

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
Réception des soumissions - TPSGC / Bid
Receiving - PWGSC
1550, Avenue d'Estimauville
1550, D'Estimauville Avenue
Québec
Québec
G1J 0C7

INVITATION TO TENDER
APPEL D'OFFRES

**Tender To: Public Works and Government Services
Canada**

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

**Soumission aux: Travaux Publics et Services
Gouvernementaux Canada**

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

Comments - Commentaires

Vendor/Firm Name and Address
**Raison sociale et adresse du
fournisseur/de l'entrepreneur**

Issuing Office - Bureau de distribution
TPSGC-PWGSC
601-1550, Avenue d'Estimauville
Québec
Québec
G1J 0C7

Title - Sujet DRAGAGE HAVRE CAP-AUX-MEULES	
Solicitation No. - N° de l'invitation EE517-160511/A	Date 2015-07-30
Client Reference No. - N° de référence du client EE517-160511	GETS Ref. No. - N° de réf. de SEAG PW-\$QCM-008-16508
File No. - N° de dossier QCM-5-38095 (008)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2015-08-25	
Time Zone Fuseau horaire Heure Avancée de l'Est HAE	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Rochette, Jean	Buyer Id - Id de l'acheteur qcm008
Telephone No. - N° de téléphone (418) 649-2834 ()	FAX No. - N° de FAX (418) 648-2209
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: Havre de Cap-aux-Meules, Îles de la Madeleine, Québec, Canada	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée VOIR DOC	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
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)	
Signature	Date

Solicitation No. - N° de l'invitation

EE517-160511/A

Client Ref. No. - N° de réf. du client

EE517-160511

Amd. No. - N° de la modif.

File No. - N° du dossier

QCM-5-38095

Buyer ID - Id de l'acheteur

qcm008

CCC No./N° CCC - FMS No/ N° VME

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INVITATION TO TENDER

Title : CAP-AUX-MEULES HARBOUR DREDGING

IMPORTANT NOTICE TO BIDDERS

TENDER DOCUMENTS: Firms intending to submit tenders on this project should obtain tender documents through the website
<https://www.achatsetventes-buyandsell.gc.ca/>

SUPPORT THE USE OF APPRENTICES

Through Canada's Economic Action Plan 2013, the Government of Canada proposes to support the employment of apprentices in federal construction and maintenance projects. Refer to SI11.

INTEGRITY PROVISIONS – BID

Important changes have been made to the Integrity Provisions - Bid as of July 3rd 2015. See GI01, Integrity Provision-Bid of R2710T of the General Instructions for more information.

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R2710T GENERAL INSTRUCTIONS - CONSTRUCTION SERVICES - BID SECURITY REQUIREMENTS (GI) (2015-07-03)

The following GI's are included by reference and are available at the following Web Site <https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/5/R>

GI01	Integrity Provisions - Bid
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GI04	Applicable Taxes
GI05	Capital Development and Redevelopment Charges
GI06	Registry and Pre-qualification of Floating Plant
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Solicitation No – N° de l'invitation
EE517-152436/A
Client Ref No. – N° de réf. du client
EE517-15-2436

Amd. No. – N° de la modif.
001
File No. – N° du dossier
QCM-5-38003

Buyer ID – id de l'acheteur
qcm008

BA01 Identification
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Appendix 6 Floating plant description
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SPECIAL INSTRUCTIONS TO BIDDERS (SI)

SI01 INTEGRITY PROVISIONS – DECLARATION OF CONVICTED OFFENCES

As applicable, pursuant to GI01 of the Declaration of Convicted Offences, paragraph 10 (copied below) of the General Instructions R2710T, the Bidder must provide with its bid, a completed Declaration Form, to be given further consideration in the procurement process.

Declaration of Convicted Offences

Where a Bidder or its Affiliate is unable to certify that it has not been convicted of any of the offences referenced under the Canadian Offences Resulting in Legal Incapacity, the Canadian Offences and the Foreign Offences subsections, the Bidder must provide with its bid the completed Declaration Form, to be given further consideration in the procurement process.

SI02 BID DOCUMENTS

1. The following are the bid documents:

- a. Invitation to Tender - Page 1;
- b. Special Instructions to Bidders;
- c. General Instructions - Construction Services - Bid Security Requirements R2710T (2015-07-03)
- d. Clauses & Conditions identified in "Contract Documents";
- e. Drawings and Specifications;
- f. Bid and Acceptance Form and related Appendix(s); and
- g. Any amendment issued prior to solicitation closing.

Submission of a bid constitutes acknowledgement that the Bidder has read and agrees to be bound by these documents.

2. General Instructions - Construction Services - Bid Security Requirements R2710T is incorporated by reference and is set out in the Standard Acquisition Clauses and Conditions (SACC) Manual, issued by Public Works and Government Services Canada (PWGSC). The SACC Manual is available on the PWGSC Web site: <https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/5/R>
3. Bids sent by fax will not be accepted

SI03 ENQUIRIES DURING THE SOLICITATION PERIOD

1. Enquiries regarding this bid must be submitted in writing to jean.rochette@tpsgc-pwgsc.gc.ca, the Contracting Officer named on the Invitation to Tender - Page 1 as early as possible within the solicitation period. Except for the approval of alternative materials as described in GI15 of R2710T, enquiries should be received no later than five (5) business days prior to the date set for solicitation closing to allow sufficient time to provide a response. Enquiries received after that time may not result in an answer being provided.
2. To ensure consistency and quality of the information provided to Bidders, the Contracting Officer shall examine the content of the enquiry and shall decide whether or not to issue an amendment.
3. All enquiries and other communications related to this bid sent throughout the solicitation period are to be directed ONLY to the Contracting Officer named on the Invitation to Tender - Page 1. Failure to comply with this requirement may result in the bid being declared non-responsive.

SI04 SITE VISIT

Not applicable

SI05 REVISION OF BID

A bid may be revised by letter or facsimile in accordance with GI10 of R2710T. The facsimile number for receipt of revisions is (418) 648-2209.

SI06 BID RESULTS

1. A public bid opening will be held in the office designated on the Front Page "Invitation to Tender" for the receipt of bids shortly after the time set for solicitation closing.
2. Following solicitation closing, bid results may be obtained by calling at No. (418) 649-2888.

SI07 INSUFFICIENT FUNDING

In the event that the lowest compliant bid exceeds the amount of funding allocated for the Work, Canada in its sole discretion may

- a. cancel the solicitation; or
- b. obtain additional funding and award the Contract to the Bidder submitting the lowest compliant bid; and/or
- c. negotiate a reduction in the bid price and/or scope of work of not more than 15% with the Bidder submitting the lowest compliant bid. Should an agreement satisfactory to Canada not be reached, Canada shall exercise option (a) or (b).

SI08 BID VALIDITY PERIOD

1. Canada reserves the right to seek an extension to the bid validity period prescribed in BA04 of the Bid and Acceptance Form. Upon notification in writing from Canada, Bidders shall have the option to either accept or reject the proposed extension.
2. If the extension referred to in paragraph 1. of SI08 is accepted, in writing, by all those who submitted bids, then Canada shall continue immediately with the evaluation of the bids and its approvals processes.
3. If the extension referred to in paragraph 1. of SI08 is not accepted in writing by all those who submitted bids then Canada shall, at its sole discretion, either
 - a. continue to evaluate the bids of those who have accepted the proposed extension and seek the necessary approvals; or
 - b. cancel the invitation to tender.
4. The provisions expressed herein do not in any manner limit Canada's rights in law or under GI11 of R2710T.

SI09 CONSTRUCTION DOCUMENTS

The successful Contractor will be provided with one paper copy of the sealed and signed drawings, the specifications and the amendments upon acceptance of the offer. Obtaining more copies shall be the responsibility of the Contractor including costs.

SI10 SECURITY RELATED REQUIREMENTS

Not applicable

SI11 PUBLIC WORKS AND GOVERNMENT SERVICES CANADA APPRENTICE PROCUREMENT INITIATIVE

1. To encourage employers to participate in apprenticeship training, Contractors bidding on construction and maintenance contracts by Public Works and Government Services Canada (PWGSC) are being asked to sign a voluntary certification, signaling their commitment to hire and train apprentices.
2. Canada is facing skills shortages across various sectors and regions, especially in the skilled trades. Equipping Canadians with skills and training is a shared responsibility. In Economic Action Plan (EAP) 2013, the Government of Canada made a commitment to support the use of apprentices in federal construction and maintenance contracts. Contractors have an important role in supporting apprentices through hiring and training and are encouraged to certify that they are providing opportunities to apprentices as part of doing business with the Government of Canada.
3. Through the Economic Action Plan 2013 and support for training programs, the Government of Canada is encouraging apprenticeships and careers in the skilled trades. In addition, the government offers a tax credit to employers to encourage them to hire apprentices. Information on this tax measure administered by the Canada Revenue Agency can be found at: www.cra-arc.gc.ca. Employers are also encouraged to find out what additional information and supports are available from their respective provincial or territorial jurisdiction.
4. Signed certifications (Appendix 4) will be used to better understand contractor use of apprentices on Government of Canada maintenance and construction contracts and may inform future policy and program development.
5. The Contractor hereby certifies the following:

In order to help meet demand for skilled trades people, the Contractor agrees to use, and require its subcontractors to use, reasonable commercial efforts to hire and train registered apprentices, to strive to fully utilize allowable apprenticeship ratios * and to respect any hiring requirements prescribed by provincial or territorial statutes

The Contractor hereby consents to this information being collected and held by PWGSC, and Employment and Social Development Canada to support work to gather data on the hiring and training of apprentices in federal construction and maintenance contracts.

To support this initiative, a voluntary certification signaling the Contractor's commitment to hire and train apprentices is available at Appendix 4.

If you accept fill out and sign Appendix 4

** The journeyperson-apprentice ratio is defined as the number of qualified/certified journeypersons that an employer must employ in a designated trade or occupation in order to be eligible to register an apprentice as determined by provincial/territorial (P/T) legislation, regulation, policy directive or by law issued by the responsible authority or agency.*

SI12 WEB SITES

The connection to some of the Web sites in the solicitation documents is established by the use of hyperlinks. The following is a list of the addresses of the Web sites:

Treasury Board Appendix L, Acceptable Bonding Companies

<http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=14494§ion=text#appl>

Buy and Sell <https://www.achatsetventes-buyandsell.gc.ca>

Canadian economic sanctions <http://www.international.gc.ca/sanctions/index.aspx?lang=eng>

Contractor Performance Evaluation Report (Form PWGSC-TPSGC 2913)

<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/2913.pdf>

Bid Bond (form PWGSC-TPSGC 504) <http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/504.pdf>

Performance Bond (form PWGSC-TPSGC 505) <http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/505.pdf>

Labour and Material Payment Bond (form PWGWSC-TPSGC 506)

<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/506.pdf>

Standard Acquisition Clauses and Conditions (SACC) Manual

<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/5/R>

PWGSC, Industrial Security Services <http://ssi-iss.tpsgc-pwgsc.gc.ca/index-eng.html>

PWGSC, Code of Conduct and Certifications

<http://www.tpsgc-pwgsc.gc.ca/app-acq/cndt-cndct/contexte-context-eng.html>

Construction and Consultant Services Contract Administration Forms Real Property Contracting

<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/formulaires-forms-eng.html>

Declaration Form

<http://www.tpsgc-pwgsc.gc.ca/ci-if/formulaire-form-eng.html>

SI13 FINANCIAL BID

The total amount of the bid excludes taxes.

SI14 BID MANDATORY REQUIREMENTS

Bids shall comply with all of the mandatory requirements in the invitation to tender documents in order to be declared responsive, including the mandatory requirements set out in other sections of the invitation to tender documents.

If Canada requests that the bidder submit information or documents within a time period specified in this clause or in a written request made to the bidder, failure to provide these documents or this information at Canada’s request within the specified time period will result in the bid being deemed non-responsive.

The lowest compliant bid shall be recommended for a contract award.

Mandatory requirements at bid closing Mandatory documents to be supplied with the bid	
	<i>Reference</i>
<i>If any of the following documents relative to criteria 1.1 to 1.5 is missing at bid closing, the bid will be deemed non-responsive.</i>	
1.1 Bidders shall complete the <u>Combined Price Table</u> .	Appendix 1 herein
1.2 Bid security, in accordance with GI08 BID SECURITY REQUIREMENTS of the General Instructions to Bidders (R2710T).	<ul style="list-style-type: none"> • Clause GI08 of General Instructions to Bidders, R2710T • Clauses BA04 and BA07 of the Bid and Acceptance Form • See the bid bond form at the following Internet link: https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/5/R/R2710T/11
1.3 In order to comply with clause GI06, Registry and Pre-qualification of Floating Plant, of the General Instructions to bidders R2710T:	
<p>1.3.1 Submit a bid on the basis that the dredges or other floating plant to be used for the work are registered in Canada.</p> <p>Bidders shall identify the dredge(s) and other floating plant, (scows, tug(s) and supply vessel(s) and support equipment), that will be used by filling out Appendix 6 and shall provide it with the bid.</p> <p>If necessary, bidders shall be able to demonstrate, within 48 hours of receipt of Canada’s written request, that the dredges or floating plant are registered in Canada.</p>	<ul style="list-style-type: none"> • Clause GI06 of General Instructions to Bidders, R2710T • Appendix 6 herein
<p>1.3.2 Append to its bid a copy of the <u>certificate of qualification issued by Industry Canada if the dredge(s) or other floating plant to be used for the work IS NOT (ARE NOT) MANUFACTURED IN CANADA.</u></p> <p>If at bid closing this certificate is not appended to the bid for any of the dredges or equipment not manufactured in Canada indicated in Appendix 6, the bid will be deemed <u>non-responsive</u>.</p> <p>See Industry Canada certificate application in Appendix 8.</p>	<ul style="list-style-type: none"> • Clause GI06 of General Instructions to Bidders, R2710T • Appendix 8 herein

<p>1.4 Mandatory Specifications of the equipment Bidder shall take note that the dredging shall be executed with equipment stated in Article 2.1 from section 35 20 23 of the specifications.</p> <p>Bidder shall provide a description of the dredge(s) and dump scows to be used to do the work, which will allow Canada to verify if the proposed floating plants are compliant with specifications requirements. Include in Appendix 6 the information on the dredge(s) and dump scows used.</p> <p>Failure to identify the dredge(s) and dump scows or to attach Appendix 6 to the bid shall make the bid <u>non-responsive</u>.</p>	<ul style="list-style-type: none">• Article 2.1 from section 35 20 23 of the specifications• Appendix 6 herein
<p>1.5 Positionning system The bidder shall describe the positionning system that be used to performed the work.</p>	<ul style="list-style-type: none">• Appendix 7 to this Invitation to Tender

SUPPLEMENTARY CONDITIONS (SC)

SC01 INSURANCE TERMS

SC01.1 Insurance requirements

The Contractor must comply with the insurance requirements specified in SC01 - Insurance terms. The Contractor must maintain the required insurance coverage for the duration of the Contract. Compliance with the insurance requirements does not release the Contractor from or reduce its liability under the Contract.

The Contractor is responsible for deciding if additional insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any additional insurance coverage is at the Contractor's expense, and for its own benefit and protection.

The Contractor must forward to the Contracting Authority within ten (10) days after the date of award of the Contract, a Certificate of Insurance evidencing the insurance coverage and confirming that the insurance policy complying with the requirements is in force. Coverage must be placed with an Insurer licensed to carry out business in Canada. The Contractor must, if requested by the Contracting Authority, forward to Canada a certified true copy of all applicable insurance policies.

SC01.2 Marine liability insurance

1. The Contractor must obtain Protection & Indemnity (P&I) insurance that must include excess collision liability and pollution liability. The insurance must be placed with a member of the International Group of Protection & Indemnity Associations or with a fixed market in an amount of \$ 10,000,000.00. Coverage must include crew liability, if it is not covered by Worker's Compensation as detailed in paragraph 2 below.
2. The Contractor must obtain Worker's Compensation insurance covering all employees engaged in the Work in accordance with the statutory requirements of the Territory or Province or state of nationality, domicile, employment, having jurisdiction over such employees. If the Contractor is assessed any additional levy, extra assessment or super-assessment by a Worker's Compensation Board, as a result of an accident causing injury or death to an employee of the Contractor or subcontractor, or due to unsafe working conditions, then such levy or assessment must be paid by the Contractor at its sole cost.
3. The Protection and Indemnity insurance policy must include the following:
 - (a) Additional Insured: Canada is added as an additional insured, but only with respect to liability arising out of the Contractor's performance of the Contract. The interest of Canada as additional insured should read as follows: Canada, represented by Public Works and Government Services Canada.
 - (b) Waiver of Subrogation Rights: Contractor's Insurer to waive all rights of subrogation against Canada as represented by Transport Canada and Public Works and Government Services Canada for any and all loss of or damage to the watercraft however caused.
 - (c) Notice of Cancellation : The Insurer will endeavour to provide the Contracting Authority thirty (30) days written notice of cancellation.
 - (d) Cross Liability/Separation of Insureds: Without increasing the limit of liability, the policy must protect all insured parties to the full extent of coverage provided. Further, the policy must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.

SC01.3 Commercial General Liability Insurance

1. The Contractor must obtain Commercial General Liability Insurance, and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature, but for not less than \$2,000,000 per accident or occurrence and in the annual aggregate.
2. The Commercial General Liability policy must include the following:
 - (a) Additional Insured: Canada is added as an additional insured, but only with respect to liability arising out of the Contractor's performance of the Contract. The interest of Canada should read as follows: Canada, as represented by Public Works and Government Services Canada.
 - (b) Bodily Injury and Property Damage to third parties arising out of the operations of the Contractor.
 - (c) Products and Completed Operations: Coverage for bodily injury or property damage arising out of goods or products manufactured, sold, handled, or distributed by the Contractor and/or arising out of operations that have been completed by the Contractor.
 - (d) Personal Injury: While not limited to, the coverage must include Violation of Privacy, Libel and Slander, False Arrest, Detention or Imprisonment and Defamation of Character.
 - (e) Cross Liability/Separation of Insureds: Without increasing the limit of liability, the policy must protect all insured parties to the full extent of coverage provided. Further, the policy must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.
 - (f) Blanket Contractual Liability: The policy must, on a blanket basis or by specific reference to the Contract, extend to assumed liabilities with respect to contractual provisions.
 - (g) Employees and, if applicable, Volunteers must be included as Additional Insured.
 - (h) Employers' Liability (or confirmation that all employees are covered by Worker's compensation (WSIB) or similar program)
 - (i) Broad Form Property Damage including Completed Operations: Expands the Property Damage coverage to include certain losses that would otherwise be excluded by the standard care, custody or control exclusion found in a standard policy.
 - (j) Notice of Cancellation: The Insurer will endeavour to provide the Contracting Authority thirty (30) days written notice of policy cancellation.
 - (k) If the policy is written on a claims-made basis, coverage must be in place for a period of at least 12 months after the completion or termination of the Contract.

SC02 APPLICABILITY OF OPTION (UNFUNDED OPTION)

1. The Contractor acknowledges that Canada has an irrevocable option that may be exercised, in whole or in part, to obtain the optional services described in the unit price table (Tender and Amendments subsequently issued), and to ask the Contractor to perform the said work in accordance with the conditions contained or mentioned in the said document, at the unit price specified in the unit price table (basis of payment);
2. Option is applicable at all times over the term of the contract;

3. NOTICE given to the Contractor for the applicability of option:

a) For the option no 2.3 and 3.2 :

If Canada decides to exercise the option above indicated, the Departmental Representative shall give the Contractor a verbal notice within 48 hours of the start of the optional work, which notice will be followed within two (2) weeks by a amendment to the contract.

SC03 PRICE JUSTIFICATION

In the event that the Bidder's bid is the sole responsive bid received, the Bidder must provide, on Canada's request, one or more of the following price justification:

- a. a current published price list indicating the percentage discount available to Canada; or
- b. a copy of paid invoices for the like quality and quantity of the goods, services or both sold to other customers; or
- c. a price breakdown showing the cost of direct labour, direct materials, purchased items, engineering and plant overheads, general and administrative overhead, transportation, etc., and profit; or
- d. price or rate certifications; or
- e. any other supporting documentation as requested by Canada.

CONTRACT DOCUMENTS (CD)

1. The following are the contract documents:
 - a. Contract Page when signed by Canada;
 - b. Duly completed Bid and Acceptance Form and any Appendices attached thereto;
 - c. Drawings and Specifications;
 - d. General Conditions and clauses

GC1 General Provisions – Construction Services	R2810D	(2015-07-09);
GC2 Administration of the Contract	R2820D	(2015-02-25);
GC3 Execution and Control of the Work	R2830D	(2015-02-25);
GC4 Protective Measures	R2840D	(2008-05-12);
GC5 Terms of Payment	R2850D	(2015-02-25);
GC6 Delays and Changes in the Work	R2860D	(2013-04-25);
GC7 Default, Suspension or Termination of Contract	R2870D	(2008-05-12);
GC8 Dispute Resolution	R2880D	(2015-04-01);
GC9 Contract Security	R2890D	(2014-06-26);
GC10 Insurance	R2900D	(2008-05-12);
Allowable Costs for Contract Changes Under GC6.4.1 Supplementary Conditions	R2950D	(2015-02-25);
 - e. Any amendment issued or any allowable bid revision received before the date and time set for solicitation
 - f. Any amendment incorporated by mutual agreement between Canada and the Contractor before acceptance of the bid; and
 - g. Any amendment or variation of the contract documents that is made in accordance with the General Conditions.
2. The documents identified by title, number and date above are incorporated by reference and are set out in the Standard Acquisition Clauses and Conditions (SACC) Manual, issued by Public Works and Government Services Canada (PWGSC). The SACC Manual is available on the PWGSC Web site:
<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>
3. The language of the contract documents is the language of the Bid and Acceptance Form submitted.

BID AND ACCEPTANCE FORM (BA)

BA01 IDENTIFICATION

Cap-aux-Meules Harbour dredging, QC
Solicitation No : EE517-160511/A
Project No : R.071850.001

BA02 BUSINESS NAME AND ADDRESS OF BIDDER

Name: _____

Address: _____

Telephone: _____ Fax: _____ PBN: _____

Email: _____

BA03 THE OFFER

The Bidder offers to Canada to perform and complete the Work for the above named project in accordance with the Bid Documents for the Total Bid Amount of

\$ _____ excluding applicable tax(es).
(amount in numbers)

BA04 BID VALIDITY PERIOD

The bid shall not be withdrawn for a period of sixty [60] days following the date of solicitation closing.

BA05 ACCEPTANCE AND CONTRACT

Upon acceptance of the Contractor's offer by Canada, a binding Contract shall be formed between Canada and the Contractor. The documents forming the Contract shall be the contract documents identified in Contract Documents (CD).

BA06 CONSTRUCTION TIME

The Contractor shall perform and complete the Work by April 15 2016.

BA07 BID SECURITY

The Bidder is enclosing bid security with its bid in accordance with GI08 - Bid Security Requirements of R2710T - General Instructions - Construction Services - Bid Security Requirements.

BA08 SIGNATURE

Solicitation No – N° de l'invitation
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Amd. No. – N° de la modif.
001
File No. – N° du dossier
QCM-5-38003

Buyer ID – id de l'acheteur
qcm008

Name and title of person authorized to sign on behalf of Bidder (Type or print)

Signature

Date

APPENDIX 1 - COMBINED PRICE FORM

- 1) The prices per unit shall govern in establishing the Total Extended Amount. Any arithmetical errors in this Appendix will be corrected by Canada.
- 2) Canada may reject the bid if any of the prices submitted do not reasonably reflect the cost of performing the part of the work to which that price applies.

LUMP SUM

The Lump Sum Amount designates Work to which a Lump Sum Arrangement applies.

- (a) Work included in the Lump Sum Amount represents all work not included in the unit price table.

Item	Description	Firm Total Amount (\$)
1.1	Mobilization and demobilization – Floating equipment	\$
1.2	Mobilization and demobilization – Other equipment (land based)	\$
TOTAL LUMP SUM AMOUNT (LSA) Excluding applicable GST and QST		\$

UNIT PRICE TABLE

The Unit Price Table designates Work to which a Unit Price Arrangement applies.

- (a) Work included in each item is as described in the referenced specification section.
- (b) The Price per Unit shall not include any amounts for Work that is not included in that unit price Item.

1. Base work

Item	Class of Labour, Plant or Material	Unit of Measurement	Estimated Quantity	Price per Unit applicable GST / QST extra	Extended amount GST / QST extra
2.1	Dredging - Class B Material	CMPM	15,670	\$	\$
2.2	Dredging – Class A fragmented material	CMPM	1,100	\$	\$
3.1	Disposal at sea	CMPM	16,700	\$	\$
TOTAL EXTENDED AMOUNT (TEA) Excluding applicable GST and QST					\$

2. Optional work

Item	Class of Labour, Plant or Material	Unit of Measurement	Estimated Quantity	Price per Unit applicable GST / QST extra	Extended amount GST / QST extra
2.3	Dredging – Class A Material – Rock or fragments at least 3.0 m ³ (optional)	m ³	100	\$	\$
3.2	Disposal on land (optional)	m ³	100	\$	\$
TOTAL EXTENDED OPTIONAL AMOUNT (TOA) Excluding applicable GST and QST					\$
TOTAL BID AMOUNT (LSA + TEA + TOA) Excluding applicable GST and QST					\$

Solicitation No – N° de l'invitation
EE517-152436/A
Client Ref No. – N° de réf. du client
EE517-15-2436

Amd. No. – N° de la modif.
001
File No. – N° du dossier
QCM-5-38003

Buyer ID – id de l'acheteur
qcm008

APPENDIX 2 – DEPARTMENTAL REPRESENTATIVE'S AUTHORITY

TO BE PROVIDED AT CONTRACT AWARD.

Contracting Authority is :

Name : _____

Title : _____

Department : _____

Division : _____

Telephone : ____ - ____ - _____

e-mail : _____

Technical Authority is :

Name : _____

Title : _____

Department : _____

Division : _____

Telephone : ____ - ____ - _____

e-mail : _____

APPENDIX 4 - VOLUNTARY CERTIFICATION TO SUPPORT THE USE OF APPRENTICES

Note; The contractor will be asked to fill out a report every six months or at project completion as per sample “Voluntary Reports for Apprentices Employed during the Contract” provided at Annex C

Name: _____

Signature: _____

Company Name: _____

Company Legal Name: _____

Solicitation Number: _____

Number of company employees: _____

Number of apprentices planned to be working on this contract: _____

Trades of those apprentices:

APPENDIX 6 - FLOATING PLANT DESCRIPTION

Dredges and Other Floating Equipments

The Bidder declares, by the fact of filling in the following tables, that the named equipments are entirely at his disposal, and that he is able to meet performances and capacities as stated below considering the materials and conditions related to this project. The Bidder must understand that a contract award from Public Works & Government Services Canada does not imply an acceptance of the claimed performances or capacities but only confirms that the equipments meet the requirements of the floating plant clauses.

DREDGE (S)

	<i>Main dredge</i>	<i>Secondary dredge (if required)</i>
<i>Dredge name</i>		
<i>Registration number</i>		
<i>Type of dredge</i>		
<i>If trailing suction hopper dredge: Hopper Capacity (m³)</i>		
<i>Draft (m)</i>		
<i>Dredging depth (m)</i>		
<i>Dredging capacity (m³/h)</i>		
<i>Manufacturing place *</i>		

Appendix 6 (continued)

SCOW (S) / SELF-PROPELLING SCOW (S)

Name	Registration number	Capacity (m³)	Draft (m)	Manufacturing Place *

TUG (S)

Name	Registration number	Engine (HP)	Draft (m)	Manufacturing Place *

SUPPLY VESSELS AND OTHERS FLOATING EQUIPMENT

Name	Registration number	Purpose	Draft (m)	Manufacturing Place *

* If manufacturing place is not Canada, append to your bid the certificate issued by Industry Canada

Appendix 7 (continued)

CERTIFICATE OF QUALIFICATION

Each floating equipment to be used in the course of the works **must be of Canadian manufacture and Canadian registry**. The Bidder must obtain a certificate of qualification from Industry Canada for any floating equipment which is not of Canadian manufacture. **A certified copy of the certificate must accompany the bid.** Requests related to the certification must be sent to :

Defence and Marine Director
Aerospace, Defence and Marine Branch
INDUSTRY CANADA
C.D. Howe Building – room 733C
235 Queen Street
Ottawa, ON
K1A 0H5

Attention : Mr. Phil Mickle
Phone : (613) 617-1860
Fax : (613) 998-6703
E-mail : Phil.Mickle@ic.gc.ca

The Director must have received any request at least fourteen (14) days before the closing bid date. The Industry Canada evaluated and recognized floating equipments may be accepted to work out a dredging project. Requests for certificates of qualification may be submitted by completing the Appendix 8 here after.

APPENDIX 8 - POSITIONNING SYSTEM DESCRIPTION

Describe the positioning system that will be used to performed the Work. Specify trade-mark, model, precision, etc.

APPENDIX 8 – REQUEST FOR CERTIFICATE OF QUALIFICATION OF FLOATING PLANT

(The Bidder will use a separate sheet for each unit of floating plant.)

1. Name and address of owner:

2. Name and address of operator:

3. Name of unit:

4. Canadian registry no.:

5. Type of unit (dredge, tug, scow, pontoon, etc.):

6. Date of Canadian registry:

7. Date unit originally built:

8. Shipyard where unit originally built:

9. Record of work done to unit in Canada. For each major job, show:
 - Date:
 - Shipyard:
 - Type of work:
 - Cost:
 - Country of origin of equipment installed:

10. If unit has changed ownership, show name and current address of previous owner(s) for each modification referred to in item 9 on a separate page.

Signature

Date

Corporate Seal



Travaux publics et
Services gouvernementaux
Canada

Public Works and
Government Services
Canada

Cap-aux-Meules
(Magdalen Islands)

Harbour Dredging

Project n° R.071850.001
File n° 4380-C045/15

Specifications for Tender

July 2015

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	01 33 00 Submittal Procedures	2
	01 35 30 (D) Health and Safety Requirements – Dredging	6
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<hr/>		
<u>DRAWINGS</u>		
Drawing N° QU-15001-M		1

END OF SECTION

Part 1 General

1.1 WORK BY OTHERS

- .1 Co-operate with other Contractors in carrying out their respective works and carry out instructions from the Departmental Representative.
- .2 Co-ordinate work with that of other Contractors. If any part of work under this Contract depends for its proper execution or result upon work of another Contractor, report promptly to the Departmental Representative, in writing, any defects which may interfere with proper execution of Work.

1.2 FUTURE WORK

- .1 Ensure that Work avoids encroachment into areas required for future work.

1.3 WORK SEQUENCE

- .1 Construct Work in stages to accommodate the users of premises during construction.
- .2 During construction, co-ordinate Progress Schedule with site occupancy.
- .3 Construct Work in stages to provide for continuous public usage.
- .4 Maintain fire access/control and foresee fire response.

1.4 CONTRACTOR USE OF PREMISES

- .1 Unrestricted use of site until Substantial Performance.
- .2 Limit access to and use of premises for Work to allow:
 - .1 Departmental Representative occupancy.
 - .2 Partial occupancy by the Departmental Representative.
 - .3 Work by other contractors.
 - .4 Public usage.
- .3 Co-ordinate use of premises under direction of Departmental Representative.
- .4 Obtain and pay for use of additional storage or work areas needed for operations under this Contract.
- .5 At completion of operations, condition of existing maritime structures shall be equal to or better than that which existed before new work started.

1.5 OCCUPANCY BY THE DEPARTMENTAL REPRESENTATIVE

- .1 The Departmental Representative will occupy premises during entire construction period for execution of normal operations.

- .2 Co-operate with the Departmental Representative in scheduling operations to minimize conflict and to facilitate the Departmental Representative usage.

1.6 REQUIRED DOCUMENTS

- .1 Maintain at job site, one copy each document as follows:
 - .1 Contract Drawings.
 - .2 Specifications.
 - .3 Addenda.
 - .4 Reviewed Shop Drawings.
 - .5 List of Outstanding Shop Drawings.
 - .6 Change Orders.
 - .7 Other Modifications to Contract.
 - .8 Field Test Reports.
 - .9 Copy of Approved Work Schedule.
 - .10 Health and Safety Plan and Other Safety Related Documents.
 - .11 Other documents as specified.

Part 2 Products

2.1 NOT USED

- .1 Not used.

Part 3 Execution

3.1 NOT USED

- .1 Not used.

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 Public Works and Government Services Canada (PWGSC)
 - .1 PWGSC, Standard Acquisition Clauses and Conditions Manual (SACC) (cf. Call for Tender document).

1.2 ADMINISTRATIVE

- .1 Submit required documents and samples to Departmental Representative for review. Submit promptly and in orderly sequence to not cause delay in work. Failure to submit in ample time is not considered sufficient reason for an extension of Contract time and no claim for extension by reason of such default will be allowed.
- .2 Do not proceed with work subject to submittals or mock-ups until submittals are fully reviewed and approved.
- .3 Characteristics shown on shop drawings, product data, samples and mock-ups shall be indicated in metric units (SI).
- .4 Verify documents before handing them to the Departmental Representative. This preliminary review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and co-ordinated with requirements of Work and Contract documents. Submittals not stamped, signed, dated and identified as to specific project will be returned without being examined and shall be considered rejected.
- .5 Notify Departmental Representative, in writing at time of submission, identifying deviations from requirements of Contract documents stating reasons for deviations.
- .6 Verify field measurements and that affected adjacent work are coordinated.
- .7 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Departmental Representative's review.
- .8 Keep one reviewed copy of each submission on site.
- .9 A covering letter containing the following information should accompany the documents submitted:
 - .1 Date.
 - .2 Project designation and number.
 - .3 Contractor's name and address.
 - .4 Identification and quantity of each document submitted.
 - .5 Any other relevant information.

1.3 CERTIFICATES AND MINUTES

- .1 Submit relevant documents required by the agency having jurisdiction for the protection of workers in case of work accident immediately after Contract award.

Part 2 Products

2.1 NOT USED

- .1 Not used.

Part 3 Execution

3.1 NOT USED

- .1 Not used.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 The Contractor shall manage his activities in such manner that the health and safety of the public and the personnel at the work site/workplace, including environmental protection, are at all times given precedence over project cost or schedule considerations.

1.2 REFERENCES

- .1 As the context requires, the latest available release of the following documents shall always be referred to:
 - .1 Canada Labour Code - Part II, Canadian Occupational Safety and Health Regulations.
 - .2 Canadian Standards Association (CSA).
 - .3 Act Respecting Occupational Health and Safety, R.S.Q. Chapter S-2.1, last version.
 - .4 Construction Safety Code, S-2.1, r.6, last version.
 - .5 Any other law or regulation relating to health and safety that would be applicable under the company statute or the context of the works.

1.3 SUBMITTALS

- .1 Submit the documents required according to section 01 33 00 (Submittal Procedures).
- .2 Submit to Departmental Representative the site-specific work site/workplace safety program, as outlined in article 1.8 - Safety and Health Management at least ten (10) days prior to start of work. The Contractor must review his program during the course of the project if any change occurs in work as planned. The Departmental Representative may, after receiving the program or at any time during the project, ask the Contractor to update or modify the program in order to better reflect the reality of the worksite/workplace. The Contractor shall make the required changes before work begins.
- .3 Submit to Departmental Representative the worksite/workplace inspection sheet, duly completed at intervals indicated in article 1.12 - Workplace Inspection and Correction of Hazardous Situations.
- .4 Submit to Departmental Representative within 24 hours one copy of any inspection report, correction notice or recommendation issued by federal or provincial inspectors.
- .5 Submit to Departmental Representative within 24 hours an investigation report for any accident involving injury and any incident exposing a potential hazard.
- .6 Submit to Departmental Representative all material safety data sheets for controlled products to be used at the worksite/workplace at least three (3) days before they are to be used on the worksite/workplace.
- .7 Submit to Departmental Representative copies of the training certificates required toward the application of the safety program, in particular:

- .1 First aid in the workplace and cardiopulmonary resuscitation.
- .2 Work in confined areas.
- .3 Lock-out procedures.
- .4 Wearing and fitting of individual protective gear.
- .5 Any other training called for by regulation or the safety program.
- .8 Medical examinations: where legislation, regulations, directions, specifications or a safety program require medical examinations, the Contractor shall:
 - .1 Prior to mobilization, submit to Departmental Representative the certificates of medical examination for all concerned supervisory staff and employees who will be on duty when the worksite/workplace opens.
 - .2 Thereafter, submit without delay certificates of medical examination for any newcomers to the worksite/workplace.
- .9 Emergency plan: the emergency plan, as defined in article 1.8.3 - Safety and Health Management, shall be submitted to Departmental Representative at the same time as the site-specific safety program.
- .10 Work permits: the Contractor shall obtain all the municipal, provincial and federal permits that are required in the Contract. A copy of the permit application forms shall be submitted without delay to the Departmental Representative.
- .11 Plans and certificates of compliance: the Contractor shall provide the Departmental Representative with a copy of all plans, methods and certificates of compliance signed and sealed by an engineer in the following instance:
 - .1 Any changes to equipment or a piece of machinery that has not been authorized in writing by the manufacturer. Copy of these documents must be available at all times on the worksite/workplace.

1.4 RISK ASSESSMENT

- .1 The Contractor must identify all hazards inherent to each task carried out at the worksite/workplace.
- .2 The Contractor shall plan and organize the work so as to foster hazard abatement at the source, or mutual protection, so that reliance on individual protective gear can be kept to a minimum. Where individual protection against falls is required, workers shall use a safety harness to CAN/CSA- Z-259.10-M90 requirements. Safety belts shall not be used as protection against falls.
- .3 Equipment, tools and protective gear which cannot be installed, fitted or used without compromising the health or safety of workers or the public shall be deemed inadequate for the work at hand.
- .4 All mechanical equipment shall be inspected before delivery to the worksite/workplace. Before using any mechanical equipment, the Contractor shall submit to Departmental Representative a certificate of compliance signed by a qualified mechanic. Whenever he suspects a defect or risk, the Departmental Representative may order the immediate shut-down of equipment and require a new inspection by a specialist of his own choosing.

1.5 MEETINGS

- .1 A Contractor's representative who has decisional ability must attend all meetings at which worksite/workplace safety and health issues are to be discussed.
- .2 The Contractor shall set up a safety committee, and convene meetings every second week. This committee must include at least one representative of the Contractor with decision authority and the workers' representative for each trade or industry. The committee's role is to see to the application of the safety program and ensure that measures are taken to promptly correct any situation that could cause an accident or adversely affect the health of workers.

1.6 REGULATORY REQUIREMENTS

- .1 Comply with all legislation, regulations and standards applicable to the Work.

1.7 SITE SPECIFIC / IMPLEMENTATION CONDITIONS

- .1 At this worksite/workplace, the Contractor must take into account of the following conditions:
 - .1 Risks involved in the transshipment, handling and closing-in of floating equipment; manual work in the vicinity of an operating hydraulic or cable shovel during dredging operations.
 - .2 Risks involved in the potential release of oil products at sea and with the operations undertaken to confine the spill.
 - .3 Risk of falling into the water and drowning.

1.8 SAFETY AND HEALTH MANAGEMENT

- .1 The Contractor shall acknowledge and assume all the charges and obligations which customarily devolve upon a Head Contractor and employer under the terms of the laws and regulations on occupational health and safety applicable to him.
- .2 The Contractor shall prepare a specific worksite/workplace safety program based on hazard identification and apply it from the start of project until close-out is completed. The safety program must take into account all the information appearing in article 1.7 - Site Specific / Implementation Conditions. The safety plan must be submitted to all parties concerned, in accordance with the provisions set forth in article 1.3 - Submittals. At minimum, the safety program shall include:
 - .1 Company safety and health policy.
 - .2 A description of the work, total costs, schedule and projected workforce curve.
 - .3 Flow chart of safety and health responsibility.
 - .4 The physical and material layout of the worksite/workplace.
 - .5 First-aid and first-line treatment standards.
 - .6 Identification of worksite/workplace-specific hazards.
 - .7 Risks identified to the tasks being carried out, including the preventive measures and the application procedures.
 - .8 Training requirements.
 - .9 Procedures in case of accident/injury.

- .10 Written commitment to comply with the prevention program, signed by all parties.
- .11 A worksite/workplace inspection schedule based on the preventive measures.
- .3 The Contractor shall draw up an effective emergency plan based on the characteristics and constraints of the worksite/workplace and its surroundings. Submit the emergency plan to all parties concerned, as required in article 1.3 - Submittals. The emergency plan shall include:
 - .1 Evacuation procedure.
 - .2 Identification of respondents (police, firefighters, ambulance services, etc.).
 - .3 Identification of persons in charge at the worksite/workplace.
 - .4 Identification of first-aid attendants.
 - .5 Training required for those responsible for applying the plan.
 - .6 Any other information needed, in the light of the worksite/workplace characteristics.

1.9 RESPONSIBILITIES

- .1 No matter the size of the construction worksite/workplace or the number of workers on site, the Contractor shall one competent person to supervise and take responsibility for health and safety. Take all necessary measures to ensure the health and safety of persons and property at or in the immediate vicinity of the worksite/workplace and likely to be affected by work activities.
- .2 Take all necessary measures to ensure application of and compliance with the safety and health requirements of the contract documents, applicable federal or provincial regulations, applicable standards as well as the worksite/workplace-specific safety program, and comply without delay with any order or correction notice issued by an inspector.
- .3 The Contractor shall take all necessary measures to keep the worksite/workplace clean and tidy throughout the course of the work.

1.10 COMMUNICATIONS AND POSTING

- .1 Make all necessary arrangements to ensure effective communication of safety and health information at the worksite/workplace. As they arrive on the worksite/workplace, all workers must be informed of the safety program and of their rights and obligations. The Contractor must insist on workers' right to refuse to perform work which they feel may threaten their own health, safety or physical integrity or that of other persons at the worksite/workplace. The Contractor shall keep on the worksite/workplace and update a written record of all information transmitted and the signature of all workers who received the information.
- .2 The following information and documents must be posted in a location readily accessible to all workers:
 - .1 Identification of the employer and/or the Head Contractor.
 - .2 Company Occupational Safety and Health policy.
 - .3 Worksite/workplace-specific safety program.
 - .4 Emergency plan.

- .5 Material safety data sheets (MSDS) for all controlled products used at the worksite/workplace.
- .6 Minutes of worksite/workplace committee meetings.
- .7 Names of worksite/workplace committee representatives.
- .8 Names of first-aid attendants.
- .9 Action reports and correction notices issued by inspectors.

1.11 UNFORESEEN CIRCUMSTANCES

- .1 Whenever a source of danger, not defined in the specifications or unidentifiable during the preliminary worksite/workplace inspection, arises as a result of the work or in the course of activities, the Contractor shall immediately suspend work, take appropriate temporary measures to protect the workers and the public and notify the Departmental Representative, both verbally and in writing. The Contractor shall then modify or update the safety program in order to resume work in safe conditions.

1.12 WORKPLACE INSPECTION AND CORRECTION OF HAZARDOUS SITUATIONS

- .1 Proceed to workplace inspection and complete the worksite/workplace inspection checklist at least once a week.
- .2 Immediately take all necessary measures to correct any lapses from legislative or regulatory requirements and any hazards identified by a government inspector, by the Departmental Representative, by the PWGSC safety and health coordinator, or during routine inspections.
- .3 Submit to Departmental Representative written confirmation of all measures taken to correct lapses and hazardous situations.
- .4 Work interruption: the Contractor shall give the person assigned to safety and health responsibilities full authority to order interruption/resuming of work when deemed necessary or desirable in the interest of safety and health. This person should always act so that the safety and health of the public and worksite/workplace workers and environmental protection take precedence over cost and scheduling considerations. Without limiting the scope of the articles on “Health and Safety Management” and “Responsibilities” in this section, the Departmental Representative or any person appointed by Public Works and Governmental Services Canada may order cessation of work if, in his/her view, there exist hazards or threats to the safety or health of site workers or the public, or to the environment.

1.13 BLASTING

- .1 Blasting and any use of explosives is prohibited unless authorized in writing by the Departmental Representative.

Part 2 Products

2.1 NOT USED

.1 Not used.

Part 3 Execution

3.1 NOT USED

.1 Not used.

END OF SECTION

Part 1 General

1.1 PRECEDENCE

- .1 The sections in Division 01 have precedence over the technical sections in the other divisions of this project.

1.2 DISPOSAL AT SEA PERMITS

- .1 Before any dredging is undertaken at the site, the Contractor shall ascertain to have on hand and on board of floating equipment the dredging and disposal at sea permits issued by Environment Canada, and strictly comply with the conditions therein stated.

1.3 FIRES

- .1 Fires and burning of rubbish on site/workplace are not permitted.

1.4 WASTE DISPOSAL

- .1 Do not dispose of waste materials and/or volatile materials such as mineral spirits and thinners for oil or paint, in waterways, storm and sanitary sewers. These materials must be managed and disposed of in accordance with the requirements of local authorities.

1.5 POLLUTION CONTROL

- .1 Control emissions from equipment and plant to local authorities' emission requirements.
- .2 Prevent fine materials and other foreign matter from contaminating air beyond the work site.
- .3 Have absorbent materials available at all time on site/workplace in order to respond promptly in case of hazardous material spill.
- .4 In case of accidental marine spill, the Contractor shall immediately notify the Regional Alert and Warning Network (Canadian Coast Guard) at 1-800-363-4735 and take all actions required to correct the situation and minimize the environmental impacts.
- .5 In addition the Contractor shall have available on the dredge a spill control kit. This kit should include at least the following components:
 - .1 One (1) or several salvage drums with minimum storage capacity of 285 litres (75 US gallons).
 - .2 One hundred (100) absorbent pads 340 g (12 oz. CAN).
 - .3 Fifteen (15) flotation collars 0.07 m wide and 1.2 m long.
 - .4 Four (4) flotation collars 0.1 m wide and 3 m long.
 - .5 Nine (9) kg of granular sorbent.
 - .6 One (1) drain cover.
 - .7 One (1) shovel.
 - .8 Disposal bags.
 - .9 Sealing or patch (capping) paste.

The Contractor shall make use of the kit in the event of an oil spill and comply with paragraph 1.5.4 of this section.

- .6 Regarding the transportation, handling and storage of dangerous goods on board vessels, the Contractor shall comply with the Canada Shipping Act and all regulations pursuant to that legislation.
- .7 Do not dump excavated fill, waste material or debris in waterways.
- .8 Do not store oil products or other hazardous material less than 30 metres from the shore.
- .9 Perform vehicle maintenance and refueling at a minimum distance of 30 metres from the shore.

1.6 INVASIVE SPECIES

- .1 An exotic invasive allochthonous species is, by definition, a species alien to the ecosystem where it is found, but able to breed and likely to have harmful effects on the economy, the environment or human health. This kind of nuisance includes, in addition to plants, some animals, fungi and microorganisms that are also a threat to biodiversity.
- .2 Marine ecosystems are vulnerable to allochthonous or invasive species, in particular when performing work that requires floating equipment. To prevent the introduction of invasive species in the natural ecosystem when performing work in the marine environment with floating equipment, the following measures shall be observed. The risks of introducing allochthonous species are minimized when using clean marine equipment that has been stored on land prior to work inception. Thus:
 - .1 For equipment cleaned and stored on land just before work is undertaken, the Contractor shall:
 - .1 Submit to Departmental Representative, in writing, a list of the equipment with location of storage area and expected date for streaming. Departmental Representative is entitled to verify if equipment was actually cleaned and stored on land prior to work performance.
 - .2 In anticipation of using already waterborne equipment, the Contractor shall demonstrate, at own expense, that floating equipment is free from invasive species just before mobilization at worksite. Thus:
 - .1 The Contractor shall submit a written inspection report, immediately before its mobilization to worksite, certifying that the equipment is free of invasive species. Inspection report to be prepared by a qualified biologist experienced in the identification of benthic fauna and the sampling performed by divers. Report shall include, without limitation, the following information and data: list of inspected equipment (tugs, tow-barges, etc.), date and location of inspection, summary of sampling and identification protocols, a list of the samples, a table of results, and a certification pertaining to the occurrence or absence of invasive species. The report shall include photographs and bear the signature of the qualified biologist prior to submittal to the Departmental Representative along with other Contract documents needed before equipment is mobilised.

- .2 Should an occurrence of invasive species be confirmed in the inspection report, the Contractor is required to replace the equipment or to proceed, at own expense, with complete cleaning of the equipment. A description of the cleaning work performed shall be included in the additional (post-cleaning) inspection report with all the relevant information herein mentioned.
- .3 The Department reserves the right to seek a second expert opinion at any time. Should invasive species be observed, the Contractor shall suspend work and proceed, at own expense, with cleaning of the affected equipment and follow the above mentioned procedure.

Part 2 Products

2.1 NOT USED

- .1 Not used

Part 3 Execution

3.1 MITIGATION MEASURES

- .1 Throughout the work, the Contractor shall implement rigorously all the requirements listed in this section as well as those included in Appendix D.

3.2 DREDGING, RELEASE AND TRANSPORT OF SEDIMENTS

- .1 Whenever possible, prioritize the use of a grab clamshell for dredging.
- .2 Curtail sediment resuspension.
- .3 Reduce the rate of rise and descent of the bucket. Avoid sudden movements of the bucket.
- .4 Avoid overfilling the barges to prevent liquid overflow and sediment spillage during transport to the offshore disposal site.
- .5 Avoid dredging, transporting and releasing sediment during unfavourable weather conditions (strong winds, storms, etc.) in order to prevent overflow and minimize sediment dispersion.
- .6 Where various debris are dredged, dispose of such materials on land at an authorized site.
- .7 Ascertain that the bottom of the barge is leak-proof during the transport of sediments.
- .8 Do not fill barges to capacity during inclement weather in order to prevent sediment overflow during transportation.

9. The Contractor must be able to demonstrate that his equipment was inspected and is free of invasive species.
- .10 The Contractor shall implement an Environmental Emergency Plan (EEP) to deal with spills involving oil products or other hazardous material. The EEP shall be available on site and be communicated to all employees.
- .11 Proceed to a preliminary inspection of equipment and regular check-up thereafter in order to ensure that the machinery is in good working order, clean and leak proof. In case of failure, replace the equipment or repair in appropriate locations identified in the Contractor's EEP.
- .12 Prefer floating equipment running on type HF biodegradable oil specially designed for this type of equipment.
- .13 Have on hand and maintain permanently a spill emergency kit both near the dredge and in the refuelling areas. The kit shall include all the necessary material in sufficient quantity to recover all contaminants.
- .14 Do not dispose of volatile materials or other hazardous material by releasing such products into the aquatic environment.
- .15 Should a spill occur, respond immediately to contain the leak and confine the hazardous materials. The area affected by the spill should be cleaned and the contaminated material removed and disposed of at an authorised site.
- .16 In case of spill, immediately report the occurrence to Environment Canada's emergency service (1-866-283-2333), to Urgence Environnement du Québec (1-866-694-5454) and the Canadian Coast Guard (1-800-363-4735).
- .17 Manage used oils and other contaminated waste in accordance with applicable regulations. This includes on-site storage, transportation and disposal.
- .18 Should a marine mammal come within 400 metres of the barges or dredger, the dredging operations or sediment release shall be stopped and boats must maintain a stationary position until the animal is more than 400 m away or until at least 20 minutes have lapsed since the last sighting.
- .19 The use of means or devices to scare marine mammals is prohibited.

END OF SECTION

Part 1 General

1.1 CONTENT OF THIS SECTION

- .1 Offices and storage.

1.2 PRECEDENCE

- .1 Sections of Division 01 have precedence over the technical sections in the other divisions of this specification.

1.3 SITE OFFICES

- .1 The Contractor shall provide the Departmental Representative with reasonable site office space on the dredge, with relevant amenities.

1.4 SANITARY FACILITIES

- .1 Provide sanitary facilities for the work force in accordance with governing regulations and ordinances.
- .2 Post notices and take precautions as required by local health authorities. Keep area and premises in sanitary condition.

Part 2 Products

2.1 NOT USED

- .1 Not used.

Part 3 Execution

3.1 NOT USED

- .1 Not used.

END OF SECTION

Part 1 General

1.1 RELATED SECTIONS

- .1 Section 01 11 01 – Work related General Information
- .2 Section 01 35 43 – Environmental Procedures

1.2 MEASUREMENT FOR PAYMENT PURPOSES

- .1 Only the material excavated above the required dredging level (plus an additional 0.1 m in depth) and within the side slopes indicated or specified will be measured.
- .2 Quantities indicated in the price table are approximate expected quantities, and they may not be increased without a written permission from the Departmental Representative. No payment will be made to the Contractor for work involving additional quantities without prior written authorisation by departmental representative.
- .3 Mobilization/Demobilization:
 - .1 Item n° 1.1 - Floating equipment
 - .1 The Contractor agrees to provide, at Departmental Representative's request and within 48 hours, the following information related to the lump sum defined in this section:
 - .1 Location of the equipment
 - .2 Distances to be travelled (or were travelled) in km
 - .3 Itinerary (route)
 - .4 Approximate dates.
 - .2 The lump sum will represent the costs incurred by the Departmental Representative in relation to the installation and start-up of the Contractor's equipment at the dredging site and the dismantling and demobilization of same at work completion.
 - .2 Item n° 1.2 - Other equipment (land-based)
 - .1 Before the contract is awarded, the Contractor agrees to provide, at Departmental Representative's request and within 48 hours, the following information related to the lump sum defined in this section:
 - .1 Location of the equipment
 - .2 Distances to be travelled in km
 - .3 Itinerary (route)
 - .4 Approximate dates.
 - .2 The lump sum will represent the costs incurred by the Departmental Representative in relation to the installation and start-up of the Contractor's equipment at the dredging site and the dismantling and demobilization of same at work completion, including all fit-up and dismantling costs required for land-based installations.
 - .3 Worksite organisation costs are included in this amount.

.4 Dredging

.1 Item n° 2.1 - Dredging – Class B material

- .1 The Contractor shall submit a unit price per cubic meters in-place measurement (m³mp) to be applied to the volume dredged. The Contractor may submit a request for payment once the Certificate of Completion is signed by the Departmental Representative on the site.
- .2 Should the work exceed thirty (30) days, a progressive payment based on the cubic metre in-scow measurement (CMSM) converted to cubic meter measured in place (CMPM) with a reduction factor of 1,5 may be accepted.
- .3 The dredging area is defined within the lateral limits and grade depths indicated on the drawings and includes side slopes of 3 horizontal to 1 vertical ratio, as defined in paragraph 1.3.9 of this section.
- .4 Dredging will be measured per cubic meters in-place measurement (CMPM). The volume will be based on bathymetric surveys before and after the complete dredging of the areas delineated on the drawings.
- .5 The Departmental Representative reserves the right to change the horizontal and/or vertical limits of dredging at all times before the beginning of work.
- .6 Post dredge surveys and mechanical sweeping of dredged areas are included in the unit price for dredging, as well as all the equipment, tooling, labour and other elements required to perform the work.
- .7 All operations relating to the installation of the dredging equipment are considered incidental to the work and will not be measured for separate payment.
- .8 Filling and sedimentation in previously dredged areas, or where the work is not yet completed, may occur before acceptance. The Contractor remains responsible and he shall remove this material and complete the dredging of all areas shown on the drawings at the specified depth in order to obtain the Certificate of Completion. The removal of filling or sedimentation during dredging will not be measured separately for payment.
- .9 In his unit price, the Contractor shall include all costs associated with material dredged below the dredging line and outside the dredging limits.

.2 Item n° 2.2 – Dredging – Class A fragmented material (rock or fragment less than 50 cm diameter)

- .1 The Contractor must submit a unit price per cubic metre in-place measurement (CMPM) to be applied to the volume of fragmented and dredged rock. The Contractor may submit a payment request once the Completion Certificate is signed by the Departmental Representative on the site.
- .2 No fragment of rock subject to immersion offshore shall measure more than 50 cm in diameter.

- .3 The dredging sector is defined by the lateral boundaries and depth levels indicated on the plans and includes lateral slopes with a ratio of 3 horizontal to 1 vertical, as defined in paragraph 1.3.9 of this section.
 - .4 The dredged material will be measured in cubic metres in-place measurement. The volume will be determined in accordance with the bathymetric surveys carried out before and after the complete dredging of the demarcated areas on the plans.
 - .5 The Departmental Representative reserves the right to change the horizontal or vertical limits of dredging at all times before the beginning of work.
 - .6 All equipment, tools, labour and other elements required to carry out the work are included in the unit price.
 - .7 All operations relating to the installation of the dredging equipment are considered incidental to the work and will not be measured for separate payment.
 - .8 Prior to acceptance of the work, backfilling and sedimentation may occur in areas where the work has not been completed, or where dredging was previously carried out. The Contractor is responsible and must remove this material and complete the dredging work in all of the areas to the specified depth shown on the plan in order to obtain the Certificate of Completion. The removal of backfilling or sedimentation material during the dredging work will not be measured separately for payment purposes.
 - .9 In his unit price, the Contractor must include all costs associated with dredged material removed below the dredging level and outside the dredging boundaries
- .3 Article n° 2.3 – Dredging – Class A material (Optional)
(rock or fragments at least 3.0 m³ in volume)
- .1 The Contractor must submit a unit price per cubic metre in-place measurement (CMPM) to be applied to the volume of dredged material. The Contractor may submit a payment request once the Completion Certificate is signed by the Departmental Representative on the site.
 - .2 The dredging sector is defined by the lateral boundaries and depth levels indicated on the plans and includes lateral slopes with a ratio of 3 horizontal to 1 vertical, as defined in paragraph 1.3.9 of this section.
 - .3 Dredging to be measured in cubic metres (m³). The volume will be determined in the presence of a representative of the Department by measuring each fragment or rock dredged.
 - .4 The Departmental Representative reserves the right to change the horizontal or vertical limits of dredging at all times before the beginning of work.
 - .5 All equipment, tools, labour and other elements required to carry out the work are included in the unit price.

- .6 All operations associated with setting up the dredging equipment will be deemed incidental to the work and will not be measured separately for payment purposes.
- .5 Disposal
 - .1 Item n° 3.1 – Disposal at sea
 - .1 The Contractor must submit a unit price per cubic metre in-place measurement (CMPM) for the transport of dredged materials and their disposal at sea as indicated in items n° 2.1 and 2.2 of the unit price schedule. The authorised ocean disposal site (Appendix A) shall be located and marked with accuracy as specified.
 - .2 Dispose of dredged materials in accordance with the requirements of the specifications, as indicated in the mitigation measures (Appendix D), and in the other contract documents.
 - .3 All operations relating to the disposal of materials at the offshore disposal site will be considered incidental to the work and will not be subject to measurement and separate payment.
 - .2 Item n° 3.2: Disposal on land
 - .1 The submitted unit price for the disposal of dredged material will be the volume payable referred to in item n° 2.3 (m³) in the schedule of unit prices.
 - .2 The dredged material will be disposed of in accordance with the requirements set out in this Specification and in other contract documents.
 - .3 All operations associated with the removal and disposal of dredged material at an authorised site will be deemed incidental to the work and will not be subject to measurement and separate payment.
- .6 Other considerations
 - .1 The lump sum amount include all materials, transportation, rentals, installation of equipment, equipment, tools, labour, and expenses for performing work not specifically described on the plans or in the specifications or in other tender documents and yet considered necessary to comply with best practices.
 - .2 All work described in this specification or shown on the drawings, and work required toward completion of the work covered by this specification, yet not defined as separate items entitling to a lump-sum or unit price payment, will be considered directly or indirectly as related to the overall purpose of the contract and no separate payment will be made in respect of any of this work; the cost of all activities directly or indirectly related to the matter of this contract must, however, be included in the unit prices quoted in the bid.
 - .3 There will be no additional payment for temporary structures used during dredging operations.
 - .4 There will be no additional payment for delays due to fishing activities or gear located at the dredging sites or at the open-water disposal site.
 - .5 There will be no additional payment for delays resulting from maritime traffic.
 - .6 There will be no additional payment for downtime.
 - .7 There will be no additional payment for mooring and anchoring facilities for dredging or other floating equipment.

- .8 There will be no additional payment for downtime resulting from operational adjustments to the execution.
- .9 There will be no additional payment for time losses due to weather conditions or time losses resulting from the monitoring of marine mammals.
- 7. Tenderers must prepare their bids by filling out the unit price schedule included in the tender documents.
- 8. Obstacles
 - .1 The removal of debris or obstacles, where authorized by the Departmental Representative, will be paid according to the number of hours on task toward such removal multiplied by the hourly rate calculated by the Departmental Representative as described in the next paragraph.
 - .2 The hourly rate will be calculated at the end of the contract by dividing the amount paid for dredging and the disposal of class B dredged material, excluding the costs of mobilization and demobilization, with the number of operational hours of the dredge during the contract (excluding interruptions due to repairs, bad weather, etc.). The periods of less than a half an hour in duration for dredging and/or removal of obstacles will not be considered.
- 9. Payment by instalments: Canada will pay the Contractor as follows:
 - 1. Mobilization/Demobilization
 - .1 Floating equipment: in accordance with clause 1.2.3 (and sub-paragraphs), when the dredge is on site and operational, fifty percent (50%) of the fixed price for Mobilization/Demobilization indicated in the bid document.
 - .2 The remaining fifty percent (50%) will be included in the final payment of the contract, after signature of the Certificate of Completion.
 - 2. Dredging
 - .1 In accordance with clause 1.2.4 (and sub-paragraphs), in monthly progress payment(s) as assessed by the Departmental Representative or, after signature of the Certificate of Completion, one hundred percent (100%) of the amount established in multiplying the m³mp dredged volume by the unit price of dredging.
 - 3. Disposal
 - .1 At sea: In accordance with clause 1.2.5.1 (and sub-paragraphs), in monthly progress payment(s) as assessed by the Departmental Representative or, after signature of the Certificate of Completion, one hundred percent (100%) of the amount established in multiplying the m³mp dredged volume by the unit price for disposal at sea.
 - .2 Land-based: in accordance with clause 1.2.5.2 (and sub-paragraphs), after signature of the Certificate of Completion, one hundred percent (100%) of the amount established in multiplying the m³ dredged volume by the unit price for land-based disposal.

1.3 DEFINITIONS

- .1 Dredging: excavating, transporting and disposal of underwater materials.

- .2 Disposal: transport and discharge of excavated materials to an authorised disposal site in open water or to an authorized disposal site on land.
- .3 Class A materials: solid rock requiring drilling or blasting, and boulders or rock fragments of individual volumes of at least 3.0 m³.
- .4 Class B materials: loose rock or shaly rocks, silt, quick sand, mud, gravel, coastal gravel, clay, gumbo, boulders, layers or hardpan and debris of individual volumes less than 3.0 m³.
- .5 Debris: pieces of wood, wire rope, scrap steel, pieces of concrete and other waste materials.
- .6 Dredge grade: horizontal plane above which all material is to be dredged.
- .7 m³mp (CMPM): cubic metre in-place measurement, expressed in m³.
- .8 m³mc (CMSM): cubic metre in-scow measurement, expressed in m³.
- .9 Side slope: inclined surface or plane from subgrade at side limit of dredging area to intersect original ground line outside of side limit and to be expressed as ratio of horizontal to vertical.
- .10 DGPS-RTK: technology that provides real time GPS location (x,y,z) with centimetric precision.
- .11 Chart datum: permanently established plane from which soundings or tide heights are referenced, usually Lowest Normal Tide (L.N.T.).
- .12 Coordinates
 - .1 MTM projection: modified transverse Mercator projection.
 - .2 MTM coordinates: plane rectangular coordinates used in a grid system in which grid network is applied to the MTM projection. In fact, coordinates constitute the horizontal reference parameters.
- .13 Instantaneous depth mode: mode of operation of hydrographic survey equipment where all sounding data observed at predetermined distance interval over entire course is retained in memory.
- .14 Matrix cells: each dredging area is represented as a number of cells of 2.0 m x 2.0 m or 4.0 m x 4.0 m. Depending on where bathymetric surveys are carried out, each cell may include several depths.
- .15 Least of minimum plane: hydrographic survey plane in which least sounding in grouping of matrix blocks is plotted.
- .16 Cleared area: area of dredging accepted as complying with the plans and specifications.
- .17 Certificate of completion: letter or memo provided to the Contractor by the Departmental Representative on the site stating that dredging was completed.

1.4 REGULATORY REQUIREMENTS

- .1 Comply with all rights and privileges of others and all federal, provincial and municipal laws, regulations and decrees; Contractor shall also see to compliance by his de jure or de facto employees, including subcontractors.
- .2 Mark floating equipment with lights in accordance with the Collision Regulation and the Rules of Road for the Great Lakes Basin.
- .3 Before undertaking any dredging at the site, the Contractor shall make sure to have on hand and aboard the floating equipment, the dredging and disposal at sea permits issued by Environment Canada and comply strictly with their provisions.

1.5 WORK SCHEDULE

- .1 Within a maximum of two (2) weeks of the notice of acceptance of the offer, submit a work schedule to the Departmental Representative for approval, including the execution time of each specified operation until completion.
- .2 In addition to the schedule required in the above paragraph, the Contractor shall notify the Departmental Representative of his arrival at the location two (2) weeks in advance.
- .3 The Contractor shall comply with the agreed schedule and take immediate steps to correct any deficiencies by either changing the current dredging or by transporting and moving other equipment. Inform the Departmental Representative of the corrective measures adopted.
- .4 The Work must be completed by the dates indicated in the contract documents.

1.6 LOCATION

- .1 The work to be performed is located in the harbour of the Cap-aux-Meules port, Iles-de-la-Madeleine, Quebec.
- .2 The location of material to be dredged is indicated on drawing N° QU-15001-M while appendix A specifies the disposition at sea.

1.7 INTERFERENCE TO NAVIGATION

- .1 To ascertain information on vessel movements and fishing activities in the area affected by dredging operations, please call the Port Director, Mrs. Johanne Lebel, at 418-986-3785.
- .2 Plan and execute work in manner not to interfere with fishing operations, marina activities or access to wharves by land or water.
- .3 The Departmental Representative is not responsible for loss of time, materials or equipment or for any other expenses caused by ships at anchor in the work area or resulting from other work performed by the Contractor.
- .4 Where possible, the Contractor will notify the Departmental Representative forty-eight (48) hours in advance of any special movement of his dredging equipment (either for reasons of supply, repairs, etc.).

- .5 Keep Marine Communications and Traffic Services (MCTS) informed with precision of ongoing dredging operations, at Department of Fisheries and Oceans - Canadian Coast Guard, tel.: 418-233-2854, fax: 418-233-2017, e-mail: Opsavis@dfo-mpo.gc.ca.
- .6 Should the Contractor's equipment cause an obstruction to navigation, the Contractor shall:
 - .1 Notify MPO's Marine Communications and Traffic Services (MCTS) and the Departmental Representative.
 - .2 Comply with paragraph 3.1.14 of this section.
 - .3 Remove at once this equipment at own expense. Should the Contractor fail in that obligation, the Departmental Representative will proceed to the removal of the obstacle and all costs incurred will be charged to the Contractor.

1.8 CHART DATUM, DEPTHS AND TIDAL BENCHMARKS

- .1 Elevations and dredging levels used in this specification and the contract drawings are in metres referred to Chart Datum.
- .2 Areas to be dredged are to be referenced to vertical benchmarks using DGPS-RTK technology. The Contractor shall be responsible for obtaining, on his own and at own expense all relevant data concerning the water level values to be used for the work.

1.9 FLOATING EQUIPMENT

- .1 The Contractor shall provide and maintain all his dredging equipment to dredge, load, transport and dispose of the entire volume of the materials mentioned in the estimate, taking into account the swelling of materials and surplus of dredged material as appropriate.
- .2 All equipment necessary for the execution of the dredging contract must and shall at all times be deemed satisfactory to the Departmental Representative.
- .3 The Contractor must imperatively use, in the framework of this contract, tow-barges or barges whose characteristics prevent leakage of dredged material during loading or towing operations.
- .4 Before the start of work, obtain and forward to the Departmental Representative a letter of compliance issued by Transport Canada approving any watercraft (transport, rescue, inspection or other) used by the Contractor (Transport Canada, 418-648-7912).

1.10 SITE INSPECTION

- .1 Prior to submitting a bid, it is the responsibility of the Contractor to travel to the job site and obtain all the necessary information regarding the nature and scope of the Work, and acknowledge all the conditions that may affect the execution of said works.
- .2 By the very fact of filing a bid, the Contractor acknowledges having secured the nature and geographic location of the work, the general and local conditions, especially weather or climate conditions, the roughness of water, tidal levels, specific physical conditions at the work site, the nature of the soil and seabed, the nature of the material to be dredged,

and any other circumstance likely to affect the execution conditions of the contract and the value of the work.

1.11 SITE-RELATED INFORMATION

- .1 Take necessary steps to become fully familiar with potential inclement weather and sea conditions in this area.
- .2 The particle size of surface materials is shown in Appendix B.
- .3 Since this project involves a deepening of part of the harbor, some parts of the surface area in the zone to be dredged may never have been dredged. The materials accumulated may be compacted and offer more resistance than in the case of recurring dredging.
- .4 Given potential hydrodynamic and climate events, the Contractor may expect, during execution, a sediment transport flux that could be deposited in the dredging area (refer to paragraph 1.2.4 of this section).
- .5 In Cap-aux-Meules, the tidal range can reach 1.1 m and the water level can be between 0.4 m and 1.3 m above chart datum. Daily tidal predictions can be obtained from the following website: www.marees.gc.ca/eng.
- .6 The location of the material to be dredged and the dredging grade are indicated on the drawing QU-15001-M.
- .7 The contractor shall conduct research on the historical weather and wave conditions and assess the difficulties that may be encountered.

1.12 HYDROGRAPHIC SURVEY AND ACCEPTANCE OF WORK

- .1 In order to locate as accurately as possible the materials to be dredged and to determine their volume, bathymetric surveys (soundings) will be performed by the Departmental Representative before the inception of dredging activities.
- .2 The pre-dredging bathymetric survey is provided in the Call for Tender documents. Before starting work, the Contractor shall confirm in writing to the Departmental Representative that the Contractor performed all the usual verifications and the results of the survey are accepted. No claim of additional quantities will be accepted during the contract period (i.e., after acceptance of the pre-dredging survey).
- .3 A qualified representative of the Contractor shall be in attendance with the Departmental team of surveyors during the post-dredging bathymetric surveys in order that both parties accept formally the survey results.
- .4 The Departmental Representative will provide the Contractor with the basic data for the work (pre- and post-dredging hydrographic data) in ASCII format (see example at Appendix C). The digital files will be emailed to the Contractor.
- .5 At work completion, the Contractor shall submit a formal application to carry out the post-dredging surveys at least five (5) business days in advance.

- .6 At work completion, the Departmental Representative will undertake if required two (2) bathymetric surveys, a verification sounding and a final post-dredging survey. Any additional surveys and waiting time will be charged to the Contractor on an hourly basis as follows:
 - .1 Hourly rate \$300.00.
 - .2 Will be considered survey team waiting time any period in excess of twenty-four (24) hours between the end of the verification sounding and the beginning of the final post-dredging survey.
 - .3 Waiting time will be counted by the Departmental Representative on the site in periods of eight (8) hours per day, i.e., from 8:00 to 16:00. Should the Contractor require surveys beyond this period, they will also be charged to the Contractor as waiting time.
- .7 In all cases, bathymetric surveys will be conducted during daylight and the Departmental craft will dock at sunset.
- .8 Bathymetric surveys are weather-dependent.
- .9 The Departmental Representative will not proceed to surveys, whether before or after dredging, in the presence of ice. There will be no additional payment for delays caused by such conditions or situations.
- .10 Should there remain materials above the specified level of dredging after verification soundings or subsequent surveys, the Contractor will be required to return to the site and complete the work to the satisfaction of the Departmental Representative.
- .11 For the acceptance of work, a general cleanup of the work area shall be conducted and the site left in a condition entirely satisfactory to the Departmental Representative.

1.13 SYSTEM OF UNITS

- .1 Values for bathymetry surveys, water levels, distances, surface areas and volumes, and vertical benchmark elevations (referenced to CD), etc., mentioned in this specification as well as the values referred to during the execution of the work are and shall be expressed in the International System of Units (SI).

PART 2 Products

2.1 DREDGING EQUIPMENT AND POSITIONING DEVICES

- .1 The work shall be performed using a clamshell dredge and/or a hydraulic shovel or suction dredge.
- .2 The dredger must, by its size, characteristics and draft, be suitable for the execution of work.

PART 3 Execution

3.1 GENERAL

- .1 Before work is undertaken, the Contractor shall obtain the Departmental Representative's written approval of the work schedule.
- .2 Dredge the materials to the dredge line indicated on the drawing (plus an additional depth of 0,1 m).
- .3 During execution of the work, cover the entire surface area above the dredging level as shown on the drawing.
- .4 The Contractor shall comply with the dredge line, which will be indicated to him by the Departmental Representative, and be careful to dredge the least amount of materials below such level (with the exception of the additional depth). Any excess dredging will be the sole responsibility of the Contractor and performed at his expense.
- .5 The Contractor shall dredge using a data processing system capable of properly displaying on a monitor both the position of the dredge and bathymetric data relevant to the work (location and thicknesses of material to be dredged) and the dredging template.
- .6 The coordinates of the relevant points used to determine the horizontal boundaries of the areas to be dredged will be provided by the Departmental Representative.
- .7 The Contractor shall be responsible for ensuring on his own the spatial positioning of the dredge.
- .8 The Departmental Representative may verify at his convenience the accuracy of the Contractor's positioning system(s).
- .9 All the (X,Y), (X,Y,Z) points and the main, intermediate or secondary (lat, long) points used by the Contractor, whether determined by him or provided to him by the Departmental Representative or by someone else shall be the Contractor's exclusive responsibility, especially in consideration of the risks to himself.
- .10 During the execution of the contract, the dredge and support equipment must be kept in efficient working order and in good repair at all times.
- .11 Demobilization: the Contractor may demobilize his dredging equipment only after obtaining the Departmental Representative's authorisation. Permission to demobilize will be given to the Contractor after final acceptance of the work.
- .12 Buoys required for the project: the Contractor shall provide, place (lie at anchor) and maintain at own expense all the buoys/markers required to perform the work properly. Should, by accident or otherwise, one or more buoys/markers sink or drift, they will be refloated and/or recovered at Contractor's expense and to the satisfaction of the Departmental Representative. The Contractor shall assume responsibility for all accidents of any kind whatsoever, due to the buoys/markers being improperly placed or insufficiently visible during the day or improperly lighted during the night or for any other reason.

- .13 Navigation buoys: the Contractor shall not, at any time, remove or move the main navigation buoys. Any justified relocation of one or more buoys will be performed by the Department of Fisheries and Oceans; forward requests for this service to Departmental Representative at least five (5) business days in advance. Departmental Representative reserves the right to assess the merits of any such request by the Contractor.
- .14 Keep all signals and lights required to be installed on all floating equipment in accordance with the "Collision Regulations" and the "Navigation Safety Regulations" on the St-Lawrence. All equipment required for the work shall be properly identified and/or visible at all times.
- .15 No discharge of dredged material will be permitted outside of designated disposal site, or as the case may be, at the land disposal site unless authorised by the Departmental Representative.
- .16 Mark floating equipment with lights in accordance with International Rules of Road and maintain radio watch on board.
- .17 The Contractor shall complete daily reports on his activities. Forms will be provided by the Departmental Representative before the start of work.
- .18 Carry out work so that no damage is caused to fishing gear and minimize interference with fishing activities in the conduct of operations within the areas identified.
- .19 The Contractor shall be responsible for any damage to fishing gear within the marked areas if they result from dredging activity. If damage occurs, assume cost responsibility for replacement or repair including for loss of fishing opportunity.
- .20 All plant and equipment must be maintained in good repair and seaworthy condition.
- .21 Where in the judgment of the Departmental Representative during the performance of work, the equipment supplied is not suitable and adequate to perform the work properly, or if the Contractor is delayed in the work schedule, the Contractor shall, within fifteen (15) days of a written notice from the Departmental Representative, provide any additional equipment approved by the latter.
- .22 Establish and maintain water level gauges or tide boards in order that proper depth of dredging can be determined. Locate gauges or tide boards so as to be clearly visible.
- .23 Remove shoaling which occurs as result of Work at no expense to the Departmental Representative.
- .24 Remove material cast-over on surrounding area and dispose of it as dredged material. Do not cast-over material unless authorized by Departmental Representative.
- .25 Immediately notify Departmental Representative upon encountering object which might be classified as obstruction, including boulders 3.0 m³ in volume or more and solid rock. By-pass object after clearly marking location with buoys manufactured before the start of work and continue Work after providing Departmental Representative with MTM coordinates.

- .26 Foresee the anchoring of the dredging equipment and bear costs.
- .27 Take the necessary precautions to protect existing structures or features in the vicinity of the work. Where applicable, any damage to these structures will be repaired at Contractor's expense.
- .28 Unless authorised in writing by the Departmental Representative, do not dredge at a distance less than 3.0 metres of an existing structure. The intersection between the side slope and the original bottom surface line must be at 3.0 m from the structure, these distances being measured perpendicular to the face of the structure. Unless otherwise indicated on the plans, dredge side slope three horizontal to one vertical.
- .29 Always give precedence to port operations over dredging, and to unloading operations.
- .30 Dredging and unloading operations must be coordinated with the port authorities.
- .31 The Transport Canada property shall be kept clean throughout the project.
- .32 No dockside work (unloading, transshipment, transport, handling, etc.) may proceed and no temporary facility may be under construction (or implemented) when cruise ships are docked.

3.2 ROCKS OR ROCK FRAGMENTS IN EXCESS OF 3,0 m³

- .1 Rocks or rock fragments in excess of 3,0 m³ are not expected to be found in the dredging area. Should this occur, the Contractor shall remove them by stripping the covering material (Class B).
- .2 Should such rocks or rock fragments need to be dredged, the Departmental Representative will assess this additional work and, upon request by the Departmental Representative, the Contractor shall provide the necessary and appropriate dredging equipment to load, transport and dispose of the materials to the satisfaction of Departmental Representative. The cost of this additional work to the contract will be determined in accordance with articles n° 2.3 and 3.2 of the bid form.

3.3 DISPOSAL OF DREDGED MATERIAL

- .1 Ocean disposal
 - .1 Dispose of dredged material at the site under disposal permits approved by Departmental Representative and in accordance with environmental requirements.
 - .2 Mark the boundaries of the disposal area with leading buoys equipped with lights and radar reflectors.
 - .3 The buoys marking the disposal area will lie at anchor within a 15 m radius of the theoretical position provided by the Departmental Representative.
 - .4 Discharge the dredged material according to a grid pattern defined by the Departmental Representative. The Contractor shall have on hand the release pattern before starting work.
 - .5 The release will be performed using a DGPS positioning system accurate to ± 5 m or better.
 - .6 Avoid overloading barges, especially in rough conditions.

.7 Proceed to releases as quickly as possible at the disposal site.

3.4 OVERHAUL OF DEFICIENT DREDGING

.1 Re-dredge areas that do not meet requirements to the satisfaction of the Departmental Representative.

3.5 ASSISTANCE TO AND COOPERATION WITH THE DEPARTMENTAL REPRESENTATIVE

- .1 Co-operate with the Departmental Representative on inspection of Work and provide assistance requested.
- .2 The Contractor shall provide the necessary and satisfactory water transportation to the Departmental Representative or his authorised agent from a local dock to the dredging plant to allow site visits or for any other reason as seen fit by the Departmental Representative.
- .3 The Contractor shall also commit to provide landing facilities, and secure at own expense the necessary space (on land and sea, as required) for his equipment for the entire duration of the project.

END OF SECTION

APPENDIX A

STOCKPILING AREA



latitude nord et 61° 51' de longitude ouest, NAD 83.

Le site d'immersion qui sera utilisé pour l'immersion en mer des déblais de dragage est le site PBCM-1 (Figure 2). Il est délimité par les quatre positions géographiques suivantes:

OPTION #1 (4 coins)		MTM Zone 4		Deg. déc.		Deg. min. déc.		Deg. min. sec.	
Description	Station	Eastings	Northings	Lat. (N)	Long. (O)	Lat. (N)	Long. (O)	Lat. (N)	Long. (O)
Nord	OP1-A	282123	5247693	47,36813	61,80026	47° 22,088"	61° 48,016"	47° 22' 5,282"	61° 48' 0,937"
Est	OP1-B	282573	5247474	47,36618	61,79429	47° 21,971"	61° 47,657"	47° 21' 58,246"	61° 47' 39,448"
Ouest	OP1-C	281992	5247423	47,36570	61,80198	47° 21,942"	61° 48,119"	47° 21' 56,523"	61° 48' 7,132"
Sud	OP1-D	282441	5247204	47,36375	61,79603	47° 21,825"	61° 47,762"	47° 21' 49,487"	61° 47' 45,691"

Le site a été utilisé en 2014-2015 lors des travaux de dragage d'entretien du chenal d'accès du port de Cap-aux-Meules.

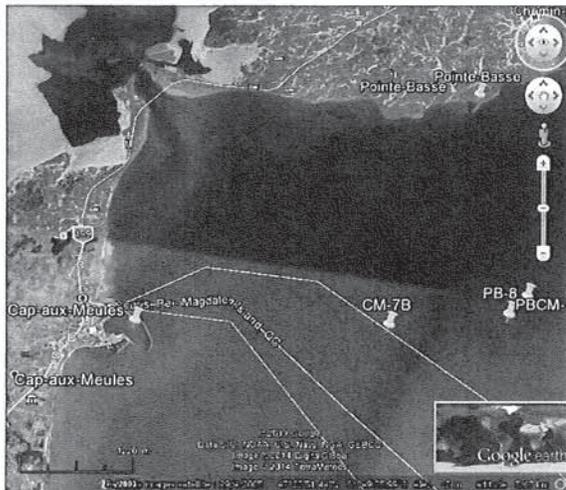


Figure 2. Localisation du site d'immersion en mer PBCM-1

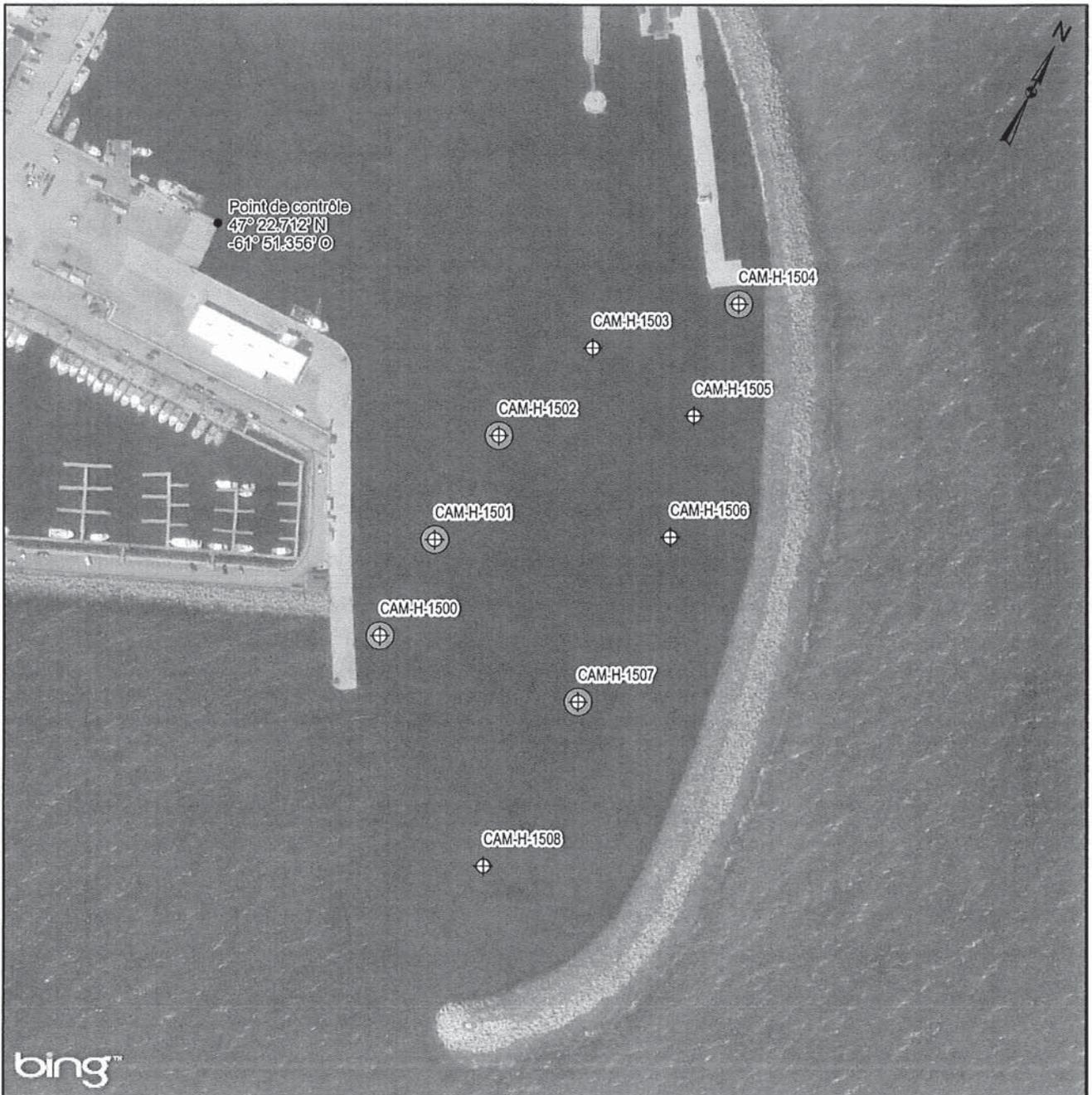
2- Justification

Le port de Cap-aux-Meules est une infrastructure importante pour la région des Îles-de-la-Madeleine. Il est le seul port commercial de la région qui dispose d'infrastructures capables d'accueillir le service du traversier reliant les Îles avec le continent et le trafic commercial. Il abrite notamment les installations du service de traversier et celles servant pour le ravitaillement en produits pétroliers et en marchandises diverses.

Depuis le dernier dragage du havre en 1998, les profondeurs d'eau disponibles ont graduellement été réduites par le phénomène de sédimentation. Selon les derniers relevés bathymétriques, dont celui de décembre 2014, il a été constaté que les profondeurs d'eau sont devenues plus contraignantes pour les opérations des navires plus gros gabarits qui transitent à cet endroit, notamment pour celles du traversier. Par conséquent, le dragage d'entretien de ce havre est nécessaire afin de rétablir une profondeur d'eau suffisante afin de permettre la

APPENDIX B

PARTICLE-SIZE OF DREDGED MATERIALS



H:\Projets\Hydro Quebec\HQ - Îles-de-la-Madeleine\MXD\14-13782\Phase 1500001413782_Figure_1_Station_échantillonnage_sédiments.mxd

LÉGENDE

- ⊕ STATION D'ÉCHANTILLONNAGE 2015
- DÉPASSEMENT DU CRITÈRE DU RÉGLEMENT SUR L'IMMERSION EN MER
- DÉPASSEMENT D'UNE OU DES RECOMMANDATIONS POUR LA PROTECTION DE LA VIE AQUATIQUE DU CCME
- DÉPASSEMENT D'UN OU DES CRITÈRES POUR L'ÉVALUATION DE LA QUALITÉ DES SÉDIMENTS AU QUÉBEC
- DÉPASSEMENT D'UN OU DES CRITÈRES DE LA POLITIQUE DE PROTECTION DES SOLS



RÉFÉRENCE

PROJECTION: NAD 1983 MTM ZONE 4.

CLIENT
HYDRO-QUÉBEC

PROJET
CARACTÉRISATION ENVIRONNEMENTALE - DÉVERSEMENT D'HYDROCARBURES AU QUAÏ DE CAP-AUX-MEULES (ÎLES-DE-LA-MADELEINE)

TITRE
STATION D'ÉCHANTILLONNAGE DE SÉDIMENTS

CONSULTANT



DATE	2015-05-11
PROJETÉ	G. VALLIERES
CARTOGRAPHIE	P. JOHNSTON
REVISÉ	G. VALLIERES
APPROUVÉ	D. MILLETTE

NO. DU PROJET
14-13782

PHASE
16000

CONFIDENTIEL

FIGURE
1

TABLEAU 2B
 Résultats des analyses granulométriques et sédimentométriques

Station échantillonnage	Date	Coordonnées (NAD83)		Composition (%)			
		MTM X	MTM Y	Gravier (2-32 mm)	Sable (0,063-<2 mm)	Silt (3,9 - <63,0 µm)	Argile (<3,9 µm)
CAM-H-1500	2015-04-24	278 099.99	5 248 716.24	-	-	-	-
CAM-H-1501	2015-04-24	278 102.57	5 248 774.42	0.2	56.9	42.9	0.0
CAM-H-1502	2015-04-24	278 107.51	5 248 838.40	0.1	64.6	35.3	0.0
CAM-H-1503	2015-04-24	278 130.32	5 248 902.04	51.3	38.6	10.1	0.0
CAM-H-1504	2015-04-24	278 188.38	5 248 957.94	-	-	-	-
CAM-H-1505	2015-04-24	278 194.45	5 248 894.69	0.6	73.6	25.8	0.0
CAM-H-1506	2015-04-24	278 212.52	5 248 832.19	-	-	-	-
CAM-H-1507	2015-04-24	278 208.49	5 248 732.72	0.0	57.0	42.9	0.1
CAM-H-1508	2015-04-24	278 203.89	5 248 633.27	-	-	-	-

Note: mm = millimètre; µm = micromètre; - = aucun résultat disponible/ non analysé.

APPENDIX C

EXAMPLE OF ASCII FILE

CAP-AUX-MEULES
Harbour Dredging
Project N°: R.071850.001

APPENDIX C

File format (example):

- East Coordinates(metre)<tab>North Coordinates(metre)<tab>Depth(metre)

```
288183.24 5237654.78 3.79  
288181.90 5237652.29 3.80  
288183.81 5237652.86 3.67
```

N.B.: Depth is positive below chart datum.

APPENDIX D

ENVIRONMENTAL MITIGATION MEASURES

APPENDIX D
Environmental Mitigation Measures

Project component	Valued environmental component	Potential environmental effects of the project	Description of mitigation measures
Mobilization/ Demobilization	Invasive species	Introduction of invasive species in the aquatic environment	<p>The Contractor shall demonstrate that his floating equipment is free of invasive species with respect to their origin.</p> <p>Use of clean marine equipment stored on land before work is undertaken:</p> <ul style="list-style-type: none"> • For equipment that was cleaned and stored on land just before the inception of work, the Contractor needs to provide TC in writing with a list of such equipment, their storage site and the proposed date of streaming. TC must be able to ascertain whether the facilities were actually clean and stored on land before work is undertaken. <p>Where equipment is already in the water, the Contractor shall demonstrate that the equipment stayed along the coasts of Magdalen Islands in the last twelve (12) months or more; otherwise he must:</p> <ul style="list-style-type: none"> • Immediately before the equipment is mobilised to the place of work, provide a written inspection report certifying that the equipment is free of invasive species. Inspection report to be prepared by a qualified biologist experienced in the identification of benthic fauna and the sampling performed by divers. Report shall include, without limitation, the following information and data: list of inspected equipment (tugs, tow-barges, etc.), date and location of inspection, summary of sampling and identification protocols, a list of the samples, a table of results, and a certification pertaining to the occurrence or absence of invasive species. The report shall include photographs and bear the signature of the qualified biologist prior to submittal to the Project Manager along with other Contract documents needed before equipment is mobilised to the Magdalen Islands. • Should an occurrence of invasive species be confirmed in the inspection report, the Contractor is required to replace the equipment or to proceed, at own expense, with complete cleaning of the equipment. A description of the cleaning work performed must be included in the additional (post-cleaning) inspection report with all the relevant information herein mentioned. • TC reserves the right to seek a second expert opinion at any time. Should invasive species be observed, the Contractor shall suspend work and proceed, at own expense, with cleaning of the affected equipment and follow the above mentioned procedure.

Project component	Valued environmental component	Potential environmental effects of the project	Description of mitigation measures
	Migratory birds	Disturbance of migratory birds by moving machinery	<ul style="list-style-type: none"> Disturbing or destroying and taking the nest or eggs of migratory birds is prohibited.
	Quality of soils Soundscape Air quality	The movement of equipment could result in the contamination of soils, disturbance of the soundscape, and air quality if the machinery is in poor condition	<ul style="list-style-type: none"> Machinery to be in good working order (regular maintenance) and the noise level within applicable standards. Turn off engine of machinery when not in use.
	Surface water quality	The presence of workers causes the production of domestic sewage and waste that can deteriorate locally and temporarily, the quality of surface water	<ul style="list-style-type: none"> Provide on site sanitary facilities in sufficient quantity to prevent any dispersal of waste into the environment (lavatories, bins, containers, etc.).
	Health, safety and the environment Territory use and port activities Transport and navigation	Access to the harbour could be difficult because of the work and the presence of machinery. There are risks of injuries and accidental spills	<ul style="list-style-type: none"> Maintain continuous navigable access to the harbour. Establish a Health & Safety and Environmental plan and make presentation to all employees on site (start-up meeting). Plan to include potential environmental risks, the management of hazardous products on the site, the list and location of safety equipment and environmental emergency supplies, and the procedures in case of spill. Follow up on this plan throughout the duration of work. Make site safe and outline the work areas on land, if any, and of aquatic work if necessary. A Notice to Shipping will be issued by the promoter to inform users of the work period and zone of activity.
Dredging of sediments and rocks	Surface water quality	Physical alteration of the marine site, transient increase in turbidity due	<ul style="list-style-type: none"> Reduce the rate of rise of the bucket during excavation of sediments. Stop dredging activities when weather conditions are not favourable to prevent the dispersion of dredged

Project component	Valued environmental component	Potential environmental effects of the project	Description of mitigation measures
	Quality of sediments Bathymetry Aquatic life and habitat Species at risk Use of fishery resources Soundscape	to the resuspension of sediment and rock fragments, loss of living organisms	<ul style="list-style-type: none"> • or resuspended material beyond operations area. • Do not excavate sediments beyond the dredging template. • Dredging is prohibited from April 15 to May 31 to protect herring spawning. • When loading the barge, bring down the bucket as low as possible in the barge. • Avoid overloading the barge. • Do not use blasting to extract underwater rocks.
Transport of dredging spoil, by tow-barge or hopper dredge, to open water disposal site	Surface water quality	If dredged material is released, transient increase in turbidity occurs due to sediment resuspension	<ul style="list-style-type: none"> • Use watertight barges to avoid the release of sediment during transport. • Avoid transport under unfavourable weather conditions to prevent the risk of accidents or the spillage of spoil.
	Marine life and habitat Species at risk	Disturbance by noise and movement in the marine environment due to the increased traffic of tugs	<ul style="list-style-type: none"> • Use equipment in good working order (cf. Presence and use of machinery) • Travel by tugs to be done at low speed. • Optimize travel of equipment to minimize the number of round trips.
	Use of territory and port activities Transport and navigation	Increased traffic in the harbour due to dredging operations	<ul style="list-style-type: none"> • Coordinate the movement of equipment between the dredging site and the disposal site or the wharf in order prevent congestion in the access channel to the harbour. • Travel by tugs must be done at low speed to ensure safety during work. • Optimize travel of equipment to minimize the number of round trips and avoid overflowing barges to prevent sediment overflow. • A Notice to Shipping will be issued by the promoter to inform users of the work period and zone of activity.
Dumping at sea of dredging spoil	Surface water quality Quality of sediments	Physicochemical alteration of the site, transient increase in turbidity due to	<ul style="list-style-type: none"> • Discharge dredged material when weather conditions are favourable. • Reduce the speed of the barge at the disposal site and discharge sediments quickly through a bottom-opening equipment to help minimize fine sediment resuspension and to curtail dispersal.

Project component	Valued environmental component	Potential environmental effects of the project	Description of mitigation measures
	Marine life and habitat Species at risk Use of fishery resources	sediment resuspension and loss of living organisms	<ul style="list-style-type: none"> In order to protect the high concentration of American lobster larvae in the PBCM-1 site, sea dumping is prohibited between July 1st and August 31st.
	Bathymetry Transport and navigation	Physical alteration of the site	<ul style="list-style-type: none"> A Notice to Shipping will be issued by the promoter to inform users of the work period and zone of activity. Reduce the speed of the barge at the disposal site and discharge sediments quickly through a bottom-opening equipment to help minimize fine sediment resuspension and to curtail dispersal.
Use of machinery	Air quality	Emission of particles in the air Machinery exhaust emissions	<ul style="list-style-type: none"> Equipment to be in good working order (regular maintenance), and clean. Turn off engine of machinery when not in use.
	Soundscape	Increased noise during work	<ul style="list-style-type: none"> Machinery to be in good working order (regular maintenance) and the noise level within applicable standards. Turn off engine of machinery when not in use.
	Port activities Transport and navigation	Encroachment of navigation or traffic areas in the port by the machinery	<ul style="list-style-type: none"> Make site safe and outline the work areas on land, if any, and of aquatic work if necessary. Maintain continuous navigable access to the harbour. A Notice to Shipping will be issued by the promoter to inform users of the work period and zone of activity. Close coordination should be exercised between the Contractor, the operators, the work supervisor, the port management and TC in order to avoid disrupting operations within the port, the ferry activities and that of other vessels.
Waste management	Water quality Air quality Quality of soils Quality of life Marine life and habitat	Environmental contamination	<ul style="list-style-type: none"> Manage waste properly in accordance with applicable rules and regulations. Do not discharge hydrocarbons, solvents, thinners and any hazardous substances into waterways, and storm and sanitary sewer systems. Manage hazardous substances in accordance with applicable rules and regulations. All waste must be disposed of in accordance with regulations and may not be burned or buried on site.

Project component	Valued environmental component	Potential environmental effects of the project	Description of mitigation measures
Accidents and failures	Water quality Quality of soils and sediments Marine life and habitat Species at risk and habitat	Faulty operations or mistakes, equipment failures and tank leaks may cause the accidental spill of hazardous material into the environment	<ul style="list-style-type: none"> • The equipment must be inspected, in good working order, clean, and free of lubricant and fuel leaks. • Hydrocarbons will be carefully handled and stored more than 30 metres of the marine environment or provided with a secondary containment system to prevent accidental spills. • When refueling machinery, take all measures to minimize the risk of accidental spill. • A complete spill response kit must be readily accessible on the site and employees must be trained to respond to spills. • Make site safe and outline the work areas on land, if any, and of aquatic work if necessary. • Should a spill occur, the contaminated water, sediments or soils will be confined, characterized and recovered by a specialized firm and transported to a processing center approved by the MDDELCC in accordance with regulations. • Prefer floating equipment running on biodegradable oil specially designed for this type of operation. • In case of spill, immediately report the incident to the responsible authorities and respond quickly. Contact EC's emergency services (1-866-283-2333), the Canadian Coast Guard (1-800-363-4735) and the site supervisor.