

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
**Bid Receiving Public Works and Government
Services Canada/Réception des soumissions
Travaux publics et Services gouvernementaux
Canada**
John Cabot Building
10 Barters Hill, P.O. Box 4600
St. John's
Newfoundland and Labrador
A1C 5T2
Bid Fax: (709) 772-4603

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
PWGSC/TPSGC-Nfld Region/Real Property
John Cabot Building
10 Barters Hill, P.O. Box 4600
St. John's
Newfoundl
A1C 5T2

Title - Sujet Dredging - Branch, NL	
Solicitation No. - N° de l'invitation E0224-142564/A	Date 2014-02-28
Client Reference No. - N° de référence du client R.069444.001	GETS Ref. No. - N° de réf. de SEAG PW-\$PWD-010-6044
File No. - N° de dossier PWD-3-36204 (010)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2014-03-17	
Time Zone Fuseau horaire Newfoundland Daylight Saving Time NDT	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Chaulk, Patricia	Buyer Id - Id de l'acheteur pwd010
Telephone No. - N° de téléphone (709) 772-8357 ()	FAX No. - N° de FAX (709) 772-4603
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF PUBLIC WORKS AND GOVERNMENT SERVICES CANADA JOHN CABOT BLDG 6TH FL. 10 BARTERS HILL P.O.BOX 4600 ST JOHNS Newfoundland and Labrador A1C5T2 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée See Herein	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

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INVITATION TO TENDER

IMPORTANT NOTICE TO BIDDERS

INSURANCE TERMS

The Insurance Terms have been amended. Refer to the Supplementary Conditions.

R2940D CLAUSE IS CANCELLED AND SECTION 3.8 OF R2830D IS MODIFIED

Following the repeal of the Fair Wages and Hours of Labour Act, R2940D clause will be non applicable for contracts awarded after January 1st 2014. For contracts awarded prior to that date the clause remains applicable.

As a result section 3.8 of R2830D has been modified as indicated in Supplementary Conditions SC02

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R2410T GENERAL INSTRUCTIONS TO BIDDERS (GI) (2013-04-25)

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	Code of Conduct and Certification - Bid
GI02	Completion of Bid
GI03	Identity or Legal Capacity of the Bidder
GI04	Applicable Taxes
GI05	Capital Development and Redevelopment Charges
GI06	Listing of Subcontractors and Suppliers
GI07	Submission of Bid
GI08	Revision of Bid
GI09	Rejection of Bid
GI10	Bid Costs
GI11	Procurement Business Number
GI12	Compliance With Applicable Laws
GI13	Approval of Alternative Materials
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SUPPLEMENTARY CONDITIONS (SC)

SC01	Insurance Terms
SC02	Labour

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CONTRACT DOCUMENTS (CD)

BID AND ACCEPTANCE FORM (BA)

BA01 Identification
BA02 Business Name and Address of Bidder
BA03 The Offer
BA04 Bid Validity Period
BA05 Acceptance and Contract
BA06 Construction Time
BA07 Signature

APPENDIX 1 - COMBINED PRICE FORM

APPENDIX 2 - COMPLETE LIST OF EACH INDIVIDUAL WHO ARE CURRENTLY DIRECTORS OF THE BIDDER

ANNEX A - CERTIFICATE OF INSURANCE FORM

SPECIAL INSTRUCTIONS TO BIDDERS (SI)

SI01 CODE OF CONDUCT AND CERTIFICATIONS - RELATED DOCUMENTATION

By submitting a bid, the Bidder certifies that the Bidder and its affiliates are in compliance with the provisions as stated in Section 01 Code of Conduct and Certifications - Bid of Standard Instructions to Bidders R2410T (2013-04-25). The related documentation therein required will assist Canada in confirming that the certifications are true.

SI02 BID DOCUMENTS

1. The following are the bid documents:

- a. Invitation to Tender - Page 1;
- b. Special Instructions to Bidders;
- c. General Instructions to Bidders, R2410T (2013-04-25)
- 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 to Bidders 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>

3. Tenders received by fax will be accepted as official and must meet the following requirements

- a. Must be completed on the Bid and Acceptance Form
- b. Must include a cover page indicating

- Project number
- Solicitation number
- Bidder's name
- Closing Date and Time

- c. Must be received before tender closing time at fax number (709) 772-4603.

SI03 ENQUIRIES DURING THE SOLICITATION PERIOD

1. Enquiries regarding this bid must be submitted in writing to 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 G113 of R2410T, enquiries should be received no later than five (5) calendar 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

All bidders, before submitting their bid, are recommended to inspect and examine the site and its surroundings and satisfy themselves as to the form and nature of the work and materials necessary for the completion of the works. For further details refer to Specification, General Instructions 1.5 Familiarization with Site.

SI05 REVISION OF BID

A bid may be revised by letter or facsimile in accordance with GI08 of R2410T. The facsimile number for receipt of revisions is (709) 772-4603.

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. (709) 772-2319.

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 GI09 of R2410T.

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. Additional copies, up to a maximum of two (2), will be provided free of charge upon request by the Contractor. Obtaining more copies shall be the responsibility of the Contractor including costs.

SI10 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 PWGWS-TPSGC 506)

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

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Standard Acquisition Clauses and Conditions (SACC) Manual

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

Schedules of Wage Rates for Federal Construction Contracts

http://www.labour.gc.ca/eng/standards_equity/contracts/schedules/index.shtml

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/index-eng.html>

PWGSC Consent to a Criminal Record Verification (PWGSC-TPSGC 229)

<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/documents/229.pdf>

Construction and Consultant Services Contract Administration Forms Real Property Contracting

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

SUPPLEMENTARY CONDITIONS (SC)**SC01 INSURANCE TERMS****1) Insurance Contracts**

(a) The Contractor must, at the Contractor's expense, obtain and maintain insurance contracts in accordance with the requirements of the Certificate of Insurance. Coverage must be placed with an Insurer licensed to carry out business in Canada.

(b) 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.

2) Period of Insurance

(a) The policies required in the Certificate of Insurance must be in force from the date of contract award and be maintained throughout the duration of the Contract.

(b) The Contractor must be responsible to provide and maintain coverage for Products/Completed Operations hazards on its Commercial General Liability insurance policy, for a period of six (6) years beyond the date of the Certificate of Substantial Performance.

3) Proof of Insurance

(a) Before commencement of the Work, and no later than thirty (30) days after acceptance of its bid, the Contractor must deposit with Canada a Certificate of Insurance on the form attached herein.

(b) Upon request by Canada, the Contractor must provide originals or certified true copies of all contracts of insurance maintained by the Contractor pursuant to the Certificate of Insurance.

4) Insurance Proceeds

In the event of a claim, the Contractor must, without delay, do such things and execute such documents as are necessary to effect payment of the proceeds.

5) Deductible

The payment of monies up to the deductible amount made in satisfaction of a claim must be borne by the Contractor.

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SC02 LABOUR

Clause R2830D subsection GC3.8 has been modified as follows;

1. Title has been changed from "Labour and Fair Wages" to "Labour".
2. Delete subsection 1.
3. Following subsections must be renumbered accordingly.

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	R2810D (2013-04-25);
GC2 Administration of the Contract	R2820D (2012-07-16);
GC3 Execution and Control of the Work	R2830D (2010-01-11);
GC4 Protective Measures	R2840D (2008-05-12);
GC5 Terms of Payment	R2550D (2010-01-11);
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	R2884D (2008-05-12);
GC10 Insurance	R2900D (2008-05-12);

Supplementary Conditions
 Allowable Costs for Contract Changes Under GC6.4.1 R2950D (2007-05-25);
 Schedules of Wage Rates for Federal Construction Contracts;

 - e. any amendment issued or any allowable bid revision received before the date and time set for solicitation closing;
 - 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.

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BID AND ACCEPTANCE FORM (BA)

BA01 IDENTIFICATION

- 1) Description of the Work: **Dredging - Branch, NL**
2) Solicitation Number: **E0224-142564/A**
3) Project Number: **R.069444.001**

BA02 BUSINESS NAME AND ADDRESS OF BIDDER

Name: _____

Address: _____

Telephone: _____ Fax: _____ PBN: _____

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 INDICATED IN APPENDIX 1.**

BA04 BID VALIDITY PERIOD

The bid shall not be withdrawn for a period of thirty [30] 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 within one [1] week from the date of notification of acceptance of the offer.

BA07 SIGNATURE

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

Signature

Date

APPENDIX 1 - COMBINED PRICE FORM (1 page)

- 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.

LUMP SUM AMOUNT (LSA) Excluding applicable tax(es)	\$
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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.

Item	Specification Reference	Class of Labour, Plant or Material	Unit of Measure-ment	Estimated Quantity (EQ)	Price per Unit GST/HST extra (PU)	Extended amount (EQ x PU) GST/HST extra
1	35 20 23	Dredging	m ³	1,500	\$	\$
TOTAL EXTENDED AMOUNT (TEA) Excluding GST/HST						\$

TOTAL BID AMOUNT

TOTAL BID AMOUNT (LSA + TEA) Excluding applicable tax(es)	\$
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ANNEX A - CERTIFICATE OF INSURANCE FORM

(2 Pages Attached)

**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA
REAL PROPERTY CONTRACTING
NL DIVISION**

SPECIFICATION

Dredging - Branch, NL

Solicitation No.: E0224-142564



Contracting Officer:

Patricia Chaulk
Real Property Contracting
10 Barter's Hill, P.O. Box 4600
St. John's, NL A1C 5T2
Telephone: (709) 772-8357
Facsimile: (709) 772-4603

PUBLIC WORKS AND GOVERNMENT SERVICES CANADA
SPECIFICATION FOR DREDGING
BRANCH, NL

<u>Section</u>	<u>Title</u>	<u>Pages</u>
01 10 10	GENERAL INSTRUCTIONS	10
01 35 24	SPECIAL PROCEDURES ON FIRE SAFETY REQUIREMENTS	5
01 35 28	HEALTH AND SAFETY REQUIREMENTS	17
01 35 44	ENVIRONMENTAL PROTECTION PROCEDURES FOR MARINE WORK	14
01 50 00	TEMPORARY FACILITIES	3
01 56 00	TEMPORARY BARRIERS AND ENCLOSURES	2
01 74 11	CLEANING	1
01 74 21	CONSTRUCTION/DEMOLITION WASTE MANAGEMENT AND DISPOSAL	5
35 20 23	DREDGING	11
	 DRAWING - SITE PLAN	 1

-
- 1.1 SCOPE .1 The work covered under this contract consists of the furnishing of all plant, labour, equipment and material for Dredging at Branch, Newfoundland and Labrador, in strict accordance with specifications and accompanying drawings and subject to all terms and condition of contract.
- 1.2 DESCRIPTION OF WORK .1 In general, work under this contract consist of but will not necessarily be limited to the following:
.1 The dredging of approximately 1500 m³ of Class "B" material as shown on the drawings. All material will be disposed of at the approved disposal site.
- 1.3 SITE OF WORK .1 Work will be carried out at Branch, Newfoundland and Labrador in the location as shown on the accompanying drawings.
.2 Due to the location of this project, certain environmental conditions are in place for this project. No in water work after March 31,2012.
- 1.4 DATUM .1 Datum used for this project is Lowest Normal Tides (LNT) and is assumed to be 3.46 metres below Bench Mark PWC 9801.
.2 Bidders are advised to consult the Tide Tables issued by Fisheries and Oceans in order to make sure of the tidal conditions affecting work.
- 1.5 FAMILIARIZATION WITH SITE .1 Before submitting a bid, it is recommended that bidders visit the site and its surroundings to review and verify the form, nature and extent of the work, materials needed for the completion of the work, the means of access to the site, severity, exposure and uncertainty of weather, soil conditions, any accommodations they may require, and in general shall obtain all necessary information as to risks,
-

1.5 FAMILIARIZATION WITH SITE
(Cont'd)

(Cont'd)
contingencies and other circumstances which may influence or affect their bid. No allowance shall be made subsequently in this connection on account of error or negligence to properly observe and determine the conditions that will apply.

- .2 Contractors, bidders or those they invite to site are to review specification Section 01 35 28 - Health and Safety Requirements before visiting site. Take all appropriate safety measures for any visit to site, either before or after acceptance of bid.

1.6 CODES AND STANDARDS

- .1 Perform work in accordance with the latest edition of the National Building Code of Canada, FCC Standard 373 - Standard for Piers and Wharves (<http://www.hrsdc.gc.ca/en/lp/lp/fp/standards/373.shtml>), and any other code of provincial or local application including all amendments up to project bid closing date provided that in any case of conflict or discrepancy, the more stringent requirements shall apply.
- .2 Materials and workmanship must meet or exceed requirements of specified standards, codes and referenced documents.

1.7 TERM ENGINEER

- .1 Unless specifically stated otherwise, the term Engineer where used in the Specifications and on the Drawings shall mean the Departmental Representative as defined in the General Conditions of the Contract.

1.8 SETTING OUT WORK

- .1 Set grades and layout work in detail from control points and grades established by Departmental Representative.
- .2 Assume full responsibility for and execute complete layout of work to locations, lines and elevations indicated or as directed by Departmental Representative.

1.8 SETTING OUT
WORK
(Cont'd)

- .3 Provide devices needed to layout and construct work.
- .4 Supply such devices as straight edges and templates required to facilitate Departmental Representative's inspection of work.
- .5 Supply stakes and other survey markers required for laying out work.

1.9 COST BREAKDOWN

- .1 Before submitting first progress claim submit breakdown of Contract price in detail as directed by Departmental Representative and aggregating contract price. Departmental Representative will provide the required forms for application of progress payment.
- .2 Provide cost breakdown in same format as the numerical and subject title system used in this specification project manual and thereafter sub-divided into major work components or building systems as directed by Departmental Representative.
- .3 Upon approval by Departmental Representative, cost breakdown will be used as basis for progress payment.
- .4 All work items not designated in the unit price table as a measurement for payment, are to be included in the lump sum arrangement, as noted on the Bid and Acceptance Form.

1.10 WORK SCHEDULE

- .1 Submit within 7 work days of notification of acceptance of bid, a construction schedule showing commencement and completion of all work within the time stated on the Bid and Acceptance Form and the date stated in the bid acceptance letter.
- .2 Provide sufficient details in schedule to clearly illustrate entire implementation plan, depicting efficient coordination of tasks and resources, to achieve completion of work on time and permit effective monitoring of work progress in relation to established milestones.

1.10 WORK SCHEDULE .3
(Cont'd)

- As a minimum, work schedule to be prepared and submitted in the form of Bar (GANTT) Charts, indicating work activities, tasks and other project elements, their anticipated durations and planned dates for achieving key activities and major project milestones provided in sufficient details and supported by narratives to demonstrate a reasonable plan for completion of project within designated time, e.g., show target dates for dredging each area and groynes construction, if applicable. Generally Bar Charts derived from commercially available computerized project management system are preferred but not mandatory.
- .4 Submit schedule updates on a minimum monthly basis and more often, when requested by Departmental Representative, due to frequent changing project conditions. Provide a narrative explanation of necessary changes and schedule revisions at each update.
- .5 The schedule, including all updates, shall be to Departmental Representative's approval. Take necessary measures to complete work within approved time. Do not change schedule without Departmental Representative's approval.
- .6 All work on the project will be completed within the time indicated on the Bid and Acceptance Form.

1.11 ABBREVIATIONS .1

- Following abbreviations of standard specifications have been used in this specification and on the drawings:
CGSB - Canadian Government Specifications Board
CSA - Canadian Standards Association
NLGA - National Lumber Grades Authority
ASTM - American Society for Testing and Materials
- .2 Where these abbreviations and standards are used in this project, latest edition in effect on date of bid call will be considered applicable.

1.12 QUARRY AND
EXPLOSIVES

- .1 Make own arrangements with Provincial authorities and owners of private properties, for the quarrying and transportation of rock and all materials and machinery necessary for work over their property, roads or streets as case may be.

1.13 SITE
OPERATIONS

- .1 Arrange for sufficient space adjacent to project site for conduct of operations, storage of materials and so on. Exercise care so as not to obstruct or damage public or private property in area. Do not interfere with normal day-to-day operations in progress at site. All arrangements for space and access will be made by Contractor.
- .2 Remove snow and ice as required to maintain safe access in a manner that does not damage existing structures or interfere with the operations of others.

1.14 PROJECT
MEETINGS

- .1 Departmental Representative will arrange project meetings and assume responsibility for setting times and recording minutes.
- .2 Project meetings will take place on site of work unless so directed by the Departmental Representative.
- .3 Departmental Representative will assume responsibility for recording minutes of meetings and forwarding copies to all parties present at the meetings.
- .4 Have a responsible member of firm present at all project meetings.

1.15 PROTECTION

- .1 Store all materials and equipment to be incorporated into work to prevent damage by any means.
- .2 Repair or replace all materials or equipment damaged in transit or storage to the satisfaction of Departmental Representative and at no cost to Canada.

1.16 EXISTING
SERVICES

- .1 Where work involves breaking into or connecting to existing services, carry out work at times directed by governing authorities, with minimum of disturbance to site operations, pedestrian, vehicular traffic, tenant operations.
- .2 Before commencing work, establish location and extent of service lines in area of work and notify Departmental Representative of findings. There are existing light poles and power lines in the area of work that may cause problems in constructing the shore protection repairs.
- .3 Submit schedule to and obtain approval from Departmental Representative for any shut-down or closure of active service or facility. This includes disconnection of electrical power and communication services to tenant's operational areas. Adhere to approved schedule and provide notice to affected parties.
- .4 Provide temporary services when directed by Departmental Representative to maintain critical facility systems.
- .5 Provide adequate bridging over trenches which cross walkways or roads to permit normal traffic.
- .6 Where unknown services are encountered, immediately advise Departmental Representative and confirm findings in writing.
- .7 Protect, relocate or maintain existing active services as required. When inactive services are encountered, cap off in manner approved by authorities having jurisdiction over service. Record locations of maintained, re-routed and abandoned service lines.

1.17 DOCUMENTS
REQUIRED

- .1 Maintain at job site, one copy each of the following:
 - .1 Contract Drawings
 - .2 Specifications
 - .3 Addenda
 - .4 Reviewed Shop Drawings
 - .5 List of outstanding shop drawings

1.17 DOCUMENTS
REQUIRED
(Cont'd)

- .1 (Cont'd)
 - .6 Change Orders
 - .7 Other modifications to Contract
 - .8 Field Test Reports
 - .9 Copy of Approved Work Schedule
 - .10 Site specific Health and Safety Plan and other safety related documents
 - .11 Other documents as stipulated elsewhere in the Contract Documents.

1.18 PERMITS

- .1 Obtain and pay for all permits, certificates and licenses as required by Municipal, Provincial, Federal and other Authorities.
- .2 Provide appropriate notifications of project to municipal and provincial inspection authorities.
- .3 Obtain compliance certificates as prescribed by legislative and regulatory provisions of municipal, provincial and federal authorities as applicable to the performance of work.
- .4 Submit to Departmental Representative, copy of application submissions and approval documents received for above referenced authorities.
- .5 Submit to Departmental Representative, copy of quarry permit, if applicable, prior to start of quarry operations.
- .6 Comply with all requirements, recommendations and advise by all regulatory authorities unless otherwise agreed in writing by Departmental Representative. Make requests for such deviations to these requirements sufficiently in advance of related work.
- .7 Follow all Regulatory Approvals and Responses for this project.

1.19 EXISTING SUB-
SURFACE CONDITIONS

- .1 There is no Information pertaining to the existing sub-surface conditions at this location.

1.20 LOCATION OF
EQUIPMENT

- .1 Location of cleats, jib cranes, equipment, fixtures, power pedestals and outlets, shown or specified shall be considered as approximate. Actual location shall be as required to suit conditions at time of installation and as is reasonable. Obtain approval of Departmental Representative.
- .2 Locate equipment, fixtures and distribution systems to provide minimum interference and maximum usable space and in accordance with manufacturer's recommendations for safety, access and maintenance.
- .3 Inform Departmental Representative when impending installation conflicts with other new or existing components. Follow directives for actual location.
- .4 Submit field drawings to indicate relative position of various services and equipment when required by Departmental Representative.

1.21 FISH HABITAT

- .1 This work is being conducted in an area where fish habitat may be affected. Perform work to conform with rules and regulations governing fish habitat and in accordance with authorization for work or undertakings affecting fish habitat.
- .2 Contact the Department of Fisheries and Oceans detachment at least 48 hours in advance of starting any work on site.

1.22 NOTICE TO
SHIPPING/MARINERS

- .1 Notify the Marine Communications and Traffic Services' Centre, of Fisheries and Oceans Canada, at (709) 772-2083, ten (10) days prior to commencement and upon completion of the work, in order to allow for the issuance of Notices to Shipping/Mariners.
- .2 During construction any vessels or barges utilized must be marked in accordance with the provisions of the Canada Shipping Act Collision Regulations.

-
- 1.23 ACCEPTANCE .1 Prior to the issuance of the Certificate of Substantial Performance, in company with Departmental Representative, make a check of all work. Correct all discrepancies before final inspection and acceptance.
- 1.24 WORKS COORDINATION .1 Responsible for coordinating the work of the various trades, where the work of such trades interfaces with each other.
- .2 Convene meetings between trades whose work interfaces and ensure that they are fully aware of the areas and the extent of where interfacing is required. Provide each trade with the plans and specifications of the interfacing trade, as required, to assist them in planning and carrying out their respective work.
- .3 Canada will not be responsible for or held accountable for any extra costs incurred as a result of the failure to carry out coordination work. Disputes between the various trades as a result of their not being informed of the areas and extent of interface work shall be the sole responsibility of the General Contractor and shall be resolved at no extra cost to Canada. Be familiar with vessel movements and fishery activities in area affected by operations. Plan and execute Work in manner that will not interfere with fishing operations, marine operations and construction activities at wharf sites, or access to wharves by land or water.
- 1.25 CONTRACTOR'S USE OF SITE .1 Construction operations, including storage of materials for this contract, not to interfere with the fishing activity and/or operations at this harbour facility.
- .2 Responsible for arranging the storage of materials on or off site, and any materials stored at the site which interfere with any of the day to day activities at or near the site will be moved promptly at the Contractor's expense, upon request by Departmental Representative.
-

1.25 CONTRACTOR'S
USE OF SITE
(Cont'd)

- .3 Exercise care so as not to obstruct or damage public or private property in the area.
- .4 At completion of work, restore area to its original condition. Damage to ground and property will be repaired by Contractor. Remove all construction materials, residue, excess, etc., and leave site in a condition acceptable to Departmental Representative.

1.26 WORK
COMMENCEMENT

- .1 Mobilization to project site is to commence immediately after acceptance of bid and submission of Site Specific Safety Plan and insurance documentation, unless otherwise agreed by Departmental Representative.
- .2 Project work on site is to commence as soon as possible, with a continuous reasonable work force, unless otherwise agreed by Departmental Representative.
- .3 Weather conditions, short construction season, delivery challenges and the location of the work site may require the use of longer working days and additional work force to complete the project within the specified completion time.
- .4 Make every effort to ensure that sufficient material and equipment is delivered to site at the earliest possible date after acceptance of bid and replenished as required.

1.27 FACILITY
SMOKING ENVIRONMENT

- .1 Comply with smoking restrictions.

1.28 INTERPRETATION
OF DOCUMENTS

- .1 Supplementary to the Order of Precedence article of the General Conditions of the Contract, the Division 01 sections take precedence over the technical specification sections in other Divisions of the Specification Manual.

-
- 1.1 SECTION INCLUDES .1 Fire Safety Requirements.
.2 Hot Work Permit.
- 1.2 RELATED WORK .1 Section 01 35 28 - Health and Safety Requirements.
- 1.3 REFERENCES .1 Fire Protection Standards issued by Fire Protection Services of Human Resources Development Canada as follows:
.1 FCC No. 301-June 1982 Standard for Construction Operations (<http://www.hrsdc.gc.ca/en/lp/lo/fp/standards/301.shtml>).
.2 FCC No. 302-June 1982 Standard for Welding and Cutting (<http://www.hrsdc.gc.ca/en/lp/lo/fp/standards/302.shtml>).
.3 FCC standards, may also be viewed at the Regional Fire Protection Services' office (previously known as the Fire Commissioner of Canada) located at 99 Wyse Road, 8th Floor, Dartmouth, NS, Tel: (902) 426-6053.
- 1.4 DEFINITIONS .1 Hot Work defined as:
.1 Welding work.
.2 Cutting of materials by use of torch or other open flame devices.
.3 Grinding with equipment which produces sparks.
- 1.5 SUBMITTALS .1 Submit copy of Hot Work Procedures and sample of Hot Work permit to Departmental Representative for review, within 14 calendar days after notification of acceptance of bid.
- 1.6 FIRE SAFETY REQUIREMENTS .1 Implement and follow fire safety measures during Work. Comply with following:
.1 National Fire Code, 2005
.2 Fire Protection Standards FCC 301 and FCC 302.
-

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1.6 FIRE SAFETY
REQUIREMENTS
(Cont'd)

- .1 (Cont'd)
 - .3 Federal and Provincial Occupational Health and Safety Acts and Regulations as specified in Section 01 35 28.
- .2 In event of conflict between any provisions of above authorities the most stringent provision will apply. Should a dispute arise in determining the most stringent requirement, Departmental Representative will advise on the course of action to be followed.

1.7 HOT WORK
AUTHORIZATION

- .1 Obtain Departmental Representative's written "Authorization to Proceed" before conducting any form of Hot work on site.
- .2 To obtain authorization submit to Departmental Representative:
 - .1 Contractor's typewritten Hot Work Procedures to be followed on site as specified below.
 - .2 Description of the type and frequency of Hot Work required.
 - .3 Sample Hot Work Permit to be used.
- .3 Upon review and confirmation that effective fire safety measures will be implemented during performance of hot work, Departmental Representative will provide authorization to proceed as follows:
 - .1 Issue one written "Authorization to Proceed" covering the entire project for duration of work or;
 - .2 Separate work, or segregate certain parts of work, into individual entities. Each entity requiring a separately written "Authorization to Proceed" from Departmental Representative. Follow Departmental Representative's directives in this regard.
- .4 Requirement for individual authorization based on:
 - .1 Nature or phasing of work;
 - .2 Risk to Facility operations;
 - .3 Quantity of various trades needing to perform hot work on project or;
 - .4 Other situation deemed necessary by Departmental Representative to ensure fire safety on premises.

1.7 HOT WORK
AUTHORIZATION
(Cont'd)

- .5 Do not perform any Hot Work until receipt of Departmental Representative's written "Authorization to Proceed" for that portion of work.
- .6 In tenant occupied Facility, coordinate performance of Hot Work with Facility Manager through the Departmental Representative. When directed, perform Hot Work only during non-operative hours of Facility. Follow Departmental Representative's directives in this regard.

1.8 HOT WORK
PROCEDURES

- .1 Develop and implement safety procedures and work practices to be followed during the performance of Hot Work.
- .2 Procedures to include:
 - .1 Requirement to perform hazard assessment of site and immediate hot work area for each hot work event in accordance with Hazard Assessment and Safety Plan requirements of Section 01 35 28.
 - .2 Use of a Hot Work Permit system for each hot work event.
 - .3 The step by step process of how to prepare and issue permit.
 - .4 Permit shall be issued by Contractor's site Superintendent, or other authorized person designated by Contractor, granting permission to worker or subcontractor to proceed with hot work.
 - .5 Provision of a designated person to carryout a Fire Safety Watch for a minimum of 3060 minutes immediately upon completion of the hot work.
 - .6 Compliance with fire safety codes and standards specified herein and occupational health and safety regulations specified in Section 01 35 28.
- .3 Generic procedures, if used, must be edited and supplemented with pertinent information tailored to reflect specific project conditions. Clearly label as being the Hot Work Procedures applicable to this contract.

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1.8 HOT WORK
PROCEDURES
(Cont'd)

- .4 Hot Work Procedures shall clearly establish worker instructions and allocate responsibilities of:
 - .1 Worker(s),
 - .2 Authorized person issuing the Hot Work Permit,
 - .3 Fire Safety Watcher,
 - .4 Subcontractors and Contractor.
- .5 Brief all workers and subcontractors on Hot Work Procedures and Permit system established for project. Stringently enforce compliance.
 - .1 Failure to comply with the established procedures may result in the issuance of a Non-Compliance Notification at Departmental Representative's discretion with possible disciplinary measures imposed as specified in Section 01 35 28.

1.9 HOT WORK
PERMIT

- .1 Hot Work Permit to include, as a minimum, the following data:
 - .1 Project name and project number.
 - .2 Building name, address and specific room or area where hot work will be performed.
 - .3 Date when permit issued.
 - .4 Description of hot work type to be performed.
 - .5 Special precautions required, including type of fire extinguisher needed.
 - .6 Name and signature of person authorized to issue the permit.
 - .7 Name of worker (clearly printed) to which the permit is being issued.
 - .8 Time Duration that permit is valid (not to exceed 8 hours). Indicate start time and date, and completion time and date.
 - .9 Worker signature with date and time upon hot work termination.
 - .10 Specified time period requiring safety watch.
 - .11 Name and signature of designated Fire Safety Watcher, complete with time and date when safety watch terminated, certifying that surrounding area was under continual surveillance and inspection during the full watch time period specified in Permit and commenced immediately upon completion of Hot Work.

1.9 HOT WORK
PERMIT
(Cont'd)

- .2 Permit to be typewritten form. Industry Standard forms shall only be used if all data specified above is included on form.
- .3 Each Hot Work Permit to be completed in full and signed as follows:
 - .1 Authorized person issuing Permit before hot work commences.
 - .2 Worker upon completion of Hot Work.
 - .3 Fire Safety Watcher upon termination of safety watch.
 - .4 Returned to Contractor's Site Superintendent for safe keeping.

1.10 DOCUMENTS
ON SITE

- .1 Keep Hot Work Permits and Hazard assessment documentation on site for duration of Work.
- .2 Upon request, make available to Departmental Representative or to authorized safety representative for inspection.

-
- 1.1 RELATED WORK .1 Section 01 35 24 - Special Procedures on Fire Safety Requirements.
- 1.2 SUBMITTALS .1 Submit to Departmental Representative copies of the following documents, including updates:
- .1 Site Specific Health and Safety Plan.
 - .2 Building Permit, compliance certificates and other permits obtained.
 - .3 Reports or directions issued by Federal and Provincial Inspectors and other Authorities having jurisdiction.
 - .4 Accident or Incident Reports.
 - .5 MSDS data sheets.
 - .6 Name of Contractor's representative designated to perform full time health and safety supervision on site.
 - .7 Name of person designated as Health and Safety Site Coordinator.
 - .8 Letter of Good Standing/Certificate of Clearance form the provincial Workers Compensation Board.
- .2 Medical Surveillance: Obtain and maintain worker medical surveillance documentation for work posing a potential health hazard to workers as stipulated in Federal or Provincial Occupational Safety and Health Regulations. Upon request, submit copy of documentation to Departmental Representative.
- .3 Upon request by Departmental Representative, submit reports and other documentation as stipulated to be produced and maintained by Federal and Provincial Occupational Health and Safety Regulations and as specified herein.
- .4 Submit above documents in accordance with the submittal procedures specified.
- 1.3 COMPLIANCE REQUIREMENTS .1 Comply with the Occupational Health and Safety Act for the Province of Newfoundland and Labrador, and the Occupational Health and Safety Regulations made pursuant to the Act.
- .2 Comply with Canada Labour Code Part II, and the Canada Occupational Safety and Health
-

1.3 COMPLIANCE
REQUIREMENTS
(Cont'd)

- .2 (Cont'd)
Regulations made under Part II of the Canada Labour Code.
- .3 Observe and enforce construction safety measures required by:
 - .1 2005 National Building Code of Canada, Part 8.
 - .2 Provincial Worker's Compensation Board.
 - .3 Municipal statutes and ordinances.
- .4 In event of conflict between any provisions of above authorities the most stringent provision will apply. Should a dispute arise in determining the most stringent requirement, Departmental Representative will advise on the course of action to be followed.
- .5 A copy of the Canada Labour Code Part II may be obtained by contacting:
Canadian Government Publishing
Public Works and Government Services Canada
Ottawa, Ontario, K1A 0S9 Tel: (819) 956-4800
(1-800-635-7943) Publication No. L31-85/2000 E or F)
- .6 Maintain Workers Compensation Coverage for duration of Contract. Submit Letter of Good Standing to Departmental Representative at time of submitting the Project Health and Safety Plan and with each Request for Progress Payment.

1.4 RESPONSIBILITY

- .1 Be responsible for health and safety of persons on site, of property and for protection of persons and public circulating adjacent to work operations to extent that they may be affected by conduct of the Work.
 - .2 Enforce compliance by all workers, sub-contractors and other persons granted access to work site with safety requirements of Contract Documents, applicable Federal, Provincial, and local statutes, regulations, and ordinances, and with site specific Health and Safety Plan.
-

1.5 SITE CONTROL
AND ACCESS

- .1 Control work site and entry points to construction areas.
 - .1 Delineate and isolate construction areas from other areas of site Facility by use of appropriate means.
 - .2 Post notices and signage at entry points and at other strategic locations identifying entrance onto site to be restricted to authorized persons only.
 - .3 Signage must be professionally made, bilingual in both official languages or display internationally understood graphic symbols.
- .2 Approve and grant access to site only to workers and authorized persons.
 - .1 Immediately stop non-authorized persons from circulating in construction areas and remove from site.
 - .2 Provide site safety orientation to all persons before granting access. Advise of site conditions, hazards and mandatory safety rules to be observed on site.
- .3 Secure site at night time to extent required to protect against unauthorized entry. Provide security guard where protection cannot be achieved by other means.
- .4 Ensure persons granted access to site wear appropriate personal protective equipment (PPE) suitable to work and site conditions.
 - .1 Provide such PPE to authorized persons who require access to perform inspections or other approved purposes.

1.6 PROTECTION

- .1 Carry out work placing emphasis on health and safety of the Public, Facility personnel, construction workers and protection of the environment.
- .2 Erect safety barricades, lights and signage on site to effectively delineate work areas, protect pedestrian and vehicular traffic around and adjacent to work, and to create a safe working environment.
 - .1 Erect fences, hoarding, protective barriers and temporary lighting as required.

1.6 PROTECTION
(Cont'd)

- .2 (Cont'd)
 - .1 (Cont'd)
See Section 01 56 00 for minimum acceptable barricades.
 - .3 Should unforeseen or peculiar safety related hazard or condition become evident during performance of work, immediately take measures to rectify the situation and prevent damage or harm. Advise Departmental Representative verbally and in writing.

1.7 PERMITS

- .1 Obtain building permit, licenses, compliance certificates and other permits as specified in Section 01 10 10 before and during progress of work. Post on site.
- .2 Where particular permit or compliance certificate cannot be obtained at the required stage of work, notify Departmental Representative in writing and obtain Departmental Representative's approval to proceed prior to carrying out that portion of work.

1.8 HAZARD
ASSESSMENTS

- .1 Conduct site specific health and safety hazard assessment before commencing project and during course of work identifying risks and hazards resulting from site conditions, weather conditions and work operations.
 - .1 Perform on-going assessments addressing new risks and hazards as work progresses including when new subtrade or sub-contractor arrives on site.
 - .2 Also, conduct assessment when the scope of work has been changed by Change Order and when potential hazard or weakness in current health and safety practices are identified by Departmental Representative or by an authorized safety representative.
- .2 Record results in writing and address in Health and Safety Plan.
- .3 Keep copy of all assessments on site.

1.9 PROJECT/SITE
CONDITIONS

- .1 The following are known or potential project related health, environmental and safety hazards at site which must be properly managed if encountered during course of work:
 - .1 Existing hazardous products stored used by Facility personnel are:
 - .1 Sea bottom soils may contain contaminants that require it to be transported to approved waste disposal sites.
 - .2 Safety hazards due to existing site conditions and conduct of work adjacent inside operational Facility are:
 - .1 Fishing vessels using the harbour.
 - .3 The following are known or potential project related safety hazards at site:
 - .1 Working in close proximity of water.
 - .2 Use of water crafts and floating platforms.
 - .3 Wet and slippery conditions.
 - .4 Inclement weather.
 - .5 Potential structural weakness of existing structures.
 - .6 Heavy equipment activity in the area.
 - .7 Heavy lifting.
 - .8 Working at heights.
 - .9 Cutting tools and other construction power tools.
 - .10 Overhead power/utility lines.
 - .11 Risk of electric shock.
 - .12 Vehicular and pedestrian traffic.
 - .13 Confined spaces.
- .2 Above list shall not be construed as being complete and inclusive of potential health, and safety hazards encountered during work. Include above items into hazard assessment process.
- .3 Obtain from Departmental Representative, copy of MSDS Data sheets for existing hazardous products stored on site or used by Facility personnel.

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1.10 HEALTH AND
SAFETY MEETINGS

- .1 Attend pre-construction health and safety meeting conducted by Departmental Representative. Have following persons in attendance:
 - .1 Site Superintendent.
 - .2 Contractor's designated Health and Safety Site Supervisor.
 - .3 Health and Safety Site Coordinator.
 - .4 Departmental Representative will advise of date, time and location.
- .2 Conduct health and safety meetings and tool box briefings on site. Hold on a regular and pre-scheduled basis during entire work in accordance with requirements and frequency as stipulated in provincial Occupational Health and Safety Regulations.
 - .1 Keep workers informed of potential hazards and provide safe work practices and procedures to be followed.
 - .2 Take written minutes and post on site.
 - .3 Conduct formal meetings on a minimum monthly basis.

1.11 HEALTH AND
SAFETY PLAN

- .1 Develop written site specific Project Health and Safety Plan, based on hazard assessments, prior to commencement of work.
 - .1 Submit copy to Departmental Representative within 7 calendar days of acceptance of bid.
 - .2 Submit updates as work progresses.
- .2 Health and Safety Plan shall contain three (3) parts with following information:
 - .1 Part 1 - Hazards: List of individual health risks and safety hazards identified by hazard assessment process.
 - .2 Part 2 - Safety Measures: Engineering controls, personal protective equipment and safe work practices used to mitigate hazards and risks listed in Part 1 of Plan.
 - .3 Part 3a: Emergency Response: standard operating procedures, evacuation measures and emergency response in the occurrence of an accident, incident or emergency.
 - .1 Include response to all hazards listed in Part 1 of Plan.
 - .2 Evacuation measures to complement the Facility's existing Emergency

1.11 HEALTH AND
SAFETY PLAN
(Cont'd)

.2 (Cont'd)

.3 Part 3a: (Cont'd)

.2 (Cont'd)

Response and Evacuation Plan. Obtain pertinent information from Departmental Representative.

.3 List names and telephone numbers of officials to contact including:

.1 General Contractor and all Subcontractors.

.2 Federal and Provincial Departments as stipulated by laws and regulations of authorities having jurisdiction and local emergency resource organizations, as needed base on nature of emergency.

.3 Officials from PWGSC and site Facility Management. Departmental Representative will provide list.

.4 Part 3b - Site Communications:

.1 Procedures used on site to share work related safety issues between workers, subcontractors, and General Contractor.

.2 List of critical tasks and work activities, to be communicated with the Facility Manager, which has risk of affecting tenant operations, or endangering health and safety of Facility personnel and the general public. Develop list in consultation with the Departmental Representative.

.3 Prepare Health and Safety Plan in a three column format, addressing the three parts specified above, as follows:

Column 1	Column 2	Column 3
Part 1	Part 2	Part 3a/3b
Identified Hazards	Safety Measures	Emergency Response & Site Communications

.4 Develop Plan in collaboration with subcontractors. Address work activities of all trades. Revise and update Plan as subcontractors arrive on site.

.5 Implement and enforce compliance with requirements of Plan for full duration of work to final completion and demobilization from site.

1.11 HEALTH AND
SAFETY PLAN
(Cont'd)

- .6 As work progresses, review and update Plan. Address additional health risks and safety hazards identified by on-going hazard assessments.
- .7 Post copy of Plan and updates, on site.
- .8 Submission of the Health and Safety Plan and updates, to the Departmental Representative, is for review and information purposes only. Departmental Representative's receipt, review and any comments made of the Plan shall not be construed to imply approval in part, or in hold, of such Plan by Departmental Representative, and shall not be interpreted as a warranty of being complete and accurate, or as a confirmation that all health and safety requirements of the Work, have been addressed, and that it is legislative compliant. Furthermore, Departmental Representative's review of the Plan shall not relieve the Contractor of any of his legal obligations for Occupational Health and Safety provisions specified as part of the Work and those required by provincial legislation or those which would otherwise be applicable to the site of the work.

1.12 SAFETY
SUPERVISION AND
INSPECTIONS

- .1 Designate one person to be present on site at all times, responsible for supervising health and safety of the Work.
 - .1 Person to be competent in Occupational Health and Construction Safety as defined in the Provincial Occupational Health and Safety Act.
- .2 Assign responsibility, obligation and authority to such designated person to stop work as deemed necessary for reasons of health and safety.
- .3 Conduct regularly scheduled informal safety inspections of work site on a minimum bi-weekly basis.
 - .1 Note deficiencies and remedial action taken in a log book or diary.

1.12 SAFETY
SUPERVISION AND
INSPECTIONS
(Cont'd)

- .4 Conduct Formal Inspections on a minimum monthly basis.
 - .1 Use standardized safety checklist forms.
 - .2 Prepare written report of each inspection. Document deficiencies, remedial action needed and assign responsibility for rectification to appropriate subcontractor or worker.
 - .3 Distribute monthly reports to subcontractors for their pursuance.
 - .4 Follow-up and ensure appropriate action and corrective measures are taken.
- .5 Cooperate with site's Health and Safety Site Coordinator responsible for the entire site, should one be designated by Departmental Representative.
- .6 Keep inspection reports on site.

1.13 TRAINING

- .1 Ensure that all workers and other persons granted access to site are competently trained and knowledgeable on:
 - .1 Safe use of tools and equipment.
 - .2 How to wear and use personal protective equipment (PPE).
 - .3 Safe work practices and procedures to be followed in carrying out work.
 - .4 Site conditions and minimum safety rules to be observed on site, as given at site orientation session.
- .2 Maintain evidence and records of worker training.

1.14 MINIMUM
SITE SAFETY RULES

- .1 Notwithstanding the requirement to abide by federal and provincial health and safety regulations, the following safety rules shall be considered minimum requirements to be obeyed by all persons granted site access:
 - .1 Wear personnel protective equipment (PPE) appropriate to function and task on site; the minimum requirements being hard hat, safety footwear and eye protection.
 - .2 Immediately report unsafe activity or condition at site, near-miss accident, injury and damage.

1.14 MINIMUM
SITE SAFETY RULES
(Cont'd)

- .1 (Cont'd)
 - .3 Maintain site in tidy condition.
 - .4 Obey warning signs and safety tags.
- .2 Brief workers on site safety rules and on disciplinary measures to be taken by Departmental Representative for violation or non-compliance of such rules. Post rules on site.
- .3 The following actions or conduct by Contractor, workers and sub-contractors will be considered as non conformance with the health and safety requirements of the contract for which a Non-compliance Notification will be issued to the General Contractor by the Departmental Representative:
 - .1 Failure to follow the minimum site safety rules specified above.
 - .2 Negligence resulting in serious injury or major property damage.
 - .3 Deliberate non-compliance with Federal and Provincial Acts and Regulations.
 - .4 Falsification of information in Workers Compensation Reports, safety reports and other health and safety related documents submitted to Departmental Representative or to Authority having jurisdiction.
 - .5 Possession of firearms on site.
 - .6 Possession of non-prescriptive illegal drugs or alcohol.
 - .7 Action, or lack thereof, resulting in the issuance of Warnings, Fines or Stop Work Orders from a Provincial Authority having jurisdiction.
 - .8 Violation of other specified health and safety rules and requirements as determined by Departmental Representative.
- .4 See elsewhere in this section for details on Non-Compliance Notifications and resulting disciplinary measures.

1.15 ACCIDENT
REPORTING

- .1 Investigate and report the following incidents and accidents:
 - .1 Those as required by Provincial Occupational Safety and Health Act and Regulations.

1.15 ACCIDENT
REPORTING
(Cont'd)

- .1 (Cont'd)
- .2 Injury requiring medical aid as defined in the Canadian Dictionary of Safety Terms-1987, published by the Canadian Society of Safety Engineers (C.S.S.E) as follows:
 - .1 Medical Aid Injury: any minor injury for which medical treatment was provided and the cost of which is covered by Workers' Compensation Board of the province in which the injury was incurred.
 - .3 Property damage in excess of \$5000.00.
 - .4 Interruption to Facility operations with potential loss to a Federal Department in excess of \$5000.00.
 - .5 Those which require notification to Workers Compensation Board or other regulatory agencies as stipulated by applicable law or regulations.
- .2 Send written report to Departmental Representative for all above cases.

1.16 TOOLS AND
EQUIPMENT SAFETY

- .1 Routinely check and maintain tools, equipment and machinery for safe operation.
- .2 Conduct checks as part of site safety inspections. When requested, submit proof that checks and maintenance have been carried out.
- .3 Tag and immediately remove from site items found faulty or defective.

1.17 HAZARDOUS
PRODUCTS

- .1 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS).
- .2 Keep MSDS data sheets for all products delivered to site. Post on site. Submit copy to Departmental Representative upon receipt.
- .3 On building renovation projects where work is within or immediately adjacent to occupied areas, also post copy of data sheets in a public location accessible to Facility personnel.

1.18 BLASTING

- .1 Blasting or other use of explosives is not permitted without prior written instructions from Departmental Representative.
- .2 Do blasting operations in accordance with local and provincial codes.

1.19 POWDER
ACTUATED DEVICES

- .1 Use powder actuated fastening devices only after receipt of written permission from Departmental Representative.

1.20 CONFINED
SPACES

- .1 Carry out work in confined spaces in compliance with:
 - .1 Provincial Occupational Safety and Health Regulations; and
 - .2 Canada Occupational Safety and Health Regulations (COSH) made under the Canada Labour Code - Part II.
- .2 Conduct hazard assessment and address in Safety Plan before entering confined space.
- .3 Obtain "Entry Permit" from Facility management before entering a Facility's known confined space in accordance with Part XI, Section 11.3, of COSH Regulations. Keep copy of permits received.
- .4 Provide and maintain equipment and PPE as required for the safety and emergency evacuation of persons entering confined spaces.
- .5 Provide training to persons who will be entering and to those persons who will be assisting in the confined space entry process. Training to be specialized instructions beyond (basic confined space entry information) as required to suit type and conditions of confined space.
- .6 Safety for Inspectors:
 - .1 Upon request, provide PPE and training to Departmental Representative and to other authorized persons, for the purpose of entering confined space to conduct inspections.

-
- 1.20 CONFINED SPACES
(Cont'd)
- .6 Safety for Inspectors: (Cont'd)
.2 Be responsible for the efficacy of the equipment and safety of such persons during their entry and occupancy in the confined space.
- 1.21 POSTING OF DOCUMENTS
- .1 Post on site safety documentation as stipulated by Authorities having jurisdiction and as specified herein. Place in a common visible location.
- 1.22 SITE RECORDS
- .1 Maintain on site a copy of all health and safety documentation and reports specified to be produced as part of the work and received from authorities having jurisdiction.
- .2 Upon request, make available to Departmental Representative, or authorized safety representative, for review. Provide copy when directed by Departmental Representative.
- 1.23 NON-COMPLIANCE AND DISCIPLINARY MEASURES
- .1 Immediately address and correct health and safety violations and non-compliance issues.
- .2 Negligence or failure to follow occupational health and safety provisions specified in the Contract Documents and of those of applicable laws and regulations could result in disciplinary measures taken by the Departmental Representative against the General Contractor.
- .3 PWGSC uses a system of Non-Compliance Notifications and Disciplinary Measures on projects as follows:
.1 A non-compliance notification is issued to the General Contractor, by the Departmental Representative, whenever there is a violation or non-compliance of the project's health and safety requirements and of those of Provincial and Federal regulations by any worker, subcontractor or other person to whom the Contractor has granted access to the work site.
-

1.23 NON-COMPLIANCE .3
AND DISCIPLINARY
MEASURES
(Cont'd)

(Cont'd)

.2 Non-compliance notifications are progressive in nature resulting in disciplinary measures imposed depending on the frequency, nature and severity of the infraction.

.3 Disciplinary measures could include:

.1 Removal of the offending person or party from site;

.2 Financial penalties in the form of progress payment reduction or holdback assessments made against the Contract and;

.3 Taking the Work Out of Contractor's Hands in accordance with the General Conditions.

.4 Departmental Representative will make final decision as to what constitutes a violation and when to issue a Non-compliance Notification.

.5 Non-compliance Notifications issued by Departmental Representative shall not be construed as to overrule or disregard warnings, orders and fines levied against Contractor by a regulatory agency having jurisdiction.

.6 Details of the Non-compliance Notification and Disciplinary Measures system will be provided by Departmental Representative upon acceptance of bid and prior to commencement of work.

.7 Each non-compliance notification issued is given a numerical rating based on a three level numbering system. Each level is progressive in nature to reflect:
.1 The seriousness of the infraction as viewed by the Departmental Representative.
.2 The degree of disciplinary action which will be taken by the Departmental Representative.

.8 Numerical ratings are as follows:

.1 Non-compliance Notification-Level No.1
Rating:

.1 Situation: occurrence of a first time infraction by a person or party on site.

1.23 NON-COMPLIANCE .8
AND DISCIPLINARY
MEASURES
(Cont'd)

Numerical ratings are as follows: (Cont'd)

.1 (Cont'd)

.2 Action: verbal warning to General Contractor, documented in Departmental files and copy sent to the General Contractor.

.2 Non-compliance Notification-Level No.2
Rating:

.1 Situation:

.1 The second occurrence of a previous infraction by the same person or party on site or;

.2 Accumulation of several level-1 notifications for different infractions by the same person or party on site or;

.3 Non-action on the part of the Contractor or subcontractor to rectify non-compliance infractions previously identified in one or several level-1 notifications or;

.4 Violation or non observance of a Federal or Provincial safety Law or Regulation by subcontractor or Contractor or;

.5 Negligence by a person or party resulting in injury or major property damage.

.2 Action: written notice to General Contractor complete with an order for immediate remedial action to be taken. Depending on the severity of the offense, the order may include request for the immediate removal of the offending person or party from site.

.3 Non-compliance Notification-Level No.3

Rating:

.1 Situation:

.1 Continued and repeated non-compliance with health and safety requirements by the General Contractor or by subcontractor(s) or;

.2 The occurrence of a serious accident on site resulting in serious bodily injury or death.

.2 Action:

.1 Formal letter issued to General Contractor with an order to "Immediately Stop Work" until so notified to proceed.

1.23 NON-COMPLIANCE .8
AND DISCIPLINARY
MEASURES
(Cont'd)

Numerical ratings are as follows: (Cont'd)

.3 (Cont'd)

.2 Action: (Cont'd)

.2 Review of all non-compliance and/or accident occurrences in the project with possible investigation by the Department of PWGSC.

.3 Based on outcome of the review/investigation, Work could be suspended or taken out of the Contractor's hands in accordance with the General Conditions.

.3 The term "serious accident" used herein shall have the same meaning as defined in the Canadian Dictionary of Safety Terms - 1987 issue from the Canadian Society of Safety Engineers (C.S.S.E).

- .9 Decision on which rating level to be placed on any given Non-Compliance Notification will be determined solely by Departmental Representative.
- .10 Further details on the disciplinary system will be provided at the pre-construction Health and Safety meeting after Contract award.
- .11 Be responsible to fully brief workers and subcontractors on the operation and importance of this system.

1.24 DIVING
OPERATIONS

- .1 All diving work to comply fully with the requirements of CSA Z275.2-04, "Occupational Safety Code for Diving Operations", CSA Z275.4-02, "Competency Standards for Diving Operations" and CSA Z180.1-00, "Compressed Breathing Air and Systems."
- .2 Dive personnel must meet the minimum competency requirements of the CSA Z275.4-02 (R2008) and all divers must possess a valid Category 1 Diving Certificate or an Unrestricted Surface-supplied Certificate.
- .3 Diving in free-swim mode is not permitted at the work site.

1.24 DIVING
OPERATIONS
(Cont'd)

- .4 Divers must have a current (less than one year) validated medical examination certificate(s) from a licensed Diving Physician in Newfoundland and Labrador who is knowledgeable and competent in diving and hyperbaric medicine, for all dives.

1.1 RELATED SECTIONS .1 Waste Management and Disposal: Section 01 74 21.

- 1.2 REFERENCES
- .1 WHMIS: Workplace Hazardous Materials Information System, Health Canada.
 - .2 Transport Canada, Transportation of Dangerous Goods Regulations including SOR/2011-210 (Amendment 10) and SOR/2011-239 (Amendment 8), <http://www.tc.gc.ca/eng/tdg/safety-menu.htm> 1-866-814-1477.
 - .3 Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters, Department of Fisheries and Oceans Canada, 1998.
 - .4 MBCA: Migratory Birds Convention Act, Environment Canada, 1994, <http://laws-lois.justice.gc.ca/eng/acts/M-7.0/>.
 - .5 Canadian Coast Guard Regulations, Department of Fisheries and Oceans Canada, http://www.ccg-gcc.gc.ca/eng/Ccg/atn_Laws.
 - .6 Canadian Shipping Act, Transport Canada, 2001, <http://tc.gc.ca/eng/acts-regulations/acts-2001c26.htm>.
 - .7 AWPA: American Wood Protection Association, <http://www.awpa.com/>.

- 1.3 DEFINITIONS
- .1 Hazardous Material: Product, substance, or organism that is used for its original purpose; and that is either dangerous goods or a material that may cause adverse impact to the environment or adversely affect health of persons, animals, or plant life when released into the environment.
 - .2 Wetlands: land where the water table is at, near or above the surface or which is saturated for a long enough period to promote such features as wet-altered soils and water tolerant vegetation. Wetlands include organic wetlands or "peatlands," and mineral wetlands

1.3 DEFINITIONS
(Cont'd)

- .2 Wetlands: (Cont'd)
or mineral soil areas that are influenced by
excess water but produce little or no peat
- .3 Watercourse: refers to the bed and shore of a
river, stream, lake, creek, pond, marsh,
estuary or salt-water body that contains water
for at least part of each year.
- .4 Alien species: refers to a species or
subspecies introduced outside its normal
distribution whose establishment and spread
threaten ecosystems, habitats or species with
economic or environmental harm.
- .5 Buffer zone: a vegetated land that protects
watercourses from adjacent land uses. It
refers to the land adjacent to watercourses,
such as streams, rivers, lakes, ponds, oceans,
and wetlands, including the floodplain and the
transitional lands between the watercourse and
the drier upland areas.

1.4 TRANSPORTATION

- .1 Transport hazardous materials and hazardous
waste in compliance with Federal
Transportation of Dangerous Goods Act.
 - .2 Do not overload trucks when hauling material.
Secure contents against spillage.
 - .3 Maintain trucks clean and free of mud, dirt
and other foreign matter.
 - .4 Avoid potential release of contents and of
any foreign matter onto highways, roads and
access routes used for the Work. Take extra
care when hauling dredged material and other
hazardous materials. Immediately clean any
spillage and soils.
 - .5 Before commencement of work, advise the
Departmental Representative of the existing
roads and temporary routes proposed to be used
to access work areas and to haul material to
and from the site, including roads to the
dredged disposal field.
-

1.5 DISPOSAL OF
DREDGED MATERIAL

- .1 Obtain applicable permit from the Department of the Environment for the Province of Newfoundland & Labrador and stringently follow all directives and procedures stipulated in permit for transportation and disposal of dredged material to approved disposal site.
- .2 Obtain applicable permit from the Department of the Environment for the Province of Nova Scotia for transportation and disposal of dredged material. Obtain approval from Departmental Representative of site selected for disposal.
 - .1 Site selection must meet following criteria:
 - .1 Water that decants from the disposed dredge spoil shall not enter any waterways.
 - .2 Site should allow for diffuse dispersion or diversion onto a field or woodland but not into drainage ditches that would carry water to a waterway.
 - .3 Locate on-land disposal site no closer than:
 - .1 30.5 meters from a surface watercourse or a domestic water supply.
 - .2 30.5 meters from a common road or public highway.
 - .3 45.7 meters from a residential or commercial building, unless a lesser distance is approved by the landowner.
- .3 Eliminate free board spillage when excavating, loading and hauling dredged material.
- .4 Do not overload trucks when hauling dredged material or other hazardous material. Secure contents against spillage. Clean ground spills to extent as directed by authority having jurisdiction and by Departmental Representative.
- .5 Obtain Departmental Representative's approval of the proposed route to be used to haul dredged material to the disposal field site.
- .6 Place and spread dredged material at the disposal field in a uniform and well graded manner. Minimize height and slopes of the

1.5 DISPOSAL OF
DREDGED MATERIAL
(Cont'd)

- .6 (Cont'd)
disposed material. Match slopes and contours of the existing surrounding terrain as much as possible following grades indicated as directed by Departmental Representative.
- .7 Control disposal and runoff of water containing suspended materials or other harmful substances in accordance with requirements of authority having jurisdiction.
- .8 Suction Dredging:
 - .1 Routinely inspect pipe for any potential breach in the sediment train and keep in good leak free condition at all time.
 - .2 Should leakage occur along the pipeline immediately cease dredging operations and repair leak.

1.6 HAZARDOUS
MATERIAL HANDLING

- .1 Handle and store hazardous materials on site in accordance with WHMIS procedures and requirements.
- .2 Store all hazardous liquids in location and manner to prevent their spillage into the environment.
- .3 Maintain written inventory of all hazardous materials kept on site. List product name, quantity and storage date.
- .4 Keep MSDS data sheets on site for all items.

1.7 PETROLEUM, OIL
AND LUBRICANTS

- .1 Comply with Federal and Provincial laws, regulations, codes and guidelines for the storage of fuel and petroleum products on site.
- .2 Do not place fuel storage tanks and store fuel or other petroleum products within a 30 metre buffer zone of watercourses and wetlands. Do not fuel or lubricate equipment within this 30 metre buffer zone. Obtain approval from Departmental Representative of acceptable location on site for fuel storage and equipment service.

1.7 PETROLEUM, OIL .3
AND LUBRICANTS
(Cont'd)

- .3 Do not dump petroleum products or any other deleterious substances on ground or in the water.
- .4 Be diligent and take all necessary precautions to avoid spills and contaminate the soil and water (both surface and subsurface) when handling petroleum products on site and during fueling and servicing of vehicles and equipment.
- .5 Maintain on site appropriate emergency spill response equipment consisting of at least one 250 litre (55 gallon) overpack spill kit for containment and cleanup of spills.
- .6 Maintain vehicles and equipment in good working order to prevent leaks on site.
- .7 In the event of a petroleum spill, immediately notify the Departmental Representative and the Canadian Coast Guard (CCG) at 1-800-565-1633 (24 hour report line). Perform clean-up in accordance with all regulations and procedures stipulated by authority having jurisdiction.

1.8 DISPOSAL OF
WASTES AND
HAZARDOUS
MATERIALS

- .1 Do not bury rubbishdemolition debris and waste materials on site. Dispose at approved landfill sites as specified in Section 01 74 21.
- .2 Do not dispose of hazardous waste or volatile materials, such as mineral spirits, paints, thinners, oil or fuel into waterways, storm or sanitary sewers or waste landfill sites.
- .3 Do not store, handle and dispose of hazardous materials and hazardous waste in accordance with applicable federal and provincial laws, regulations, codes and guidelines.
- .4 Do not dispose of hazardous waste, volatile materials (such as mineral spirits, paints, thinners etc.) and petroleum products into waterways, storm or sanitary sewers or in waste landfill sites.

1.8 DISPOSAL OF
WASTES AND
HAZARDOUS
MATERIALS
(Cont'd)

- .5 Dispose of construction waste materials and demolition debris, resulting from work, at approved landfill sites only. Carryout such disposal in strict accordance with provincial and municipal rules and regulations. Separate out and prevent improper disposal of items banned from landfills.
- .6 Establish methods and undertake construction practices which will minimize waste and optimize use of construction materials. Separate at source all construction waste materials, demolition debris and product packaging and delivery containers into various waste categories in order to maximize recycling abilities of various materials and avoid disposal of debris at landfill site(s) in a "mixed state". Where recycling firms, specializing in recycling of specific materials exist, transport such materials to the recycling facility and avoid disposal at landfill sites.
- .7 Communicate with landfill operator prior to commencement of work, to determine what specific construction, demolition and renovation waste materials have been banned from disposal at the landfill and at transfer stations.

1.9 DRAINAGE

- .1 Provide temporary drainage and pumping as necessary to keep excavations and site free from water.
- .2 Do not pump water containing suspended materials into waterways, sewer or drainage systems.
- .3 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with governing regulations and requirements.
- .4 Pumped water must meet applicable federal, provincial, and municipal standards before it can be discharged to a surface water body. If regulatory guidelines exceedences are noted, the Departmental Representative has the right to issue stop pumping instructions to the

1.9 DRAINAGE
(Cont'd)

- .4 (Cont'd)
Contractor. Contractor will not be compensated for any delays associated with retrofitting equipment to meet guidelines.
- .5 Provide control devices such as filter fabrics, sediment traps and settling ponds to control drainage and prevent erosion of adjacent lands. Maintain in good order for duration of work.

1.10 PERMITS

- .1 All guidelines and instructions stated on permits must be strictly adhered to.

1.11 WORK ADJACENT
TO WATERWAYS

- .1 Do not operate construction equipment in waterways.
 - .2 Do not use waterway beds for borrow material.
 - .3 Do not dump excavated fill, waste material or debris in waterways.
 - .4 At borrow sites, design and construct temporary crossings to minimize erosion to waterways in strict conformance with provincial and federal environmental regulations.
 - .5 Do not skid logs or construction materials across waterways.
 - .6 Avoid indicated spawning beds when constructing temporary crossings of waterways.
 - .7 Do not blast under water or within 100 m of spawning beds.
 - .8 Do not refuel any type of equipment within 100 m of a water body. Maintain equipment in good working condition with no fluid leaks, loose hoses or fittings.
-

1.12 POLLUTION
CONTROL

- .1 Maintain temporary erosion and pollution control features installed under this contract.
- .2 Control emissions from equipment and plant to local authorities emission requirements.
- .3 Prevent sandblasting and other extraneous materials from contaminating air beyond application area, by providing temporary enclosures.
- .4 Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads and around entire construction site.
- .5 Maintain inventory of hazardous materials and hazardous waste stored on site. List items by product name, quantity and date when storage began.
- .6 Have emergency spill response equipment and rapid clean-up kit, appropriate to work, at site. Locate adjacent to work and where hazardous materials are stored. Provide personal protective equipment as required for clean-up.
- .7 Report, to Federal and Provincial Department of the Environment, spills of petroleum and other hazardous materials as well as accidents having potential of polluting the environment. Also notify Departmental Representative and submit a written spill report to Departmental Representative within 24 hours of occurrence.
- .8 Provide a floating debris containment boom whenever any of the Contractors methods of work allow for the potential of floating debris.

1.13 WATER QUALITY

- .1 Conduct dredging excavation work of a watercourse or wetland in such a manner to limit turbidity and reduce sediment suspension in the water to an absolute minimum at all times.
 - .1 Maintain appropriate production speed and momentum of the dredging excavation

1.13 WATER QUALITY .1
(Cont'd)

(Cont'd)

.1 (Cont'd)

equipment. Make adjustments as required and as approved by Departmental Representative.

.2 Strategically position dredging excavator equipment and barge haul vehicles to avoid over the water swings of excavated material whenever possible.

.2 Where work may affect the water quality adjacent to water intake lines used by Lobster Holding Facilities, Fish Processing Facilities and other harbour users, schedule work in cooperation with the Harbour Authority as directed by Departmental Representative to minimize interference and impact to harbour users.

.3 Visually monitor the water turbidity of the surrounding areas adjacent to the work and up to the established dredge limit of 200 metre.

.1 Should excessive change occur in the turbidity beyond the dredge limit which differs from existing conditions of the surrounding water bodies, such as a distinct color difference; notify the Departmental Representative to obtain appropriate mitigation measures to be followed.

.4 Water quality during suction dredging:

.1 Minimize out-fall of the dredge material at the disposal site by placing the pipeline outtake at or near the water level surface.

.2 Restrict vessel traffic adjacent to the disposal site to an absolute minimum to avoid the re-suspension of dredged material from propeller wash.

.5 Water contamination by preservative treated wood:

.1 Preservative treated lumber and timber, whether plant or site treated, shall be cured for a minimum of 30 days from date of the treatment application before their installation in areas which will be in contact with the water.

.2 Do not cut treated wood lumber over the surface of a watercourse or wetland.

.3 Do not use liquid applied preservative products over the surface of a watercourse or wetland.

1.13 WATER QUALITY .5
(Cont'd)

(Cont'd)

.4 Wood treated with Chromate Copper Arsenate (CCA) or Ammoniac Copper Zinc Arsenate (ACZA) must be CSA or AWWA approved.

.5 Do not use timber and lumber treated with cresote, petroleum and pentachlorophenol for any part of the Work.

.6 Do not washdown equipment within a 30 metre buffer zone of a wetland, watercourse or other identified environmentally sensitive area.

1.14 BLASTING

.1 Develop a Blasting Plan for any blasting required in the Work identifying measures employed to minimize the impact on fish, mammals, water quality and the environment.

.2 Blasting Plan shall include the following minimum requirements:

.1 Predictive analysis conducted to assess the zone of influence of the blasting activities.

.2 Ensure that fish and mammals are scared away from the blasting area by use of boat, pre-blasting caps or by other means.

.3 Make use of shock wave padding (bubble curtain or air curtain) to minimize the transmission of the blast through the water.

.4 The number and magnitude of explosives used is kept to an absolute minimum as required for the Work.

.3 Submit Blasting Plan to Departmental Representative for review prior to the commencement of any blasting.

.4 Obtain required permit required by authority having jurisdiction.

1.15 SOCIOECONOMIC
RESTRICTIONS

.1 Abide by municipal and provincial regulations for any restrictions on work performed during the night time and on flood lighting of the site. Obtain applicable permits.

.2 Place flood lights in opposite direction of adjacent residential and business areas.

- 1.15 SOCIOECONOMIC RESTRICTIONS (Cont'd) .3 Equip equipment and machinery with purposely designed mufflers to reduce noise on site to lowest possible level. Maintain mufflers in good operating condition at all times.
- 1.16 BIRDS AND BIRD HABITAT
- .1 Become knowledgeable with abide by the Migratory Birds Convention Act (MBCA) in regards to the protection of migratory birds, their eggs, nests and their young encountered on site and in the vicinity.
- .2 Minimize disturbance to all birds on site and adjacent areas during the entire course of the Work.
- .3 Do not approach concentrations of seabirds, waterfowl and shorebirds when anchoring equipment, accessing wharves or ferrying supplies.
- .4 During night time work, position flood lights in opposite direction of nearby bird nesting habitat.
- .5 Do not use beaches, dunes and other natural previously undisturbed areas of the site to conduct work unless specifically approved by the Departmental Representative.
- .6 Should nests of migratory birds in wetlands be encountered during work, immediately notify Departmental Representative for directives to be followed.
- .1 Do not disturb nest site and neighbouring vegetation until nesting is completed.
- .2 Minimize work immediately adjacent to such areas until nesting is completed.
- .3 Protect these areas by following recommendations of Canadian Wildlife Service.
- 1.17 WILDLIFE PROTECTION .1 Should nests of migratory birds in wetlands be encountered during work, immediately notify Departmental Representative for directives to be followed.
-

1.17 WILDLIFE
PROTECTION
(Cont'd)

- .1 (Cont'd)
 - .1 Do not disturb nest site and neighbouring vegetation until nesting is completed.
 - .2 Minimize work immediately adjacent to such areas until nesting is completed.
 - .3 Protect these areas by following recommendations of Canadian Wildlife.

1.18 FISH AND
FISH HABITAT

- .1 Be aware of the risk for contamination of the fish habitat at the site as a result of alien species being introduced in the water.
- .2 To minimize the possibility of fish habitat contamination, all construction equipment which will be immersed into the water of a watercourse, or has the possibility of coming into contact with such water during the course of the work, must be cleaned and washed to ensure that they are free of marine growth and alien species.
 - .1 Equipment shall include boats, barges, cranes, excavators, haul trucks, pumps, pipe lines and other all miscellaneous tools and equipment previously used in a marine environment.
- .3 Cleaning and washing of equipment shall be performed immediately upon their arrival at the site and before use in or over the body of water.
- .4 Conduct cleaning and washing operations as follows:
 - .1 Scrap and remove heavy accumulation of mud and dispose appropriately.
 - .2 Wash all surfaces of equipment by use of a pressurized fresh water supply.
 - .3 Immediately follow with application of a heavy sprayed coating of undiluted vinegar or other environmentally approved cleaning agent to thoroughly remove all plant matter, animals and sediments.
 - .4 Check and remove all plant, animal and sediment matter from the all bilges and filters.
 - .5 Drain standing water from equipment and let fully dry before use.

1.18 FISH AND
FISH HABITAT
(Cont'd)

- .4 (Cont'd)
- .6 Upon removal from the water, drain standing water from equipment and let fully dry before removal off the site.
- .5 Do not perform cleaning and washdown within a 30 metre buffer zone of a wetland, watercourse or other identified environmentally sensitive area.
- .6 Record of Assurance Logbook:
 - .1 Maintain an on-going log of past and present usage and washdowns of all equipment to illustrate mitigation measures undertaken against fish habitat contamination by alien species.
 - .2 Write data in a hard cover bound logbook,
 - .3 Include the following:
 - .1 Date and location where equipment was previously used in a watercourse or wetland;
 - .2 Type of work performed.
 - .3 Dates of washdown for each piece of equipment;
 - .4 Cleaning method and cleaning agent(s) used.
- .7 Keep Record of Assurance Logbook updated from project to project. Upon request, submit logbook to Departmental Representative for review.
- .8 Abide by requirements and recommendations of the Federal Department of Environment and the Department of Fisheries and Oceans - Habitat Protection and Sustainable Development Branch in cleaning and washdown of equipment.

1.19 AIR QUALITY

- .1 Keep airborne dust and dirt resulting from the work on site to an absolute minimum.
- .2 Apply dust control measures to roads, parking lots and work areas.
- .3 Spray surfaces with water or other environmentally approved product. Use purposely suited equipment or machinery and apply in sufficient quantity and frequency to

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- 1.19 AIR QUALITY .3 (Cont'd)
(Cont'd) provide effective result and continued dust
control during the entire course of the work.
- .4 Do not use oil or any other petroleum
products for dust control.
- 1.20 FIRES .1 Fires and burning of rubbish on site is not
permitted.

END

-
- 1.1 ACCESS .1 Provide and maintain adequate access to project site.
- .2 Maintain access roads for duration of contract and make good damage resulting from Contractors' use of roads.
- 1.2 CONTRACTOR'S SITE OFFICE .1 Be responsible for and provide own site office, if required, including electricity, heat, lights and telephone. Locate site office as directed by Departmental Representative.
- 1.3 DEPARTMENTAL REPRESENTATIVE'S SITE OFFICE .1 Provide or construct a separate site office for the use of the Departmental Representative and the Site Representative. The building must be in place prior to commencement of work.
- .2 Provide heating system to maintain 22°C inside temperature at -20°C outside temperature.
- .3 The building will be approximately 2400 mm x 3600 mm. It will have a suitable frame covered with a weatherproof siding and lined with plywood or other approved material. The floor will be of 19 mm thick material. It will be provided with suitable window with at least 1 m² of glass and arranged to provide at least 0.5 m² of screened opening. The door will be fitted with a lockset and 2 keys.
- .4 The office will be equipped with a drafting chair and a 900 mm x 1500 mm table having a hinged, smooth wooden top suitable for drafting.
- .5 Install electrical lighting system to provide minimum 750 lux using surface mounted, shielded commercial fixtures with 10% upward light component.
- .6 Maintain office in clean condition.
- .7 Arrange and pay for telephone and facsimile machine in the Departmental Representative's Office for Site Representative's exclusive use. Long distance calls or faxes placed on
-

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|---|----|--|
| <u>1.3 DEPARTMENTAL
REPRESENTATIVE'S
SITE OFFICE
(Cont'd)</u> | .7 | (Cont'd)
this phone by the Departmental Representative
or the Site Representative will be paid by the
Departmental Representative. |
| | .8 | Contractor may, on approval of Departmental
Representative, provide cellular or mobile
phone. If approval to use cellular or mobile
phone is granted, be responsible for all
services, airtime, license and network access
fees, and all other fees or charges required
to utilize the phone as intended by the
manufacturer. |
|
 | | |
| <u>1.4 SANITARY
FACILITIES</u> | .1 | Provide sanitary facilities for work force in
accordance with governing regulations and
ordinances. |
| | .2 | Post notices and take such precautions as
required by local health authorities. Keep
area and premises in sanitary condition. |
|
 | | |
| <u>1.5 POWER</u> | .1 | Arrange, pay for and maintain temporary
electrical power supply in accordance with
governing regulations and ordinances. |
| | .2 | Supply and install all temporary facilities
for power such as pole lines and underground
cables to approval of local power supply
authority. |
|
 | | |
| <u>1.6 WATER SUPPLY</u> | .1 | Arrange, pay for and maintain temporary water
supply in accordance with governing
regulations and ordinances. |
|
 | | |
| <u>1.7 SCAFFOLDING</u> | .1 | Design, construct and maintain scaffolding in
rigid, secure and safe manner in accordance
with CAN/CSA-S269.2-M87 (R2003). |
| | .2 | Erect scaffolding independent of walls.
Remove when no longer required. |
-

1.8 CONSTRUCTION
SIGN AND NOTICES

- .1 Contractor or subcontractor advertisement signboards are not permitted on site.
- .2 Only notices of safety or instructions are permitted on site.
- .3 Safety and Instruction Signs and Notices:
 - .1 Signs and notices for safety and instruction shall be in both official languages. Graphic symbols shall conform to CAN/CSA-Z321-96 (R2001).
- .4 Maintenance and Disposal of Site Signs:
 - .1 Maintain approved signs and notices in good condition for duration of project and dispose of off site on completion of project or earlier if directed by Departmental Representative.

1.9 REMOVAL OF
TEMPORARY
FACILITIES

- .1 Remove temporary facilities from site when directed by Departmental Representative.

PART 1 - GENERAL

- | | | |
|---|----|---|
| <u>1.1 SECTION INCLUDES</u> | .1 | Barriers. |
| | .2 | Traffic Controls. |
|
<u>1.2 INSTALLATION AND REMOVAL</u> | .1 | Provide temporary controls in order to execute work expeditiously. |
| | .2 | Remove from site all such work after use. |
|
<u>1.3 HOARDING</u> | .1 | Erect temporary site enclosure using new 1.2 m high snow fence wired to rolled steel "T" bar fence posts spaced at 2.4 m centres. Provide one lockable truck gate. Maintain fence in good repair. |
|
<u>1.4 GUARD RAILS AND BARRICADES</u> | .1 | Provide secure, rigid guard rails and barricades around open excavations. |
| | .2 | Provide barricades along wharf structure when wheelguard is removed. |
| | .3 | Provide as required by governing authorities. |
|
<u>1.5 ACCESS TO SITE</u> | .1 | Provide and maintain access to adjacent harbour facilities. |
|
<u>1.6 PUBLIC TRAFFIC FLOW</u> | .1 | Provide and maintain competent signal flag operators, traffic signals, barricades and flares, lights, or lanterns as required to perform work and protect the public. |
|
<u>1.7 FIRE ROUTES</u> | .1 | Maintain access to property including overhead clearances for use by emergency response vehicles. |
-

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TEMPORARY BARRIERS AND
ENCLOSURES

Section 01 56 00
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FEBRUARY 2014

1.8 PROTECTION FOR
OFF-SITE AND PUBLIC
PROPERTY

- .1 Protect surrounding private and public property from damage during performance of work.
- .2 Be responsible for damage incurred.

END

PART 1 - GENERAL

- 1.1 GENERAL .1 Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
- .2 Store volatile waste in covered metal containers, and remove from premises at end of each working day.
- .3 Prevent accumulation of wastes which create hazardous conditions.
- .4 Provide adequate ventilation during use of volatile or noxious substances.
- 1.2 MATERIALS .1 Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.
- 1.3 CLEANING DURING CONSTRUCTION .1 Maintain project grounds and public properties in a tidy condition, free from accumulations of waste material and debris. Clean areas on a daily basis.
- .2 Provide on-site garbage containers for collection of waste materials and debris.
- .3 Remove waste materials and debris from site on a daily basis.
- 1.4 FINAL CLEANING .1 In preparation for acceptance of the Work perform final cleaning.
- .2 Inspect finishes, fitments and equipment. Ensure specified workmanship and operation.
- .3 Broom clean exterior paved and concrete surfaces; rake clean other surfaces of grounds.

1.1 RELATED
SECTIONS

- .1 Section 01 35 44 - Environment Protection Procedures for Marine Work.

1.2 WASTE
MANAGEMENT PLAN

- .1 Prior to commencement of work, prepare waste Management Workplan.
- .2 Workplan to include:
 - .1 Waste audit.
 - .2 Waste reduction practices.
 - .3 Material source separation process.
 - .4 Procedures for sending recyclables to recycling facilities.
 - .5 Procedures for sending non-salvageable items and waste to approved waste processing facility or landfill site.
 - .6 Training and supervising workforce on waste management at site.
- .3 Workplan to incorporate waste management requirements specified herein and in other sections of the Specifications.
- .4 Develop Workplan in collaboration with all subcontractors to ensure all waste management issues and opportunities are addressed.
- .5 Submit copy of Workplan to Departmental Representative for review and approval.
 - .1 Make revisions to Plan as directed by Departmental Representative.
- .6 Implement and manage all aspects of Waste Management Workplan for duration of work.
- .7 Revise Plan as work progresses addressing new opportunities for diversion of waste from landfill.

1.3 WASTE AUDIT

- .1 At project start-up, conduct waste audit of:
 - .1 Site conditions identifying salvageable and non-salvageable items and waste resulting from demolition and removal work.
 - .2 Projected waste resulting from product packaging and from material leftover after installation work.

- 1.3 WASTE AUDIT (Cont'd) .2 Develop written list. Record type, composition and quantity of various salvageable items and waste anticipated, reasons for waste generation and operational factors which contribute to waste.
- 1.4 WASTE REDUCTION .1 Based on waste audit, develop waste reduction program.
- .2 Structure program to prioritize actions, with waste reduction as first priority, followed by salvage and recycling effort, then disposal as solid waste.
- .3 Identify materials and equipment to be:
- .1 Protected and turned over to Departmental Representative when indicated.
 - .2 Salvaged for resale by Contractor.
 - .3 Sent to recycling facility.
 - .4 Sent to waste processing/landfill site for their recycling effort.
 - .5 Disposed of in approved landfill site.
- .4 Reduce construction waste during installation work. Undertake practices which will minimize waste and optimize full use of new materials on site, such as:
- .1 Use of a central cutting area to allow for easy access to off-cuts;
 - .2 Use of off-cuts for blocking and bridging elsewhere.
 - .3 Use of effective and strategically placed facilities on site for storage and staging of left-over or partially cut materials (such as gypsum board, plywood, ceiling tiles, insulation, etc.) to allow for easy incorporation into work whenever possible avoiding unnecessary waste.
- .5 Develop other strategies and innovative procedures to reduce waste such as minimizing the extent of packaging used for delivery of materials to site, etc.
-

1.5 MATERIAL SOURCE .1
SEPARATION PROCESS

Develop and implement material source separation process at commencement of work as part of mobilization and waste management at site.

- .2 Provide on-site facilities to collect, handle and store anticipated quantities of reusable, salvageable and recyclable materials.
 - .1 Use suitable containers for individual collection of items based on intended purpose.
 - .2 Locate to facilitate deposit but without hindering daily operations of existing building tenants.
 - .3 Clearly mark containers and stockpiles as to purpose and use.

- .3 Perform demolition and removal of existing structure components and equipment following a systematic deconstruction process.
 - .1 Separate materials and equipment at source, carefully dismantling, labelling and stockpiling alike items for the following purposes:
 - .1 Reinstallation into the work where indicated.
 - .2 Salvaging reusable items not needed in project which Contractor may sell to other parties. Sale of such items not permitted on site.
 - .3 Sending as many items as possible to locally available recycling facility.
 - .4 Segregating remaining waste and debris into various individual waste categories for disposal in a "non-mixed state" as recommended by waste processing/landfill sites.

- .4 Isolate product packaging and delivery containers from general waste stream. Send to recycling facility or return to supplier/manufacturer.
- .5 Send leftover material resulting from installation work for recycling whenever possible.
- .6 Establish methods whereby hazardous and toxic waste materials, and their containers, encountered or used in the course work are properly isolated, stored on site and disposed in accordance with applicable laws and

1.5 MATERIAL SOURCE .6
SEPARATION PROCESS
(Cont'd)

(Cont'd)
regulations from authorities having
jurisdiction.

- .7 Isolate and store existing materials and equipment identified for re-incorporation into the Work. Protect against damage.

1.6 WORKER TRAINING .1
AND SUPERVISION

Provide adequate training to workforce, through meetings and demonstrations, to emphasize purpose and worker responsibilities in carrying out the Waste Management Plan.

- .2 Waste Management Coordinator: designate full-time person on site, experienced in waste management and having knowledge of the purpose and content of Waste Management Plan to:
 - .1 Oversee and supervise waste management during work.
 - .2 Provide instructions and directions to all workers and subcontractors on waste reduction, source separation and disposal practices.
- .3 Post a copy of Plan in a prominent location on site for review by workers.

1.7 CERTIFICATION
OF MATERIAL
DIVERSION

- .1 Submit to Departmental Representative, copies of certified weigh bills from authorized waste processing sites and sale receipts from recycling/reuse facilities confirming receipt of building materials and quantity of waste diverted from landfill.
 - .2 Submit data at pre-determined project milestones as determined by Departmental Representative.
 - .3 Compare actual quantities diverted from landfill with projections made during waste audit.
-

1.8 DISPOSAL
REQUIREMENTS

- .1 Burying or burning of rubbish and waste materials is prohibited.
- .2 Disposal of waste, volatile materials, mineral spirits, oil, paint, paint thinner or unused preservative material into waterways, storm, or sanitary sewers is prohibited.
- .3 Do not dispose of preservative treated wood through incineration.
- .4 Do not dispose of preservative treated wood with other materials destined for recycling or reuse.
- .5 Dispose of treated wood, end pieces, wood scraps and sawdust at a sanitary landfill.
- .6 Dispose of waste only at approved waste processing facility or landfill sites approved by authority having jurisdiction.
- .7 Contact the authority having jurisdiction prior to commencement of work, to determine what, if any, demolition and construction waste materials have been banned from disposal in landfills and at transfer stations. Take appropriate action to isolate such banned materials at site of work and dispose in strict accordance with provincial and municipal regulations.
- .8 Transport waste intended for landfill in separated condition, following rules and recommendations of Landfill Operator in support of their effort to divert, recycle and reduce amount of solid waste placed in landfill.
- .9 Collect, bundle and transport salvaged materials to be recycled in separated categories and condition as directed by recycling facility. Ship materials only to approved recycling facilities.
- .10 Sale of salvaged items by Contractor to other parties not permitted on site.

PART 1 - GENERAL

1.1 RELATED
SECTIONS

- .1 Section 01 74 21 - Construction/Demolition
Waste Management and Disposal.

1.2 DEFINITIONS

- .1 Dredging: excavating, transporting and
disposing of above or underwater materials.
- .2 Class A material: solid rock requiring
drilling and blasting to loosen, and boulders
or rock fragments of individual volumes 1.5 m³
or more.
- .3 Class B material: loose or shale rock, silt,
sand, quick sand, mud, shingle, gravel, clay,
sand, gumbo, boulders, hardpan (not bedrock)
and any debris of individual volumes less than
1.5 m³.
- .4 Obstructions: material other than Class A,
having individual volumes of 1.5 m³ or more.
- .5 CMPM: cubic metres place measurement. SQM:
area in square metres projected horizontal.
CMSM: cubic meters scow measurement.
- .6 Debris: pieces of wood, wire rope, scrap
steel, pieces of concrete and other waste
materials.
- .7 Grade: plane above which material is to be
dredged.
- .8 Estimated quantity:
 - .1 Volume of material calculated to be
above grade and within specified side slopes
unless otherwise specified.
 - .2 Areas in square metres of material
calculated horizontally to exist above grade
and within dredge limits, unless otherwise
specified.
- .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.

1.2 DEFINITIONS
(Cont'd)

- .10 Chart Datum: permanently established plane from which soundings or tide heights are referenced, usually Lowest Normal Tide (LNT).
- .11 Coordinates:
 - .1 U.T.M.: universal transverse mercator projection.
 - .2 M.T.M.: modified transverse mercator projection.
 - .3 U.T.M. or M.T.M. Coordinates: plane rectangular coordinates used in grid system in which grid network is applied to U.T.M. or M.T.M. projection. Horizontal control information as indicated.
- .12 Minimum Mode: mode of operation of hydrographic survey equipment where minimum sounding over length of travel between position updates will be retained in memory. Soundings taken in this mode may be shallower than actual bottom elevations due to variations in water depths due to wave action.
- .13 Matrix Block: each dredge area is presented as number of 1.0 x 1.0 m long blocks. Dependent on position of sounding, block may have 0 to 9 soundings contained within it.
- .14 Least of Minimum Plan: hydrographic survey plan in which least sounding in grouping of matrix blocks is plotted.
- .15 Instantaneous Mode: mode of operation of hydrographic survey equipment where only sounding observed at predetermined distance interval is retained in memory.
- .16 Average of Instantaneous Plan: hydrographic survey plan in which average sounding in appropriate grouping of matrix blocks is plotted.
- .17 Lowest Normal Tide (LNT): plane so low that tide will seldom fall below it.
- .18 Cleared Area: area of dredging accepted as achieving the required grade and verified by a PWGSC survey.

1.3 SUBMITTALS

- .1 Submit to Departmental Representative for approval, two weeks before blasting, details of proposed blasting operations showing types and quantities of explosives, loading charges and patterns, type of blasting caps, blasting techniques, blast protection measures, time of blasting and other pertinent details. Submit subsequent changes to Departmental Representative before proceeding.
- .2 Submit to Departmental Representative complete photographic and descriptive record of buildings, roads and structures in general area of Project Work, before blasting is started. Describe buildings both inside and out. Record existing cracks in walls or structural components.

1.4 REGULATORY REQUIREMENTS

- .1 There are strict environmental procedures that must be followed during the Work.
- .2 Comply with municipal, provincial and national codes and regulations relating to project.
- .3 Mark floating equipment with lights in accordance with the provisions of the Canada Shipping Act Collision Regulations and Notices to Mariners.

1.5 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
 - .2 Contaminated sediments must be disposed of in confined disposal facility or capped disposal site.
 - .3 Metals, wood and recyclable materials removed during the dredging activities must be diverted appropriate recycling facilities.
-

1.6 SCHEDULING

- .1 Submit to Departmental Representative, within 2 weeks after acceptance of bid, schedule of work including time periods during which each operation involved in Work will be undertaken. At time of submission of schedule, meet with Departmental Representative to review schedule. Due to the location of this project, certain environmental conditions are in place for this project. No in water work after March 31, 2014.
- .2 Adhere to schedule and take immediate action to correct any slippage by effectively altering existing dredging operations or mobilizing other equipment. Notify Departmental Representative of corrective action to be taken.

1.7 LOCATION

- .1 Work comprises dredging of areas as indicated and as specified herein.

1.8 INTERFERENCE TO NAVIGATION

- .1 Be familiar with vessel movements and fishery activities in area affected by dredging operations. Plan and execute Work in manner that will not interfere with fishing operations, marine operations and construction activities at wharf sites, or access to wharves by land or water. Contractor will not be allow to bar/close off entire channel during dredging operations.
 - .2 Departmental Representative will not be responsible for loss of time, equipment, material or any other cost related to interference with moored vessels in harbour or due to other Contractor's operations.
 - .3 Keep the Marine Communications and Traffic Services' Centre, Fisheries and Oceans Canada, informed of dredging operations in order that necessary Notices to Mariners will be issued.
-

1.9 DATUM, WATER
GAUGES AND TARGETS

- .1 Elevations used in this specification and contract drawings are in metres referred to Canadian Hydrographic Services Survey datum.
- .2 Areas to be dredged are to be referenced to vertical bench marks for each location of dredging as indicated.
- .3 Chart datum for soundings indicated is assumed to be 3.46 m below Bench Mark PWC 9801.

1.10 FLOATING PLANT

- .1 Dredges or other floating plants to be employed on this Work, to be of Canadian registry, make or manufacture, or, must receive certificate of qualification from Industry Canada, Aerospace, Defence and Marine Branch and this certificate to accompany bid submission.
- .2 Requests for certification in format of form PWGSC-TPSGC 2843 (06/2007) attached to the Bid and Acceptance Form to be directed to Mr. Emile Rochon, Aerospace, Defence and Marine Branch, Industry Canada, CD Howe Building - Room 733C, 235 Queen Street, Ottawa, Ontario, K1A 0H5, and to be received there not less than 14 days prior to bid closing.

1.11 INSPECTION OF
SITE

- .1 Contractor to visit site of Work and become thoroughly familiar with extent and nature of Work and conditions affecting Work before bidding. Contractor is to note that this location is very exposed and dredging operations will be limited due to weather conditions.

1.12 SITE
INFORMATION

- .1 Results of prior soundings are available for inspection at: Public Works and Government Services Canada, P.O. Box 4600, 6th floor The John Cabot Building, 10 Barter Hill, St. John's, NL, A1C 5T2.
- .2 Results of most recent soundings (2013 Survey) are included on the drawings. This

1.12 SITE
INFORMATION
(Cont'd)

- .2 (Cont'd)
data will be used for all calculations for quantity purposes. If the contractor wishes to perform own survey, a written notice must be submitted to the Departmental Representative (at least 7 days notice) so PWGSC can verify the sounding survey before the commencement of any work.
- .3 Results of prior soundings are made available for bidding purposes only. It should be noted that this information may differ from site condition. Take this into consideration when submitting bid.
- .4 Take necessary steps to become fully familiar with potential inclement weather and sea conditions in this area.

1.13 SURVEY
REQUIREMENTS

- .1 Provide, at own expense, survey vessel, equipment and crew to set up and maintain control for location of dredge limits and to sound areas immediately after dredging to verify that grade depth has been attained. Areas are to be sounded to provide sounding printout display of at least 1 x 1 m UTM grid to approval of Departmental Representative.

1.14 SURVEYS AND
ACCEPTANCE OF WORK

- .1 As soon as practical after acceptance of bid, Contractor has 7 days to accept sounding survey in contract. If any differences are found, Departmental Representative will complete new pre-dredge survey of all dredge area locations within 7 days of the request. Survey will be by electronic survey equipment sounding in instantaneous mode. Survey plan at 1:500 scale plotting average of instantaneous depths obtained in this survey will define actual pre-dredge seabed areas.
- .2 No area will be dredged prior to Departmental Representative and Contractor's mutual acceptance of pre-dredge survey for that area.
- .3 Post-dredge survey will be undertaken by Departmental Representative upon completion of dredging. Survey will confirm if dredging is

1.14 SURVEYS AND
ACCEPTANCE OF WORK
(Cont'd)

- .3 (Cont'd)
completed as specified and whether area can be considered cleared area. Survey will be by electronic sweep equipment. Survey plan at 1:500 plotting least of minimum depths obtained in this survey will identify areas requiring reworking to obtain following elevations using least of minimum mode.
- .4 Contractor to re-dredge as necessary to remove all material within dredge areas and any additional areas where soundings differ after the completion of the after dredging survey from the pre-dredged survey which is found to be above grade using the least of minimum mode elevations as specified herein.
- .5 One additional survey will be undertaken at Departmental Representative's cost, for those areas not meeting acceptance criteria for dredging. All additional surveys required to clear areas will be undertaken by the Departmental Representative at Contractor's cost.
- .6 Departmental Representative will take average of instantaneous soundings simultaneously with least of minimum soundings.
- .7 All elevations obtained in minimum mode within specified areas of dredging must be at or deeper than specific dredge depth before area will be considered completed.

1.15 MEASUREMENT
FOR PAYMENT

- .1 Only material excavated above grade plane and within side slopes indicated or specified will be measured.
- .2 Dredging: will be measured in cubic metres (m³), in-place measurement (cmpm), determined from existing seabed elevation established from the current sounding survey down to grade depth elevation. Quantities will be determined by a sounding survey performed by the PWGSC Survey Crew after dredging survey is completed by using electronic sounding and DPGS positioning equipment. The Departmental Representative will verify that the Contractor has performed dredging to the specified grade

1.15 MEASUREMENT
FOR PAYMENT
(Cont'd)

- .2 Dredging: (Cont'd)
depth. No payment will be made for over-dredging. PWGSC will conduct an interim and final survey. The Contractor will formally request at least seven (7) days in advance that the final after-dredging survey be performed upon completion of dredging. The survey will be dependent on the weather. If the survey and inspection shows that all material has not been removed, the Contractor is to re-dredge to obtain grade depth. The Contractor will perform a sounding survey, using a method approved by the Departmental Representative to verify that the specified dredge depth has been obtained. The Departmental Representative will then perform a third survey for final verification of dredge depth. This third sounding survey and any subsequent surveys will be at the cost of the Contractor.
- .3 Obstructions.
.1 Removal of obstructions, authorized by Departmental Representative will be measured in hours actually used in removal.
.2 Dredging equipment used for removal of obstructions will be paid for at rate computed from average hourly earnings of equipment for preceding two weeks negotiated in advance and authorized in writing by Departmental Representative submitted with unit prices included with bid.
- .4 All operations in connection with field positioning of dredging equipment will not be measured separately for payment.
- .5 No separate payment will be made for Contractor's survey vessel, equipment and crew or diving services.
- .6 Payment will include disposal of all dredge material, using water tight boxes, at the approved disposal site. Contractor responsible for obtaining and payment of all dumping permit fees. All dredged material is to be disposed at the disposal site and levelled off at completion. The disposal site is the quarry own by J&E Enterprises, located between St.Bride's and Branch.

- 1.15 MEASUREMENT FOR PAYMENT (Cont'd)
- .7 There will be no additional payment for delays and/or downtime for vessel traffic, fishery operations, marine operations, during periods when no dredging is permitted. Contractor should contact the Harbour Authority to determine schedules of operations.
 - .8 There will be no additional payment for downtime and for delays caused by vessel traffic.
 - .9 Removal of infilling material because of weather conditions will not be measured for payment.

PART 2 - PRODUCTS

- 2.1 DREDGING EQUIPMENT
- .1 Contractor to determine required equipment necessary to dredge material specified and to dispose of dredged material at locations specified or indicated.

PART 3 - EXECUTION

- 3.1 GENERAL
- .1 Mark floating equipment with lights in accordance with the provisions of the Canada Shipping Act Collision Regulations and maintain radio watch on board.
 - .2 Place and maintain buoys, markers and lights required to define work and disposal areas.
 - .3 Lay out Work from control points and baselines established by Departmental Representative. Be responsible for accuracy of Work relative to established bench marks and baseline. Provide and maintain electronic position fixing and distance measuring equipment, laser transits and such other equipment as normally required for accurate dredging control.
 - .4 Establish and maintain water level gauges or tide boards in order that proper depth of

3.1 GENERAL
(Cont'd)

- .4 (Cont'd)
dredging can be determined. Locate gauges and tide boards so as to be clearly visible.
- .5 Establish and maintain on-land targets for location and definition of designated dredge area limits. Targets to be suitable for control of dredging operations and locating soundings. Remove targets on completion of Work.
- .6 Dredge area to grade depths indicated on the drawing.
- .7 Dredge side slopes to 1.5 horizontal to 1.0 vertical in Class B material.
- .8 Remove materials above specified grade depths, within limits indicated. Material removed from below grade depth or outside specified area or side slope is not part of Work.
- .9 Remove shoaling which occurs as result of Work at no expense to Canada.
- .10 Remove material cast-over on surrounding area and dispose of it as dredged material. Do not cast-over material unless authorized by Departmental Representative.
- .11 Remove infilling in dredge areas which occurs prior to acceptance by Departmental Representative.
- .12 Immediately notify Departmental Representative upon encountering object which might be classified as obstruction. By-pass object after clearly marking its location and continue Work.

3.2 DISPOSAL OF
DREDGED MATERIAL

- .1 Dispose of dredged material by depositing in disposal areas indicated in manner approved by Departmental Representative, using water tight truck boxes. Contractor responsible for obtaining and payment of all dumping permit fees. All dredged material is to be disposed at the quarry own by J&E Enterprises, located between Branch and St.Bride's.

3.3 DREDGING IN
VICINITY OF
STRUCTURES

- .1 Do not dredge material from areas lying within 1.5 m of existing structure unless authorized by Departmental Representative.

3.4 SWEEPING

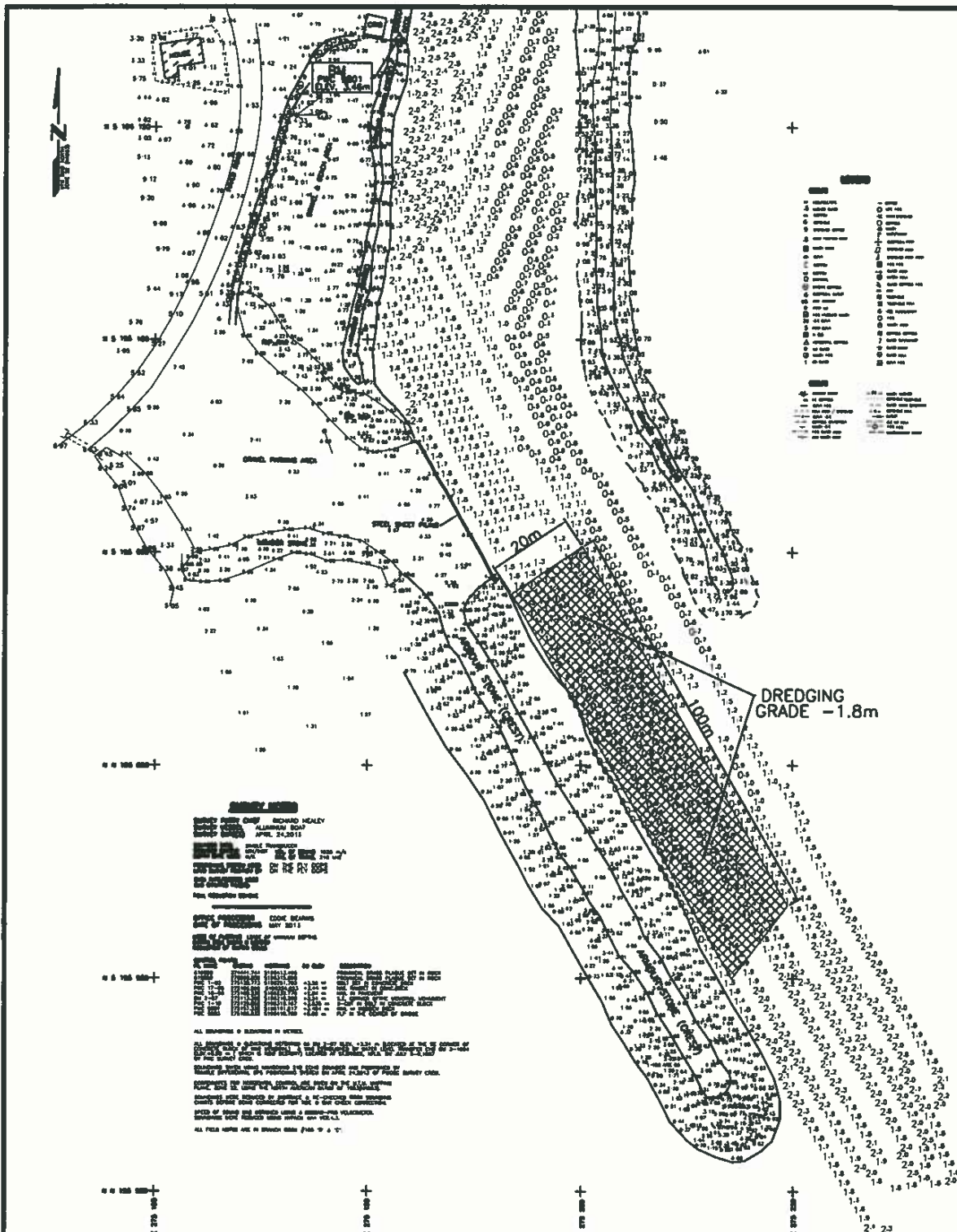
- .1 Sweep dredged areas on completion of dredging to confirm that grade depth has been achieved.
- .2 Sweeping equipment to consist of heavy steel beam suspended from scow or any necessary equipment to sweep at required grade depth or other approved method. Beam to be capable of adjustment and calibration and approved by Departmental Representative.
- .3 If, as result of incomplete Work, additional verification of depths by sounding or sweeping becomes necessary, additional costs involved shall be paid by Contractor.

3.5 RE-DREDGING

- .1 Re-dredge unsatisfactory Work and verify depths with additional sounding or sweeping to approval of Departmental Representative.

3.6 CO-OPERATION
AND ASSISTANCE TO
DEPARTMENTAL
REPRESENTATIVE

- .1 Co-operate with Departmental Representative on inspection of Work and provide assistance requested.
- .2 On request of Departmental Representative, furnish use of such boats, equipment, labour and materials forming ordinary and usual part of dredging plant as may be reasonably necessary to inspect and supervise Work. Volume of material transported in partially filled scows will be determined by Departmental Representative.



Public Works and Government Services Canada	Travaux publics et Services gouvernementaux Canada	Drawing title	Titre du dessin		designed conçu	date
		SOUNDING & TOPO SURVEY		PWGSC	FEB. 2014	
project	project	SITE PLAN DREDGING		drawn dessiné	date	
		BRANCH, NL		ED. BEARNS	FEB. 2014	
		Tender			approved approuvé	date
		PWGSC Project Manager			Administrateur de projets TPSGC	
		project number	no. du projet	drawing no.	no. du dessin	
		R.069444.001		1 OF 1		



CERTIFICATE OF INSURANCE

Page 1 of 2

Description and Location of Work Dredging - Branch, NL		Contract No. E0224-142564/A			
		Project No. R.069444.001			
Name of Insurer, Broker or Agent		Address (No., Street)	City	Province	Postal Code
Name of Insurer (Contractor)		Address (No., Street)	City	Province	Postal Code
Additional Insured; Her Majesty the Queen the Right of Canada as represented by the Minister of Public Works and Government Services					
Type of Insurance (Required when Checked)	Insurer Name and Policy Number	Inception Date D / M / Y	Expiry Date D / M / Y	Limits of Liability	
<input checked="" type="checkbox"/> Commercial General Liability				Annual General Aggregate	Completed Operations Aggregate
<input type="checkbox"/> Umbrella/Excess Liability				\$	\$
<input type="checkbox"/> Builder's Rsk / Installation Floater				\$	\$
<input type="checkbox"/> Pollution Liability				<input type="checkbox"/> Per Incident <input type="checkbox"/> Per Occurrence	Aggregate
<input type="checkbox"/> Marine Liability				\$	\$
<input type="checkbox"/> Aviation Liability				<input type="checkbox"/> Per Incident <input type="checkbox"/> Per Occurrence	Aggregate
<input type="checkbox"/>				\$	\$
I certify that the above policies were issued by Insurers in the course of their Insurance business in Canada, are currently in force and include the applicable Insurance coverages stated on page 2 of this Certificate of Insurance, including advance notice of cancellation / reduction in coverage.					
Name of person authorized to sign on behalf of Insurer(s) (Officer, Agent, Broker)		Telephone Number			
Signature		Date D / M / Y			

<p>General</p> <p>The insurance policies required on page 1 of the Certificate of Insurance must be in force and must include the insurance coverage listed under the corresponding type of insurance on this page.</p> <p>The policies must insure the Contractor and must include Her Majesty the Queen in Right of Canada as represented by the Minister of Public Works and Government Services as an additional Insured.</p> <p>The insurance policies must be endorsed to provide Canada with not less than thirty (30) days notice in writing in advance of a cancellation of insurance or any reduction in coverage.</p> <p>Without increasing the limit of liability, the policies must protect all insured parties to the full extent of coverage provided. Further, the policies must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.</p>	<p>Commercial General Liability</p> <p>The insurance coverage provided must not be substantially less than that provided by the latest edition of IBC Form 2100.</p> <p>The policy must either include or be endorsed to include coverage for the following exposures or hazards if the Work is subject thereto:</p> <ul style="list-style-type: none"> (a) Blasting. (b) Pile driving and caisson work. (c) Underpinning (d) Removal or weakening of support of any structure or land whether such support be natural or otherwise if the work is performed by the insured contractor. <p>The policy must have the following minimum limits:</p> <ul style="list-style-type: none"> (a) \$5,000,000 Each Occurrence Limit; (b) \$10,000,000 General Aggregate Limit per policy year if the policy contains a General Aggregate; and (c) \$5,000,000 Products/Completed Operations Aggregate Limit. <p>Umbrella or excess liability insurance may be used to achieve the required limits.</p>	<p>Builder's Risk / Installation Floater</p> <p>The insurance coverage provided must not be less than that provided by the latest edition of IBC Forms 4042 and 4047.</p> <p>The policy must permit use and occupancy of any of the projects, or any part thereof, where such use and occupancy is for the purposes for which a project is intended upon completion.</p> <p>The policy may exclude or be endorsed to exclude coverage for loss or damage caused by asbestos, fungi or spores, cyber and terrorism.</p> <p>The policy must have a limit that is not less than the sum of the contract value plus the declared value (if any) set forth in the contract documents of all material and equipment supplied by Canada at the site of the project to be incorporated into and form part of the finished Work. If the value of the Work is changed, the policy must be changed to reflect the revised contract value.</p> <p>The policy must provide that the proceeds thereof are payable to Canada or as Canada may direct in accordance with GC10.2, "Insurance Proceeds" (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/5/R/R2900D/2).</p>
<p>Contractors Pollution Liability</p> <p>The policy must have a limit usual for a contract of this nature, but not less than \$1,000,000 per incident or occurrence and in the aggregate.</p>	<p>Marine Liability</p> <p>The insurance coverage must be provided by a Protection & Indemnity (P&I) insurance policy and must include excess collision liability and pollution liability.</p> <p>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 not less than the limits determined by the Marine Liability Act, S.C. 2001, c. 6. Coverage must include crew liability, if it is not covered by the statutory requirements of the Territory or Province having jurisdiction over such employees.</p> <p>The policy must waive all rights of subrogation against Canada as represented by Public Works and Government Services Canada for any and all loss of or damage to the watercraft however caused.</p>	<p>Aviation Liability</p> <p>The insurance coverage shall include Bodily Injury (including passenger Bodily Injury) and Property Damage, in an amount of not less than \$5,000,000 per incident or occurrence and in the aggregate.</p>