 Term of Contract

#### 6.4.1 Period of the Contract

The period of the Contract is from date of Contract to March 31, 2025 inclusively.

# 6.5 Authorities

# 6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Marie-France Chrétien Title: Contracting Specialist

Department: Fisheries and Oceans Canada
Directorate: Materiel and Procurement Services

Address: 301 Bishop Drive

Fredericton, NB, E3C 2M6

Telephone: 450-521-4448

E-mail address: marie-france.chretien@dfo-mpo.gc.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.

# 6.5.2 Project Authority [to be inserted at contract award]

Name:	
Title:	
Department:	
Directorate:	
Address:	
Telephone:	
F-mail address	

The Project Authority for the Contract is:

The Project Authority 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 Project Authority, however the Project 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.

	30004382
6.5.3	Contractor's Representative: [to be inserted at contract award]
Name: Title:	
Depart Directo Addres	prate:
Teleph E-mail	address:
6.6	Proactive Disclosure of Contracts with Former Public Servants
Service reporte	viding information on its status, with respect to being a former public servant in receipt of a Public superannuation Act (PSSA) pension, the Contractor has agreed that this information will be ad on departmental websites as part of the published proactive disclosure reports, in accordance ontracting Policy Notice: 2012-2 of the Treasury Board Secretariat of Canada.
6.7	Payment
6.7.1	Basis of Payment
"B", to	ontractor will be paid for the Work performed, in accordance with the Basis of payment at Annex a limitation of expenditure of \$ [to be inserted at contract award]. Customs duties are and Applicable Taxes are extra.
6.7.2	Limitation of Expenditure
1.	Canada's total liability to the Contractor under the Contract must not exceed \$ [to be inserted at contract award]. Customs duties are included and Applicable Taxes are extra.
2.	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

- a. when it is 75% committed, or
- b. four months before the contract expiry date, or

notify the Contracting Authority in writing as to the adequacy of this sum:

c. as soon as the Contractor considers that the contract funds provided are inadequate for the completion of the Work,

# whichever comes first.

3. 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.

# 6.8 Methods of Payment

# 6.8.1 Monthly Payment

Canada will pay the Contractor on a monthly basis for work performed during the month covered by the invoice in accordance with the payment provisions of the Contract if:

- a. an accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract:
- b. all such documents have been verified by Canada;
- c. the Work performed has been accepted by Canada.

# 6.9 Electronic Payment of Invoices – Contract

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- a. Acquisition Card;
- b. Direct Deposit (Domestic and International)

# 6.10 Invoicing Instructions

The Contractor must submit invoices in accordance with <u>subsection 6.3.2.1 entitled "Invoice Submission"</u> above. Invoices cannot be submitted until all work identified in the invoice is completed. Payments will be made provided that the invoice(s) are emailed to DFO Accounts Payable at:

- <u>DFO.invoicing-facturation.MPO@DFO-MPO.gc.ca</u>
- [insert the name of the Project/Technical Authority and the AP Coder at contract award]

#### 6.11 Certifications and Additional Information

## 6.11.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

# 6.11.2 SACC Manual Clauses

A3015C (2014-06-26), Certification – Contract

# 6.12 Applicable Laws

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

# 6.13 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) the general conditions 2010B (2022-12-01), General Conditions Professional Services (Medium Complexity);
- c) Annex A, Statement of Work;
- d) Annex B, Basis of Payment;

# 6.14 Insurance - <u>G1005C</u> (2016-01-28)

The Contractor is responsible for deciding if insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any insurance acquired or maintained by the Contractor is at its own expense and for its own benefit and protection. It does not release the Contractor from or reduce its liability under the Contract.

# 6.15 Dispute Resolution

- (a) The parties agree to maintain open and honest communication about the Work throughout and after the performance of the contract.
- (b) The parties agree to consult and co-operate with each other in the furtherance of the contract and promptly notify the other party or parties and attempt to resolve problems or differences that may arise.
- (c) If the parties cannot resolve a dispute through consultation and cooperation, the parties agree to consult a neutral third party offering alternative dispute resolution services to attempt to address the dispute.
- (d) Options of alternative dispute resolution services can be found on Canada's Buy and Sell website under the heading "<u>Dispute Resolution</u>".
- (e) The Parties agree to make every reasonable effort, in good faith, to settle amicably all disputes or claims relating to the Contract, through negotiations between the Parties' representatives authorized to settle. If the Parties do not reach a settlement within 25 working days after the dispute was initially raised to the other party in writing, either Party may contact the Office of the Procurement Ombudsman (OPO) to request dispute resolution/mediation services. OPO may be contacted by e-mail at <a href="mailto:boa.opo@boa-opo.gc.ca">boa.opo@boa-opo.gc.ca</a>, by telephone at 1-866-734-5169, or by web at <a href="https://www.opo-boa.gc.ca">www.opo-boa.gc.ca</a>.
- (f) The Office of the Procurement Ombudsman (OPO) was established by the Government of Canada to provide an impartial, independent venue for Canadian bidders to raise complaints regarding the administration of certain federal contracts, regardless of dollar value. If you have concerns regarding the administration of a federal contract, you may contact OPO by e-mail at boa.opo@boa-opo.gc.ca, by telephone at 1-866-734-5169, or by web at www.opo-boa.gc.ca.

#### 6.16 Environmental Considerations

As part of Canada's policy directing federal departments and agencies to take the necessary steps to acquire products and services that have a lower impact on the environment than those traditionally acquired, Contractors should:

- a. Paper consumption:
  - Provide and transmit draft reports, final reports in electronic format. Should printed material
    be required, double sided printing in black and white format is the default unless otherwise
    specified by the Project Authority.
  - Printed material is requested on minimum recycled content of 30% and/or certified as originating from a sustainably managed forest.

Solicitation No. –  $N^{\circ}$  de l'invitation : 30004382

• Recycle unneeded printed documents (in accordance with Security requirements).

# b. Travel requirements:

- The Contractor is encouraged to use video and/or teleconferencing where possible to cut down unnecessary travel.
- Use of Properties with Environmental Ratings: Contractors to the Government of Canada may access the PWGSC Accommodation directory, which includes Eco-Rated properties. When searching for accommodation, Contractors can go to the following link and search for properties with Environmental Ratings, identified by Green Keys or Green Leafs that will honour the pricing for Contractors.
- Use public transportation or another method of green transportation as much as possible.

#### **ANNEX A - STATEMENT OF WORK**

# 1. TITLE

Hydro-sedimentary modeling study of the silting up of the access channel to Grande-Entrée-Îles-de-la-Madeleine harbour and the search for solutions to this silting of the channel.

# 2. BACKGROUND

#### 2.1 Introduction

Fisheries and Oceans Canada / Small Craft Program (DFO/SCH) intends to hire an engineering firm through a competitive process to provide the services required for this project. To lighten the text, project refers to the hydro-sedimentary modeling study of the silting of the access channel to the fishing harbour of Grande-Entrée and the search for solutions to this silting of the channel.

# 2.2 Description of the DFO/SCH Organizational Framework

The Small Craft Harbours Regional Branch is governed by the Fishing and Recreational Harbours Act. It is under this program that Small Craft Harbours (SCH) supports the commercial fishing industry by operating and maintaining a national network of core harbours to provide safe and accessible facilities for commercial fishers and mariculturists.

# 2.3 Erosion and sedimentation in the Magdalen Islands (IDM)

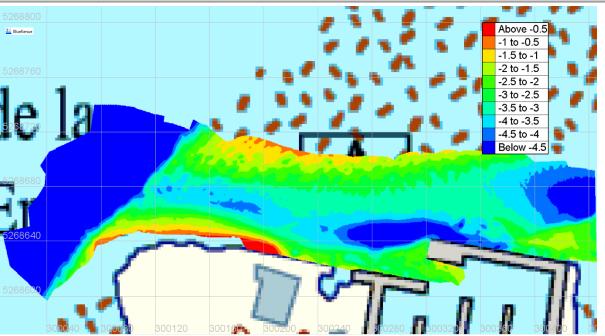
SCH is responsible for 9 essential fishing harbours in the Magdalen Islands. The sedimentary movements that occur on the Islands are of great amplitude and cause, depending on the case, erosion and / or sedimentation. These sedimentary movements have always been important on the Islands, in particular because of the fragility of the banks (sand and limestone sandstone) but also because of the geographical situation of the Islands exposed to severe weather and hydrodynamic conditions.

Erosion and sedimentation near fishing harbours are important issues for SCH. Depending on the year and season, constantly at the mercy of extreme events, marine structures can be eroded or on the contrary be subject to significant sedimentation, forcing dredging.

# 2.4 Problem at Grande Entrée harbour

Before 2015, the entrance channel of the Grande-Entrée harbour was dredged every 5 years approximately. Starting in 2015, this dredging had to be carried out on an annual basis to ensure safe access to the harbour. The Stantec-2022 study¹ reports a significant increase in monthly sedimentation rates from about 30 m3/month before 2015 to about 150 m3/month from 2015 to 2021. Figures 1 and 2 illustrate the morphological changes observed between the 2013 and 2022 pre-dredging sounding surveys. There is a relatively systematic northward shift in the harbour entrance channel of the - 3.0 m ZC isobath between these two bathymetric surveys.

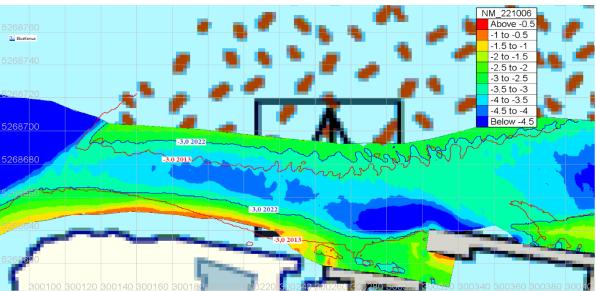
<sup>&</sup>lt;sup>1</sup>-Stantec Consultants Ltd, "Study of phenomena causing the increase in silting up at Grande-Entrée harbour and solutions in considering climate change", Final report prepared for PSPC for DFO, October 2022



Solicitation No. - Nº de l'invitation :

30004382

Bathymetry collected on May 5, 2013 Figure 1



Bathymetry collected on October 6, 2022, illustrating the displacement of the Figure 2 isobath -3.0 m ZC

# 2.5 Description of the study

The area covered in the hydro-sedimentary study includes the dredging area of the entrance to Grande-Entrée harbour as well as the potential sediment source areas (see the location of the harbour on Figure 3).



Figure 3 Location of Grande-Entrée harbour (nautical chart + Google Maps)

#### 3. PROJECT OBJECTIVES

The expertise covered by this Request for Proposals is engineering services for numerical modelling (1D and 2D) of waves, shoreline currents and sandy and gravelly sediment transport in the short term (a storm) and long-term (≥ 30 years) to support the understanding of sedimentary movements and the design of protective structures (including groins, linear stone protection, beach nourishment) and to evaluate their performance. The aim is to find the causes of the increase in the quantities to be dredged in the entrance channel of Grande-Entrée harbour and to evaluate solutions to reduce the dredging effort required for this harbour.

The main objective of the study is to reduce the quantities of sediment to be dredged in the channel of Grande-Entrée harbour. To this end, the firm selected for the study will be required to provide the Ministry with scientific data (numerical modelling of hydro-sedimentary conditions) to support the recommendation for intervention through protective works (including groins, linear stone protection, beach nourishment), a modification of the dredged pattern or other solutions to be defined.

The study is divided into four main stages:

- Review of all the documentation and establishment of an overall portrait of the sedimentary dynamics
  of the Grande-Entrée sector.
- 2. Model the transport of sediments in the short term (characteristic storm events) into the dredging area of the harbour entrance channel, including potential sediment source areas (at a minimum, the beach south of the harbour and Islet C). This exercise should enable us to determine more precisely the sediment source zones affecting the dredging area.
- 3. Model long-term sediment transport (≥ 30 years) to assess the evolution of the sediment system without interventions (other than annual dredging). This exercise will be done while neglecting the presence of ice cover in the Gulf of St. Lawrence.

4. Propose solutions to limit the quantities of sediment dredged annually in the harbour entrance channel. The performance of the structures and their impacts will have to be modelled, in the short term in response to characteristic storm events and in the long term to assess the evolution of the system, including the impact of climate change (essentially the disappearance of ice cover and rise in mean sea level).

These results will also be used to feed into the impact assessment as part of the environmental impact assessment and review procedure to be carried out later.

#### 4. SCOPE OF DELIVERABLES

The mandate is to establish for the Grande-Entrée site:

- 1. An understanding of the overall sedimentary dynamics of the Grande-Entrée site through the analysis of documentation.
- 2. Numerical terrain models required for the study of hydro-sedimentary phenomena.
- 3. The characteristic wave regime of the study area (offshore time series, characteristic storms for return periods of 2, 20 and 50 years) and the water level regime (tide and storm surges).
- 4. The regime of circulation of water bodies between the gulf and the lagoon according to the variation of water levels at the entrance of the lagoon.
- 5. Hydrodynamic modelling of wave refraction from offshore to the coastline.
- 6. The heights, periods and directions of the characteristic waves, in order to design the proposed protective works.
- 7. Short-term hydro-sedimentary modelling (at the scale of characteristic storm events) over the study area (current status and after introduction of protective measures).
- 8. Long-term sedimentary dynamics of sites (≥30 years current status and after introduction of protective measures).
- 9. Evaluation of the performance of the proposed concepts and the impact of the intervention on sediment transport in the short and long term (≥ 30 years).

#### 5. TASKS TO BE CARRIED OUT

## The contractor/firm must:

#### 1. Make available to the project, a team composed of:

- a. Project manager: Senior Engineer with experience in managing coastal sedimentology study projects:
- b. Senior Modeler: Senior Engineer in hydro-sedimentary modelling:
- c. Assistant modeler: junior engineer or intermediate in numerical modelling;
- d. Coastal Infrastructure Designer: intermediate engineer in coastal structure design;
- e. Estimator: intermediate engineer specialized in coastal infrastructure costs

#### 2. Analyze available data:

This analysis must provide a comprehensive understanding of the hydro-sedimentary dynamics of the Grande-Entrée sector, coastal evolution and issues.

Solicitation No. - Nº de l'invitation : 30004382

# 3. Mount digital terrain models (DTMs):

- a. DTMs must represent the topography and nearshore bathymetry of the study areas, as well as bathymetry further offshore, necessary for modelling offshore wave transformation as they
- b. Digital terrain models will be based on data provided by the department (for example, recent LiDAR, recent bathymetric survey, low-resolution Canadian Hydrographic Service (CHS) bathymetry further offshore, fore-shore survey, recent photogrammetry survey, etc.). The data available will be specified at the time of contract award;
- DTMs must be made available to SCH in the form of images, ASCII files and SHP files.
- 4. Establish the characteristic wave regime of the study area (time series, 20- and 50-year return period storms), water level regime, and combined high wave and high-water level regime (storm and storm surge synchronicity);
  - a. The offshore wave regime will be established using hourly data extracted from models covering the Gulf of St. Lawrence (including the influence of storm surges from the Atlantic) and calibrated on recent data from the Université du Québec à Rimouski (UQAR). These models must use a climate forcing recognized by the scientific community (for example CFSR or HRDPS from 2018) and cover at least 30 years, including without interruption the storm Dorian (September 2019). These wave data shall be applied to the offshore limit of the refraction model;
  - Water level data will come from models that must have been calibrated to Canadian Hydrographic Service (CHS) data. These data must cover the same minimum period of 30 years as the waves, including (without interruption) storm Dorian.

# 5. Establish the current regime in the study area;

- a. The results of this modelling must be able to take into account tidal currents in sediment transit. A hypothesis of no exchange between the northern part of the lagoon (Lagune de la Grande-Entrée) and the southern part of the lagoon (Lagune du Havre aux Maisons) will be posed as a first approximation.
- b. Current regime must at least be established for high water tidal conditions and storm surge conditions (such as during storm Dorian).
- The current regime will also have to be established for the characteristic storms that will be used for short-term hydro-sedimentary modelling.

# 6. Establish wave refractive patterns up to the coastline;

- The modelling of wave propagation and transformation from offshore to shore must be carried out by a recognized model that makes it possible to reproduce all the phenomena affecting wave propagation (wind generation, refraction, diffraction, breaking, interaction with currents, etc.).
- b. The wave transformation model must already have been validated by sensitivity tests at other sites in the Estuary and Gulf of St. Lawrence during previous studies, subjected to wave and ice conditions similar to those encountered at the study site.
- 7. Establish the heights, periods and directions of design waves by modeling wave transformation, in order to design protection structures;
  - a. The number of cases of representative waves and water levels, responsible for morphological changes at the site under study (morphological wave regime), must be established and justified according to the objective pursued (in particular "short term versus long term" with the impact of climate change);
  - b. Refractive and direction coefficients shall be determined for representative wave cases.

# 8. Establish the sedimentary dynamics of the site in the short term (at the scale of a storm);

- a. The firm will have to propose and apply a hydro-sedimentary modelling approach that works for fine and coarse particle sizes (D<sub>50</sub> from 0.1 mm to 15 mm or more), since the usual models are designed for sand transport (grain diameter typically less than 2 mm);
- b. Simulations under current 2D horizontal conditions must establish the sedimentary dynamics of the target areas, as well as the coastal currents and the main directions of longitudinal sediment

- transport. Recommendations will have to be issued to select intervention concepts in order to limit the problem of silting up the access channel to the fishing harbour;
- Simulations under future horizontal 2D conditions must establish the sedimentary dynamics of protected beach areas, as well as the coastal currents and main directions of longitudinal sediment transport. Recommendations must be made to refine intervention concepts;
- d. Simulations in current and future vertical 2D conditions for cross-sectional transport will be used to characterize the response of the profile of a beach to the attack of storm waves, in order to analyze the evolution of the beach (current and/or future beach nourishment) and the equilibrium profiles.

# 9. Establish the long-term sedimentary dynamics of the site (≥ 30 years);

- a. Modelling must assess nearshore transport (erosion/sedimentation) along the coast over the long term (≥ 30 years);
- b. All cases of morphological wave regime will have to be simulated to establish sediment budgets and long-term morphological evolution (≥30 years), to determine the impact on sediment transport and on the adjacent coast;
- c. The modelled morphological evolution and sediment budgets will have to be calibrated from the various available information (topographic and bathymetric surveys, aerial photographs, orthophotos, LiDAR, UQAR coastal line surveys). Long-term modelling will need to take into account the anticipated impact of climate change on Gulf ice and water levels (SSP5-8.5 scenario) as well as isostatic subsidence of the Islands.
- 10. Evaluate the performance of the proposed concepts (at least three options or combination of options) to reduce the quantities of dredging and the impacts of the intervention on sediment transport;
  - a. The intervention concepts must be implemented in the model and then simulated with the same methodology used to establish the short- and long-term sediment dynamics (≥30 years);
  - b. The comparison between the results of the modelling at the site in its natural state versus the modelling at the site with the proposed concepts should make it possible to evaluate the short and long-term performance of different concepts and their impacts on the beach at the site, but also on adjacent areas;
  - c. The modelling must also make it possible to assess the risks of overtopping, sedimentation and erosion of the banks and of the proposed protection structures.
  - d. The modelling will also have to demonstrate that the proposed concepts will not have an impact on sedimentation in the Seleine Mines channel.

#### **DESCRIPTIONS OF DELIVERABLES** 6.

The deliverables with their requirements for this study are listed in the table below.

Available	Description	Acceptance criteria
Study work plan  Deliverable submission deadline:	Kick-off meeting	Study work plan for DFO approval, including project schedule, resource allocation.
3 days after the kick-off meeting.		
No. 1: Detailed plan of the methodology & simulation scenarios	Detailed plan of the methodology and simulation scenarios.	Detailed plan of the methodology and simulation scenarios.
Deliverable presentation meeting:		
3 weeks after contract award		
No. 2: Hydrodynamics of Marine Conditions	Global sedimentary dynamics of the area through documentation analysis	Documentation analysis report (with references) and description of the overall sedimentary dynamics of the area.
Deliverable presentation	Digital terrain models	In-report maps and numerical data (ASCII/xyz and SHP formats)
meeting:  10 weeks after contract award	Characteristic wave regime of the study site	Description of the methodology. Time series of waves off the site under study and at critical design points for the structure design. Modeling calibration results.
	Water level data	Description of the methodology. Time series of water levels. Modeling calibration results.
	Current regime in the study site area	Detailed description of the methodology. Hour-by-hour maps of currents for the stated characteristic conditions.

Available	Description	Acceptance criteria
No. 3: Numerical modelling of hydrosedimentary conditions  Deliverable	Hydro-sedimentary modelling of current conditions	Presentation of the topographic and hydrodynamic parameters used to reproduce current conditions. Analysis report of modelled morphological changes. Comparison of modelled and surveyed DTMs.
presentation meeting:	Presentation of the planned protective measures.	Report presenting the planned protection measures, with explanation of the reasons for these choices and the expected results.
18 weeks after receipt of DFO comments on deliverable 2	Preliminary analysis of proposed protective measures	Analysis report of modelled morphological changes following the introduction of the protective measures envisaged for at least two characteristic events. Comparison of current and modelled DTMs.
No. 4: Numerical modelling of proposed options	Presentation of the proposed protective measures (at least three options and/or combinations of options).	Report presenting the proposed protective measures, with explanation of the reasons for these choices and the expected results.
Deliverable presentation meeting:	Preliminary hydro-sedimentary analysis of proposed protective measures	Analysis report of morphological changes modelled in the short and long term, following the introduction of the proposed protective measures. Comparison of
8 weeks after receipt of DFO comments on deliverable 3	Relevance and effectiveness of the solutions analyzed	current and modelled DTMs.  Comparative analysis of proposed protective measures, recommendation of an option, or combination of options for detailed analysis.
No. 5: Numerical modelling of the selected option	A detailed overview of recommended protective measures (optimizing an option or combination of options).	Report presenting recommended protective measures, plans, sections, details.
Deliverable presentation meeting:  4 weeks after receipt of	Complete hydro-sedimentary analysis of recommended protective measures	Analysis report of morphological changes modelled in the short and long term, following the introduction of recommended protective measures. Comparison of current and modelled DTMs.
DFO comments on deliverable 4	Relevance and effectiveness of the analyzed solution	Presentation of the impacts of the recommended measures on the sedimentary dynamics of the harbour access channel and on the Grande-Entrée environment (shorelines, Seleine Mine channel, etc.).
No. 6: Preliminary- final expert report  Deliverable presentation meeting:	Submission of a preliminary- final report	Complete and detailed presentation report of all the work carried out within the framework of this study, descriptions (data, methodology, calculations, etc.), graphs, plans, sections, details, digital files.
4 weeks after receipt of DFO comments on deliverable 5		

Available	Description	Acceptance criteria
No. 7: Final expert report	Submission of a final report	Revised report of complete and detailed presentation of all the work carried out within the framework of this study,
Deliverable presentation meeting:		descriptions (data, methodology, calculations, etc.), graphs, plans, sections, details, digital files.
4 weeks after receipt of DFO comments on deliverable 6		

#### 7. RESPONSIBILITIES OF THE RETAINED CONTRACTOR/FIRM

#### The contractor/firm must:

- 1. Ensure that work is properly planned and organized and carried out by identified resources;
- 2. Organize the meetings necessary to carry out the work;
- 3. Ensure that all services described in this Statement of Work are provided.
- 4. Compiles and maintains an orderly set of working papers, file information, documents accessed, and reports. These documents will become the property of the Crown at the end of the contract;
- 5. Proactively work with the Departmental Representative to discuss and clarify key activities, content of deliverables, project risks and mitigation measures;
- 6. Immediately inform the Departmental Representative of any significant or urgent findings or observations during all phases of the assignment;
- 7. Receive approval from the Departmental Representative for any changes to the approved work plan;
- 8. Receive written approval from the Departmental Representative prior to undertaking any work not specifically identified in the work plan and this Statement of Work.

# 8. SPECIFICATIONS AND STANDARDS

- 1. Deliverables and required submissions, including summaries, reports, drawings, plans, must be provided in electronic format. Electronic copy files must be in PDF format as well as in the original format (DWG, Word, Excel, MS-Project, PowerPoint, ASCII, PNG, geotif, etc.).
- 2. Each deliverable must be presented at a virtual meeting attended by the project manager and the disciplinary officer(s) involved.
- 3. Each deliverable must be submitted to DFO at least 3 business days prior to the meeting date.
- 4. DFO recognizes the importance of the project timeline. As a result, he will send his comments and/or requests for information as soon as possible.
- 5. Expert reports submitted must be of academic quality and have been verified prior to transmission to SCH. Any unsatisfactory report submitted to SCH will be returned and must be reviewed by the project manager within seventy-two (72) hours at no additional cost to SCH.
- Preliminary report thematic versions must be provided as studies progress to present, for example, the data used, their analysis, the DTMs, currents, offshore waves, refracted waves and their impact on sediments, hydro-sedimentary analyses, proposed solutions, etc. to protect the contractor/firm from rejection.
- 7. No additional time will be granted to ensure the smooth running of the studies.

# 9. LANGUAGE OF WORK

The language of communication with DFO is French. Work plans, schedules and progress reports must be written in French. The executive summary must be bilingual (French and English). All deliverables must be provided in French.

# 10. RESPONSE TIME

As part of this project, the resources must respond to SCH inquiries within three (03) business days.

Small Craft Harbour undertakes to respond within 3 working days to all requests for information.

#### 11. MEETINGS

Only the first meeting (kick-off) will be convened by the SCH Project Manager. The project manager from the firm must convene other meetings, at least 48 hours in advance, during the project development period, which must be attended by relevant members/project team leaders.

The project manager from the firm must prepare meeting minutes within five (5) days of the meetings.

# 12. RESPONSIBILITIES OF SCH

DFO-SCH will make available all relevant information for this study.

#### 13. DOCUMENTATION AVAILABLE DURING THE PREPARATION OF PROPOSALS

The following documents are available to consultants during the proposal preparation period:

- Dredging particle size analyses (2011, 2015, 2019 and 2023 see <u>Appendix 1 of the Statement</u> of Work):
- Photographs taken at low altitude in 2022 (see Appendix 2 of the Statement of Work);
- Current dredging pattern (see Appendix 3 of the Statement of Work).

# 14. DOCUMENTATION PROVIDED TO THE SELECTED CONTRACTOR/FIRM

The following documents will be provided to the Contractor/Firm selected at the beginning of the work:

- a. Stantec Report 2022 (with confidentiality agreement);
- b. Georeferenced location plan for port infrastructure;
- c. Bathymetric surveys of the dredging area;
- d. Georeferenced historical aerial photographs (2017);
- e. Orthophotos 2023 (CERMIM);
- f. LIDAR 2022;
- g. Particle size analyses conducted as part of dredging (2011, 2015 and 2019);
- h. Photographs and videos taken at low altitude in 2022 (CERMIM);
- i. Photogrammetry topographic surveys 2023 (see Figures 4 and 5):
- j. Single and multibeam bathymetric surveys conducted in 2022 and 2023 (see Figure 6);
- k. Current dredging pattern;
- Particle size analysis of samples taken from the study area (2023 see Figure 7);
- m. Measurements of the retreat of the shore (bollards) made by UQAR in the Grande-Entrée sector.

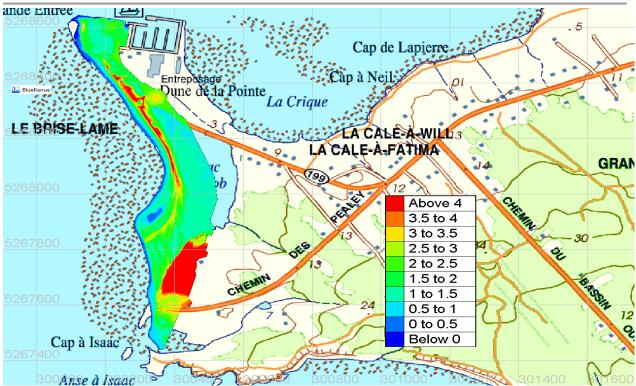


Figure 4 Location of topographic surveys (by photogrammetry) carried out on Grande-Entrée beach (May 2023)

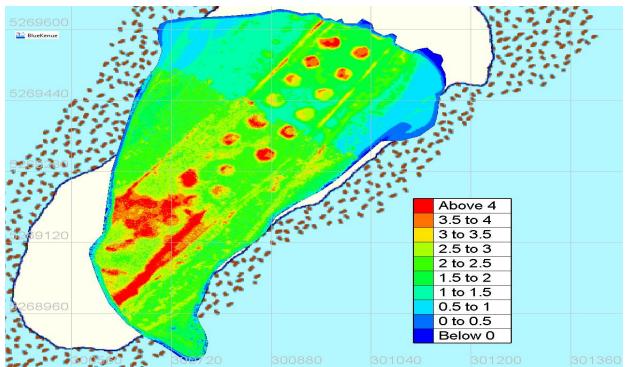


Figure 5 Location of topographic surveys (by photogrammetry) carried out on block C (May 2023)

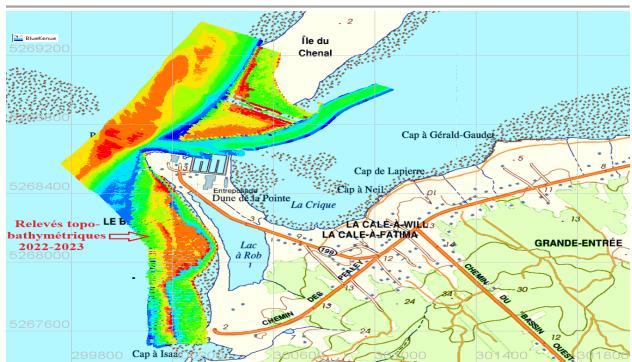


Figure 6 Bathymetric surveys conducted in the study area (2022 & 2023)

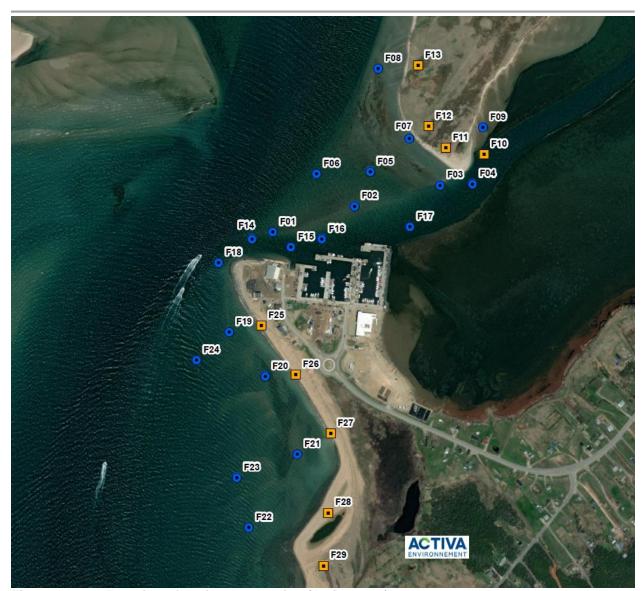


Figure 7 Location of sediment sampling (Activa 2023)

# APPENDIX 1 Particle size analysis of sediments collected in the fishing harbour area

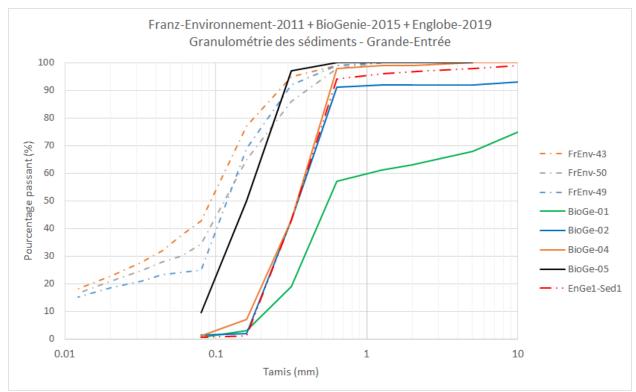


Figure 1.1 Sediment particle size curves (2011-2015-2019)

Table 1.1 Location of samples

Firms	Sample number	X (MTM 4)	Y (MTM 4)
Franz Environment - 2011	FrEnv-43	300328.3	5268547.7
	FrEnv-49	300394.2	5268535.7
	FrEnv-50	300400.2	5268606.9
Biogénie - 2015	BioGe-01	300125.4	5268654.3
	BioGe-02	300246.6	5268631.6
	BioGe-04	300284.5	5268669.7
	BioGe-05	300410	5268643.7
Englobe - 2019	EnGe1-Sed1	300179.1	5268648.3

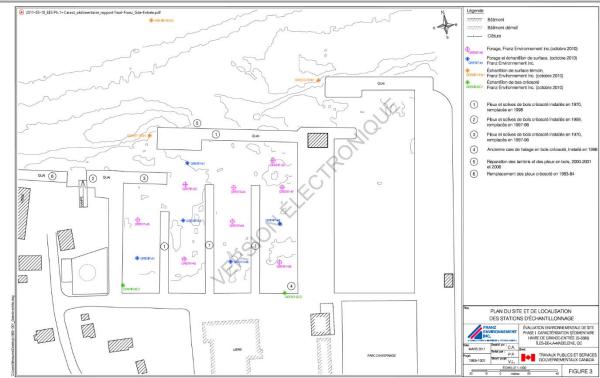


Figure 1.2 Location of samples (Franz Environnement 2011)

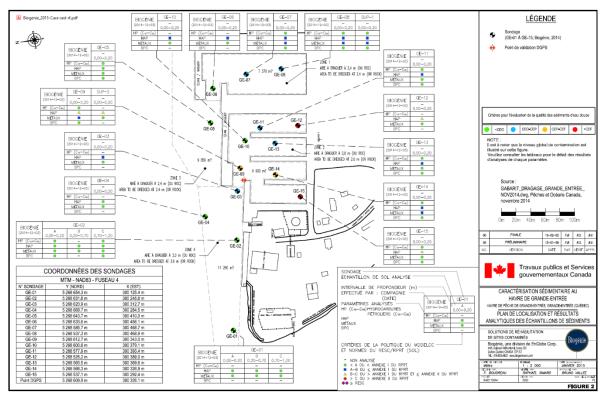


Figure 1.3 Sample location (Biogénie 2015)

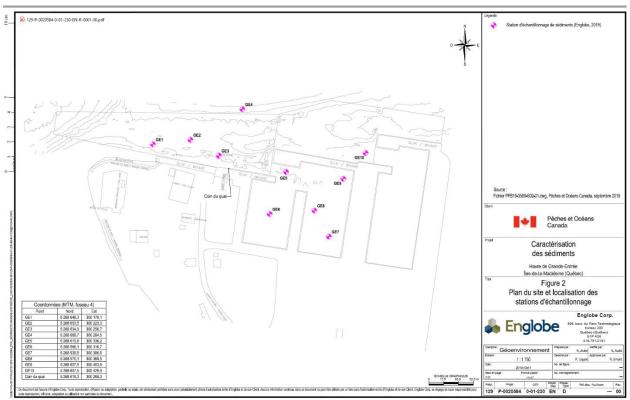


Figure 1.4 Sample location (Englobe 2019)

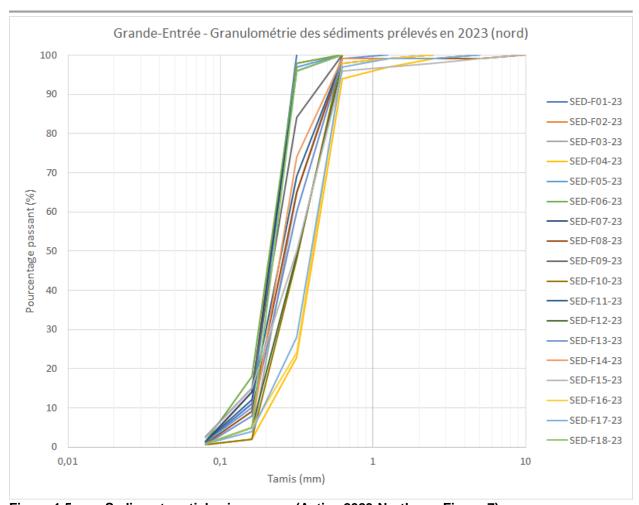


Figure 1.5 Sediment particle size curves (Activa 2023-North see Figure 7)

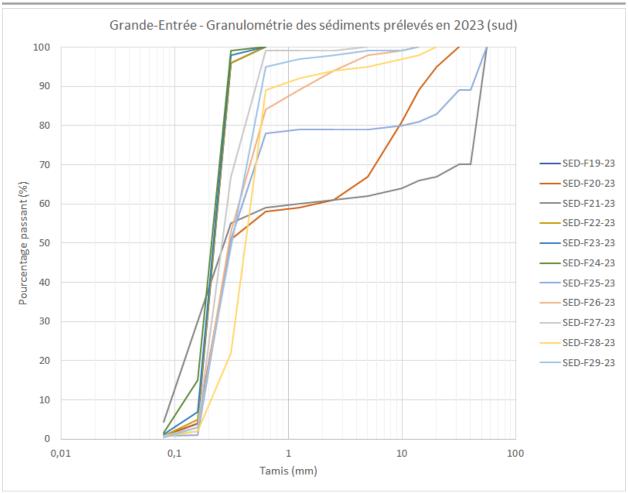


Figure 1.6 Sediment particle size curves (2023-South)

## **APPENDIX 2**

Photos taken with a drone by CERMIM in the area of the fishing harbour of Grande-Entrée October 2022

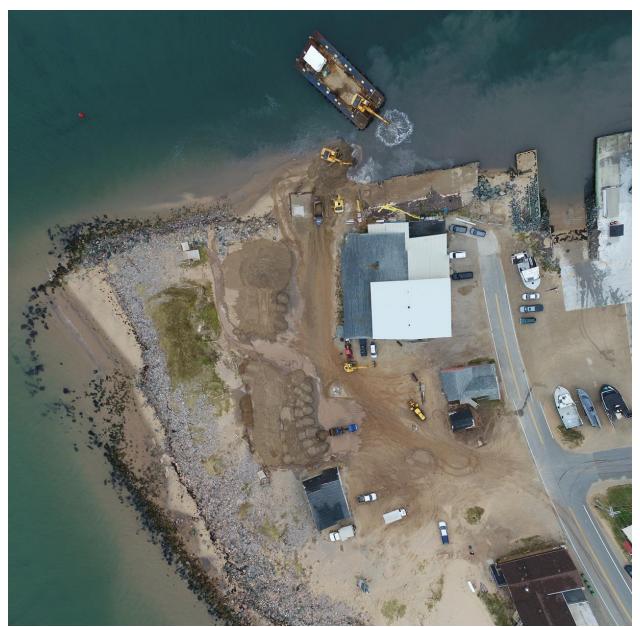


Figure 2.1 Composite photo of the western sector of the fishing harbour (dredging operation in progress)



Figure 2.2 Photo of the West Sector of the Fishing Harbour - Ramp Area



Photo of the west sector of the fishing harbour - Wharf area Figure 2.3



Figure 2.4 Photo of the western sector of the fishing harbour - Pedestrian area

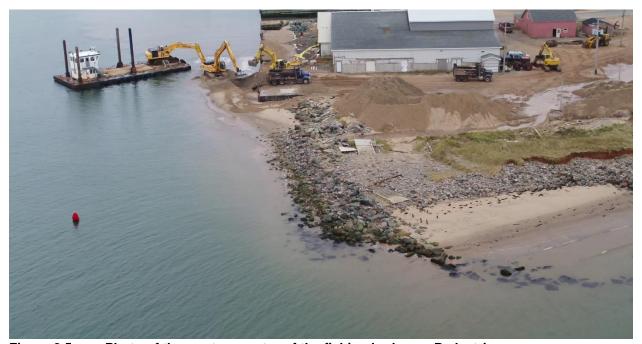


Figure 2.5 Photo of the western sector of the fishing harbour - Pedestrian area



Figure 2.6 Photo of the western sector of the fishing harbour - Pedestrian area



Figure 2.7 Photo of the West Sector of the Fishing Harbour - Rockfill Sector



Figure 2.8 Photo of the West Sector of the Fishing Harbour - Riprap Sector



Figure 2.9 Photo of the West Sector of the Fishing Harbour - Rockfill Sector

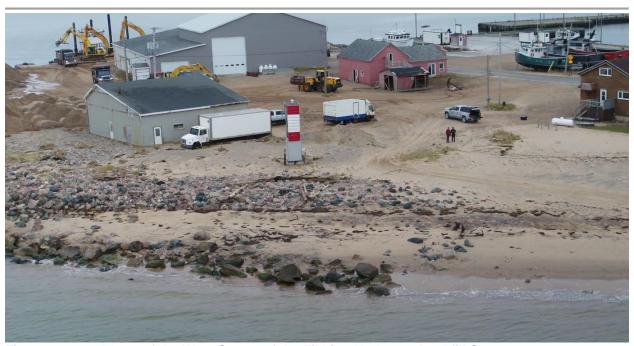


Figure 2.10 Photo of the West Sector of the Fishing Harbour - Rockfill Sector



Figure 2.11 Photo of the West Sector of the Fishing Harbour - Beach Area



Figure 2.12 Photo of the West Sector of the Fishing Harbour - Beach Area



Figure 2.13 Photo of the West Sector of the Fishing Harbour - Beach Area



Figure 2.14 Photo of the western sector of the fishing harbour - Beach area



Figure 2.15 Photo of the western sector of the fishing harbour - Beach sector

Various photos of the Grande-Entrée fishing harbour sector and islet C



Figure 2.16 Photo of the West Sector of the Fishing Harbour - Point Area 2005

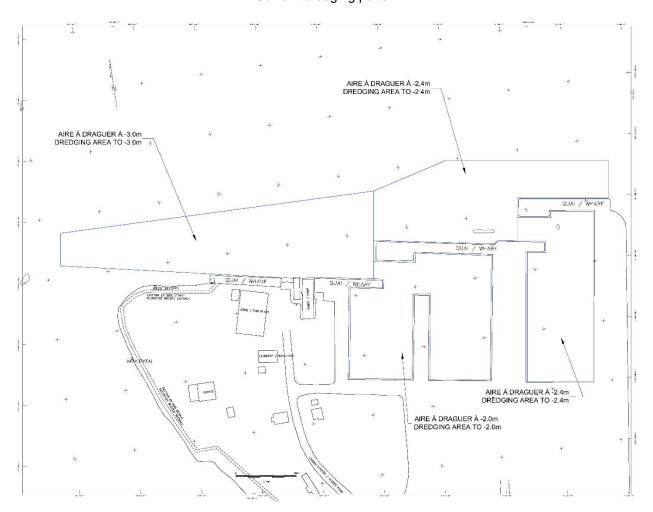


Figure 2.17 Photo of the western sector of the fishing harbour - Point sector in 2020 (Geoterram)



Island C photo (photo taken by Geoterram in 2020 looking northeast) Figure 2.18

# APPENDIX 3 Current dredging pattern



Solicitation No. –  $N^{\circ}$  de l'invitation : 30004382

#### **ANNEX B - BASIS OF PAYMENT**

Prices must only appear in the financial bid and in no other part of the submission. Bidders are required to submit their financial proposal in accordance with the Tables below.

The Bidder must complete the following tables and indicate a lump sum price for each of the applicable deliverables (in Canadian dollars) that it deems necessary to meet the requirements of the Contract. Customs duties are included and applicable taxes are extra.

Canada will not accept any travel and living expenses incurred under any resulting contract by the Contractor for any relocation of resources necessary to meet its contractual obligations.

Contract period: contract award date to March 31, 2025 (approximately)			
Article #	Key deliverables	Maturity	Price (\$)
1	Detailed plan of the methodology & simulation scenarios  Deliverable 1	3 weeks after contract award	\$
2	Hydrodynamics of marine conditions  Deliverable 2	10 weeks after contract award	\$
4	Numerical modelling of hydro-sedimentary conditions:  Deliverable 3	18 weeks after receipt of DFO comments on Deliverable 2	\$
4	Numerical modelling of the proposed options: <b>Deliverable 4</b>	8 weeks after receipt of DFO comments on Deliverable 3	\$
5	Numerical modeling of the chosen solution: Deliverable 5	4 weeks after receipt of DFO comments on Deliverable 4	\$
6	Preliminary-final expert report:  Deliverable 6	4 weeks after receipt of DFO comments on Deliverable 5	\$
7	Final expert report:  Deliverable 7	4 weeks after receipt of DFO comments on Deliverable 6	\$
TOTAL COST OF SERVICES REQUIRED FOR EVALUATION PURPOSES			\$

## **ANNEX C - EVALUATION CRITERIA**

It is essential that the elements contained in the bidder's proposal are stated in a clear and concise manner. Bidders must ensure that their proposal contains all the elements necessary to enable the client to assess the compliance of their respective proposals according to the criteria below.

## **MANDATORY TECHNICAL CRITERIA**

The offer must meet the mandatory technical criteria set out below. The Offeror must include in its proposal the following table indicating that the proposal meets the mandatory technical criteria and indicate on which page or section of the proposal the information to verify this can be found. Each mandatory technical criterion must be treated separately.

Tenders that do not meet these mandatory technical criteria will be declared non-compliant and will not be considered.

No	Mandatory Criteria	Meets criteria (√)	Proposal Page No.
MC1	Identification of Offeror's Team Members  The Offeror must propose a team consisting of the following resources (as per section 5 of Annex A – Statement of Work). The information must include name, number of years of experience, educational credentials and certifications/licenses. For the CO1 criterion, a curriculum vitae can be accepted if it demonstrates the mandatory information (name, number of years of experience, diplomas and certifications/licenses).  a. A project manager: senior engineer with experience in managing coastal sedimentology study projects  b. A Senior Modeler: Senior Hydro-Sedimentary Modeling Engineer; c. An Assistant Modeler: Junior or Intermediate Numerical Modeling Engineer; d. A Coastal Infrastructure Designer: Intermediate Structural Design Engineer; e. An estimator: an intermediate engineer specializing in coastal infrastructure costs  - A Senior Engineer must have a minimum of 10 years of experience and be licensed (Engineering).  - An intermediate engineer must have a minimum of 5 years of experience and be a licensee (engineering).  - A junior engineer must have a minimum of 2 years of experience and an engineering degree.		

Solicitation No. – N° de l'invitation : 30004382

No	Mandatory Criteria	Meets criteria (√)	Proposal Page No.
	The Offeror must include with its technical offer proof that the proposed personnel hold active licenses in good standing issued in Canada for management and intermediate personnel, and university degrees for junior personnel.		

#### POINT-RATED TECHNICAL CRITERIA

The table of point-rated technical criteria below will be used to evaluate bids. It is the responsibility of the Offerors to ensure that **the section/page number** in the rated technical criteria table can be used to evaluate each resource.

## **Specific Technical Submission Requirements**

The point-rated technical criteria (TC1, TC2, TC3 and TC4) must be presented within a maximum of 50 pages, including text and tables. Any excess pages will be removed from the proposal and excluded from assessment by the DFO assessment committee.

No	Point-rated technical criteria	Maximum number of points Obtained	Proposal Page/Section Number	
Describe	TC1 Contractor/Firm Project Achievements  Describe the contractor's/firm's accomplishments and experience on projects that are materially similar to the project as described in Annex A "Statement of Work".			
TC1	<ul> <li>What the Offeror must provide: <ul> <li>a) A description of three (3) hydrosedimentary studies in a coastal environment, comparable in complexity to the project as described in the "Statement of Work". All three projects must have been completed within the last ten (10) years prior to the closing date of this Request for Proposals (RFP). Of these three (3) projects, at least two of them are expected to include coastal infrastructure interfering with sediment transit.</li> <li>Only the first three (3) projects presented in order will be considered. All other projects will not receive any consideration as if they had not been submitted.</li> </ul> </li> <li>For each project, clearly indicate: <ul> <li>a) How this project is comparable/relevant to the project that is the subject of the RFP;</li> <li>b) Intent and brief description of the project; The narrative portions should include a discussion of the modelling approach and philosophy used to respect the spirit of the project and to meet the challenges and methods of resolution in coastal works design;</li> <li>c) Scope of services rendered and objectives; constraints and deliverables, as well as the dates on which the services were provided;</li> <li>d) Client References: Name, address, telephone numbers and email address of clients whose names are given in reference to the level of work performed. References may be subject to verification;</li> <li>e) Names of key individuals responsible for carrying out the project.</li> </ul> </li> </ul>	The score for the Offeror's response to TC1 Contractor/Firm Project Achievements will be assigned as follows:  15 points - The offeror is highly qualified and experienced. The Offeror has participated in three (3) projects that include coastal infrastructure interfering with sediment transit in accordance with TC1.  10 points - The offeror has the qualifications and experience. The Offeror has participated in three (3) projects, two (2) of which include coastal infrastructure interfering with sediment transit in accordance with TC1.  5 points - The offeror has an acceptable level of qualifications and experience. The Offeror has participated in three (3) projects, one (1) of which includes coastal infrastructure interfering with sediment transit in accordance with TC1.		

No	Point-rated technical criteria	Maximum number of points Obtained	Proposal Page/Section Number		
The lead technical	TC2 Project Understanding:  The lead consultant should demonstrate an understanding of the project goals and specifics, functional and technical requirements, constraints and aspects that will affect the finished product as described in Annex A – Statement of Work				
TC2	<ul> <li>What the Offeror must provide:</li> <li>a) Explain, in your own words, the functional and technical requirements of the hydrosedimentary modelling project;</li> <li>b) General goals (safety, sustainable development, special features);</li> <li>c) The significant issues, challenges, constraints and risks and how your team's approach will be applied to these particular issues and challenges;</li> <li>d) Project timeline and risk management.</li> </ul>	Maximum of 10 points The score for the Offeror's response to TC2 Project Understanding will be assigned as follows:  10 points if the Offeror provides a complete and thorough description of the proposal with important additional explanatory elements on the understanding of the project in order to carry out the statement of work.  7 points if the Offeror provides a complete description of the understanding of the project in order to carry out the statement of work.  4 points if the Offeror provides an incomplete description of the understanding of the project in order to carry out the statement of work.  The following definitions will be used to assess TC2:  • A complete and thorough understanding means that the proposal satisfies each element of TC2 and adds important explanatory elements that demonstrate a full understanding of the objectives, as described in points (a) to (d) above.  • A complete understanding means that the proposal satisfies the elements of TC2 as described in (a) to (d) above and adds explanatory elements that demonstrate a good grasp of the subject matter.  • Incomplete or incorrect understanding means that the proposal does not address or satisfies all elements of TC2, as described in (a) to (d) above.			

No	Point-rated technical criteria	Maximum number of points Obtained	Proposal Page/Section Number
тсз [	Design Methodology		
Descr	iption of the methodology used.		
TC3	What the Offeror must provide:  a) The methodology of the hydrodynamic and hydro-sedimentary analyses (set of models that will be used, objective pursued by each model, parameters used as input to the models, sequences of use of the models, expected results, etc.) will have to be explained.  b) Describe the key challenges and how your team's approach will be applied to those challenges.	The score for the Offeror's response to TC3 Design Methodology will be assigned as follows:  20 points if the Offeror provides a complete and exhaustive description of the proposal with significant additional explanatory elements on the methodology as well as a complete and exhaustive description of the main challenges and the team's approach to overcome them in order to execute the statement of work.  10 points if the Offeror provides a general description of the methodology and a general understanding of the team's key challenges and approach to execute the statement of work.  The following definitions will be used to assess TC3:  A complete and exhaustive understanding means that the proposal satisfies points (a) and (b) of TC3 and adds important explanatory elements that demonstrate full understanding.  A general understanding means that the proposal satisfies TC3 (a) and (b), but some important elements are missing.	

Solicitation No. – N° de l'invitation : 30004382

No	Point-rated technical criteria	Maximum number of points Obtained	Proposal Page/Section Number
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## TC4 Project Team Profile

Demonstration of the achievements of key individuals in projects

## What the Offeror must provide:

1. A description of each of the following team members, explaining how they meet the scope of services described in Annex A – Statement of Work (a maximum of three pages for each member presented).

This is to demonstrate that the personnel identified as part of the proposed team have the skills, experience and competencies required to deliver all of the deliverables listed in Annex A "Statement of Work".

Describe the experience and competence of the key individuals to be assigned to this project, regardless of their previous association with the current contractor/firm's business.

## Information that should be provided for each key person:

a) For each of the key members of the team, present three (3) projects that are comparable in complexity to the project as described in the "Statement of Work". All three projects must have been completed within the last ten (10) years prior to the closing date of this RFP. Of these three projects, at least two of them must include coastal infrastructure that interferes with sediment transit.

## The similarities and comparable aspects for the projects presented are:

- Coastal erosion,
- Dredging of channels with erosion and silting problems (projects mainly involving fine sediments will not be taken into account),
- Coastal erosion control infrastructures.

Only the first three (3) projects presented in order will be considered and all others will not receive any consideration as if they had not been submitted

- a) Relevant experience, competence and number of years of experience;
- b) Role, responsibility and degree of involvement of each member in previous projects;
- c) Client references: name, address, telephone numbers and emails of clients whose names are given in reference to the project delivery; References are subject to verification.
- d) For each of the following key informants, demonstrate experience gained in the same capacity and in the same role, in previous projects.

No	Point-rated technical criteria	Maximum number of points Obtained	Proposal Page/Section Number
TC4.1	Project Manager: Senior Engineer with experience in managing coastal sedimentology study projects  - A Senior Engineer must have a minimum of 10 years of experience and be licensed (Engineering).	Maximum of 15 points  The score for the Offeror's response to TC4.1 Project Team Profile - Project Manager will be assigned as follows:  15 points if the Project Manager has managed three (3) projects that include coastal infrastructures interfering with sediment transit in accordance with TC4.  10 points - if the Project Authority has managed three (3) projects, two (2) of which include coastal infrastructures interfering with sediment transit in accordance with TC4.  5 points - if the project authority has managed three (3) projects, one of which includes coastal infrastructures interfering with sediment transit in accordance with TC4.	
TC4.2	a) Senior Modeler: Senior Engineer in Hydro-Sedimentary Modeling  - A Senior Engineer must have a minimum of 10 years of experience and be licensed (Engineering).		

Solicitation No. –  $N^{\circ}$  de l'invitation : 30004382

			Proposal
No	Point-rated technical criteria	Maximum number of points Obtained	Page/Section Number
TC4.3	<ul> <li>Assistant Modeler: Junior or Intermediate Numerical Modeling Engineer</li> <li>An intermediate engineer must have a minimum of 5 years of experience and be a licensee (engineering).</li> <li>A junior engineer must have a minimum of 6 months of experience and an engineering degree.</li> </ul>	<ul> <li>Maximum of 5 points</li> <li>5 points - if the Assistant Modeller has been involved in three (3) hydrosedimentary modelling projects, at least two of which include coastal infrastructures interfering with sediment transit in accordance with TC4.</li> <li>3 points - if the assistant modeller has participated in three (3) hydrosedimentary modelling projects including one that includes coastal infrastructures interfering with sediment transit in accordance with TC4</li> </ul>	
		/ 5 points	
TC4.4	Coastal Infrastructure Designer: Intermediate Structural Design Engineer  - An intermediate engineer must have a minimum of 5 years of experience and be a licensee (engineering).	Maximum of 10 points  10 points - if the designer has designed three (3) coastal infrastructure projects interfering with sediment transit in accordance with TC4.  6 points - if the designer has designed three (3) coastal infrastructure projects, two (2) of which include coastal infrastructure interfering with sediment transit in accordance with TC4.  4 points - if the designer has designed three (3) coastal infrastructure projects, one (1) of which includes coastal infrastructure interfering with sediment transit in accordance with TC4. / 10 points	

Solicitation No. –  $N^{\circ}$  de l'invitation : 30004382

No	Point-rated technical criteria	Maximum number of points Obtained	Proposal Page/Section Number
TC4.5	Estimator: Intermediate engineer specializing in coastal infrastructure costs  - An intermediate engineer must have a minimum of 5 years of experience and be a licensee (engineering).	5 points - if the estimator has estimated three (3) coastal infrastructure projects that interfere with sediment transit in accordance with TC4.  4 points - if the estimator has estimated three (3) coastal infrastructure projects, two (2) of which interfere with sediment transit in accordance with TC4.  3 points - if the estimator has estimated three (3) coastal infrastructure projects, one (1) of which interferes with sediment transit in accordance with TC4.	
Total Score (A minimum of 60 points is required)			/100