

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

**INVITATION TO TENDER**  
**APPEL D'OFFRES**

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

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

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

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

**Comments - Commentaires**

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

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

|  |   |
|--|---|
| <b>Title - Sujet</b><br>MPO-SMITH  |   |
| <b>Solicitation No. - N° de l'invitation</b><br>F3006-14N642/A   | <b>Date</b><br>2014-11-19                                       |
| <b>Client Reference No. - N° de référence du client</b><br>F3006-14N642  | <b>GETS Ref. No. - N° de réf. de SEAG</b><br>PW-\$QCL-036-16205 |
| <b>File No. - N° de dossier</b><br>QCL-4-37212 (036)   | <b>CCC No./N° CCC - FMS No./N° VME</b>                          |
| <b>Solicitation Closes - L'invitation prend fin</b><br><b>at - à 02:00 PM</b><br><b>on - le 2014-12-08</b>   |   |
| <b>Time Zone</b><br><b>Fuseau horaire</b><br>Heure Normale du l'Est<br>HNE   |   |
| <b>F.O.B. - F.A.B.</b> Specified Herein - Précisé dans les présentes<br><b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input type="checkbox"/> <b>Other-Autre:</b> <input checked="" type="checkbox"/>                    |   |
| <b>Address Enquiries to: - Adresser toutes questions à:</b><br>Gagnon, Mathieu   | <b>Buyer Id - Id de l'acheteur</b><br>qcl036                    |
| <b>Telephone No. - N° de téléphone</b><br>(418) 649-2883 ( )   | <b>FAX No. - N° de FAX</b><br>(418) 648-2209                    |
| <b>Destination - of Goods, Services, and Construction:</b><br><b>Destination - des biens, services et construction:</b><br>MINISTERE DES PECHEES ET DES OCEANS<br>F.C.G. SMITH<br>101 BLVD CHAMPLAIN<br>QUEBEC<br>Québec<br>G1K7Y7<br>Canada |   |

**Instructions: See Herein**

**Instructions: Voir aux présentes**

|  |  |
|--|--|
| <b>Delivery Required - Livraison exigée</b><br>VOIR DOC  | <b>Delivery Offered - Livraison proposée</b> |
| <b>Vendor/Firm Name and Address</b><br><b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>   |  |
| <b>Telephone No. - N° de téléphone</b><br><b>Facsimile No. - N° de télécopieur</b>   |  |
| <b>Name and title of person authorized to sign on behalf of Vendor/Firm</b><br><b>(type or print)</b><br><b>Nom et titre de la personne autorisée à signer au nom du fournisseur/</b><br><b>de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b> |  |
| <b>Signature</b>   | <b>Date</b>                                  |

Solicitation No. - N° de l'invitation

F3006-14N642/A

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

F3006-14N642

Amd. No. - N° de la modif.

File No. - N° du dossier

QCL-4-37212

Buyer ID - Id de l'acheteur

qc1036

CCC No./N° CCC - FMS No/ N° VME

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**See next page.**

Solicitation No – N° de l'invitation  
F3006-14N642/A  
Client Ref No. – N° de réf. du client  
F3006-14N642

Amd. No. – N° de la modif.  
File No. – N° du dossier  
QCL-4-37212

Buyer ID – id de l'acheteur  
qcl 036

---

## TABLE OF CONTENTS

### PART 1 - GENERAL INFORMATION

- 1.1 Introduction
- 1.2 Summary

### PART 2 - BIDDER INSTRUCTIONS

- 2.1. Standard Instructions, Clauses and Conditions
- 2.2 Submission of Bids
- 2.3 Enquiries - Bid Solicitation
- 2.4 Applicable Laws
- 2.5 Bidders' Conference
- 2.6 Viewing - Vessel
- 2.7 Work Period

### PART 3 - BID PREPARATION INSTRUCTIONS

- 3.1 Bid Preparation Instructions

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

- 4.1 Evaluation Procedures
- 4.2 Basis of Selection
- 4.3 Public Bid Opening

### PART 5 - CERTIFICATIONS

- 5.1 General
- 5.2. Mandatory Certifications Required Precedent to Contract Award

### PART 6 - SECURITY, FINANCIAL AND OTHER REQUIREMENTS

- 6.1 Security Requirement
- 6.2 Financial Security Requirement (Not used)
- 6.3 Accommodation (Not used)
- 6.4 Parking (Not used)
- 6.5 Material and Supply Support (Not used)
- 6.6 Workers' Compensation - Letter of Good Standing (Not used)
- 6.7 Welding Certification
- 6.8 Valid Labour Agreement (Not used)
- 6.9 Work Schedule and Reports (Not used)
- 6.10 Fueling and De-fueling Crown Vessels (Not used)
- 6.11 ISO 9001:2008 - Quality Management Systems (Not used)
- 6.12 Environmental Protection (Not used)
- 6.13 Insurance Requirement

Solicitation No – N° de l'invitation  
F3006-14N642/A  
Client Ref No. – N° de réf. du client  
F3006-14N642

Amd. No. – N° de la modif.  
File No. – N° du dossier  
QCL-4-37212

Buyer ID – id de l'acheteur  
qcl 036

---

## PART 7 - RESULTING CONTRACT CLAUSES

1. Requirement
2. Standard Clauses and Conditions
3. Security Requirement
4. Term of Contract
5. Authorities
6. Payment
7. Invoicing Instructions
8. Certifications
9. Applicable Laws
10. Priority of Documents
11. Insurance Requirements
12. Financial Security (Not used)
13. Accommodation (Not used)
14. Parking (Not used)
15. Sub-contract and Sub-contractor List (Not used)
16. Work Schedule and Reports
17. Insulation Materials - Asbestos Free
18. Loan of Equipment - Marine (Not used)
19. Trade Qualifications
20. Material and Supply Support (Not used)
21. ISO 9001:2008 - Quality Management Systems (Not used)
22. Quality Control Plan (Not used)
23. Welding Certification
24. Environmental Protection
25. Fueling and De-fueling a Crown Vessel (Not used)
26. Procedure for Design Change or Additional Work
27. Equipment/Systems: Inspection/Test (Not used)
28. Inspection and Test Plan (Not used)
29. Vessel Custody (Not used)
30. Vessel Manned Refits
31. Pre-fit Meeting
32. Meetings
33. Outstanding Work and Acceptance
34. Licensing
35. Hazardous Waste
36. Government Site Regulations
37. Scrap and Waste Material
38. Stability and Weight Management (Not used)
39. Vessel - Access by Canada (Not used)
40. Title to Property
41. Defence Contract
42. Limitation of Contractor's Liability for Damages to Canada

Solicitation No – N° de l'invitation  
F3006-14N642/A  
Client Ref No. – N° de réf. du client  
F3006-14N642

Amd. No. – N° de la modif.  
File No. – N° du dossier  
QCL-4-37212

Buyer ID – id de l'acheteur  
qcl 036

---

**List of Annexes:**

|                       |   |
|-----------------------|---|
| Annex A               | Technical Specification                                 |
| Annex B               | Basis of Payment  |
| Annex C               | Insurance Requirements                                  |
| Annex D               | Inspection/Quality Assurance/Quality Control (Not used) |
| Annex E               | Warranty  |
| Annex F               | Vessel Custody (Not used)                               |
| Appendix 1 of Annex F | Acceptance Certificate (Not used)                       |
| Annex G               | Security Requirements Check List (Not used)             |
| Annex H               | Project Management Services (Not used)                  |
| Annex I               | Financial Bid Presentation Sheet                        |
| Appendix 1 of Annex I | Price Data Sheet  |

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## **PART 1 - GENERAL INFORMATION**

### **1.1 Introduction**

The bid solicitation and resulting contract document is divided into seven parts plus annexes as follows:

- Part 1** General Information: provides a general description of the requirement;
- Part 2** Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation and states that the Bidder agrees to be bound by the clauses and conditions contained in all parts of the bid solicitation;
- Part 3** Bid Preparation Instructions: provides bidders with instructions on how to prepare their bid;
- Part 4** Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, if applicable, and the basis of selection;
- Part 5** Certifications: includes the certifications to be provided;
- Part 6** Security, Financial and Other Requirements: includes specific requirements that must be addressed by bidders; and
- Part 7** Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The Annexes include the Requirement, the Basis of Payment and other annexes.

### **1.2 Summary**

- (i) The requirement is:
- a) to carry out the scope of work regarding the Canadian Coast Guard Ships (C.C.G.S.) FCG SMITH in accordance with the associated Technical Specifications detailed in the Requirement attached as Annex A.
  - b) to carry out any approved unscheduled work not covered in paragraph a) Above.
  - c) The requirement is exempt from the provisions of the World Trade Organization Agreement on Government Procurement (WTO-AGP), Annex 4 and the North American Free Trade Agreement (NAFTA), Chapter 10 Annex 1001.2b Paragraph 1, however, it is subject to the Agreement on Internal Trade (AIT).

Solicitation No – N° de l'invitation  
F3006-14N642/A  
Client Ref No. – N° de réf. du client  
F3006-14N642

Amd. No. – N° de la modif.  
File No. – N° du dossier  
QCL-4-37212

Buyer ID – id de l'acheteur  
qcl 036

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## **PART 2 - BIDDER INSTRUCTIONS**

### **2.1 Standard Instructions, Clauses and Conditions**

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

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

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

### **2.2 Submission of Bids**

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

### **2.3 Enquiries - Bid Solicitation**

All enquiries must be submitted in writing to the Contracting Authority no later than **five (5)** calendar days before the bid closing date. Enquiries received after that time may not be answered.

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

### **2.4 Applicable Laws**

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

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

Solicitation No – N° de l'invitation  
F3006-14N642/A  
Client Ref No. – N° de réf. du client  
F3006-14N642

Amd. No. – N° de la modif.  
File No. – N° du dossier  
QCL-4-37212

Buyer ID – id de l'acheteur  
qcl 036

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## **2.5 Bidders' Conference (Not mandatory)**

A bidders' Conference chaired by the Contracting Authority will be convened on board vessel CCGS Pierre Radisson at 0900, 3<sup>rd</sup> December 2014. The vessel will be moored at Fisheries and Oceans Canada – Coast Guard Wharf, at 15, du Prince Street, Sorel-Tracy (QC) J3P 4J4.

It is recommended that the Bidder or a representative of the Bidder attend the Bidders' Conference in order to review the Scope of the Work required and to receive additional information and clarifications. Bidders are to communicate with the Contracting Authority prior to the conference to confirm attendance. Bidders that do not attend are not precluded from submitting a bid. Bidders are to provide the Contracting Authority with the names of their representatives no later than two days prior to the conference. The Contracting Authority will have an attendance form which is to be signed by the Bidder's representative(s) in attendance. Bidders are advised that any clarifications or changes resulting from the Bidder's conference and/or the subsequent viewing of the vessel, shall be included as an amendment to the bid solicitation document.

## **2.6 Viewing - Vessel (Not mandatory)**

A site visit will be held immediately after the bidders' conference.

## **2.7 Work Period**

Work is to commence and be completed as follows:

Start of work: January 7th, 2015  
End of work: April 5th, 2015

The Bidder agrees through submission of its response to the bid solicitation that the above time frame provides an adequate period to perform the subject work and absorb a reasonable amount of unscheduled work; and further, that they have sufficient material and human resources allocated or available to complete the subject work and a reasonable amount of unscheduled work within the Work period.



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

### **3.1 Bid Preparation Instructions**

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

- Section I: Management Bid (1 hard copy)
- Section II: Financial Bid (1 hard copy)
- Section III: Certifications Requirements (1 hard copy)

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

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

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

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process Policy on Green Procurement (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, bidders are encouraged to:

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

#### **Section I: Management Bid**

The Management Bid should be concise and should include all the certifications and other requirements as noted in Parts 4 and 6.

#### **Section II: Financial Bid**

Bidders must submit their financial bid in accordance with the Financial Bid Presentation Sheet Annex I and the detailed Pricing Data Sheet, Appendix 1 to Annex I. The total amount of Goods and Services Tax or Harmonized Sales Tax is to be shown separately, if applicable.

#### **Section III: Certification Requirements**

Bidders must submit the certifications required under Part 5.

#### **3.1.2 SACC Manual Clause**

C0417T (2008-05-12) Unscheduled Work and Evaluation Price

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## PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

### 4.1 Evaluation Procedures

(a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical, management and financial evaluation criteria specified below.

(b) An evaluation team composed of representatives of Canada will evaluate the bids.

#### 4.1.1 Financial Bid

Bidders must submit their financial bid in accordance with the Financial Bid Presentation Sheet Annex "I". The total amount of Goods and Services Tax or Harmonized Sales Tax is to be shown separately, if applicable.

#### 4.1.2 Mandatory Criteria

Bids will be assessed in accordance with the entire requirement of the bid solicitation including compliance with the mandatory certifications and table of deliverable requirements as detailed in Parts 2, 4, 5 & 6. Only those bids which are found to meet all the mandatory requirements within the specified time frames will be deemed responsive.

#### 4.1.3 Table of Mandatory Requirements to be met by bid closing

Notwithstanding deliverable requirements specified anywhere else within this solicitation and its associated Technical Specification, the following are the only mandatory deliverables that must be submitted with the Bid at the time of bid closing. The following are mandatory and the Bidder must be compliant on each item to be considered responsive

| Item | Description  | Completed and Attached |
|------|--|------------------------|
| 1    | Completed Annex "I" Financial Bid presentation Sheet         |                        |
| 2    | Completed Appendix 1 to Annex "I" <u>Pricing Data Sheets</u> |                        |
| 3    | Letter or proof of Insurance as per article 6. 13 of Part 6  |                        |

#### 4.1.4 Other informations upon request only

The following information, which supports the bid, may be requested by the Contracting Authority from the bidder and it must be provided within **two (2)** working days of the written request:

| Item | Description  | Completed and Attached  |
|------|--|-------------------------|
| 1    | Proof of welding certification, as per clause 6.7 of Part 6; | Prior to contract award |

Solicitation No – N° de l'invitation  
F3006-14N642/A  
Client Ref No. – N° de réf. du client  
F3006-14N642

Amd. No. – N° de la modif.  
File No. – N° du dossier  
QCL-4-37212

Buyer ID – id de l'acheteur  
qcl 036

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#### 4.1.5 Deliverables after Contract award

| Élément | Description  | Doit être fourni après l'attribution du Contrat, dans les |
|---------|--|---|
| 1       | Work Schedule and Reports as per article 7.16, Part 7                              | 5 calendar days   |
| 2       | Insurance Requirements as per article 7.11, Part 7                                 | 3 calendar days   |
| 3       | Submit a detailed report of work and tests performed on document 5.0 Resultats.doc | End of contract   |
| 4       | Functional Fire detection or extinguishing systems certification                   | Prior to end of contract                                  |

#### 4.2 Basis of Selection

A bid must comply with the requirements of the bid solicitation and meet all mandatory evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

#### 4.3 Public Bid Opening

A public bid opening will be held in Public Works and Government Services Canada, 601-1550, D'Estimauville Ave., Québec, Qc at 02:00 PM (EDST) on the date show at the first page.

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## **PART 5 - CERTIFICATIONS**

### **5.1 Generality**

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

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

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with this request will also render the bid non-responsive or will constitute a default under the Contract.

### **5.2. Mandatory Certifications Required Precedent to Contract Award**

#### **5.2.1 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 2003. The related documentation therein required will assist Canada in confirming that the certifications are true.

#### **5.2.2 Federal Contractors Program for Employment Equity - Bid Certification**

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "[FCP Limited Eligibility to Bid](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)" list ([http://www.labour.gc.ca/eng/standards\\_equity/eq/emp/fcp/list/inelig.shtml](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)) available from [Human Resources and Skills Development Canada \(HRSDC\) - Labour's](#) website.

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

Canada will also have the right to terminate the Contract for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list during the period of the Contract.

The Bidder must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, before contract award. If the Bidder is a Joint Venture, the Bidder must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

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## **PART 6 - SECURITY, FINANCIAL AND OTHER REQUIREMENTS**

### **6.1 Security Requirement (*Not used*)**

### **6.2 Financial Requirements (*Not used*)**

### **6.3 Accommodation (*Not used*)**

### **6.4 Parking (*Not used*)**

### **6.5 Material and Supply Support (*Not used*)**

### **6.6 Workers' Compensation - Letter of Good Standing (*Not used*)**

### **6.7 Welding Certification**

At bids closing date the Bidder should submit evidence demonstrating its certification to the welding standards in accordance with the following:

Welding must be undertaken by a company Certified by the Canadian Welding Bureau (CWB) to the requirements of the following Canadian Standards Association (CSA) standards:

- (a) CSA W47.1, Certification of Companies for Fusion Welding of Steel, section 2;
- (b) CSA W47.2, Certification of companies for fusion welding of aluminum;
- (c) CSA W59, Welded steel construction (metal arc welding); and
- (d) CSA W59.2, Welded aluminum construction.

In addition, welding must be done in accordance with the requirements of the applicable and related drawings and specifications.

### **6.8 Valid Labour Agreement (*Not used*)**

### **6.9 Work Schedule and Reports (*Not used*)**

### **6.10 Fueling and De-fueling Crown Vessels (*Not used*)**

### **6.11 ISO 9001:2000 - Quality Management Systems (*Not used*)**

### **6.12 Environmental Protection (*Not used*)**

### **6.13 Insurances Requirements**

At bids closing date the Bidder must provide a letter from an insurance broker or an insurance company licensed to operate in Canada stating that the Bidder, if awarded a contract as a result of the bid solicitation, can be insured in accordance with the Insurance Requirements specified in Annex "C".

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## PART 7 - RESULTING CONTRACT CLAUSES

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

### 1. Requirement

a) to carry out the docking, maintenance and alterations of the Canadian Coast Guard Ship (C.C.G.S.) Pierre Radisson in accordance with the associated Technical Specification attached as Annex A.

b) to carry out any approved unscheduled work not covered in paragraph a) Above.

### 2. Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the *Standard Acquisition Clauses and Conditions* Manual issued by Public Works and Government Services Canada (PWGSC). The Manual is available on the PWGSC Website:

<http://sacc.pwgsc.gc.ca/sacc/index-e.jsp>.

#### 2.1 General Conditions

2030,(2014-09-25), General Conditions - Higher Complexity - Goods, apply to and form part of the Contract. (with the exception of Article 26 which is deleted in its entirety).

Section 22 of 2030 is amended in Annex E Warranty.

#### 2.2 Supplemental General Conditions

1029 (2010-08-16) Ship Repairs, excluding section 09 apply to and form part of the Contract.

### 3. Security Requirement

There is no security requirement associated with this Statement of Work

### 4. Term of Contract

#### 4.1 Work Period

Work is to commence and be completed during the Work Period as follows:

Start of work: January 07<sup>th</sup>, 2015

End of work: April 05<sup>th</sup>, 2015

The Contractor agrees that the above time frame provides an adequate period to perform the subject work and absorb a reasonable amount of unscheduled work; and further, that it has sufficient material and human resources allocated or available to complete the subject work and a reasonable amount of unscheduled work within the Work Period.

Solicitation No – N° de l'invitation  
F3006-14N642/A  
Client Ref No. – N° de réf. du client  
F3006-14N642

Amd. No. – N° de la modif.  
File No. – N° du dossier  
QCL-4-37212

Buyer ID – id de l'acheteur  
qcl 036

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## 5. Authorities

### 5.1 Contracting Authority

#### The Contracting Authority for the Contract is:

Mathieu Gagnon  
Chef aux approvisionnements Marine / Marine Supply Chief  
Travaux publics et Services gouvernementaux Canada / Public Works and Government Services Canada  
Région du Québec/Québec area  
Division marine /marine division  
1550, avenue D'Estimauville, Québec, (Québec) G1J 0C4,  
Quebec, Canada  
[mathieu.gagnon@tpsgc-pwgsc.gc.ca](mailto:mathieu.gagnon@tpsgc-pwgsc.gc.ca)  
Téléphone/phone: (418) 649-2883  
Télécopieur/Fax: (418) 648-2209

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

### 5.2 Technical Authority

#### The Technical Authority for the Contract is:

*Name will be determined at Contract award*

Telephone: \_\_\_\_ \_\_\_\_ \_\_\_\_  
Facsimile: \_\_\_\_ \_\_\_\_ \_\_\_\_  
E-mail address: \_\_\_\_\_

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

### 5.3 Inspection Authority/Inspector

#### The Inspection Authority for the Contract is:

See section 5.2

The Inspection Authority is the Department of Public Works and Government Services Canada, who for the purposes of this requirement is the inspector responsible for inspection of the work and acceptance of the finished work under this requirement. The Inspection Authority will be represented on-site by a designated inspector and such other Government of Canada inspectors who will from time to time be assigned in support of the designated Inspector.

Solicitation No – N° de l'invitation  
F3006-14N642/A  
Client Ref No. – N° de réf. du client  
F3006-14N642

Amd. No. – N° de la modif.  
File No. – N° du dossier  
QCL-4-37212

Buyer ID – id de l'acheteur  
qcl 036

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## **6. Payment**

### **6.1 Basis of Payment - Firm Price**

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid the firm price indicated in Annex B. Goods and Services Tax or Harmonized Sales Tax is extra, if applicable. Payment for unscheduled work will be done in accordance with Basis of Payment outlined at Annex B.

### **6.2 Method of Payment**

|                    |                     |                     |
|--------------------|---------------------|---------------------|
| SACC Manual Clause | H1000C (2008-05-12) | Single Payment      |
| SACC Manual Clause | C6000C (2011-05-16) | Limitation of Price |

## **7. Invoicing Instructions**

7.1 The Contractor must submit invoices in accordance with the information required in Section 13 of 2030, (2014-09-25), General Conditions - Higher Complexity - Goods

### **7.2 Invoice**

**Invoice to be made to the name of:**

[DFOinvoicing-MPOfacturation@dfo-mpo.gc.ca](mailto:DFOinvoicing-MPOfacturation@dfo-mpo.gc.ca)

Write the name of the contact person;

Michelle Turcotte – Tel. 418 648-5930  
Mailing Address  
Pêches et Océans Canada  
PO Box 1901, STN A  
Fredericton (Nouveau-Brunswick)  
E3B 5G4

Copy to be sent for verification to:

Public Works and Government Services Canada  
Supply Directorate  
1550, avenue D'Estimauville  
Québec, (Québec)  
G1J 0C4  
Canada

Att.: Mathieu Gagnon

## **8. Certifications**

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



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**9. Applicable Laws**

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

**10. Priority of Documents**

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

- (a) the Articles of Agreement;
- (b) the Supplemental General Conditions 1029, (2010-08-16), Ship Repairs;
- (c) General Conditions 2030, (2014-09-25) - Higher Complexity - Goods;
- (d) Annex A, Requirement;
- (e) Annex B, Basis of Payment;
- (f) Annex C, Insurance Requirements;
- (g) Annex E, Warranty;
- (h) the Contractor's bid dated \_\_\_\_\_.

**11. Insurance Requirements**

The Contractor must comply with the insurance requirements specified in Annex C. The Contractor must maintain the required insurance coverage for the duration of the Contract. Compliance with the insurance requirements will not release the Contractor from or reduce its liability under the Contract.

The Contractor is responsible to decide 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 will be at the Contractor's expense, and for its own benefit and protection.

The Contractor must forward to the Contracting Authority within three (3) calendar days after the date of award of the Contract a Certificate of Insurance including details of the insurance coverage, exclusions, deductibles and conditions and confirming that the insurance policy complying with the requirements is in force. The Contractor must, if requested by the Contracting Authority, forward to Canada a certified true copy of all applicable insurance policies.

**12. Financial Security (*Not used*)**

**13. Accommodation (*Not used*)**

**14. Parking (*Not used*)**

**15. Sub-contracts and Sub-contractor List (*Not used*)**

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## 16. Work Schedule and Reports

No later than **five (5) calendar days** after contract award, the preliminary schedule must be revised and expanded as necessary and resubmitted before commencement of the Work.

The Contractor must provide a detailed work schedule showing the commencement and completion dates for the Work in the available work period, including realistic target dates for significant events. During the Work Period the schedule is to be reviewed on an ongoing basis by the Inspection Authority and the Contractor, updated when necessary, and available in the Contractor's office for review by Canada's authorities to determine the progress of the Work.

Production work schedules must be revised and resubmitted before each Progress Meeting. The revised schedules must show the effect of progressed work and approved work arisings. Changes in scheduled completion dates due to unscheduled work will not be accepted except as negotiated under Design Change or Additional Work, Article 26.

## 17. Insulation Materials - Asbestos Free

All materials used to insulate or re-insulate any surfaces on board the vessel must meet Transport Canada Marine standards, for commercial marine work, and, for all work, be free from asbestos in any form. The Contractor must ensure that all machinery and equipment located below or adjacent to surfaces to be re-insulated are adequately covered and protected before removing existing insulation.

## 18. Loan of Equipment - Marine (*Not used*)

## 19. Trade Qualifications

The Contractor must use qualified, certificated (if applicable) and competent tradespeople and supervision to ensure a uniform high level of workmanship. The Inspection Authority may request to view and record details of the certification and/or qualifications held by the Contractor's tradespeople. This request should not be unduly exercised but only to ensure qualified tradespeople are on the job

## 20. Material and Supply Support (*Not used*)

## 21. ISO 9001:2000 - Quality Management Systems (*Not used*)

## 22. Quality Control Plan (*Not used*)

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## 23. Welding Certification

Welding must only be undertaken by a company Certified by the Canadian Welding Bureau (CWB) to the requirements of the following Canadian Standards Association (CSA) standards:

- (e) CSA W47.1, Certification of Companies for Fusion Welding of Steel, section 2;
- (f) CSA W47.2, Certification of companies for fusion welding of aluminum;
- (g) CSA W59, Welded steel construction (metal arc welding); and
- (h) CSA W59.2, Welded aluminum construction.

In addition, welding must be done in accordance with the requirements of the applicable drawings and specifications.

Before the commencement of any fabrication work, and upon request from the Inspection Authority, the Contractor must provide approved welding procedures and/or a list of welding personnel intended to be used in the completion of the work. The list must identify the CWB welding procedure qualifications attained by each of the personnel listed and must be accompanied by a copy of each person's current CWB welding certification.

## 24. Environmental Protection

The Contractor and its sub-contractors engaged in the Work on a Crown vessel must carry out the Work in compliance with applicable municipal, provincial and federal environmental laws, regulations and industry standards.

The Contractor must have detailed procedures and processes for identifying, removing, tracking, storing, transporting and disposing of all potential pollutants and hazardous material encountered, to ensure compliance as required above.

All waste disposal certificates are to be provided to the Inspection Authority, with information copies sent to the Contracting Authority. Furthermore, additional evidence of compliance with municipal, provincial and federal environmental laws and regulations is to be furnished by the Contractor to the Contracting Authority when so requested.

The Contractor must have environmental emergency response plans and/or procedures in place. Contractor and subcontractor employees must have received the appropriate training in emergency preparedness and response. Contractor personnel engaging in activities which may cause environmental impacts or potential non compliance situations, must be competent to do so on the basis of appropriate education, training, or experience.

## 25. Fueling and De-fueling a Crown Vessel (*Not used*)

## 26. Procedure for Design Change or Additional Work

SACC Manual Clause B5007C (2010-01-11) Design Change or Additional Work

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**26.1 Price Breakdown:**

The Contractor must, upon request, provide a price breakdown for all unscheduled work, by specific activities with trades, person-hours, material, subcontracts and services.

**26.2 Pro-rated Prices:**

Hours and prices for unscheduled work will be based on comparable historical data applicable to similar work at the same facility, or will be determined by pro-rating the quoted work costs in the Contract when in similar areas of the vessel.

**27. Equipment/Systems: Inspection/Test (*Not used*)**

**28. Inspection and Test Plan (*Not used*)**

**29. Vessel Custody (*Not used*)**

**30. Vessel manned Refits**

SACC Manual Clause A0032C (2011-05-16) Vessel Manned Refits

**31. Pre-Refit Meeting**

A Pre-Refit meeting will be convened and chaired by the Contracting Authority at the Contractor's facility two (2) working days before the commencement of the work period.

**32. Meetings**

Progress meetings, chaired by the Contracting Authority, will take place at the Contractor's facility as and when required, generally once a month. Interim meetings may also be scheduled. Contractor attendees at these meetings will, as a minimum, be its Contract (Project) Manager, Production Manager (Superintendent) and Quality Assurance Manager. Progress meetings will generally incorporate Technical meetings to be chaired by the Technical Authority.

**33. Outstanding Work and Acceptance**

The Inspection Authority, in conjunction with the Contractor, will prepare a list of outstanding work items towards the end of the vessel Work Period. This list will form the annexes to the formal acceptance document for the vessel. A Contract Completion Meeting will be convened by the Inspector on the work completion date to review and sign off the Acceptance Document. In addition to any amount held under the Warranty Holdback Clause, a holdback of twice the estimated value of outstanding work will be held until completion of said work.

The PWGSC-TPSGC 1205 Acceptance Document is to be completed and distribution is to be made by the Public Works and Government Services Canada Inspection Authority as follows:

- (a) original to the PWGSC Contracting Authority
- (b) one copy to the Technical Authority
- (c) one copy to contractor
- (d) Contracting authority

Solicitation No – N° de l'invitation  
F3006-14N642/A  
Client Ref No. – N° de réf. du client  
F3006-14N642

Amd. No. – N° de la modif.  
File No. – N° du dossier  
QCL-4-37212

Buyer ID – id de l'acheteur  
qcl 036

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**34. Licensing**

The Contractor must obtain and maintain all permits, licenses and certificates of approval required for the work to be performed under any applicable federal, provincial or municipal legislation. The Contractor is responsible for any charges imposed by such legislation or regulations. Upon request, the Contractor must provide a copy of any such permit, license or certificate to Canada.

**35. Hazardous Waste - Vessels**

SACC Manual Clause A0290C (2008-05-12) Hazardous Waste - Vessels

**36. Government Site Regulations**

SACC Manual Clause A9068C (2010-01-11) Government Site Regulations

**37. Scrap and Waste Material**

SACC Manual Clause A9055C (2010-08-16) Scrap and Waste Material

**38. Stability and Weight Management (*Not used*)**

**39. Vessel - Access by Canada (*Not used*)**

**40. Title to Property - Vessel (*Not used*)**

**41. Defence Contract**

SACC Manual Clause A9006C (2012-07-16) Defence Contract

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#### **42. Limitation of Contractor's Liability for Damages to Canada**

1. This section applies despite any other provision of the Contract and replaces the section of the general conditions entitled "Liability". Any reference in this section to damages caused by the Contractor also includes damages caused by its employees, as well as its subcontractors, agents, and representatives, and any of their employees.
2. Whether the claim is based in contract, tort, or another cause of action, the Contractor's liability for all damages suffered by Canada caused by the Contractor's performance of or failure to perform the Contract is limited to \$10 million per incident or occurrence to an annual aggregate of \$20 million for losses or damage caused in any one year of carrying out the Contract, each year starting on the date of coming into force of the Contract or its anniversary. This limitation of the Contractor's liability does not apply to nor include:
  - (a) Any infringement of intellectual property rights;
  - (b) Any breach of warranty obligations;
  - (c) Any liability of Canada to a third party arising from any act or omission of the Contractor in performing the Contract; or
  - (d) Any loss for which the policies of insurance specified in the Contract or any other policies of insurance held by the Contractor would provide insurance coverage.
3. Each Party agrees that it is fully liable for any damages that it causes to any third party in connection with the Contract, regardless of whether the third party makes its claim against Canada or the Contractor. If Canada is required, as a result of joint and several liability, to pay a third party in respect of damages caused by the Contractor, the Contractor must reimburse Canada for that amount.
4. The Parties agree that nothing herein is intended to limit any insurable interest of the Contractor nor to limit the amounts otherwise recoverable under any insurance policy. The Parties agree that to the extent that the insurance coverage required to be maintained by the Contractor under this Contract or any additional insurance coverage maintained by the Contractor, whichever is greater, is more than the limitations of liability described in sub article (2), the limitations provided herein are increased accordingly and the Contractor shall be liable for the higher amount to the full extent of the insurance proceeds recovered.
5. If, at any time, the total cumulative liability of the Contractor for losses or damage suffered by Canada caused by the Contractor's performance of or failure to perform the Contract, excluding liability described under subsection 2(a), (b), (c) and (d) exceeds \$40 million, either Party may terminate the Contract by giving notice in writing to the other Party and neither Party will make any claim against the other for damages, costs, expected profits or any other such loss arising out of the termination. However, no such termination or expiry of the Contract shall reduce or terminate any of the liabilities that have accrued to the effective date of the termination but which liabilities are subject to the limitations as specified in sub-article (1) through (4) above.

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6. The date of termination pursuant to this Article, shall be the date specified by Canada in its notice to terminate, or, if the Contractor exercises the right to terminate, in a notice to the Contractor from Canada in response to the Contractor's notice to terminate. The date of termination shall be in Canada's discretion to a maximum of 12 months after service of the original notice to terminate served by either Party pursuant to sub-article 5, above.
  7. In the event of a termination under this Article, the Contract will automatically remain in force subject to all of the same terms and conditions until the date of termination and the Contractor agrees that it will be paid in accordance with the applicable provisions as set out in the Basis of Payment, Annex B and that the Contractor's liability remains as specified in subarticles (1) through (4), above.
  8. Nothing shall limit Canada's other remedies, including Canada's right to terminate the Contract for default for breach by the Contractor of any of its obligations under this Contract, notwithstanding that the Contractor may have reached any limitation of its liability hereunder.

Solicitation No – N° de l'invitation  
F3006-14N642/A  
Client Ref No. – N° de réf. du client  
F3006-14N642

Amd. No. – N° de la modif.  
File No. – N° du dossier  
QCL-4-37212

Buyer ID – id de l'acheteur  
qcl 036

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## **ANNEX A**

### **REQUIREMENT - SPECIFICATION**

**See electronic Annex.**



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## ANNEX B

### BASIS OF PAYMENT FIRM PRICE

**Remark to Bidder: Annex B will form the Basis of Payment for the resulting contract and should not be filled in at annex 'I' the bid submission stage.**

#### B1 Contract Firm Price

|    |   |          |
|----|---|----------|
| A) | <b>Known Work</b><br>For work as stated in Contract Clause 1a), Specified in Annex "A" for a FIRM PRICE of: | \$ _____ |
| B) | <b>Applicable taxes</b>   | \$ _____ |
| C) | <b>Total Firm Price</b>   | \$ _____ |

#### B2 Unscheduled Work

##### Payment for Unscheduled Work:

The Contractor will be paid for unscheduled work arising, as authorized by Canada. The authorized unscheduled work will be calculated as follows:

Number of hours (to be negotiated) X \$\_\_\_\_\_, being the Contractor's firm hourly charge-out labour rate which includes overhead and profit, plus net laid-down cost of materials to which will be added a mark-up of 10 percent, plus Goods and Services Tax or Harmonized Sales Tax, if applicable, calculated at 5 percent of the total cost of material and labour. The firm hourly charge-out labour rate and the material mark-up will remain firm for the term of the Contract and any subsequent amendments.

**B2.1:** Notwithstanding definitions or usage elsewhere in this document, or in the Bidder's Cost Management System, when negotiating *Hours* for unscheduled work, PWGSC will consider only those hours of labour directly involved in the production of the subject work package. Elements of *Related Labour Costs* identified in B2.2 below, will not be negotiated, but will be included in the firm hourly Charge-out Labour Rate in accordance with paragraph B2.2

**B2.2:** Allowance for *Related Labour Costs* such as: Management, Direct Supervision, Purchasing and Material Handling, Quality Assurance and Reporting, First Aid, Gas Free Inspecting and Reporting, and Estimating will be included as *Overhead* within the *firm hourly Charge-out Labour Rate* entered in line B2 above.

**B2.3:** The 10% mark-up rate for materials will also apply to subcontracted costs. The mark-up rate includes any allowance for material and subcontract management not allowed for in the Chargeout Labour Rate. The Contractor will not be entitled to a separate labour component for the purchase and handling of materials or subcontract administration.

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## ANNEX C

### INSURANCE REQUIREMENTS

#### C.1 Ship Repairers' Liability Insurance

1. The Contractor must obtain Ship Repairer's Liability Insurance and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature, but for not less than \$10,000,000 per accident or occurrence and in the annual aggregate
2. The Ship Repairer's Liability insurance must include the following:
  - (a) Additional Insured: Canada is added as an additional insured, but only with respect to liability arising out of the Contractor's performance of the Contract. The interest of Canada as additional insured should read as follows: Canada, represented by Public Works and Government Services Canada.
  - (b) waiver of subrogation rights: Contractor's insurer to waive all rights of subrogation against Canada as represented by the Department of Public Works and Government Services Canada and the Canadian Coast Guard for any and all loss of or damage to the vessel, however caused.
  - (c) Notice of Cancellation: The Insurer will endeavor to provide the Contracting Authority thirty (30) days written notice of cancellation.
  - (d) Contractual Liability: The policy must, on a blanket basis or by specific reference to the contract, extend to assumed liabilities with respect to contractual provisions.
  - (e) Cross Liability/Separation of Insureds: Without increasing the limit of liability, the policy must protect all insured parties to the full extent of coverage provided. Further, the policy must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.

#### C.2 Commercial General Liability Insurance

1. The Contractor must obtain Commercial General Liability Insurance, and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature, but for not less than \$10,000,000 per accident or occurrence and in the annual aggregate
2. The Commercial General Liability Insurance policy must include the following:
  - (a) Additional Insured: Canada is added as an additional insured, but only with respect to liability arising out of the Contractor's performance of the Contract. The interest of Canada should read as follows: Canada, as represented by Public Works and Government Services Canada.
  - (b) Bodily Injury and Property Damage to third parties arising out of the operations of the Contractor.

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- (c) Personal Injury: While not limited to, the coverage must include Violation of Privacy, Libel and Slander, False Arrest, Detention or Imprisonment and Defamation of Character.
  - (d) Cross Liability/Separation of Insureds: Without increasing the limit of liability, the policy must protect all insured parties to the full extent of coverage provided. Further, the policy must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.
  - (e) Blanket Contractual Liability: The policy must, on a blanket basis or by specific reference to the Contract, extend to assumed liabilities with respect to contractual provisions.
  - (f) Employees and, if applicable, Volunteers must be included as Additional Insured.
  - (g) Employers' Liability : to protect the Contractor for liabilities arising in the management and administration of statutory and contractual entitlements of its employees.
  - (h) Notice of Cancellation: The Insurer agrees to provide the Contracting Authority thirty (30) days written notice of policy cancellation.
  - (i) If the policy is written on a claims-made basis, coverage must be in place for a period of at least 12 months after the completion or termination of the Contract.
  - (j) Owners' or Contractors' Protective Liability: Covers the damages that the Contractor becomes legally obligated to pay arising out of the operations of a subcontractor.
  - (k) Sudden and accidental Pollution Liability (minimum 72 hours): To protect the Contractor for liabilities arising from damages caused by accidental pollution incidents.

In addition, if the Contractor decides NOT to obtain Ship Repairers' Liability Insurance. (See Article C1) then the Commercial General Liability Insurance Policy must also include the following:

- a) Products and Completed Operations: Coverage for bodily injury or property damage arising out of goods or products manufactured, sold, handled, or distributed by the Contractor and/or arising out of operations that have been completed by the Contractor.
- b) Broad Form Property Damage including Completed Operations: Expands the Property Damage coverage to include certain losses that would otherwise be excluded by the standard care, custody or control exclusion found in a standard policy.
- c) Amendment to the Watercraft Exclusion to extend to incidental repair operations on board watercraft.

Solicitation No – N° de l'invitation  
F3006-14N642/A

Client Ref No. – N° de réf. du client  
F3006-14N642

Amd. No. – N° de la modif.

File No. – N° du dossier  
QCL-4-37212

Buyer ID – id de l'acheteur  
qcl 036

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**ANNEX D**

**INSPECTION/QUALITY ASSURANCE/QUALITY CONTROL**

**(NOT USED)**

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## ANNEX E

### WARRANTY

**2030 (2014-09-25) General Conditions Higher Complexity Goods are hereby amended, by deleting section 2030 22(2014-09-25), Warranty and replacing it as follows:**

#### **E.1 Section 22 Warranty**

1. At the discretion of the Minister, the Contractor will replace or make good at its own expense any finished work, excluding Government Issue incorporated therein, which becomes defective or which fails to conform to contract requirements as a result of faulty or inefficient manufacture, material or workmanship.
2. Notwithstanding prior acceptance of the finished work, and without restricting any other term of the Contract or any condition, warranty or provision implied or imposed by law, the Contractor hereby warrants that the following shall be free from all defects and shall conform with the requirements of the contract:

- (a) The painting of the underwater portion of the hull for a period of three hundred and sixty-five (365) days commencing from the date of undocking, except that the Contractor will only be liable to repair and/or replace to a value to be determined as follows:

Original cost to Canada of the underwater painting Work, divided by three hundred and sixty-five (365) days and multiplied by the number of days remaining in the warranty period. The resultant would represent the "Dollar Credit" due to Canada from the Contractor.

- (b) All other painting Work for a period of three hundred and sixty-five (365) days commencing from the date of acceptance of the Work;

- (c) all parts and material provided by the Contractor for a period of three hundred and sixty-five (365) days commencing from the date of acceptance of such parts or material;

- (d) All other items of Work for a period of ninety (90) days commencing from the date of acceptance of the Work, except that:

- (i) the warranty on the Work related to any system or equipment not immediately placed in continuous use or service shall extend for a period of ninety (90) days from the date of acceptance of the vessel;

- ii) for all outstanding defects, deviations, and Work items listed on the Acceptance Document at Delivery, the Warranty will be ninety (90) days from the subsequent date of acceptance for each item.

3. If more than one warranty period applies, in accordance with the above, to any Work, then the warranty shall be for the longest period.

4. The Contractor agrees to pass to Canada, and exercise on behalf of Canada, all warranties on the Materials supplied or held by the Contractor which exceed the periods indicated Above.

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## **E.2 Warranty Procedures**

### **E2.1 Scope**

- (a) The following are the procedures which suit the particular requirements for warranty considerations for a vessel on completion of a refit.

### **E2.2 Definition**

- (a) There are a number of definitions of "warranty" most of which are intended to describe its force and effect in law. One such definition is offered as follows:

"A warranty is an agreement whereby the vendor's or manufacturer's responsibility for performance of its product is extended for a specific period of time beyond the date at which the title to the product passes to the buyer."

### **E2.3 Warranty Conditions**

- (a) General Conditions 2030, Higher Complexity - Goods are augmented by clauses incorporated into the subject Contract.
- (b) The warranty periods may be stated in more than one part.
  - (i) 90 days commencing from the day the PWGSC 1205 Acceptance Document is signed for workmanship provided by the contractor for the refit work specified;
  - (ii) 365 days from the date of undocking the vessel for the specified areas of underwater paint and topside painting;
  - (iii) 365 days commencing from the day the PWGSC 1205 Acceptance Document is signed for parts and material provided by the contractor for the refit work specified;
  - (iv) Any other specific warranty periods that may be required in the contract or offered by the Contractor.
- (c) The foregoing does not cover the disposition of other deficiencies that will be directly related to Technical Authority problem areas of the following nature:
  - (i) items becoming unserviceable that were not included in the refit specification;
  - (ii) refit specifications or other related documentation requiring amendments or corrections to increase viability; and
  - (iii) work performed that is directly related to the Technical Authority.

### **E2.4 Reporting Failures With Warranty Potential**

- (a) The initial purpose of a report of a failure is to facilitate the decision as to whether or not to involve warranty and to generate action to effect repairs. Therefore in addition to identification, location data, etc. the report must contain details of the defect. Warranty decisions as a general rule are to be made locally and the administrative process is to be in accordance with procedures as indicated.
- (b) These procedures are necessary as invoking a warranty does not simply mean that the warrantor will automatically proceed with repairs at his expense. A review of the defect may well result in a disclaimer of responsibility, therefore, it is imperative that during such a review the Department is directly represented by competent technical authority qualified to agree or disagree with the warrantor's assertions.

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## E2.5 Procedures

- (a) Immediately it becomes known to the Ship's Staff that an equipment/system is performing below accepted standards or has become defective, the procedures for the investigation and reporting are as follows:
- (i) The vessel advises the Technical Authority when a defect, which is considered to be directly associated the refit work, has occurred.
  - (ii) On review of the Specification and the Acceptance Document, the Technical Authority in consort with Ship's Staff is to complete the Tombstone Data and section 1 of the Warranty Claim Form and forward the original to the Contractor for review with a copy to the PWGSC contracting Authority. If the PWGSC Contracting or Inspection Authority is unable to support warranty action, the Defect Claim Form will be returned to the originator with a brief justification. (It is to be noted that in the latter instance PWGSC will inform the Contractor of its decision and no further action will be required of the Contractor.

Warranty defect claims may be forwarded in hard copy, by fax or by e-mail whichever format is the most convenient.

- (iii) Assuming the Contractor accepts full responsibility for repair, the Contractor completes Section 2 and 3 of the Warranty Claim Form, returns it to the Inspection Authority who confirms corrective action has been completed, and who then distributes the form to the Technical Authority and the PWGSC Contracting Authority.
- (b) In the event that the Contractor disputes the claim as a warranty defect, or agrees to share, the contractor is to complete Part 2 of the Warranty Claim Form with the appropriate information and forward it to the Contracting Authority who will distribute copies as necessary.
- (c) When a warranty defect claim is disputed by the Contractor, the Technical Authority may arrange to correct the defect by in-house resources or by contracting the work out. All associated costs must be tracked and recorded as a possible charge against the contractor by PWGSC action. Material costs and manhours expended in correcting the defect are to be recorded and entered in Section 5 of the warranty defect claim by the Technical Authority who will forward the warranty defect claim to the PWGSC Contracting Authority for action. Defective parts of equipment are to be retained pending settlement of claim.
- (d) Defective equipment associated with potential warranty should not normally be dismantled until the contractor's representative has had the opportunity to observe the defect. The necessary work is to be undertaken through normal repair methods and costs must be segregated as a possible charge against a contractor by PWGSC action.

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## **E2.6 Liability**

- (a) Agreement between the Contracting Authority, Inspection Authority, Technical Authority and the Contractor will result in one of the following conditions:
  - (i) The contractor accepts full responsibility for costs to repair or overhaul under the warranty provisions of the contract;
  - (ii) The Technical Authority accepts full responsibility for repair and overhaul of item concerned;  
or
  - (iii) The Contractor and the Technical Authority agree to share responsibility for the costs to repair or overhaul the unserviceable item, in such cases the PWGSC Contracting Authority will negotiate the best possible sharing arrangement.
- (b) In the event of a disagreement as in paragraph 5c, PWGSC will take necessary action with the contractor while the Technical Authority informs its Senior Management including pertinent data and recommendations.
- (c) The total cost of processing warranty claims must include accommodation and travel costs of the contractor's employees as well as equipment/system down time and operational constraints. Accordingly, the cost to remediate the defect, in manhours and material, will be discussed between the Contracting/Inspection Authorities and the Technical Authority to determine the best course of action.

## **E2.7 Alongside Period For Warranty Repairs and Checks**

- (a) If at all possible, an alongside period for the vessel is to be arranged just before the expiration of the 90 day warranty period. This alongside period is to provide time for warranty repair and check by the contractor.
- (b) In respect to the underwater paint, should it become defective during the associated warranty period the contractor is only liable to repair to a value determined as follows:

"Original cost to Canada for painting and preservation of the underwater section of the hull, divided by three hundred and sixty-five (365) days and multiplied by the number of days remaining in the three hundred and sixty-five (365) days warranty period. The resultant would represent the 'Dollar Credit' due to Canada from the Contractor."

- (c) The Underwater paint system, before expiration of the warranty, should be checked by divers. The Technical Authority, is to arrange the inspection and inform the Contracting Authority of any adverse results.



Solicitation No – N° de l'invitation  
F3006-14N642/A  
Client Ref No. – N° de réf. du client  
F3006-14N642

Amd. No. – N° de la modif.  
File No. – N° du dossier  
QCL-4-37212

Buyer ID – id de l'acheteur  
qcl 036

## Appendix 1 of Annexe E



Public Works and Government  
Services Canada

Travaux publics et Services  
gouvernementaux Canada

### Warranty Claim Réclamation De Garantie

|  |  |                               |
|--|--|-------------------------------|
| Vessel Name – Nom de navire            | File No. – N° de dossier   | Contract No. - N ° de contrat |
| Customer Department – Ministère client | Warranty Claim Serial No.<br>Numéro de série de réclamation de garantie  |                               |
| Contractor – Entrepreneur              | <b><u>Effect on Vessel Operations</u></b><br><b><u>Effet sur des opérations de navire</u></b><br><br>Critical   Degraded   Operational   Non-operational<br><br>Critique   Dégradé   Opérationnel   Non-opérationnel |                               |

#### 1. Description of Complaint – Description de plainte

Contact Information – l'information de contact

Name – Nom

Tel. No. - N ° Tél

Signature – Signature

Date

#### 2. Contractor's Investigative Report – Le rapport investigateur de l'entrepreneur

Solicitation No – N° de l'invitation  
F3006-14N642/A  
Client Ref No. – N° de réf. du client  
F3006-14N642

Amd. No. – N° de la modif.  
File No. – N° du dossier  
QCL-4-37212

Buyer ID – id de l'acheteur  
qcl 036

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### 3. Contractor's Corrective Action – La modalité de reprise de l'entrepreneur

---

\_\_\_\_\_  
Contractor's Name and Signature – Nom et signature de l'entrepreneur

\_\_\_\_\_  
Date of Corrective Action - Date de modalité de reprise

\_\_\_\_\_  
Client Name and Signature - Nom et signature de client

\_\_\_\_\_  
Date

### 4. PWGSC Review of Warranty Claim Action – Examen d'action de réclamation de garantie par TPSGC

---

\_\_\_\_\_  
Signature – Signature

\_\_\_\_\_  
Date

---

Solicitation No – N° de l'invitation  
F3006-14N642/A  
Client Ref No. – N° de réf. du client  
F3006-14N642

Amd. No. – N° de la modif.  
File No. – N° du dossier  
QCL-4-37212

Buyer ID – id de l'acheteur  
qcl 036

---

**ANNEX F**

**VESSEL CUSTODY**

**(NOT USED)**

Solicitation No – N° de l'invitation  
F3006-14N642/A

Client Ref No. – N° de réf. du client  
F3006-14N642

Amd. No. – N° de la modif.

File No. – N° du dossier  
QCL-4-37212

Buyer ID – id de l'acheteur  
qcl 036

---

**Annex G**

**SECURITY REQUIREMENTS CHECK LIST**

**(NOT USED)**

Solicitation No – N° de l'invitation  
F3006-14N642/A  
Client Ref No. – N° de réf. du client  
F3006-14N642

Amd. No. – N° de la modif.  
File No. – N° du dossier  
QCL-4-37212

Buyer ID – id de l'acheteur  
qcl 036

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**ANNEX H**

**PROJECT MANAGEMENT SERVICES**

**(NOT USED)**

**ANNEX I**

**FINANCIAL BID PRESENTATION SHEET**

**I1 Price for Evaluation**

|  |    |
|--|----|
| <b>A) Known Work</b><br>For work as stated in Part 1 Clause 2a, Specified in Annex "A" and detailed in the attached Pricing Data Sheets Appendix 1 of Annex "I", for a FIRM PRICE of:  |    |
|  | \$ |
| <b>B) Unscheduled Work</b><br>Contractor <i>Labour Cost</i> :<br>Estimated labour hours at a firm <i>hourly Charge-out Labour Rate</i> , including overhead and profit for evaluation purpose only:<br>350 person hours X \$_____ per hour for a PRICE of:<br><b>See Note I2.1 and I2.2 below.</b> |    |
|  | \$ |
| <b>C) EVALUATION PRICE</b><br>GST Excluded, [A + B]:<br><br>For an EVALUATION PRICE of :   |    |
|  | \$ |

**I2 Unscheduled Work**

The Contractor will be paid for unscheduled work arising, as authorized by the Minister, calculated in the following manner:

"Number of hours (to be negotiated) X \$\_\_\_\_\_ your firm *hourly Charge-out Labour Rate* which includes *Overhead* and profit, plus net laid-down cost of materials to which shall be added a 10% mark-up, plus Goods and Services Tax or Harmonized Sales Tax as applicable, of the total cost of material and labour. The firm *hourly Charge-out Labour Rate* and the material mark-up will remain firm for the duration of the Contract and any subsequent amendments thereto."

- I2.1:** Notwithstanding definitions or usage elsewhere in this document, or in the Bidder's Cost Management System, when negotiating *Hours* for unscheduled work, PWGSC will consider only those hours of labour directly involved in the production of the subject work package.

Elements of Related Labour Costs identified in I2.2 below, will not be negotiated, but will be compensated for in accordance with paragraph I2.2. It is therefore incumbent upon the Bidder to enter values in the above table which will result in fair compensation, regardless of the structure of their Cost Management System.

- I2.2:** Allowance for *Related Labour Costs* such as: Management, Direct Supervision, Purchasing and Material Handling, Quality Assurance and Reporting, First Aid, Gas Free Inspecting and Reporting, and Estimating will be included as *Overhead* for the purposes of determining the *Charge-out Labour Rate* entered in line I2 above.

- I2.3:** The 10% mark-up rate for materials will also apply to subcontracted costs. The mark-up rate includes any allowance for material and subcontract management not allowed for in the *Chargeout Labour Rate*. The Contractor will not be entitled to a separate labour component for the purchase and handling of materials or subcontract administration.

Solicitation No – N° de l'invitation  
F3006-14N642/A  
Client Ref No. – N° de réf. du client  
F3006-14N642

Amd. No. – N° de la modif.  
File No. – N° du dossier  
QCL-4-37212

Buyer ID – id de l'acheteur  
qcl 036

# APPENDIX 1 OF ANNEX I

| PRICING DATA SHEETS |  |                 |             |
|---------------------|--|-----------------|-------------|
| Item                | Description  |                 | Fixed Price |
| 11.1                | Bulwark plating and adjacent structural members.<br>Except for items 11.1,c. iv & vii here below)  | \$ _____        |             |
|                     | 11.1, c. iv – Replacement of roller fairlead section   | \$ _____        |             |
|                     | 11.1, c. vii – Painting of the repair area affected by the work.   | \$ _____        |             |
|                     | <b>Total for 11.1 :</b>  | <b>\$ _____</b> |             |
| 11.2                | Installation ventilation appareil à gouverner.   |                 | \$ _____    |
| 11.3                | Main deck hatches repair (8) (Final amount prorated)<br>Price : \$ _____ / hatch x 8 hatches =   |                 | \$ _____    |
| 12.1                | Maintenance of two (2) Beaudoin motors (Final amounts prorated)  |                 |             |
|                     | Maintenance of motors.<br>Price : \$ _____ / motor x 2 motors =  | \$ _____        |             |
|                     | Cleaning of oil coolers (2)<br>Price : \$ _____ / cooler x 2 coolers =   | \$ _____        |             |
|                     | Hydrostatic Tests (2) (1.5 times the operating pressure)<br>Price : \$ _____ / test x 2 tests =  | \$ _____        |             |
|                     | Complete revision of fresh water pump (2)<br>Price : \$ _____ / pump x 2 pumps =   | \$ _____        |             |
|                     | Complete revision of transmission pumps (2)<br>Price : \$ _____ / pump x 2 pumps =   | \$ _____        |             |
|                     | Complete revision of cooling pumps (2)<br>Price : \$ _____ / pump x 2 pumps =  | \$ _____        |             |
|                     | Complete revision of sea water pumps (2)<br>Price : \$ _____ / pump x 2 pumps =  | \$ _____        |             |
|                     | Refurbishment of fuel pumps (2) including calibration and performance report.<br>Price : \$ _____ / pump x 2 pumps =                                     | \$ _____        |             |
|                     | Refurbishment of turbos compressors (2)<br>Price : \$ _____ / turbo comp. x 2 turbo comp. =  | \$ _____        |             |
|                     | Verification and refurbishment of injectors (12) including performance report.<br>Price : \$ _____ / injector x 12 injectors =                           | \$ _____        |             |
|                     | Cleaning of sea water coolers (2) including hydrostatic tests.<br>Price : \$ _____ / pump x 2 pumps =  | \$ _____        |             |
|                     | Electric Starters (2) including, disassembly, cleaning, inspection and replacement.<br>Price : \$ _____ / starter x 2 starters =                         | \$ _____        |             |
|                     | Oil change (Oil supply by CCG)   | \$ _____        |             |
|                     | Replacement of antifreeze  | \$ _____        |             |
|                     | Installation, removal and measurement of two (2) pistons (including TCMS inspection).<br>Price : \$ _____ \$ / piston x 2 pistons =                      | \$ _____        |             |
|                     | Installation, removal and measurement of the two (2) crank shaft main bearings (including TCMS inspection).<br>Price : \$ _____ / bearing x 2 bearings = | \$ _____        |             |
|                     | Four (4) hours trials  | \$ _____        |             |
|                     | <b>Total for 12.1 :</b>  | <b>\$ _____</b> |             |
|                     |  |                 | \$ _____    |

Solicitation No – N° de l'invitation  
F3006-14N642/A  
Client Ref No. – N° de réf. du client  
F3006-14N642

Amd. No. – N° de la modif.  
File No. – N° du dossier  
QCL-4-37212

Buyer ID – id de l'acheteur  
qcl 036

| PRICING DATA SHEETS                           |   |          |          |
|---|---|----------|----------|
| <b>12.2</b>                                   | Revision of the Port Transmission   |          |          |
|   | 12.2, c.xi Renewal of "Chockfast" supports  | \$ _____ |          |
|   | 12.2, c.xii Roundtrip transportation, subcontracting (test and report) of the hydraulic pump. | \$ _____ |          |
|   | 12.2, c.xiv Two (2) hours trials  | \$ _____ |          |
|   | <b>Total for 12.2 :</b>   |          |          |
| <b>14.1</b>                                   | Trouble shooting and repair of ground problem (100 hours)<br>(Final amount prorated)          |          |          |
|   | Price : \$ _____ / hour x 100 hours =   |          | \$ _____ |
| <b>14.2</b>                                   | Fuel tanks (2) calibration  |          |          |
|   | Price : \$ _____ / tank x 2 tanks =   |          | \$ _____ |
| <b>16.3</b>                                   | Removal of freezer  |          |          |
|   | 16.3, b. i – Removal and disposal of refrigeration gas  | \$ _____ |          |
|   | 16.3, b. ii – Dismantling, disposal and cleaning of the refrigerator compartment.             | \$ _____ |          |
|   | 16.3, b. iii – Vent installation  | \$ _____ |          |
|   | <b>Total for 16.3 :</b>   |          |          |
| <b>A) SCHEDULED WORK - TOTAL FIRM PRICING</b> |   |          | \$ _____ |



**Table of Contents**

# **Repairs to CCGS F.C.G. Smith – Winter 2014–2015**

Specification no.: 14IN642

Date: 2014-10-16

Version 02

Prepared by: Marine Engineering  
101 Champlain Blvd.  
Québec, QC  
G1K 7Y7

|             |  |           |
|-------------|--|-----------|
| <b>1.0</b>  | <b>GENERAL NOTES.....</b>  | <b>4</b>  |
| <b>1.1</b>  | <b>Identification.....</b>   | <b>4</b>  |
| <b>1.2</b>  | <b>References .....</b>  | <b>4</b>  |
| <b>1.3</b>  | <b>Occupational Health and Safety.....</b>                                       | <b>5</b>  |
| <b>1.4</b>  | <b>Access to Worksite .....</b>  | <b>6</b>  |
| <b>1.5</b>  | <b>Workplace Hazardous Materials Information System (WHIMS) .....</b>            | <b>6</b>  |
| <b>1.6</b>  | <b>Smoking in the Work Space .....</b>   | <b>6</b>  |
| <b>1.7</b>  | <b>Clean and Hazard Free Worksite .....</b>                                      | <b>6</b>  |
| <b>1.8</b>  | <b>Fire Protection.....</b>  | <b>7</b>  |
| <b>1.9</b>  | <b>Touch-up / Disturbed Paint.....</b>   | <b>7</b>  |
| <b>1.10</b> | <b>CCG Employees and Others on the Vessel.....</b>                               | <b>7</b>  |
| <b>1.11</b> | <b>Regulatory Inspections and/or Class Surveys.....</b>                          | <b>8</b>  |
| <b>1.12</b> | <b>Test Results and Data Book .....</b>  | <b>8</b>  |
| <b>1.13</b> | <b>Contractor Supplied Materials and Tools .....</b>                             | <b>9</b>  |
| <b>1.14</b> | <b>Government Supplied Materials &amp; Tools .....</b>                           | <b>9</b>  |
| <b>1.15</b> | <b>Restricted Areas.....</b>   | <b>9</b>  |
| <b>1.16</b> | <b>Contractor Inspections and Protection of Equipment and the Worksite .....</b> | <b>10</b> |
| <b>1.17</b> | <b>Recording of Work in Progress .....</b>                                       | <b>10</b> |
| <b>1.18</b> | <b>List of Confined Spaces.....</b>  | <b>10</b> |
| <b>1.19</b> | <b>Lead Paint and Paint Coatings .....</b>                                       | <b>10</b> |
| <b>1.20</b> | <b>Asbestos Containing Materials .....</b>                                       | <b>11</b> |
| <b>1.21</b> | <b>Removed Materials and Equipment.....</b>                                      | <b>11</b> |
| <b>1.22</b> | <b>Welding Certification .....</b>   | <b>11</b> |
| <b>1.23</b> | <b>Electrical Installations .....</b>  | <b>11</b> |
| <b>1.24</b> | <b>Electric Power .....</b>  | <b>11</b> |
| <b>1.25</b> | <b>Toilet .....</b>  | <b>11</b> |

---

|      |  |    |
|------|--|----|
| 1.26 | Contractor Crane.....                            | 11 |
| 1.27 | Ship crane.....                                  | 11 |
| 2.0  | LIST OF ACRONYMS .....                           | 12 |
|      | 10-SAFETY AND SECURITY EQUIPMENT N/A .....       | 13 |
|      | 11-HULL AND RELATED STRUCTURE.....               | 13 |
| 11.1 | Repairs to bulwark.....                          | 13 |
| 11.2 | Installation of steering gear ventilation .....  | 14 |
|      | 12-PROPULSION AND MANOEUVRING SYSTEMS .....      | 15 |
| 12.1 | Maintenance of two Baudouin engines .....        | 15 |
| 12.2 | Overhaul of portside transmission.....           | 16 |
|      | 13-VESSEL ELECTRICAL POWER GENERATION.....       | 18 |
|      | 14-ELECTRICAL POWER DISTRIBUTION.....            | 18 |
| 14.1 | Correction of grounding problem .....            | 18 |
| 14.2 | Calibration of fuel tanks .....                  | 19 |
|      | 15-AUXILIARY SYSTEMS.....                        | 19 |
|      | 16-DOMESTIC SYSTEMS.....                         | 19 |
| 16.3 | Removal of freezer.....                          | 19 |
|      | 17-DECK EQUIPMENT / VESSEL SUPPORT SYSTEMS ..... | 20 |
|      | 18-COMMUNICATION AND NAVIGATION SYSTEMS .....    | 20 |
|      | 19-INTEGRATED CONTROL SYSTEMS .....              | 20 |
|      | 21-VESSEL INFORMATION SUPPORT SYSTEMS .....      | 20 |
|      | 22-SPECIAL (PROGRAM) ASSETS.....                 | 20 |

## 1.0 GENERAL NOTES

### 1.1 Identification

1.1.1 These General Notes describe the CCG requirements applicable to all accompanying Technical Specifications.

### 1.2 References

1.2.1 Applicable regulations and documentation:

| <b>FSSM Procedures</b> | <b>Title</b>   | <b>Included Yes/No</b>  |
|------------------------|--|-------------------------|
| 7.B.2.                 | Fall Protection  | yes                     |
| 7.B.3                  | Hazard Prevention Program  |                         |
| 7.D.9                  | Entry Into Confined Spaces   | yes                     |
| 7.D.11                 | Hotwork  | yes                     |
| 7.D.19                 | Lockout and Tagout   | yes                     |
| 7.F.6                  | Handling, Storage & Disposal of Hazardous Material   | yes                     |
| 7.F.9                  | Paint and Other Coatings   | yes                     |
| 7.F.10                 | Controlling Halocarbon Use Aboard Ships  | yes                     |
| 7.F.12                 | Potable Water Quality  |                         |
| 10.A.2                 | Contractor Liability   | yes                     |
| Ship Specific          | Vessel Specific - Asbestos Management Plan   |                         |
|                        |  |                         |
| <b>Publications</b>    |  |                         |
| TP3177E                | Standard for the Control of Gas Hazards in Vessels to be Repaired or Altered               | yes                     |
| T127E                  | Transport Canada Marine Safety Electrical Standard   | yes                     |
| IEEE 45                | Recommended Practice for Electrical Installation on Ships                                  | yes                     |
| 70-000-000-EU-JA-001   | Specification for the Installation of Shipboard Electronic Equipment                       | Available from: CCG/ITS |
| CSA W47.1              | Certification of Companies for Fusion Welding of Steel Structures Division 2 Certification | yes                     |
| CSA W47.2              | Certification of Companies for Fusion Welding of Aluminum                                  |                         |
| CSA W59                | Welded Steel Construction – Metal Arc Welding  | yes                     |
| CSA W59.2              | Welded Aluminum Construction   |                         |
| <b>Acts</b>            |  |                         |
| CSA                    | Canada Shipping Act  | yes                     |
| CLC                    | Canada Labour Code   | yes                     |

|                    |   |     |
|--------------------|---|-----|
|                    |   |     |
| <b>Regulations</b> |   |     |
| MOHS               | Maritime Occupational Health and Safety | yes |
|                    |   |     |

### 1.3 Occupational Health and Safety

- 1.3.1 The Contractor and all sub-contractors shall follow Occupational Health and Safety (OHS) procedures in accordance with applicable federal and provincial OHS regulations ensuring that Contractor activities are carried out in a safe manner and do not endanger the safety of any personnel.
- 1.3.2 The Contractor and the Contractor's employees, including any sub-contractors shall attend a safety orientation meeting of the vessel prior to the commencement of any work in order to familiarize the Contractor's employees with ship specific hazards and permit systems for work protocols as well as procedures for Security, Hazard Prevention, Hazard Intervention and Pre-Job Safety Assessments. The Contractor will have access to an uncontrolled copy of the Fleet Safety and Security Manual.
- 1.3.3 The Contractor shall comply with the Fleet Safety and Security Manual, DFO/5737 and shipboard work instructions in addition to the applicable Canada Labour Code regulations while performing work involving the following;
- Hot Work;
  - Work Aloft;
  - Confined Space Entry;
  - Gas Freeing for Entry and Hot Work;
  - Lock Out/Tag Out;
  - Pre-Job Safety Assessments.
- 1.3.4 For the purpose of the Lock Out/Tag Out procedure the Contractor shall supply locks and locking devices for the Contractor's employees in addition to those provided by the Chief Engineer for the ship's crew.
- 1.3.5 The Contractor and Contractor's employees will not have access to the vessel's washrooms and crew mess facilities. The Contractor shall provide the necessary amenities for the Contractor's and sub-contractors employees as required.

#### **1.4 Access to Worksite**

- 1.4.1 The Contractor shall ensure the TA and CG staff has unrestricted access to the worksite at all times during the contract period.

#### **1.5 Workplace Hazardous Materials Information System (WHIMS)**

- 1.5.1 The Contractor must provide the TA with Material Safety Data Sheets (MSDS) for all Contractor supplied WHIMS controlled products.
- 1.5.2 The TA will provide the Contractor with access to MSD sheets for all controlled products on the ship for all specified work items.

#### **1.6 Smoking in the Work Space**

- 1.6.1 The Contractor must ensure compliance with the Non- Smokers' Health Act. The Contractor shall ensure that every employer, and any person acting on behalf of an employer, shall ensure that persons refrain from smoking in any work space under the control of the employer. The Contractor shall ensure that there is absolutely no smoking onboard the vessel.

#### **1.7 Clean and Hazard Free Worksite**

- 1.7.1 Before the Contractor starts any work on the vessel the Contractor's Quality Assurance Representative, the TA and the TI shall walk through each space and area where work is to take place, including access and removal routes and areas adjacent to those where the work is to be done as a result of this specification. The Contractor's Quality Assurance Representative shall take digital pictures of each area showing the outfit therein and download the photos in JPG format onto a CD or DVD. Each picture shall be dated and labeled as to the location on the vessel. Copies of this CD or DVD are to be provided to the TA and TI for reference purposes within 48 hours of the start of the contract.
- 1.7.2 The Contractor, during the work period shall maintain those areas of the vessel which Contractor personnel use to access those areas where work is to be undertaken, in a clean condition, free from debris and remove garbage daily.
- 1.7.3 Areas that pose a hazard as a result of the specification work are to be secured and clearly identified by the Contractor with signage to advise and protect all personnel from the hazard in accordance with applicable Canada Labour Code requirements.
- 1.7.4 Upon completion of this contract, the Contractor shall be responsible for the removal of all garbage generated from the work of this specification and for returning the vessel to the state of cleanliness in which the vessel was at the start of the contract period.

## **1.8 Fire Protection**

- 1.8.1 The Contractor must ensure the isolation, removal and installation of fire detection and suppression systems or any components thereof, is performed by a qualified technician. When the fire detection or fire suppression system is deactivated or disabled by the Contractor during the contract, the system(s) must be recertified by a qualified technician as fully functional. A signed and dated original copy of the certificate must be delivered to the TA and the TI before the end of the contract.
- 1.8.2 The Contractor must notify the TA and TI and obtain written approval from the TA prior to disturbing, removing, isolating, deactivating / disabling or locking out any part of the fire detection or suppression systems, including heat and smoke sensors.
- 1.8.3 The Contractor must ensure protection against fire at all times including when working on the ship's fire detection and / or suppression system(s). This may be accomplished as suggested below and only with the written permission of the TA:
- Disabling only one portion of a system at a time;
  - By maintaining system function using spares while work is in progress;
  - Other means acceptable to and approved by the TA.
- 1.8.4 The Contractor must note that failure to take the necessary precautions while performing work on the vessel's fire suppression system(s) could result in the accidental discharge of the fire suppression agent(s). The Contractor must recharge and certify at his cost, container(s) or systems that are discharged as a result of such work.

## **1.9 Touch-up / Disturbed Paint**

- 1.9.1 Unless stated otherwise the Contractor shall supply and apply two coats of marine primer compatible with the vessel's existing coating system to all new and/or disturbed metal surfaces.
- 1.9.2 The Contractor shall prepare all new and disturbed steelwork to the paint manufacturer's standards prior to painting.

## **1.10 CCG Employees and Others on the Vessel**

- 1.10.1 CCG / DFO employees and other personnel such as manufacturer's representatives and/or TCMS or Class surveyors may carry-out other work including work items not included in this specification, onboard the vessel during this work period. Every effort will be made by the TA to ensure this work and the associated inspections and/or surveys do not interfere with the Contractor's work. The Contractor will not be responsible for coordinating the related inspections or payment of inspection fees for this work unless otherwise specified.

### **1.11 Regulatory Inspections and/or Class Surveys**

- 1.11.1 The Contractor shall contact, coordinate and schedule all regulatory inspections and/or class surveys by the applicable authority: i.e. TCMS, HC, Environment Canada or others as required by the specification.
- 1.11.2 Any documentation generated by the above inspections and/or surveys to show that the inspections and/or surveys were conducted (i.e. original signed and dated certificates) must be provided to the TA with copies to the TI.
- 1.11.3 The Contractor must not substitute inspection by the TA or TI for the required regulatory inspections or class surveys.
- 1.11.4 The Contractor must provide timely advance notification (minimum of 24 hours) of scheduled regulatory inspections and/or class surveys to the TA and TI so they may witness the inspection.

### **1.12 Test Results and Data Book**

- 1.12.1 The Contractor shall develop a Test and Trials Plan which shall include as a minimum, all tests and trials stated in the specification. This plan shall be provided for TA and TI review 2 week(s) prior to the originally scheduled Tests and Trials commencement.
- 1.12.2 All tests, measurements, calibrations and readings must be recorded, signed by the person taking the measurements, dated and provided in report format both in hard copy and electronic format, to the TA, TI and TCMS.
- 1.12.3 Recorded dimensions shall be to a precision of three decimal places (unless otherwise stated) in the measuring system currently in use on the vessel.
- 1.12.4 The Contractor shall provide to the TA and TI current and valid calibration certificates for all instrumentation used in the Test and Trials Plan showing that the instruments have been calibrated in accordance with the manufacturer's instructions.
- 1.12.5 Hard copy reports shall be bound in standard 3-ring binders, type written on letter size paper and indexed by specification number. Electronic copies shall be in unprotected Adobe PDF format and provide on CD-ROM media. The Contractor shall provide 3 hard copies and 1 electronic copy of all reports.
- 1.12.6 All documentation from the contract period shall be inserted in a data book and delivered to the TA and TI on completion of the contract.



### **1.13 Contractor Supplied Materials and Tools**

- 1.13.1 The Contractor must ensure all materials are new and unused.
- 1.13.2 The Contractor must ensure replacement material such as jointing, packing, insulation, small hardware, oils, lubricants, cleaning solvents, preservatives, paints, coatings etc. are in accordance with the equipment manufacturer's drawings, manuals and/or instructions.
- 1.13.3 Where no particular item is specified or where substitution must be made, the TA must approve the substituted item in writing. The Contractor must provide information about materials used, certificate of grade and quality of various materials to the TA and TI prior to use.
- 1.13.4 The Contractor shall provide all equipment, devices, tools and machinery such as crane, staging, scaffolding and rigging necessary for the completion of the work in this specification.
- 1.13.5 The Contractor shall provide waste disposal services for any oil, oily waste or other hazardous or controlled waste generated by the work of this specification. The Contractor shall provide waste disposal certificates for all of the above generated waste and the disposal certificates shall indicate that the disposal was in accordance with Federal, Provincial and Municipal regulations in effect.

### **1.14 Government Supplied Materials & Tools**

- 1.14.1 All tools are Contractor supplied unless otherwise stated in the technical specifications.
- 1.14.2 Where tools are supplied by the TA they shall be returned by the Contractor in the same condition as when they were borrowed. Borrowed tools must be inventoried and signed for by the Contractor on receipt and return to the TA.
- 1.14.3 Any Government supplied material (GSM) shall be received by the Contractor and stored in a secure warehouse or storeroom having a controlled environment appropriate for the equipment as per manufacturer's instructions.

### **1.15 Restricted Areas**

- 1.15.1 The Contractor must not enter the following areas except to perform work as required by the specifications: all cabins, offices, workshops, Engineers' office, Wheelhouse, Control Room, all washrooms, Galley, Mess Rooms, Lounge areas and any other areas restricted by signage.
- 1.15.2 The Contractor must give the TA 24 hours advance notice prior to working in any accommodation areas or office spaces. This will allow CCG adequate time to move personnel and secure the areas.

### **1.16 Contractor Inspections and Protection of Equipment and the Worksite**

- 1.16.1 The Contractor must coordinate an inspection with the TA and TI on the condition and location of items to be removed prior to carrying out the specified work or to gain access to a location to carry out the work.
- 1.16.2 Any damage incurred as a result of the Contractor's work and that is attributable to the Contractor's work performance shall be repaired by the Contractor at his expense. Materials used in any replacement or repairs must meet the criteria for Contractor supplied material noted above in section Contractor Supplied Materials and Tools.
- 1.16.3 The Contractor must protect all equipment and surrounding areas from damage. Work areas are to be protected from the ingress of water, welding and blasting grit etc. Temporary covers to work areas must be installed.

### **1.17 Recording of Work in Progress**

- 1.17.1 The TA and TI may record any work in progress using various means including, but not limited to photography and video, digital or film.

### **1.18 List of Confined Spaces**

- 1.18.1 The Contractor may request a list of the vessel's identified confined spaces at the Pre-Refit meeting.

### **1.19 Lead Paint and Paint Coatings**

- 1.19.1 The Contractor shall not use lead based paints.
- 1.19.2 CG ships have been painted with lead based paints in the past and as a result some of the Contractor's processes such as grinding, welding and burning may release this lead from the coatings. The Contractor shall ensure that coatings in the affected work areas are tested for lead content and that the work is performed in accordance with applicable Federal and Provincial regulations.
- 1.19.3 The Contractor must provide HC product approval for underwater hull surface paints controlled by HC and the Pest Management Regulatory Agency.

### **1.20 Asbestos Containing Materials**

- 1.20.1 The Contractor shall not use any asbestos containing materials.
- 1.20.2 Handling of any asbestos containing materials shall be performed by personnel trained and certified in the removal of asbestos in accordance with Federal, Provincial and Municipal regulations in effect and in accordance with the Fleet Safety and Security Manual. The Contractor shall provide the TA and TI with disposal certificates for all asbestos containing material removed from the vessel indicating that the disposal was in accordance with Federal, Provincial and Municipal regulations in effect.

### **1.21 Removed Materials and Equipment**

- 1.21.1 All removed equipment as a result of this specification shall remain the property of the Coast Guard unless otherwise instructed in the specification sections.

### **1.22 Welding Certification**

- 1.22.1 For any work requiring the application of fusion welding for steel structures the Contractor and/or the sub-contractor welders shall be certified by the Canadian Welding Bureau in accordance with CSA Standards W47.1-03, latest revision – Certification of Companies for Fusion Welding of Steel Division 2 Certification as a minimum. Current copies of certification (including those of the welders) shall be provided to the TA and the TI.

### **1.23 Electrical Installations**

- 1.23.1 All electrical installations and repairs shall be carried out in accordance with the latest revisions of Transport Canada Marine Safety Electrical Standard TP127E and IEEE Standard 45 Recommended Practice for Electrical Installation on Ships.

### **1.24 Electric Power**

- 1.24.1 CCG shall allow the to use of a limited (or ----) number of 115 VAC, 1 phase, 15 amp receptacle(s) for the use of the Contractor for the contracted period.

### **1.25 Toilet**

- 1.25.1 No toilet twill be available on board of the vessel

### **1.26 Contractor Crane**

- 1.26.1 The contractor must contact the port authority to known the wharf capacity

### **1.27 Ship crane**

- 1.27.1 No crane will be available on board

## **2.0 LIST OF ACRONYMS**

|       |  |
|-------|--|
| CA    | Contract Authority (PWGSC)                         |
| CCG   | Canadian Coast Guard                               |
| CLC   | Canada Labour Code                                 |
| CSM   | Contractor Supplied Material                       |
| CSA   | Canadian Standards Association                     |
| CWB   | Canadian Welding Bureau                            |
| DFO   | Department of Fisheries and Oceans                 |
| FSSM  | Fleet Safety & Security Manual (CCG)               |
| FSR   | Field Service Representative                       |
| GSM   | Government Supplied Materials                      |
| HC    | Health Canada                                      |
| IEEE  | Institute of Electrical and Electronic Engineers   |
| LOA   | Length Over All                                    |
| MSDS  | Material Safety Data Sheet                         |
| OHS   | Occupational Health and Safety                     |
| PWGSC | Public Works and Government Services Canada        |
| SSMS  | Safety & Security Management System                |
| TBS   | Treasury Board of Canada Secretariat               |
| TCMS  | Transport Canada Marine Safety                     |
| TI    | Inspection Authority – Technical Inspector (PWGSC) |
| TA    | Technical Authority – Owner’s Representative (CCG) |
| WHMIS | Workplace Hazardous Material Information System    |
| N/A   | Non-applicable                                     |

## **10-SAFETY AND SECURITY EQUIPMENT**

N/A

## **11-HULL AND RELATED STRUCTURE**

### **11.1 Repairs to bulwark**

#### **a. Objective**

Following a collision with a wharf, the starboard bulwark was damaged and needs to be repaired in accordance with the regulations and plans provided.

#### **b. Applicable technical documentation**

- Tank capacity plan 45008
- Main deck 45027
- Bulwark construction 45033, with the section needing replacement marked off
- Three (3) photos in PDF

#### **c. Scope of work**

- i. Open and degas the tank located below in order to perform hot work.
- ii. The winch cable passing through the fairlead must be disassembled and reassembled after the work is complete.
- iii. Supply the equipment and labour needed to replace the damaged steel structure and sections, as illustrated in construction drawing 45033 and the photos provided.
- iv. The section of the roller fairlead must be rebuilt as constructed (drawing 45033 is not of the current fairlead).
- v. The steel used must be Grade A or equivalent, certified by a classification society (see note on plan). The sheet thickness must be consistent with the requirements stated in the plan provided.
- vi. The steel surface must be prepared according to the manufacturer's recommendations for paint application.
- vii. Supply and apply two basecoats, 0.005 to 0.006 inches thick, of INTERGARD 264 in red on all bare metal surfaces, then apply two 0.0015-inch thick coats of INTERTHANE 990 in Coast Guard red RAL 3000 or white RAL 9003, depending on the surface. A coating must be applied in the tank structure. The paint must be International brand, or the equivalent from Amercoat. The paint must be applied according to the paint application guide.

## **11.2 Installation of steering gear ventilation**

### **a. Objective**

- i. Install forced ventilation in the two steering gear compartments in accordance with the applicable standards.

### **b. Applicable technical documentation**

- Two (2) photos

### **c. Scope of work**

- i. A gooseneck is currently installed on each steering gear compartment. Install a second gooseneck at the rear of the compartment entrance (see photo) in accordance with Transport Canada regulations. It must be possible to hermetically seal the goosenecks. Install an axial fan (110 volt with a centrifugal switch), which must exchange air at a rate of at least 10 times per hour. The compartment is approximately 950 cubic feet. Provide a preliminary drawing for the installation of a fan and a new gooseneck. One of the gooseneck hoses must reach the bottom part of the tank, while the other must be located in the top part of the tank. The fan must be installed inside the tank.
- ii. The fan in each compartment must be connected to a 120 volt circuit that powers the lights inside the compartments. An emergency stop button must be installed for each fan outside each compartment on deck. The emergency stop boxes must meet at least the NEMA 4x standard.
- iii. Demonstrate that the new installation is watertight.
- iv. Test the installations in the presence of a CCG representative and Transport Canada inspector.

## **11.3 Repairs to deck hatches**

### **a. Objective**

Refurbish the mechanisms of eight deck hatches.

### **b. Applicable technical documentation**

- Four (4) photos

### **c. Scope of work**

- i. Dismantle the eight (8) hatches located on the deck of the vessel (see the four photos). Replace the pins and springs of the door locking mechanism. The springs are supplied by the CCG. Replace the grease nipples with stainless steel equivalents.
- ii. Check the watertightness of the hatches in the presence of a CCG representative and make necessary adjustments.

## **12-PROPULSION AND MANOEUVRING SYSTEMS**

### **12.1 Maintenance of two Baudouin engines**

#### **a. Objective**

Perform regulatory maintenance on two Baudouin propulsion engines according to the manufacturer's recommendations.

Baudouin engine serial nos.:

Starboard: 970730

Port: 970729

#### **d. Applicable technical documentation**

- Baudouin engine maintenance manual
- Parts book
- List of parts supplied by the CCG
- Baudouin maintenance document

#### **b. Scope of work**

- i. Overhaul the two (2) Baudouin engines 6P15.2SR with turbocharger according to the manufacturer's instructions in maintenance book no. 15 18 928 OM, sections R1, R2 and R3, appended.
- ii. Perform the R1, R2 and R3 engine overhauls according to the manufacturer's recommendations as per the attached document, and perform the following:
  - Clean the oil coolers and perform a hydrostatic test at 1.5 times the operating pressure.
  - Completely overhaul the cylinder heads (disassemble all parts, take measurements and refurbish).
  - Completely overhaul the freshwater, transmission and cooling pumps.
  - Completely overhaul both sea water pumps.
  - Refurbish and calibrate the fuel pumps, and submit a performance report.
  - Refurbish the turbocharger.
  - Test the injectors.
  - Check and refurbish the injectors, and submit a performance report.
  - Clean the sea water cooler and perform a hydrostatic test.
  - Disassemble, clean and inspect the electric starter.
  - Replace:
    - the oil (supplied by vessel)

- the antifreeze
- The list of parts supplied by the CCG is appended. Extra parts will be additional to the contract.
- Take the compression pressure on each cylinder and the cylinder have the lower peak pressure Remove and install the two pistons, and take all measurements of these units(the ring must be changed . TCMS must perform an inspection.
- Remove and install the two main crankshaft bearings, and take measurements. TCMS must perform an inspection.
- iii. Perform a four-hour test in the presence of the Chief Engineer and the technician who worked on the engines.
- iv. Submit a report on all the measurements taken and all the parts replaced.

## 12.2 Overhaul of portside transmission

### a. Objective

Refurbish and do full repairs on the Baudouin port transmission (serial no. Baudouin RHPG 1185) to obtain five-year certification.

### b. Applicable technical documentation

- Baudouin engine maintenance manual
- Parts book
- List of parts supplied by the CCG
- Transmission drawing, page 16

### c. Scope of work

- i. Before dismantling the transmission, install a support on the propeller shaft to prevent any movement and take measurements of the longitudinal position of the shaft so that it is in the same position when the transmission is re-installed. Confirm that it has not shifted to avoid damaging the stern tube seals.
- ii. Dismantle the necessary piping in order to overhaul the transmission. When installing the clutch, supply new fittings for all the piping.
- iii. Supply the material, labour and equipment to completely disassemble and reassemble the transmission according to the manufacturer's instructions and specifications. Remove the transmission from the vessel in order to perform metallizing and machining work according to the manufacturer's recommendations and obtain Transport Canada approval for the following:
  - Side primary shaft (see drawing, item #20).
    - ⇒ The rear section of the shaft needs to be metallized so that the bearing can be installed according to the recommended tolerance.



- ⇒ The rear section of the enclosure must be metallized so that the bearing can be installed in the housing.
- Hollow pinion shaft (see drawing, item #23).
  - ⇒ The centre section of the enclosure must be metallized so that the bearing can be installed in the housing.
- iv.** Install a new hollow pinion shaft (see drawing, item #23) (supplied by the CCG) and take measurements to adjust the mechanical assembly.
- v.** Install a new coupling on the oil pump.
- vi.** The transmission oil must be drained and disposed of. The new oil will be supplied by the CCG. Clean the filter.
- vii.** After complete removal of the transmission, all parts are to be cleaned and inspected, and the necessary measurements and clearance are to be recorded to allow TCMS and the CCG representative to inspect everything.
- viii.** A list of new parts supplied by the CCG is appended. The Contractor will be responsible for any missing parts. Suggested Canadian supplier:

Trading SOLAC  
300 Berge du Canal  
Lachine, QC  
H8B 1H3  
1-800-814-2004

- ix.** Replace the following components with OEM parts:
  - All bearings
  - All seals and gaskets
  - Clutch plates and counterplates
  - Hollow pinion shaft (see drawing, item #23)
  - Oil pump coupling
  - Replace the bushing and flexible control hoses inside the transmission
- x.** Clean, inspect and perform a hydrostatic test of the oil cooler.
- xi.** When installing the transmission, ensure alignment with the main engine's propeller shaft. The CCG will supply the positioning tool for the keyway. After the alignment, reapply Chockfast to the transmission supports.
- xii.** Ship the hydraulic pump to a specialized firm for testing on a test bench to verify performance. Submit a written report on the test confirming that the performance meets the manufacturer's specifications.
- xiii.** The Contractor shall submit to the CCG representative three (3) copies of a full report on the work performed, including the clearances and measurements, and shall list all the parts that were replaced.
- xiv.** In the presence of the TCMS inspector and CCG representative, perform a two-hour test of the transmission at various revolutions and of the propeller pitch.

### **13-VESSEL ELECTRICAL POWER GENERATION**

**N/A**

### **14-ELECTRICAL POWER DISTRIBUTION**

#### **14.1 Correction of grounding problem**

##### **a. Objective**

**Supply labour for electrical** search for and repair grounding issues aboard the vessel.

##### **b. Insulation fault detection system**

To avoid premature deterioration of the vessel's hull due to galvanic corrosion, the electric networks on board must be perfectly insulated from the hull. Transport Canada requires a minimum electrical resistance of 1 megohm ( $1 \times 10^6$  ohms) between each line and ground (TP127, paragraph 29.4).

##### **c. Insulation fault detection method**

To identify major faults, indicator lights on the main panel may be used. However, most of the problems that arise are undetectable using lights. Many of the current insulation faults are in the range of 1 to 15 megohms, which makes them invisible when taken individually. Nevertheless, all these faulty circuits, connected in parallel, have an equivalent input resistance well below 1 megohm. In such circumstances, the use of a Megger is recommended to identify the various faulty circuits. Once the faulty circuits have been identified, further searching is required to identify issues related to those circuits.

##### **d. Correction of insulation faults**

All faulty components shall be either repaired or replaced. All repair or replacement work shall be completed in accordance with the Transport Canada Ships Electrical Standards (2008) – TP 127, or a more recent version if applicable.

##### **e. Scope of work**

- i.** Find and correct ground faults to obtain a minimum insulation resistance of 1 megohm between the main entry lines and the ground. Attached is the most recent Megger report for the vessel for reference purposes.
  - Submit a full report containing the following information:

- the faulty components and their replacement
- the branch numbers
- the circuit numbers and the measurement points performed
- a description of the faults requiring correction

**ii. Ground faults have been previously identified in the following branches:**

- Panel L1, port engine room, 120 V
- Panel L2, starboard engine rooms, 120 V
- Panel L3, lighting, 120 V
- Panel L4, dining mess, 120 V
- Panel L5, wheelhouse, 120 V
- Distribution 24 V, 4 to 20 mA loop supply circuits in both engine rooms.

**f. Bid-related information**

- For the purposes of the bid, supply the qualified labour to perform electrical work on a vessel for amount of one hundred (100) hours in order to perform diagnostics in the branches mentioned in this document and to perform repairs. Indicate an hourly rate, including accommodation and living expenses.
- All equipment required for repairs will be additional to the contract and must be authorized pursuant to the contract clauses.

**14.2 Calibration of fuel tanks**

- Perform fuel-level calibration on the Simplicity monitoring and alarm system. Perform multiple level calibrations to ensure proper operation in the presence of the Chief Engineer.

**15-AUXILIARY SYSTEMS**

N/A

**16-DOMESTIC SYSTEMS**

**16.3 Removal of freezer**

**a. Objective**

- Dismantle the freezer to install a new unit.

**b. Scope of work**

- Have a certified individual to drain the refrigerant gas from the freezer and dispose in accordance with regulation. Submit a report indicating the quantity of gas drained, the type of gas, and the name and certification number of the person qualified to perform such work under Canadian regulations.

- ii. Completely dismantle and dispose of the freezer. Clean the compartment after the freezer has been removed.
- iii. Install a vent in the compartment leading from the air duct in the ceiling. The duct must be made of sheet metal and the vent should contain an adjustment key or an adjustable grill made of sheet metal to adjust the air supply. The distance between the main duct and the compartment is about 20 inches.

#### **17-DECK EQUIPMENT / VESSEL SUPPORT SYSTEMS**

N/A

#### **18-COMMUNICATION AND NAVIGATION SYSTEMS**

N/A

#### **19-INTEGRATED CONTROL SYSTEMS**

N/A

#### **21-VESSEL INFORMATION SUPPORT SYSTEMS**

N/A

#### **22-SPECIAL (PROGRAM) ASSETS**

N/A