



**RETURN BIDS TO:**

**RETOURNER LES SOUMISSIONS À:**

Bid Receiving - PWGSC / Réception des soumissions  
- TPSGC

11 Laurier St. / 11, rue Laurier

Place du Portage, Phase III

Core 0B2 / Noyau 0B2

Gatineau

Quebec

K1A0S5

Bid Fax: (819) 997-9776

**SOLICITATION AMENDMENT  
MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

**Comments - Commentaires**

**Vendor/Firm Name and Address**

Raison sociale et adresse du  
fournisseur/de l'entrepreneur

**Issuing Office - Bureau de distribution**

Marine Emergency Response Division/Division des

Interventions en cas d'urgence maritime

Centennial Towers 7th Floor - 7W11

200 Kent Street

Ottawa

Ontario

K1A0S5

<b>Title - Sujet</b> Four Season Lighted Buoys (4SB) Four Season Lighted Navigation Buoys (4SB)	
<b>Solicitation No. - N° de l'invitation</b> F7047-210014/A	<b>Amendment No. - N° modif.</b> 001
<b>Client Reference No. - N° de référence du client</b> F7047-210014	<b>Date</b> 2021-04-16
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$ERD-011-28190	
<b>File No. - N° de dossier</b> 011erd.F7047-210014	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> Eastern Daylight Saving Time EDT <b>on - le 2021-05-18</b> Heure Avancée de l'Est HAE	
<b>F.O.B. - F.A.B.</b> Specified Herein - Précisé dans les présentes	
<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> Beland, Marc	<b>Buyer Id - Id de l'acheteur</b> 011erd
<b>Telephone No. - N° de téléphone</b> (819) 712-8714 ( )	<b>FAX No. - N° de FAX</b> ( ) -
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>	

Instructions: See Herein

Instructions: Voir aux présentes

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

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**Amendment 001**

Due to a technical issue, this amendment is raised to provide industry with the English version of RFP #F7047-210014/A.

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**ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED**

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**ANNEX C**  
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**ANNEX 1 TO PART 3 OF THE BID SOLICITATION**

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**ANNEX 2 TO PART 3 OF THE BID SOLICITATION**

BIDDER'S CHECKLIST

**ANNEX 1 TO PART 4 OF THE BID SOLICITATION**

TECHNICAL BID EVALUATION PLAN

**ANNEX 2 TO PART 4 OF THE BID SOLICITATION**

CERTIFICATION OF COMPLIANCE

**ANNEX 1 TO PART 5 OF THE BID SOLICITATION**

FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY – CERTIFICATION

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## **PART 1 - GENERAL INFORMATION**

### **1.1 Introduction**

The bid solicitation is divided into six parts plus attachments and 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;
- 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, and the basis of selection;
- Part 5 Certifications and Additional Information: includes the certifications and additional information to be provided and includes specific requirements that must be addressed by Bidders; and
- Part 6 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The Annexes include the Statement of Work, the Technical Statement of Requirement, Schedule A - the Basis of Payment, Schedule B – Schedule of Deliveries, the Electronic Payment Instruments, the Federal Contractors Program for Employment Equity - Certification, the Insurance Requirements, the Task Authorization Form 572 and any other annexes.

### **1.2 Summary**

The Canadian Coast Guard (CCG) is a Special Operating Agency of Fisheries and Oceans Canada. The *Oceans Act* and the *Canada Shipping Act* provide the primary legislative basis for Coast Guard programs and empowers the Canadian Coast Guard to provide aids to navigation services for safe and efficient movement of marine traffic. The aim of the Four-Season Lighted Navigation Buoys Project (hereinafter referred to as “4SB Project”) is to provide advanced lighted-buoys (hereinafter referred to as “the buoy”) in the St. Lawrence River shipping channel between Québec City and Montréal.

The purpose of the 4SB Project is to increase navigational efficiency and safety of mariners in the St. Lawrence River shipping channel. The buoys will remain operational year-round (12 months) for a minimum of two years before requiring servicing. The buoys will be subject to extreme environmental conditions, including, though not limited to, extended periods completely submerged underwater, under accumulated ice.

Public Works and Government Services Canada (also known as Public Services and Procurement Canada) is leading this procurement on behalf of the Canadian Coast Guard. Enquiries regarding this bid solicitation must be directed only to the Contracting Authority identified in the bid solicitation. Vendors are encouraged to read the bid solicitation in its entirety before enquiring.

Only bids submitted using epost Connect service will be accepted.

The period of the resulting Contract will be from date of contract award to March 31, 2022 (inclusive) with Canada having irrevocable options to extend the term of the contract by up to 3 additional one-year periods under the same conditions. Delivery destinations include Sorel (QC, Canada) and Quebec City (QC, Canada), and are detailed in Schedule B. Additional Canadian delivery destinations may be required for some optional deliveries, if and when Canada chooses to exercise the option(s).

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The requirement is subject to the provisions of the Canadian Free Trade Agreement (CFTA).

This bid solicitation is to establish a contract with task authorizations (TA) for the delivery of the requirement detailed in the bid solicitation, to the Identified Users across Canada.

The Federal Contractors Program (FCP) for employment equity applies to this procurement; refer to Part 5 – Certifications and Additional Information, Part 6 - Resulting Contract Clauses and the annex titled Federal Contractors Program for Employment Equity - Certification.

The Phased Bid Compliance Process (PBCP) applies to this requirement.

Bidders intending to submit bids should download solicitation documents directly from the solicitation's tender notice on <http://BuyAndSell.gc.ca>. Solicitation amendments, if and when issued, will be available on <http://BuyAndSell.gc.ca>. It is the responsibility of the Bidder to ensure that all amendments issued during the solicitation period have been obtained and addressed in the submitted bid. Bidders basing their submissions on solicitation documents obtained from other sources do so at their own risk. Learn how to receive notifications about solicitation amendments at <https://buyandsell.gc.ca/procurement-data/tenders/follow-opportunities>

Businesses interested in learning more about selling to the Government of Canada are encouraged to review <https://BuyAndSell.gc.ca/for-businesses/selling-to-the-government-of-canada>.

The Office of Small and Medium Enterprises (OSME) offers free seminars to businesses interested in learning about the general procurement process and how to sell goods and services to the government. Refer to <http://www.tpsgc-pwgsc.gc.ca/app-acq/pme-sme/index-eng.html> for more information about OSME's seminars and other services.

This bid solicitation allows bidders to use the epost Connect service provided by Canada Post Corporation for bid submission. Bidders must refer to Part 2 of the bid solicitation entitled Instructions to bidders for further information.

### 1.3 Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 10 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

## 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) (<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](#) (2020-05-28) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

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Subsection 5.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days  
Insert: 180 days

### **2.1.2 Design Drawings**

Bidders must contact the Contracting Authority during the bid solicitation period to request copies of the design drawings included in Appendix B and Appendix C of Annex B, Technical Statement of Requirements. Bidders must submit a fully completed and signed non-disclosure agreement to the Contracting Authority during the bid solicitation period, in order to receive copies of the aforementioned design drawings. Bids received from Bidders who did not contact the Contracting Authority during the bid solicitation period to request the design drawings **will be rendered as non-compliant and the bid will be given no further consideration.**

### **2.1.3 List of Proposed Subcontractors**

The Bid must include a list of all subcontractors including a description of the items to be purchased, a description of the work to be performed and the location of the performance of that work. The list should not include the purchase of off-the-shelf items, software and such standard articles and materials as are ordinarily produced by manufacturers in the normal course of business, or the provision of such incidental services as might ordinarily be subcontracted in performing the Work.

## **2.2 Submission of Bids**

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

Bid Receiving Unit - National Capital Region  
Bid Receiving - PWGSC

Only bids submitted using epost Connect service will be accepted.  
The Bidder must send an e-mail requesting to open an epost Connect conversation to the following address:

E-mail address for epost Connect service:  
[tpsgc.dgareceptiondessoumissions-abbidreceiving.pwgsc@tpsgc-pwgsc.gc.ca](mailto:tpsgc.dgareceptiondessoumissions-abbidreceiving.pwgsc@tpsgc-pwgsc.gc.ca)

Note:

Bids will not be accepted if e-mailed directly to this email address.  
This e-mail address is to be used to open an epost Connect conversation, as detailed in Standard Instructions 2003, or to send bids through an epost Connect message if the bidder is using its own licensing agreement for epost Connect.

It is the Bidder's responsibility to ensure the request for opening an epost Connect conversation is sent to the e-mail address above at least six days before the solicitation closing date.

Bids submitted by facsimile, hardcopy, or any electronic means (other than the epost Connect service provided by Canada Post Corporation) will not be accepted.

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### **2.3 Former Public Servant**

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

#### Definitions

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

- a. an individual;
- b. an individual who has incorporated;
- c. a partnership made of former public servants; or
- d. a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity

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

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

#### Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension?

**Yes ( ) No ( )**

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

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

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

#### Work Force Adjustment Directive

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive?

**Yes ( ) No ( )**

If so, the Bidder must provide the following information:

- a. name of former public servant;
- b. conditions of the lump sum payment incentive;
- c. date of termination of employment;
- d. amount of lump sum payment;
- e. rate of pay on which lump sum payment is based;
- f. period of lump sum payment including start date, end date and number of weeks;
- g. number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

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

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## **2.4 Enquiries - Bid Solicitation**

All enquiries must be submitted in writing to the Contracting Authority no later than 10 calendar days before the bid closing date. Enquiries received after that time may not be answered.

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

## **2.5 Applicable Laws**

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

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.

# **PART 3 - BID PREPARATION INSTRUCTIONS**

## **3.1 Bid Preparation Instructions**

The Bidder must submit its bid electronically in accordance with section 08 of the 2003 standard instructions.

The epost Connect system has a limit of 1GB per single message posted and a limit of 20GB per conversation.

The bid must be gathered per section and separated as follows:

Section I: Technical Bid  
Section II: Financial Bid  
Section III: Certifications

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

Canada will evaluate only the documentation provided with a bidder's bid. Canada will not evaluate technical manuals or brochures that are not submitted with the bid, or any information provided by reference (e.g. Web sites).

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### **3.1.1 No Conditional Bids**

The Bidder's bid must not be made conditionally. Any condition imposed by the Bidder will render the bid nonresponsive and the bid will be given no further consideration.

### **3.1.2 Section I: Technical Bid**

In their technical bid, Bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders should demonstrate their capability and describe their approach in a thorough, concise and clear manner for carrying out the work.

The technical bid should address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada requests that Bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, Bidders may refer to different sections of their bids by identifying the specific paragraph and page number where the subject topic has already been addressed.

#### **3.1.2.1 Substantial Information**

Bidders must demonstrate their compliance with the bid solicitation by providing substantial information by describing completely and in detail how the requirement is met or addressed.

Bidders must provide with their technical bid, a document indicating clearly where the substantial information can be found for each of the mandatory criterion identified in the Technical Bid Evaluation Plan (Annex 1 to Part 4 of the Bid Solicitation).

Bidders must sign the Certification of Compliance (Annex 2 to Part 4 of the Bid Solicitation). A signed Certification of Compliance (Annex 2 to Part 4 of the Bid Solicitation) will be interpreted as meaning full agreement with the requirement, whereas a non-signed Certification of Compliance (Annex 2 to Part 4 of the Bid Solicitation) will be interpreted as meaning not in full agreement with the requirement and the Bid will be deemed non-responsive and not given any further consideration.

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

#### **3.1.3.1 Pricing Submission**

Bidders must submit their financial bid in accordance with the Schedule A. The bid must address each of the cost elements in Schedule A

The bid must be submitted in Canadian Currency.

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### **3.1.3.2 Electronic Payment of Invoices – Bid**

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Annex 1 to Part 3 Electronic Payment Instruments, to identify which ones are accepted.

If Annex 1 to Part 3 Electronic Payment Instruments is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

### **3.1.3.3 Exchange Rate Fluctuation**

The requirement does not offer exchange rate fluctuation risk mitigation. Requests for exchange rate fluctuation risk will not be considered. All bids including such provision will render the bid non-responsive.

### **3.1.3.4 Delivery Dates**

Bidders must submit their delivery dates in accordance with Schedule B – Schedule of Deliveries.

### **3.1.4 Section III: Certifications**

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

### **3.1.5 Bidder's Checklist**

Bidders should refer to Annex 2 to Part 3 of the Bid Solicitation (Bidder's Checklist).

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

### **4.1 Evaluation Procedures**

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.
- (c) Canada will use the Phased Bid Compliance Process described below.

#### **4.1.1 Phased Bid Compliance Process**

##### **4.1.1.1 (2018-07-19) General**

- (a) Canada is conducting the PBCP described below for this requirement.
- (b) Notwithstanding any review by Canada at Phase I or II of the PBCP, Bidders are and will remain solely responsible for the accuracy, consistency and completeness of their Bids and Canada does not undertake, by reason of this review, any obligations or responsibility for identifying any or all errors or omissions in Bids or in responses by a Bidder to any communication from Canada.

THE BIDDER ACKNOWLEDGES THAT THE REVIEWS IN PHASE I AND II OF THIS PBCP ARE PRELIMINARY AND DO NOT PRECLUDE A FINDING IN PHASE III THAT THE BID IS NON-RESPONSIVE, EVEN FOR MANDATORY

REQUIREMENTS WHICH WERE SUBJECT TO REVIEW IN PHASE I OR II AND NOTWITHSTANDING THAT THE BID HAD BEEN FOUND RESPONSIVE IN SUCH EARLIER PHASE. CANADA MAY DEEM A BID TO BE NON-RESPONSIVE TO A MANDATORY REQUIREMENT AT ANY PHASE.

THE BIDDER ALSO ACKNOWLEDGES THAT ITS RESPONSE TO A NOTICE OR A COMPLIANCE ASSESSMENT REPORT (CAR) (EACH DEFINED BELOW) IN PHASE I OR II MAY NOT BE SUCCESSFUL IN RENDERING ITS BID RESPONSIVE TO THE MANDATORY REQUIREMENTS THAT ARE THE SUBJECT OF THE NOTICE OR CAR, AND MAY RENDER ITS BID NON-RESPONSIVE TO OTHER MANDATORY REQUIREMENTS.

- (c) Canada may, in its discretion, request and accept at any time from a Bidder and consider as part of the Bid, any information to correct errors or deficiencies in

the Bid that are clerical or administrative, such as, without limitation, failure to sign the Bid or any part or to checkmark a box in a form, or other failure of format or form or failure to acknowledge; failure to provide a procurement business number or contact information such as names, addresses and telephone numbers; inadvertent errors in numbers or calculations that do not change the amount the Bidder has specified as the price or of any component thereof that is subject to evaluation. This shall not limit Canada's right to request or accept any information after the bid solicitation closing in circumstances where the bid solicitation expressly provides for this right. The Bidder will have the time period specified in writing by Canada to provide the necessary documentation. Failure to meet this deadline will result in the Bid being declared non-responsive.

- (d) The PBCP does not limit Canada's rights under Standard Acquisition Clauses and Conditions (SACC) 2003 (2020-05-28) Standard Instructions – Goods or Services – Competitive Requirements nor Canada's right to request or accept any information during the solicitation period or after bid solicitation closing in circumstances where the bid solicitation expressly provides for this right, or in the circumstances described in subsection (c).
- (e) Canada will send any Notice or CAR by any method Canada chooses, in its absolute discretion. The Bidder must submit its response by the method stipulated in the Notice or CAR. Responses are deemed to be received by Canada at the date and time they are delivered to Canada by the method and at the address specified in the Notice or CAR. An email response permitted by the Notice or CAR is deemed received by Canada on the date and time it is received in Canada's email inbox at Canada's email address specified in the Notice or CAR. A Notice or CAR sent by Canada to the Bidder at any address provided by the Bidder in or pursuant to the Bid is deemed received by the Bidder on the date it is sent by Canada. Canada is not responsible for late receipt by Canada of a response, however caused.

#### **4.1.1.2 (2018-03-13) Phase I: Financial Bid**

- (a) After the closing date and time of this bid solicitation, Canada will examine the Bid to determine whether it includes a Financial Bid and whether any Financial Bid includes all information required by the solicitation. Canada's review in Phase I will be limited to identifying whether any information that is required under the bid solicitation to be included in the Financial Bid is missing from the Financial Bid. This review will not assess whether the Financial Bid meets any standard or is responsive to all solicitation requirements.
- (b) Canada's review in Phase I will be performed by officials of the Department of Public Works and Government Services.
- (c) If Canada determines, in its absolute discretion that there is no Financial Bid or that the Financial Bid is missing all of the information required by the bid

solicitation to be included in the Financial Bid, then the Bid will be considered non-responsive and will be given no further consideration.

- (d) For Bids other than those described in c), Canada will send a written notice to the Bidder (“Notice”) identifying where the Financial Bid is missing information. A Bidder, whose Financial Bid has been found responsive to the requirements that are reviewed at Phase I, will not receive a Notice. Such Bidders shall not be entitled to submit any additional information in respect of their Financial Bid.
- (e) The Bidders who have been sent a Notice shall have the time period specified in the Notice (the “Remedy Period”) to remedy the matters identified in the Notice by providing to Canada, in writing, additional information or clarification in response to the Notice. Responses received after the end of the Remedy Period will not be considered by Canada, except in circumstances and on terms expressly provided for in the Notice.
- (f) In its response to the Notice, the Bidder will be entitled to remedy only that part of its Financial Bid which is identified in the Notice. For instance, where the Notice states that a required line item has been left blank, only the missing information may be added to the Financial Bid, except that, in those instances where the addition of such information will necessarily result in a change to other calculations previously submitted in its Financial Bid, (for example, the calculation to determine a total price), such necessary adjustments shall be identified by the Bidder and only these adjustments shall be made. All submitted information must comply with the requirements of this solicitation.
- (g) Any other changes to the Financial Bid submitted by the Bidder will be considered to be new information and will be disregarded. There will be no change permitted to any other Section of the Bidder’s Bid. Information submitted in accordance with the requirements of this solicitation in response to the Notice will replace, in full, **only** that part of the original Financial Bid as is permitted above, and will be used for the remainder of the bid evaluation process.
- (h) Canada will determine whether the Financial Bid is responsive to the requirements reviewed at Phase I, considering such additional information or clarification as may have been provided by the Bidder in accordance with this Section. If the Financial Bid is not found responsive for the requirements reviewed at Phase I to the satisfaction of Canada, then the Bid shall be considered non-responsive and will receive no further consideration.

- (i) Only Bids found responsive to the requirements reviewed in Phase I to the satisfaction of Canada, will receive a Phase II review.

#### **4.1.1.3 (2018-03-13) Phase II: Technical Bid**

- (a) Canada's review at Phase II will be limited to a review of the Technical Bid to identify any instances where the Bidder has failed to meet any Eligible Mandatory Criterion. This review will not assess whether the Technical Bid meets any standard or is responsive to all solicitation requirements. Eligible Mandatory Criteria are all mandatory technical criteria that are identified in this solicitation as being subject to the PBCP. Mandatory technical criteria that are not identified in the solicitation as being subject to the PBCP, will not be evaluated until Phase III.
- (b) Canada will send a written notice to the Bidder (Compliance Assessment Report or "CAR") identifying any Eligible Mandatory Criteria that the Bid has failed to meet. A Bidder whose Bid has been found responsive to the requirements that are reviewed at Phase II will receive a CAR that states that its Bid has been found responsive to the requirements reviewed at Phase II. Such Bidder shall not be entitled to submit any response to the CAR.
- (c) A Bidder shall have the period specified in the CAR (the "Remedy Period") to remedy the failure to meet any Eligible Mandatory Criterion identified in the CAR by providing to Canada in writing additional or different information or clarification in response to the CAR. Responses received after the end of the Remedy Period will not be considered by Canada, except in circumstances and on terms expressly provided for in the CAR.
- (d) The Bidder's response must address only the Eligible Mandatory Criteria listed in the CAR as not having been achieved, and must include only such information as is necessary to achieve such compliance. Any additional information provided by the Bidder which is not necessary to achieve such compliance will not be considered by Canada, except that, in those instances where such a response to the Eligible Mandatory Criteria specified in the CAR will necessarily result in a consequential change to other parts of the Bid, the Bidder shall identify such additional changes, provided that its response must not include any change to the Financial Bid.

- (e) The Bidder's response to the CAR should identify in each case the Eligible Mandatory Criterion in the CAR to which it is responding, including identifying in the corresponding section of the original Bid, the wording of the proposed change to that section, and the wording and location in the Bid of any other consequential changes that necessarily result from such change. In respect of any such consequential change, the Bidder must include a rationale explaining why such consequential change is a necessary result of the change proposed to meet the Eligible Mandatory Criterion. It is not up to Canada to revise the Bidder's Bid, and failure of the Bidder to do so in accordance with this subparagraph is at the Bidder's own risk. All submitted information must comply with the requirements of this solicitation.
- (f) Any changes to the Bid submitted by the Bidder other than as permitted in this solicitation, will be considered to be new information and will be disregarded. Information submitted in accordance with the requirements of this solicitation in response to the CAR will replace, in full, **only** that part of the original Bid as is permitted in this Section.
- (g) Additional or different information submitted during Phase II permitted by this section will be considered as included in the Bid, but will be considered by Canada in the evaluation of the Bid at Phase II only for the purpose of determining whether the Bid meets the Eligible Mandatory Criteria. It will not be used at any Phase of the evaluation to increase any score that the original Bid would achieve without the benefit of such additional or different information. For instance, an Eligible Mandatory Criterion that requires a mandatory minimum number of points to achieve compliance will be assessed at Phase II to determine whether such mandatory minimum score would be achieved with such additional or different information submitted by the Bidder in response to the CAR. If so, the Bid will be considered responsive in respect of such Eligible Mandatory Criterion, and the additional or different information submitted by the Bidder shall bind the Bidder as part of its Bid, but the Bidder's original score, which was less than the mandatory minimum for such Eligible Mandatory Criterion, will not change, and it will be that original score that is used to calculate any score for the Bid
- (h) Canada will determine whether the Bid is responsive for the requirements reviewed at Phase II, considering such additional or different information or clarification as may have been provided by the Bidder in accordance with this Section. If the Bid is not found responsive for the requirements reviewed at Phase II to the satisfaction of Canada, then the Bid shall be considered non-responsive and will receive no further consideration.
- (i) Only Bids found responsive to the requirements reviewed in Phase II to the satisfaction of Canada, will receive a Phase III evaluation.

#### **4.1.1.4 (2018-03-13) Phase III: Final Evaluation of the Bid**

- (a) In Phase III, Canada will complete the evaluation of all Bids found responsive to the requirements reviewed at Phase II. Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) A Bid is non-responsive and will receive no further consideration if it does not meet all mandatory evaluation criteria of the solicitation.

#### **4.1.2 (2017-07-31) Technical Evaluation**

The Technical Bid Evaluation Plan and mandatory technical evaluation criteria are included in the Technical Bid Evaluation Plan (Annex 1 to Part 4 of the Bid Solicitation).

Where the requirement for method of compliance is the "Certification of Compliance", the evaluation team will consider a bid compliant if the Bidder provides a completed and signed "Certification of Compliance (Annex 2 to Part 4 of the Bid Solicitation)" document.

##### **4.1.2.1 (2017-07-31) Mandatory Technical Criteria**

All mandatory technical evaluation criteria are included in the Technical Bid Evaluation Plan (Annex 1 to Part 4 of the Bid Solicitation). The Phased Bid Compliance Process will apply to all mandatory technical criteria.

##### **4.1.2.1 Mandatory Technical Criteria**

All mandatory technical evaluation criteria are included in the Technical Bid Evaluation Plan (Annex 1 to Part 4 of the Bid Solicitation). The Phased Bid Compliance Process will apply to all mandatory technical criteria.

#### **4.1.3 Financial Evaluation**

**Evaluated Price = A + B + C**

A = Sum of the extended prices of items 1 – 2 (inclusive)

B = Sum of the extended prices of items 3 – 5 (inclusive)

C = Hourly rate identified by bidder for options and unscheduled work will be multiplied by 1000 hours\*

\* 1000 hours is used for evaluation purpose only and in no way represents commitment by Canada

Extended Price for EACH item in A is calculated as follows:

*-Item #1 Quantity x Item #1 Firm Unit Price = Item #1 Extended Price*

*-This is repeated for item 2 inclusive.*

Extended Price for EACH item in B is calculated as follows:

*-Item #3 Quantity x Item #3 Firm Unit Price = Item #3 Extended Price*

*-This is repeated for items 4 – 5 inclusive.*

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Extended Price for Hourly Rate in C is calculated as follows:  
- 1000 hours x Hourly Rate

#### **4.1.3.1 Mandatory Financial Criteria**

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

#### **4.2 Basis of Selection - Mandatory Technical Criteria**

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

### **PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION**

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

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

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

#### **5.1 Certifications Required with the Bid**

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

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

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

##### **5.1.2 Certification of Compliance**

The Bidder must provide the Contracting Authority with a signed and completed Certification of Compliance (Annex 2 to Part 4 of the Bid Solicitation) to be given further consideration in the procurement process.

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### 5.1.3 Welding Certification

1. Welding must be performed by a company that is certified by the Canadian Welding Bureau (CWB) for the following Canadian Standards Association (CSA) standards:
  - a. i) CSA W47-1:19, Welded Steel Construction Division 1.
  - ii) The welding workmanship must satisfy CSA W59, Welded Steel Construction (Metal Arc Welding).
2. Before contract award and within 21 calendar days of the written request by the Contracting Authority, the successful Bidder must submit evidence demonstrating its and its subcontractor's certification by CWB in accordance with the CSA welding standards.

## 5.2 Certifications Precedent to Contract Award and Additional Information

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

### 5.2.1 Integrity Provisions – Required Documentation

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

### 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" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#) website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#>).

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

#### **5.2.3.1 Workers Compensation Certification- Letter of Good Standing**

The Bidder must have an account in good standing with the applicable provincial or territorial Workers' Compensation Board.

The Bidder must provide, within **5 calendar days** following a request from the Contracting Authority, a certificate or letter from the applicable Workers' Compensation Board confirming the Bidder's good standing account. Failure to comply with the request may result in the bid being declared non-responsive.

#### **5.2.3.2 Insurance Requirements - Proof of Availability Prior to Contract Award**

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 **Part 6 - Resulting Contract Clause 6.13**.

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

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

### **6.1 Requirement**

The Contractor must provide the goods, services or both described in the Contract, including all the Annexes, Schedules, Appendices, and any other identified documents, to Canada in accordance with, and at the prices and/or rates stated in the Contract.

#### **6.1.1 Option to Purchase**

##### **6.1.1 Optional Goods and/or Services**

The Contractor grants to Canada the irrevocable options to acquire the goods, services or both described in the Contract, including all the Annexes, Schedules, Appendices, and any other identified documents, under the same conditions and at the prices and/or rates stated in the Contract. The options may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

The Contracting Authority may exercise the options on multiple occasions and at any time before the expiry of the Contract by sending a written notice to the Contractor.

##### **6.1.2 Additional Work Requirement (AWR)**

Additional work that is not described in the Statement of Work but that is required to support the requirement and that would fall within the overall scope of the Work, may be incorporated into the Contract in accordance with Schedule A, Basis of Payment and will be authorized via a Task Authorization.

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### **6.1.2.1 Task Authorization**

The Work or a portion of the Work to be performed under the Contract will be on an "as and when requested basis" using a Task Authorization (TA). The Work described in the TA must be in accordance with the scope of the Contract.

### **6.1.2.2 Task Authorization Process**

1. The Project Authority will provide the Contractor with a description of the task using the "Task Authorization" form specified in Annex C.
2. The Task Authorization (TA) will contain the details of the activities to be performed, a description of the deliverables, and a schedule indicating completion dates for the major activities or submission dates for the deliverables. The TA will also include the applicable basis (bases) and methods of payment as specified in the Contract.
3. The Contractor must provide the Project Authority, within 7 calendar days of its receipt, the proposed total estimated cost for performing the task and a breakdown of that cost, established in accordance with the Basis of Payment specified in the Contract.
4. The Contractor must not commence work until a TA authorized by the Project Authority has been received by the Contractor. The Contractor acknowledges that any work performed before a TA has been received will be done at the Contractor's own risk.

### **6.1.2.3 Task Authorization Limit**

The Project Authority may authorize individual task authorizations up to a limit of \$5000.00. Applicable Taxes included, inclusive of any revisions.

Any task authorization to be issued in excess of that limit must be authorized by the Project Authority and Contracting Authority before issuance.

### **6.1.2.4 Canada's Obligation - Portion of the Work - Task Authorizations**

Canada's obligation with respect to the portion of the Work under the Contract that is performed through task authorizations is limited to the total amount of the actual tasks performed by the Contractor.

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### 6.1.2.5 Periodic Usage Reports - Contracts with Task Authorizations

The Contractor must compile and maintain records on its provision of services to the federal government under authorized Task Authorizations issued under the Contract.

The Contractor must provide this data in accordance with the reporting requirements detailed below. If some data is not available, the reason must be indicated. If services are not provided during a given period, the Contractor must still provide a "nil" report.

The data must be submitted on a quarterly basis to the Contracting Authority.

The quarterly periods are defined as follows:

- 1st quarter: April 1 to June 30;
- 2nd quarter: July 1 to September 30;
- 3rd quarter: October 1 to December 31; and
- 4th quarter: January 1 to March 31.

The data must be submitted to the Contracting Authority no later than 21 calendar days after the end of the reporting period.

### Reporting Requirement - Details

A detailed and current record of all authorized tasks must be kept for each contract with a task authorization process. This record must contain:

For each authorized task:

- i. the authorized task number or task revision number(s);
- ii. a title or a brief description of each authorized task;
- iii. the total estimated cost specified in the authorized Task Authorization (TA) of each task, exclusive of Applicable Taxes;
- iv. the total amount, exclusive of Applicable Taxes, expended to date against each authorized task;
- v. the start and completion date for each authorized task; and
- vi. the active status of each authorized task, as applicable.

For all authorized tasks:

- i. the amount (exclusive of Applicable Taxes) specified in the contract (as last amended, as applicable) as Canada's total liability to the contractor for all authorized TAs; and
- ii. the total amount, exclusive of Applicable Taxes, expended to date against all authorized TAs.

## 6.2 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](https://buyandsell.gc.ca/policy-and-guidelines/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.

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### **6.2.1 General Conditions**

2030 (2020-05-28), General Conditions - Higher Complexity - Goods, apply to and form part of the Contract.

1031-2 (2012-07-16), Contract Cost Principles, apply to and form part of the Contract.

### **6.2.2 Supplemental General Conditions**

4010 (2012-07-16) Supplemental General Conditions - Higher Complexity - Services, apply to and form part of the Contract.

### **6.3 Security Requirements**

There is no security requirement applicable to the Contract.

### **6.4 Term of Contract**

#### **6.4.1 Period of the Contract**

The period of the Contract is from Date of Contract to March 31, 2022 inclusive.

#### **6.4.2 Delivery Date**

All the deliverables must be received on or before the dates indicated in Schedule B – Schedule of Deliveries

#### **6.4.3 Options to Extend the Contract**

The Contractor grants to Canada the irrevocable options to extend the term of the Contract by up to three additional periods as specified below under the same conditions:

Option Period 1: April 1, 2022 to March 31, 2023; and  
Option Period 2: April 1, 2023 to March 31, 2024; and  
Option Period 2: April 1, 2024 to March 31, 2025.

The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable provisions as set out in the Basis of Payment.

The options may only be exercised by the Contracting Authority, and will be evidenced for administrative purposes only, through a contract amendment.

The Contracting Authority may exercise the options on multiple occasions and at any time before the expiry of the Contract by sending a written notice to the Contractor.

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#### **6.4.4 Comprehensive Land Claims Agreements (CLCAs)**

Does not apply.

#### **6.4.5 Delivery Points**

Delivery of the requirement will be made to delivery point(s) specified at Schedule B (Deliveries) of the Contract and as directed by the Contracting Authority.

### **6.5 Authorities**

#### **6.5.1 Contracting Authority**

The Contracting Authority for the Contract is:

Marc Béland  
Supply Specialist  
Public Works and Government Services Canada  
Acquisitions Branch  
Marine Navigation and Remediation Division  
270 Albert K1P 6E6– Ottawa, Ontario

Telephone: 819-712-8714

E-mail address: [Marc.Beland@pwgsc-tpsgc.gc.ca](mailto:Marc.Beland@pwgsc-tpsgc.gc.ca)

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

#### **6.5.2 Project Authority**

The Project Authority for the Contract is: *(to be announced upon contract award)*

Name:

Title:

Organization:

Address:

Telephone:

Facsimile:

E-mail address:

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

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### 6.5.3 Technical Authority

The Technical Authority for the Contract is: *(information will be provided at contract award)*

Name:  
Title:  
Organization:  
Address:

Telephone:  
E-mail address:

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

### 6.5.4 Contractor's Representative

Name:  
Title:  
Organization:  
Address:

Telephone:  
E-mail address:

### 6.6 Proactive Disclosure of Contracts with Former Public Servants

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

### 6.7 Payment

#### 6.7.1 Basis of Payment – Firm Price

In consideration of the Contractor satisfactorily completing its obligations under the Contract, the Contractor will be paid firm prices for a total cost of \$ \_\_\_\_\_ *(amount to be inserted at contract award)*. Customs duties are included, and Applicable Taxes are extra.

#### 6.7.2 Basis of Payment – Task Authorizations

##### Limitation of Expenditure

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### **Limitation of Expenditure or Ceiling Price - Individual Task Authorizations**

The Contractor will be paid for the Work specified in the authorized task authorization, in accordance with Schedule A. Canada's liability to the Contractor under the authorized task authorization must not exceed the limitation of expenditure or ceiling price specified in the authorized task authorization. Customs duties are included and Applicable Taxes are extra.

No increase in the liability of Canada or in the price of the Work specified in the authorized task authorization resulting from any design changes, modifications or interpretations of the Work will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been authorized, in writing, by the Contracting Authority before their incorporation into the Work.

**-OR-**

### **Firm Unit Price(s) or Firm Lot Price - Task Authorizations**

In consideration of the Contractor satisfactorily completing all of its obligations under the authorized Task Authorization (TA), the Contractor will be paid the firm unit price(s) as detailed in the Basis of Payment above, as specified in the authorized TA. Customs duties are excluded, and Applicable Taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been authorized, in writing, by the Contracting Authority before their incorporation into the Work.

### **6.7.3 Limitation of Expenditure - Cumulative Total of all Task Authorizations**

1. Canada's total liability to the Contractor under the Contract for all authorized Task Authorizations (TAs), inclusive of any revisions, must not exceed the sum of \$(to be announced at contract award). Customs duties are included, and Applicable Taxes are extra.
2. No increase in the total liability of Canada will be authorized or paid to the Contractor unless an increase has been approved, in writing, by the Contracting Authority.
3. The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:
  - a. when it is 75 percent committed, or
  - b. four (4) months before the contract expiry date, or
  - c. as soon as the Contractor considers that the sum is inadequate for the completion of the Work required in all authorized TAs, inclusive of any revisions, whichever comes first.
4. If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority, a written estimate for the additional funds required. Provision of such information by the Contractor does not increase Canada's liability.

#### **6.7.4 Travel and Living Expenses - National Joint Council Travel Directive**

The Contractor will be reimbursed its authorized travel and living expenses reasonably and properly incurred in the performance of the Work, at cost, without any allowance for profit and/or administrative overhead, in accordance with the meal, private vehicle and incidental expenses provided in Appendices B, C and D of the National Joint Council Travel Directive and with the other provisions of the directive referring to "travelers", rather than those referring to "employees".

All travel must have the prior authorization of the Contracting Authority.

All payments are subject to government audit.

Estimated cost: \$ \_\_\_\_\_

#### **6.7.5 Method of Payment**

##### **6.7.5.1 Multiple Payments – Subject to Holdback**

1. Canada will pay the Contractor in accordance with the payment provisions of the Contract for the completion and delivery of unit(s) detailed in Schedule A, up to 98% percent of the amount claimed and approved by Canada if:
  - a. an accurate and complete claim for payment using form [PWGSC-TPSGC 1111](#), Claim for Progress Payment, and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
  - b. the total amount for all payments paid by Canada does not exceed 100% percent of the total amount to be paid under the Contract;
  - c. all the certificates appearing on form [PWGSC-TPSGC 1111](#) have been signed by the respective authorized representatives;
  - d. all work delivered have been completed and accepted by Canada.
  - e.

Canada will pay the Contractor upon completion and delivery of units in accordance with the payment provisions of the Contract if:

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

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#### **6.7.6 Electronic Payment of Invoices – Contract**

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

- a. Visa Acquisition Card;
- b. MasterCard Acquisition Card;
- c. Direct Deposit (Domestic and International);
- d. Electronic Data Interchange (EDI);
- e. Wire Transfer (International Only);
- f. Large Value Transfer System (LVTS) (Over \$25M)

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### 6.7.7 Discretionary Audit

1. The following are subject to government audit before or after payment is made:
  - a. The amount claimed under the Contract, as computed in accordance with the Basis of Payment, including time charged.
  - b. The accuracy of the Contractor's time recording system.
  - c. The estimated amount of profit in any firm-priced element, firm time rate, firm overhead rate, or firm salary multiplier, for which the Contractor has provided the appropriate certification. The purpose of the audit is to determine whether the actual profit earned on a single contract if only one exists, or the aggregate of actual profit earned by the Contractor on a series of negotiated contracts containing one or more of the prices, time rates or multipliers mentioned above, during a particular period selected, is reasonable and justifiable based on the estimated amount of profit included in earlier price or rate certification(s).
  - d. Any firm-priced element, firm time rate, firm overhead rate, or firm salary multiplier for which the Contractor has provided a "most favoured customer" certification. The purpose of such audit is to determine whether the Contractor has charged anyone else, including the Contractor's most favoured customer, lower prices, rates or multipliers, for like quality and quantity of goods or services.
2. Any payments made pending completion of the audit must be regarded as interim payments only and must be adjusted to the extent necessary to reflect the results of the said audit. If there

### 6.7.8 Taxes - Foreign-based Contractor (if applicable)

Unless specified otherwise in the Contract, the price includes no amount for any federal excise tax, state or local sales or use tax, or any other tax of a similar nature, or any Canadian tax whatsoever. The price, however, includes all other taxes. If the Work is normally subject to federal excise tax, Canada will, upon request, provide the Contractor a certificate of exemption from such federal excise tax in the form prescribed by the federal regulations.

Canada will provide the Contractor evidence of export that may be requested by the tax authorities. If, as a result of Canada's failure to do so, the Contractor has to pay federal excise tax, Canada will reimburse the Contractor if the Contractor takes such steps as Canada may require to recover any payment made by the Contractor. The Contractor must refund to Canada any amount so recovered.

### 6.8 Invoicing Instructions

1. The Contractor must submit a claim for payment using form PWGSC-TPSGC 1111, Claim for Progress Payment.

Each claim must show:

- a. all information required on form PWGSC-TPSGC 1111;
- b. all applicable information detailed under the section entitled "Invoice Submission" of the general conditions; and
- c. the description and value of the milestone claimed as detailed in the Contract.

As applicable, each claim must be supported by:

- a. a copy of time sheets to support the time claimed; and
- b. a copy of the invoices, receipts, vouchers for all direct transport and insurance, and travel and living expenses.

2. Applicable Taxes must be calculated on the total amount of the claim.

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3. The Contractor must prepare and certify the claim on form PWGSC-TPSGC 1111 and e-mail it to the Contracting Authority for review. The Contracting Authority will then forward the claim to the Project Authority for certification and onward submission to the client's payment Office for the remaining certification and payment action.
4. The Contractor must not submit claims until all work identified in the claim is completed and must only submit one claim per month.

## **6.9 Certifications and Additional Information**

### **6.9.1 Compliance**

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

### **6.9.2 Federal Contractors Program for Employment Equity - Default by the Contractor**

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the name of the Contractor will be added to the "[FCP Limited Eligibility to Bid](https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#s4)" list (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#s4>). The imposition of such a sanction by ESDC will constitute the Contractor in default as per the terms of the Contract.

### **6.9.3 Welding Certification**

1. Welding must be performed by a company that is certified by the Canadian Welding Bureau (CWB) for the following Canadian Standards Association (CSA) standards:
  - a. i) CSA W47-1:19, Welded Steel Construction Division 1.
  - ii) The welding workmanship must satisfy CSA W59, Welded Steel Construction (Metal Arc Welding).
2. In addition, welding must be done in accordance with the requirements of the applicable drawings and specifications.
3. Before the commencement of any fabrication work, and upon request from the Contracting Authority, the Contractor must provide approved welding procedures and/or a list of welding personnel they intend to use in the performance 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 certification to CSA welding standards.

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## 6.10 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in \_\_\_\_\_ (to be inserted at Contract Award).

## 6.11 Priority of Documents

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

- a. The Articles of Agreement, including Schedule A, Basis of Payment and Schedule B, Deliveries.
- b. The supplemental general conditions 4010 (2012-07-16), Services - Higher Complexity;
- c. 1031-2 (2012-07-16), Contract Cost Principles;
- d. The general conditions 2030 (2018-06-21), General Conditions - Higher Complexity - Goods;
- e. Annex A, Statement of Work;
- f. Annex B, Technical Statement of Requirements;
- g. The signed Task Authorizations (including all of its annexes, if any);
- h. The Contractor's bid dated

## 6.12 Foreign Nationals (Canadian Contractor OR Foreign Contractor)

### Foreign Nationals (Canadian Contractor):

The Contractor must comply with Canadian immigration requirements applicable to foreign nationals entering Canada to work temporarily in fulfillment of the Contract. If the Contractor wishes to hire a foreign national to work in Canada to fulfill the Contract, the Contractor should immediately contact the nearest Service Canada regional office to enquire about Citizenship and Immigration Canada's requirements to issue a temporary work permit to a foreign national. The Contractor is responsible for all costs incurred as a result of non-compliance with immigration requirements.

- OR -

### Foreign Nationals (Foreign Contractor):

The Contractor must comply with Canadian immigration legislation applicable to foreign nationals entering Canada to work temporarily in fulfillment of the Contract. If the Contractor wishes to hire a foreign national to work in Canada to fulfill the Contract, the Contractor should immediately contact the nearest Canadian Embassy, Consulate or High Commission in the Contractor's country to obtain instructions, information on Citizenship and Immigration Canada's requirements and any required documents. The Contractor is responsible to ensure that foreign nationals have the required information, documents and authorizations before performing any work under the Contract in Canada.

## 6.13 Insurance – Specific Requirements

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

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

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The Contractor must forward to the Contracting Authority within ten (10) days after the date of award of the Contract, a Certificate of Insurance evidencing the insurance coverage and confirming that the insurance policy complying with the requirements is in force. For Canadian-based Contractors, coverage must be placed with an Insurer licensed to carry out business in Canada, however, for Foreign-based Contractors, coverage must be placed with an Insurer with an A.M. Best Rating no less than "A-". The Contractor must, if requested by the Contracting Authority, forward to Canada a certified true copy of all applicable insurance policies.

### **6.13.1 Commercial General Liability Insurance**

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

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- I. Owners' or Contractors' Protective Liability: Covers the damages that the Contractor becomes legally obligated to pay arising out of the operations of a subcontractor.
  
  - m. Sudden and Accidental Pollution Liability (minimum 120 hours): To protect the Contractor for liabilities arising from damages caused by accidental pollution incidents.

## **6.14 Access to Government Site, Facility, or Equipment**

### **6.14.1 Government Site Regulations**

The Contractor must comply with all regulations, instructions and directives in force on the site where the Work is performed.

### **6.14.2 Access to Facilities and Equipment**

Canada's facilities, equipment, documentation and personnel are not automatically at the disposal of the Contractor. If access to government premises, computer systems (micro computer network), working space, telephones, terminals, documentation and personnel for consultation is required by the Contractor to perform the Work, the Contractor must advise the Contracting Authority of the need for such access in a timely fashion. If the Contractor's request for access is approved by Canada and arrangements are made to provide access to the Contractor, the Contractor, its subcontractors, agents and employees must comply with all the conditions applicable at the Work site. The Contractor must further ensure that the facilities and equipment are used solely for the performance of the Contract.

### **6.14.3 Identification Badge**

Any person assigned to the performance of any part of the Work that is performed on government premises must wear in a conspicuous place the identification badge issued to that person by Canada.

When a person is required to wear a safety helmet, the Contractor, if requested to do so by the Contracting Authority, must paint the number appearing on the badge on the front of the safety helmet.

## **6.15 Shipping Instructions**

### **6.15.1 Delivery Instructions**

1. Goods must be consigned to the destination specified in the Contract and delivered: Delivered Duty Paid (DDP) (specified destination) Incoterms 2010.
2. The Contractor is responsible for all delivery charges, administration, costs and risks of transport and customs clearance, including the payment of customs duties, import clearances, and Applicable Taxes.
3. The Contractor must deliver the goods by appointment only. The Contractor or its carrier must arrange delivery appointments by contacting the designated contact person at least 2 business days in advance of the delivery time. The consignee may refuse deliveries when prior arrangements have not been made.
4. Refer to Schedule B for additional instructions.

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### **6.15.2 Wood Packaging Materials**

All wood packaging materials used in shipping must conform to the International Standards for Phytosanitary Measures No. 15: Regulation of Wood Packaging Material in International Trade (ISPM 15) (<https://www.ippc.int/en/core-activities/standards-setting/ispms/>).

Pertinent additional information on Canada's import and export programs is provided in the following Canadian Food Inspection Agency policy directives:

D-98-08 - Entry Requirements for Wood Packaging Materials Produced in All Areas Other Than the Continental United States (<http://www.inspection.gc.ca/plants/plant-protection/directives/forestry/d-98-08/eng/1323963831423/1323964135993>)

D-13-01 – Canadian Heat Treated Wood Products Certification Program (HT Program) (<http://www.inspection.gc.ca/plants/forestry/exports/ht-program/eng/1319462565070/1319462677967>).

### **6.15.3 Dangerous Goods / Hazardous Products - Labelling and Packaging Compliance**

1. The Contractor must ensure proper labelling and packaging in the supply and shipping of dangerous goods/hazardous products to the Government of Canada.
0. The Contractor will be held liable for any damages caused by improper packaging, labelling or carriage of dangerous goods/hazardous products.
3. The Contractor must clearly mark all merchandise labels with the percentage of volume that is a hazardous item. Failure to do so will result in the Contractor being held responsible for damages caused in the movement of goods/products by government vehicles or government personnel.
4. The Contractor must adhere to all applicable laws regarding dangerous goods/hazardous product

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#### 6.15.4 Transportation of Dangerous Goods/Hazardous Products

The Contractor must obtain the authorization from the Department of Transport to transport dangerous goods/hazardous products before the carrier may accept a charter involving the transportation of dangerous goods/hazardous products.

#### 6.15.5 Shipment of Dangerous Goods/Hazardous Products

The Contractor must label and ship dangerous goods/hazardous products falling within the Transportation of Dangerous Goods Act, 1992, c.34 (<http://laws-lois.justice.gc.ca/eng/acts/t-19.01/>) and the Hazardous Products Act, R.S.C. 1985, c. H-3 (<http://laws-lois.justice.gc.ca/eng/acts/H-3/>) and their regulation(s) in accordance with the said Acts and regulation(s) accompanied by the required safety data sheet(s) completed in both English and French.

#### 6.15.6 Delivery of Dangerous Goods/Hazardous Products

1. The Contractor must mark dangerous goods/hazardous products which are classed as dangerous/hazardous as follows:
  - a. shipping container - in accordance with the Transportation of Dangerous Goods Act, 1992, c. 34 (<http://laws-lois.justice.gc.ca/eng/acts/T-19.01/>); and
  - b. immediate product container - in accordance with the Hazardous Products Act, R.S., 1985, c. H-3 (<http://laws-lois.justice.gc.ca/eng/acts/H-3/>).
2. The Contractor must provide bilingual Safety Data Sheets, indicating any applicable NATO Stock Number as follows:
  - a. two hard copies:
    - i. one copy to be enclosed with the shipment, and
    - ii. one copy to be mailed to:  
< to be provided at contract award >
  - b. one copy sent in any electronic format to the following address:  
< to be provided at contract award >.
3. The Contractor will be responsible for any damages caused by improper packaging, labelling or carriage of dangerous goods/hazardous products.
4. The Contractor must ensure they adhere to all levels of regulations regarding dangerous goods/hazardous products as set forth by federal, provincial and municipal laws and by-laws.
5. The Contractor must contact the Technical Authority at least 72 hours before shipping dangerous goods/hazardous products in order to schedule a receiving time.

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## SCHEDULE A

### BASIS OF PAYMENT

#### *Instructions to Bidders:*

*The Bidder must complete the fill-ins and tables in Sections 1 and 2 of Schedule A as follows:*

- a. *All prices must be in Canadian currency;*
- b. *All prices must include customs duties;*
- c. *All prices must **not** include Applicable Taxes;*
- d. *The Bidder must provide firm unit prices for each item in:*
  - i. *Section 1 (Required Goods and Services);*
  - ii. *Section 2 (Optional Goods and/or Services);*
- e. *The Bidder must take into account any notes associated with a particular Item and/or cost element.*

**Note: These italicized Instructions to Bidders will not be included in any resulting contract.**

## 1. Required Goods and Services

Item #	Item Description <sup>1,2</sup>	Total QTY <sup>3</sup>	Firm Unit Price DDP Destination <sup>4,5</sup>	Extended Unit Price DDP Destination <sup>4,5</sup>
1	<p><b><u>Buoy – ELA 1.0m with GFE Battery installed</u></b></p> <p>Supply and Deliver a <u>complete</u> buoy including lantern, GFE battery, and all required parts, components, and documentation.</p> <p>See note 6.</p>	31		
2	<p><b><u>Buoy – ELA 1.0m WITHOUT GFE Battery installed</u></b></p> <p>Supply and Deliver a complete buoy including lantern and all required parts, components, and documentation, with the <u>EXCEPTION</u> of an installed GFE battery.</p>	21		

### Notes (Table 3. Required Goods and Services):

- 1: A brief description of the item that must be delivered in accordance with the Contract, including all Schedules, Annexes, and Appendices.
- 2: Each item is paid a firm all-inclusive price that includes all the Work required under the Contract and work that is necessary to deliver item, including without limitation, the development and delivery of ALL required documents pursuant to the Work and in accordance with Annex A, Statement of Work (including Appendix 1 and Appendix 2). The Contractor will NOT be paid separately for any documentation.
- 3: The total number of units that are required across all delivery locations. Schedule B identify the quantity of units that are required for each known (required) delivery location.
- 4: See Schedule B for destinations.
- 5: The Firm Unit Price of the item includes delivery DDP Destination and unloading of the items at Canada's facilities as per article 18.1.
- 6: The Firm Unit Price of the item does not include the price of the Battery, which will be delivered to the Contractor as GFE.

ELA: Espar Lumineux Annuel  
 GFE : Government Furnished Equipment  
 DDP: Delivery Duty Paid  
 DID: Data Item Description

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**4. Optional Goods and/or Services**

Item #	Item Description <sup>7,8</sup>	Max. QTY <sup>9</sup>	Firm Unit Price DDP Destination <sup>10</sup> , <sup>11</sup> Date of Contract Award to	Firm Unit Price DDP Destination <sup>10</sup> , <sup>11</sup> Option Period	Firm Unit Price DDP Destination <sup>10</sup> , <sup>11</sup> Option Period	Firm Unit Price DDP Destination <sup>10</sup> , <sup>11</sup> Option Period
3	<p><b><u>Buoy – ELA 1.0m with GFE Battery installed</u></b></p> <p>Supply and Deliver a complete buoy including lantern, GFE battery, and all required parts, components, and documentation.</p> <p>See note 12.</p>	75	March 31, 2022	1 (April 1, 2022 to March 31, 2023)	2 (April 1, 2023 to March 31, 2024)	2 (April 1, 2024 to March 31, 2025)
4	<p><b><u>Buoy – ELA 1.0 m WITHOUT GFE Battery installed</u></b></p> <p>Supply and Deliver a complete buoy including lantern and all required parts, components, and documentation, with the <u>EXCEPTION</u> of an installed GFE battery.</p>	75				

Item #	Item Description <sup>7,8</sup>	Maximum QTY <sup>9</sup>	Firm Unit Price DDP Destination <sup>10</sup> , <sup>11</sup> Date of Contract Award to March 31, 2022	Firm Unit Price DDP Destination <sup>10</sup> , <sup>11</sup> Option Period 1 (April 1, 2022 to March 31, 2023)	Firm Unit Price DDP Destination <sup>10</sup> , <sup>11</sup> Option Period 2 (April 1, 2023 to March 31, 2024)	Firm Unit Price DDP Destination <sup>10</sup> , <sup>11</sup> Option Period 2 (April 1, 2024 to March 31, 2025)
5	<p><b><u>Spare Parts Kits</u></b></p> <p>The provision of any or all spares in support of the deliverables as detailed the final Recommended Spare Parts List (as per Annex A, CDRL item DID-14), and as accepted by Canada. Note: The contents of each Kit will be determined if and when options are exercised. Note: 1 kit = 1 unit</p>	TBD	TBN	TBN	TBN	TBN

Notes (Table 4. Optional Goods and Services):

<sup>7</sup>: A brief description of the item that must be delivered in accordance with the Contract including all Annexes and Appendices.

<sup>8</sup>: Each item is paid a firm all-inclusive price that includes all the Work required under the Contract and work that is necessary to deliver item, including without limitation, the development and delivery of ALL required documents pursuant to the Work and in accordance with Annex A, Statement of Work (including Appendix 1 and Appendix 2). The Contractor will NOT be paid separately for any documentation.

<sup>9</sup>: Optional Items may be procured by Canada on as many occasions as necessary up to the identified maximum total quantity.

<sup>10</sup>: See Schedule B for destinations. Delivery destinations for optional goods include Sorel, QC and Quebec City, QC.  
 Should it be necessary to change the delivery destinations for optional goods, alternate transportation and insurance costs will be negotiated (at cost, with no allowance for profit) and managed through either a Task Authorization or a Contract amendment.

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- 11: The Firm Unit Price of the item includes delivery DDP Destination and unloading of the items at Canada's facilities as per article 7.18.1.
- 12: The Firm Unit Price of the item does not include the price of the Battery, which will be delivered to the Contractor as GFE.

ELA: Espar Lumineux Annuel  
GFE: Government Furnished Equipment  
TBD: To Be Determined  
TBN: To Be Negotiated  
CDRL: Contract Data Requirements List (as per the Statement of Work found at Annex A)  
DID: Data Item Description (as per the Statement of Work found at Annex A)

## **5. Work Arisings and Task Authorizations**

Work Arisings and Task Authorizations may be negotiated and authorized at any time during the Period of the Contract.

For satisfactory performance of authorized work, as specified in each individual Task Authorization, payment shall be made in accordance with the Basis of Payment for the individual Task Authorization. Price certification and/or other methods of price verification may be required if necessary.

## Schedule B

### Deliveries

As detailed in section 4.1 of Annex A (Statement of Work), specific information regarding sequence of buoy fabrication and delivery with details regarding buoy model, color, serial number, markings, and lantern, battery type and the configuration type, per Schedule A, is provided/listed to the Contractor at Appendix A (Buoy List) of Annex B (Technical Statement of Requirements).

Canada anticipates the following general delivery schedule structure (quantities may vary per season or year, as necessary):

- The first buoy delivery (4 buoys) is required by August 31, 2021.
- The remaining 48 buoys (corresponding to Table 3 of Schedule A) must be delivered before February 28, 2022;
- Delivery destinations for the buoys include CCG facilities stationed in Quebec City and Sorel, QC. Should it be necessary to change the delivery destinations for optional goods, alternate transportation and insurance costs will be negotiated (at cost, with no allowance for profit) and managed through either a Task Authorization or a Contract amendment; and,
- All required documentation must be delivered in accordance with the Contract, and as specified in the Contract Data Requirements List included in Appendix 1 and 2 of Annex A, Statement of Work.

## 2. Delivery Destination Addresses

Destination addresses for Québec and Sorel are listed below. Additional delivery destinations across various Canadian provinces (such as Prescott CCG Base) and territories may be included if and when any options are exercised.

### **Québec QC**

Garde côtière canadienne  
101, boulevard Champlain  
Québec QC G1K 7Y7

### **Sorel QC**

15 Rue du Prince  
Sorel-Tracy QC J3P 4J4

### **Prescott ON (may be used for Options if exercised)**

401 King Street  
Prescott ON K0E 1T0

Solicitation No. - N° de l'invitation  
F7047-210014/A  
Client Ref. No. - N° de réf. du client  
F7047-210014

Amd. No. - N° de la modif.  
File No. - N° du dossier

Buyer ID - Id de l'acheteur  
erd 011  
CCC No./N° CCC - FMS No./N° VME



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

Canadian  
Coast Guard

Garde côtière  
canadienne

## Integrated Technical Services



### Annex A

## Statement of Work (SOW)

### *Four-Season Lighted Navigation Buoys (4SB) Project*

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## Section 1 INTRODUCTION

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### 1.1 BACKGROUND

The Canadian Coast Guard (CCG) is a Special Operating Agency of Fisheries and Oceans Canada. The *Oceans Act* and the *Canada Shipping Act* provide the primary legislative basis for Coast Guard programs and empowers the Canadian Coast Guard to provide aids to navigation services for safe and efficient movement of marine traffic. The aim of the Four-Season Lighted Navigation Buoys Project (hereinafter referred to as “4SB Project”) is to provide advanced lighted-buoys (hereinafter referred to as “the buoy”) in the St. Lawrence River shipping channel between Québec City and Montréal.

### 1.2 PURPOSE

The purpose of the 4SB Project is to increase navigational efficiency and safety of mariners in the St. Lawrence River shipping channel. The buoys will remain operational year-round (12 months) for a minimum of two years before requiring servicing. The buoys will be subject to extreme environmental conditions, including, though not limited to, extended periods completely submerged underwater, under accumulated ice.

The purpose of this Statement of Work (SOW) is to describe the Work required in the manufacture and provision of the complete buoys to CCG facilities stationed in Québec City and Sorel.

### 1.3 SCOPE

This SOW establishes the overall requirements for the construction, outfitting, testing and documentation and support of the buoy. Annex B details the Technical Statement of Requirements (TSOR).

Each individual buoy contains the following components:

- a) Assembly of steel parts forming the buoy itself;
- b) High-performance paint coating; and,
- c) An electrical system including a battery and a lantern.

Additional information regarding quantities, deliveries, and payment are included in the Articles of Agreement, specifically in Schedule A and Schedule B.

The battery will be supplied by Canada to the Contractor as Government Furnished Equipment.

## Section 2 PROJECT MANAGEMENT

---

### 2.1 GENERAL

The Contractor must develop a formal Implementation Plan (**CDRL item DID- 01**) that details the manner with which the project will be delivered. The principles covered in the Implementation Plan must contain the methods and procedures to direct, coordinate, and control all efforts needed to deliver the complete buoys and realize the obligations specified in the Contract. This includes and is not limited to:

- Material Sourcing
- List of sub-contractors
- Production schedule
- Delivery schedule (as per the Contract including all Annexes, Appendices, and Schedules.)

### 2.2 PROJECT MANAGEMENT

The Contractor must identify a Project Manager to carry out the work necessary to meet contract requirements. The Project Manager must be the main point of contact with Canada.

The Contractor must prepare, deliver, and maintain all project deliverables in accordance with the Contract including:

- a. Appendix 1: Contract Data Requirement List (CDRL);
- b. Appendix 2: Data Item Descriptions (DIDs);
- c. Annex B: Technical Statement of Requirements (TSOR);
- d. Appendix A of Annex B: Buoys List.
- e. Appendix B of Annex B : Design Drawings of the ELA 1.0m;

### 2.3 IMPLEMENTATION PLAN AND PROJECT SCHEDULE

The Contractor must provide an Implementation Plan in accordance with **CDRL item DID- 01**, and submit it to the Project Authority (PA), Technical Authority (TA), and Contracting Authority (CA) for review and acceptance. Canada has the right to review **and revise** all CDRL items prior to final acceptance.

The Contractor must manage the project in accordance with the Implementation Plan, as accepted by Canada.

The Contractor must also provide a Project Schedule in accordance with **CDRL item DID- 02**, and submit it to the PA, TA, and CA for review and acceptance. The Project Schedule must be updated

with each claim (PWGSC form 1111) submitted pursuant to this Contract and submitted to Canada for review and acceptance.

## **2.4 PROJECT MEETINGS**

The Contractor' Project Manager must convene and co-chair all meetings required by this SOW at the Contractor's own facilities unless otherwise agreed to by Canada, or otherwise noted herein. Teleconference/video may be acceptable at Canada's discretion. The Contractor's Project Manager must provide Canada with an agenda for each meeting three business days before it is set to occur, as per **CDRL item DID- 03**, as well as provide a Record of Decisions three business days after it has occurred as per **CDRL item DID- 04**. Canada reserves the right to review and revise the agenda and Record of Decisions.

### **2.4.1 Contract Kick-off Meeting**

The Contractor's Project Manager must convene and co-chair an in-person Contract Kick-off Meeting within 10 business days of Contract award to review the following documents (at a minimum):

- Contract;
- Quality management system and documentation;
  - includes Quality Control and Quality Assurance plans (**CDRL item DID-08**)
- Welding plan (**CDRL item DID-05**)
  - Includes weld sequencing plan
- Environmental Protection Plan (**CDRL item DID-06**)
- Health & Safety Plan (**CDRL item DID-07**)
- Design drawings.

The Contractor must also provide representatives of Canada with a tour of all facilities that will be used in the fabrication of the buoys. The tour is to take place prior to fabrication of buoys. At a minimum, the PA, TA, and CA will be in attendance.

### **2.4.2 Project Review Meetings**

The Contractor must convene and co-chair a Progress Review Meeting within 28 business days of the Kick-off Meeting to review the following documents (at a minimum):

- a. Implementation Plan;
- b. Project Schedule and
- c. Test Plan.

Within one week of all testing being successfully completed (as detailed in Section 3) for the first two Buoys that will be manufactured, the Contractor must schedule a meeting with Canada. At minimum, the Contractor, TA, and CA will be in attendance where the

two built buoys will be viewed and associated test reports and drawings will be reviewed and discussed.

The Contractor must schedule six (6) project review meetings each calendar year of the Contract (not including the Kickoff and initial Project Review Meeting). The Contractor must provide Canada with 10 business days' notice for each meeting, for Canada's confirmation of attendance or proposal of an alternate date, as necessary. These meetings will be used to discuss project status, schedule, and any potential issues and risks. At a minimum, the PA, CA and TA will be in attendance and Canada will confirm any additional participants prior to each meeting.

### **2.4.3 Cancellation of Meetings**

Canada may cancel meetings at its discretion. Rescheduling of meetings must be done only with the explicit agreement of the PA and CA.

### **2.4.4 Unscheduled Meetings**

Should Canada see the need for unscheduled meetings, the Contractor must provide representation at meetings (teleconference or in person) should the need for ad hoc or unscheduled meetings be required. The Contractor's representation must be able to make required decisions related to the Work.

## **2.5 PROBLEM REPORTING/DESIGN CHANGES**

The Contractor must advise Canada by email within two calendar days upon identifying a problem or issue that may impact the Contract Work. Canada will advise whether an unscheduled meeting or other action is required.

## Section 3 ENGINEERING MANAGEMENT

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### 3.1 DRAWINGS

#### 3.1.1 Design Drawings

Design drawings can be found in Appendix B (ELA 1.0M) of Annex B (TSoR).

#### 3.1.2 Shop Drawings

Prior to manufacturing, the contractor must prepare, keep updated as needed, and deliver the **Shop Drawings** for the 4SB in accordance with **CDRL item DID-12**. Every drawing must be stamped by a Professional Engineer authorized to practice in Canada.

Shop drawings must be reviewed and accepted by Canada prior to the start of buoy manufacturing.

#### 3.1.3 Master Record of Modifications

Once approved by Canada, the Contractor must build a Master Record of Modifications (MRM) made to the design drawings for the 4SB in accordance with **CDRL item DID-13**. The MRM must be delivered prior to Contract Close-Out.

### 3.2 CERTIFICATIONS OF THE CONTRACTOR

#### 3.2.1 Quality Management System

The Contractor must be certified to the current requirements of: ISO 9001:2015 - Quality management systems - Requirements, published by the International Organization for Standardization (ISO), current edition at date of submission of the Contractor's bid. Only exclusions in accordance with clause 1.2 of ISO 9001 are acceptable.

#### 3.2.2 Welding

The Contractor (and any entity/entities performing welding pursuant to this Contract) must be certified in compliance with CSA W47.1-2019, **Division 1**. The Contractor must provide Canada with a copy of their current validation certificate from the Canadian Welding Bureau (CWB) confirming that it meets this requirement. The Contractor must also provide validation certificates for all welders performing welding pursuant to this Contract.

The Contractor must also reveal to Canada if there are any unresolved certification audit issues presently on file with the CWB.

### 3.3 QUALITY ASSURANCE DELIVERABLES

Aside from the Welding Plan (**CDRL item DID-05**) all other deliverables detailed in this section must be provided as per **CDRL item DID-08**.

### 3.3.1 Steel Documentation

The Contractor must provide Canada with a Certified Mill Test Report for 350W or 350WT steel for every purchased batch of steel that will be used for manufacturing the buoys. The Mill test must be prepared and signed by the steel manufacturer and must clearly indicate that the steel is compliant to CSA G40.21 grade 350W or 350WT.

### 3.3.2 Coating Sample

Before buoy manufacturing, the Contractor must provide a sample for all the coating types and colour variations, as detailed in Section 3.2 and Table 1 of the TSOR, for review and approval by Canada. A sample is a 350W grade steel plate measuring 3" x 4" x 1/8". The steel surface must be sanded in accordance with SSPC-SP 10/NACE No. 2. The colour of each sample will be checked and validated by Canada using a spectrophotometer, in accordance with the requirements of IALA recommendation E-108. To be approved by Canada, the chromaticity coordinates and the luminance factor of each sample must adhere to IALA recommendation E-108. The chromaticity region accepted by Canada for the colour green is limited to "preferred region" per IALA recommendation E-108.

### 3.3.3 Welding Certifications

Before performing the welding work, the Contractor must provide Canada with a list of the CWB approved welding procedures which will be performed throughout the course of the Work, as well as a list of all personnel who will be performing these procedures. This list must specify the CWB recognized welding qualifications of each welder, and must be accompanied by copies of CWB certifications for all welders who will be performing the work.

Before performing the welding inspection work, the Contractor must provide Canada with inspection personnel qualification certificates and inspection procedures.

In addition to the aforementioned, the Contractor must provide Canada with a welding plan (**CDRL item DID-05**) that will detail the following at a minimum:

- Types and locations of welds
- Sequence of welds to be performed
- Protective measures to prevent deformations and protect integrity of fabricated buoy parts

### 3.3.4 Data Sheets

The Contractor must provide Canada with the technical data sheets and material safety data sheets for all products, components, and materials used for the construction and assembly of the buoy. The data sheets must be provided before the commencement of buoy manufacturing. Following the acceptance of data sheets by Canada, the Contractor must use the accepted products, components, and materials in all subsequent buoys.

During the Contract, should any additional and/or replacement products, components, and/or materials be required, the Contractor must submit data sheets to Canada for the acceptance of the proposed items. Canada will review and verify said items' equivalency to the previously acceptable version. The Contractor must receive explicit acceptance of the products, components, and materials from Canada prior to utilizing any items for any work.

### **3.4 TESTING**

The Contractor must demonstrate that each buoy satisfies the requirements defined in the TSOR. Demonstration of operational and performance requirements must be conducted through the tests defined hereafter. At a minimum, these tests will confirm to Canada that each buoy and its components are functional, and to the satisfaction of Canada.

The Contractor must conduct the tests defined herein for each buoy. The tests must be conducted in the order as described in Section 3.4.1.

Testing must be conducted at the Contractor's or sub-contractor's facility. All testing dates reflected in the Master Project Schedule (in accordance with **CDRL item DID- 02**) must be accurate and updated as required, in order to make arrangements to attend the testing should Canada see fit to do so.

#### **3.4.1 Test Plan**

The Contractor must develop an overall Project Test Plan as per **CDRL item DID-09** which details all tests and associated schedule. At a minimum the Contractor must plan for the following tests in the following order:

**a. Welding Inspection**

All Welding Inspections must be performed, interpreted and the results reported as per the requirements defined in Section 2 of the TSOR.

Per the TSOR section 2.9, all ultrasonic and magnetic particle weld inspections are to be done by an independent 3<sup>rd</sup> party contracted by the Contractor. The Contractor is responsible for subcontracting the Welding Inspection services.

**b. Leak Test**

The Leak Test must be conducted prior to the surface preparation work and coating application. Each buoy compartment must support a pressure of 7 psi, for a period of 10 minutes, without a reduction in pressure. Flanges for 3/4 NPT plugs must be used as port of entry for the compressed air piping. The buoy compartments must be tested one at a time. During the test, a calibrated dial pressure gauge with at least 0.5 psi accuracy must be used to detect any reduction in pressure.

If a loss in pressure is detected during the leak test, the leak must be found and the necessary measures must be taken to seal it. A new Leak Test and a new Welding

Inspection must be performed again in any cases of failed Leak Tests until both tests have been completed successfully.

c. **Weight and Angle of Stability Test**

A Weight and Angle of Stability test must be conducted once the manufacturing of the buoy is completed. The Weight and Angle of Stability tests include measurements of the buoy's mass (kg) and angle of stability (°) during lifting. Only the centre lifting lug must be used to suspend the buoy. The buoy weight measuring equipment must provide a reading accuracy of  $\pm 0.1\%$  or better.

d. **Coating Inspection**

The Coating Inspection must be performed by a third party Level 2 inspector of the National Association of Corrosion Engineers (NACE) to assess the surface preparation and coating application work conducted. The Contractor is responsible for subcontracting the NACE Inspector services.

Pictures of each work step of surface preparation and coating application must be taken through the course of the work and be submitted to Canada as part of the Test report (**CDRL item DID-10**).

e. **Electrical System Test**

The Electrical System test must be carried out to verify that each component of the electrical system (battery, lantern, cables) is functional. The test must include:

- Measuring the voltage and weight of each battery;
- Testing the lantern by connecting it to a battery or a 12 VDC;
- Testing of the buoy cable by connecting the fully assembled electrical system.

The Contractor will be required to undertake the Electrical System Test with the GFE supplied battery.

### 3.4.2 Test Report

The Contractor must produce a Test Report for each buoy as per **CDRL item DID-10** after the completion of tests detailed in the Test Plan (Section 3.4.1). The report must summarize the results of the test including any outstanding issues and discrepancies resulting from the testing, how the Contractor will rectify them, and the associated timeline for resolution. The Test Report must be certified by the Contractor as an accurate record of the test results. In the case of the Welding Inspection and the Coating Inspection, the Contractor must supply all 3<sup>rd</sup> party inspection documentation with the test reports as applicable. All test reports required for each buoy must be available to Canada upon request.

### **3.4.3 Buoy Logbook**

The Contractor must prepare a logbook for each buoy in accordance with **CDRL item DID-11**. All Logbooks required for each buoy must be submitted to for Canada's review 5 calendar days prior to shipping the buoys to Canada's facilities.

Canada's acceptance of buoy logbooks must not be construed as Canada's acceptance of the applicable buoys themselves. All the Work pursuant to this Contract is subject to inspection and acceptance by Canada, as per the applicable General Conditions 2030 12 (2014-09-25).

## Section 4 BUOY DELIVERY AND SCHEDULE

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### 4.1 BUOY MANUFACTURING SCHEDULE

The Contractor must use the information in Appendix A (Buoys List) of Annex B (TSoR) to establish the buoy manufacturing sequence. Other essential information related to the buoy preparation can be found in this appendix, i.e. buoy color, serial number, markings, lantern colour and the battery.

The Contractor must incorporate the planned delivery dates of the GFE batteries into the Master Project Schedule, as per DID-02.

### 4.2 PROVISIONING OF SPARES AND RECOMMENDED SPARE PARTS LIST

The Contractor must provide a Recommended Spare Parts List (RSPL) as per **CDRL item DID-14**.

The battery is to be excluded from the RSPL.

Canada may, at its discretion, review, revise and later exercise the option(s) for the provision of some or all of the spare components.

All components supplied by the Contractor must be kitted, packaged, clearly marked and identified with manufacturer's name, item name and description, and part number on an adhesive label secured to the package.

### 4.3 MANUALS

The Contractor must provide Canada with a User's Manual for the lantern model.

All manuals must be provided in searchable portable document format (PDF). Manuals existing in hardcopy only must be scanned into digital format incorporating a full search capability with book marking.

All manuals must be provided in English and/or French.

## **APPENDIX 1                      CONTRACT DATA REQUIREMENTS LIST**

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The following section defines the various columns of information found on the Contract Data Requirements List (CDRL). The CDRL is an all-encompassing table illustrating the submission details associated with every defined Data Item Deliverable (DID). Each DID details the content and format required for each defined deliverable of the contract.

### **CONTRACTOR**

Identifies the Contractor(s) responsible for the delivery of the DIDs defined within the CDRL.

### **CONTRACT/RFP NUMBER**

Identifies the Contract or RFP for which the CDRL applies.

### **IDENTIFICATION NUMBER (ID #)**

The Identification number is an alphanumeric designation to uniquely identify each individual DID.

### **TITLE OF DATA**

Identifies the title of the DID referred to in the CDRL.

### **CONTRACT REFERENCE (CON. REF.)**

Identifies the specific paragraph number of the Contract Demand, Statement of Work, Request for Proposal, Specification, or other applicable document to assist in identifying the work effort associated with the DID.

### **REQUIRING OFFICE (REQ. OFFICE)**

Identifies the technical office of primary interest (OPI) responsible for defining the data requirement, reviewing, acceptance and/or approval of the data item, and ensuring the adequacy of the delivered data.

### **APPROVAL CODE (APP. CODE)**

Identifies items of critical data requiring specific advanced written approval, such as test plans, identified by placing an 'A' in this column. These data items may require submission of a preliminary draft prior to publication of a final document. When a preliminary draft is required, column labelled 'REMARKS' must show the length of time for Government approval/disapproval and when the final document is to be delivered. The extent of approval requirements (e.g., approval of technical content and/or format) will also be

defined in the aforementioned column. If advance approval is not required, this column is marked 'N/A'.

### **FREQUENCY (FREQ.)**

Identifies the frequency of the delivered data. The following frequency codes are used:

ANNLY	Annually
ASGEN	As generated
ASREQ	As required
BI-MO	Every 2 months
BI-WK	Every 2 weeks
DAILY	Daily
MNTHY	Monthly
ONE/R	One time with revision
OTIME	One time
QRTLY	Quarterly
R/ASR	Revisions as required
SEMIA	Semi-Annually
WKLY	Weekly
UPREQ	Upon Canada's request
TEBD	To every Buoy delivery

### **LANGUAGE (LANG.)**

Identifies the language of the delivered data. English and/or French" indicates that the item may be delivered in both the official Canadian languages, but must at least be delivered in Canadian English or Canadian French.

### **AS-OF DATE**

For data items that are submitted only once, the 'as-of' date or associated constraint is indicated. The following abbreviations are used for the constraints:

ASGEN	As generated
ASREQ	As required
DACA	Days after contract award
MACA	Months after contract award
EOM	End of Month
EOQ	End of quarter

If the as-of date is not applicable, this column is marked 'N/A'.

### **DATE OF FIRST SUBMISSION (DATE OF 1<sup>ST</sup> SUB.)**

Indicates the initial submission date or associated constraint for the first submission of the data item using typical abbreviations as listed above under 'AS-OF DATE'.

**DATE OF SUBSEQUENT SUBMISSION (DATE OF SUBSEQ. SUB.)**

Indicates the date(s) of subsequent submission(s) or associated constraint(s) of the data item. The abbreviations used for the constraints are listed above under 'AS-OF DATE'. If no subsequent submission or associated constraint are required, this column is marked 'N/A'.

**DISTRIBUTION AND ADDRESSES**

Identifies the addresses and the respective number of 'COPIES' (hard copies and soft copies separately), for both the draft and original submissions (sub column '*Draft*'), and for the final or subsequent submissions (sub column '*Final*'), for which the data item is required. All draft documents must be provided in soft copy format to facilitate review. The 'ADDRESS' column indicates the recipient of each *Draft* and *Final* copies of the data item.

**REMARKS**

Provides additional or clarifying information with respect to the DID. Where other columns refer to 'REMARKS', then the associated column is indicated with the information, and a 'See REMARKS' note is entered in the referring column.

**APPROVED BY**

Identifies the name and designation of the person approving the DID.

**DATE**

Identifies the date of the DID approval.

STATEMENT OF WORK (SOW)  
Appendix 1

CONTRACTOR:		CONTRACT:											
ID #	TITLE OF DATA	CON. REF.	REQ. OFFICE	APP. CODE	FREQ.	LANG.	AS-OF DATE	DATE OF 1ST SUB.	DATE OF SUBSEQ. SUB.	SUBMISSION DETAILS			REMARKS
										ADDRESS	DISTRIBUTION		
				DR.	H	S							
DID -01	Implementation Plan	SOW 2.1 & 2.3	CCG ITS	A	ONE/R	English and/or French	N/A	At Kickoff Meeting	See REMARKS	CCG PA	1	1	Canada will provide comments on the Implementation Plan and return it to the Contractor for revision and resubmission. The Contractor must provide a revised copy within two weeks.
APPROVED BY:													
DATE:													
DID -02	Master Project Schedule	SOW 2.3	CCG ITS	A	MONTHLY	English and/or French	N/A	At Kickoff Meeting	See REMARKS	CCG PA	1	1	Canada will provide comments on the Master Project Schedule and return it to the Contractor for revision and resubmission. The Contractor must provide a revised copy within two weeks.
APPROVED BY:													
DATE:													

STATEMENT OF WORK (SOW)  
Appendix 1

CONTRACTOR:		CONTRACT:												
ID #	TITLE OF DATA	CON. REF.	REQ. OFFICE	APP. CODE	FREQ.	LANG.	AS-OF DATE	DATE OF 1ST SUB.	DATE OF SUBSEQ. SUB.	DISTRIBUTION			REMARKS	
										ADDRESS	DR.	COPIES		
			H	S										
DID -03	Meeting Agenda	SOW 2.4	CCG ITS	A	ASREQ/R	English and/or French	N/A	3 business days prior to any meeting scheduled with Canada	See REMARKS	CCG PA and TA	1	1	1	Canada will review and provide comment, or accept all agendas within 2 business days
APPROVED BY:														
DATE:														
DID -04	Record of Decisions	SOW 2.4	CCG ITS	A	ASREQ/R	English and/or French	N/A	3 business days after any meeting scheduled with Canada	See REMARKS	CCG PA and TA	1	1	1	Canada will review and provide comment, or accept all RODs within 5 business days
APPROVED BY:														
DATE:														

STATEMENT OF WORK (SOW)  
Appendix 1

CONTRACTOR:		CONTRACT:											
SUBMISSION DETAILS													
ID #	TITLE OF DATA	CON. REF.	REQ. OFFICE	APP. CODE	FREQ.	LANG.	AS-OF DATE	DATE OF 1ST SUB.	DATE OF SUBSEQ. SUB.	DISTRIBUTION			REMARKS
										ADDRESS	DR.	COPIES	
										H	FINAL	S	
DID -05	Welding Plan	SOW 3.3.3	CCG ITS	A	ONE/R	English and/or French	N/A	At Kickoff Meeting	See REMARKS	CCG PA and TA	1	1	Canada will provide comments on the Welding Plan and return it to the Contractor for revision and resubmission. The Contractor must provide a revised copy within two weeks.
APPROVED BY:													
DATE:													
DID -06	Environmental Protection Plan	SOW 2.4	CCG ITS	A	ONE/R	English and/or French	N/A	At Kickoff Meeting	See REMARKS	CCG PA and TA	1	1	Canada will provide comments on the Environmental Protection Plan and return it to the Contractor for revision and resubmission. The Contractor must provide a revised copy within two weeks.
APPROVED BY:													
DATE:													

STATEMENT OF WORK (SOW)  
Appendix 1

CONTRACTOR:		CONTRACT:											
SUBMISSION DETAILS													
ID #	TITLE OF DATA	CON. REF.	REQ. OFFICE	APP. CODE	FREQ.	LANG.	AS-OF DATE	DATE OF 1ST SUB.	DATE OF SUBSEQ. SUB.	DISTRIBUTION			REMARKS
										ADDRESS	DR.	COPIES	
										H	FINAL	S	
DID -07	Health & Safety Plan	SOW 2.4	CCG ITS	A	ONE/R	English and/or French	N/A	At Kickoff Meeting	See REMARKS	CCG PA and TA	1	1	Canada will provide comments on the Health & Safety Plan and return it to the Contractor for revision and resubmission. The Contractor must provide a revised copy within two weeks.
APPROVED BY:													
DATE:													
DID -08	Quality Assurance Deliverables	SOW 3.3	CCG ITS	A	ONE/R	English and/or French	N/A	At Kickoff Meeting	See REMARKS	CCG PA and TA	1	1	Canada will provide comments on the Assurance deliverables and return it to the Contractor for revision and resubmission. The Contractor must provide a revised copy within two weeks.
APPROVED BY:													
DATE:													

STATEMENT OF WORK (SOW)  
Appendix 1

CONTRACTOR:		CONTRACT:												
ID #	TITLE OF DATA	CON. REF.	REQ. OFFICE	APP. CODE	FREQ.	LANG.	AS-OF DATE	DATE OF 1ST SUB.	DATE OF SUBSEQ. SUB.	SUBMISSION DETAILS				REMARKS
										ADDRESS	DISTRIBUTION			
DR.	COPIES	H	S											
DID-09	Test Plan	SOW 3.1.1	CCG ITS	A	ONE/R	English and/or French	N/A	2 weeks before first Progress Review Meeting	See REMARKS	CCG TA	1		1	Canada will provide comments on the Test Plan and return it to the Contractor for revision and resubmission. The Contractor must provide a revised copy within two weeks.
APPROVED BY:														
DATE:														
DID-10	Test Report	SOW 3.1.2	CCG ITS	N/A	ASREQ	English and/or French	N/A	UPREQ	See REMARKS	CCG TA	N/A		1	Test reports must be submitted within 7 calendar days of test completion. In case of test failure subsequent reports must be submitted within 7 calendar days of re-testing.
APPROVED BY:														
DATE:														

STATEMENT OF WORK (SOW)  
Appendix 1

CONTRACTOR:		CONTRACT:											
ID #	TITLE OF DATA	CON. REF.	REQ. OFFICE	APP. CODE	FREQ.	LANG.	AS-OF DATE	DATE OF 1ST SUB.	DATE OF SUBSEQ. SUB.	SUBMISSION DETAILS			REMARKS
										ADDRESS	DR.	COPIES	
			H			S							
DID-11	Buoy Logbook	SOW 3.4.3	CCG ITS	N/A	TEBD	English and/or French	N/A	5 calendar days prior to shipping of each buoy			1	1	The Contractor must receive Canada's explicit acceptance of the buoy logbook(s) prior to shipping the associated buoys to Canada's facilities. Canada's acceptance of buoy logbooks <u>must not be construed as</u> Canada's acceptance of the applicable buoys themselves.
											1	1	
APPROVED BY:													
DATE:													

STATEMENT OF WORK (SOW)  
Appendix 1

CONTRACTOR:		CONTRACT:													
ID #	TITLE OF DATA	CON. REF.	REQ. OFFICE	APP. CODE	FREQ.	LANG.	AS-OF DATE	DATE OF 1ST SUB.	DATE OF SUBSEQ. SUB.	SUBMISSION DETAILS			REMARKS		
										ADDRESS	DISTRIBUTION				
				DR.	COPIES										
										H	S				
DID -12	Shop Drawings	SOW 3.1.2	CCG ITS	N/A	ONE/R	English or French	N/A	PM * see remark	ASREQ	CCG TA	1		1		Prior to Manufacturing. Shop drawings to be submitted for review, revision (as required) and acceptance by Canada.
										PSPCCA			1		

APPROVED BY:  
DATE:

STATEMENT OF WORK (SOW)  
Appendix 1

CONTRACTOR:		CONTRACT:													
ID #	TITLE OF DATA	CON. REF.	REQ. OFFICE	APP. CODE	FREQ.	LANG.	AS-OF DATE	DATE OF 1ST SUB.	DATE OF SUBSEQ. SUB.	SUBMISSION DETAILS				REMARKS	
										ADDRESS	DISTRIBUTION				COPIES
DR.	H	S	FINAL												
DID -13	Master Record of Modifications	SOW 3.1.3	CCG ITS	A	ONE/R	English and/or French	See REMARKS	See REMARKS	N/A	CCG TA	1	1	1	1	Contractor to submit Master Record of Modifications to Canada 1 month prior to contract close-out. Canada will provide comments on the Master Record of Modifications and return it to the Contractor for revision and resubmission. The Contractor must provide a revised copy within two weeks.
										PSPC CA			1		
APPROVED BY:															
DATE:															

STATEMENT OF WORK (SOW)  
Appendix 1

CONTRACTOR:		CONTRACT:													
ID #	TITLE OF DATA	CON. REF.	REQ. OFFICE	APP. CODE	FREQ.	LANG.	AS-OF DATE	DATE OF 1ST SUB.	DATE OF SUBSEQ. SUB.	SUBMISSION DETAILS				REMARKS	
										ADDRESS	DISTRIBUTION				
		DR.		COPIES		FINAL		H			S				
DID -14	Recommended Spare Parts List (RSPL)	SOW 4.2	CCG ITS	A	ONE/R	English and/or French	See REMARKS	See REMARKS	N/A	CCG TA	1			1	Contractor to submit RSPL for Canada's review and revision as needed. The RSPL does not form a commitment on Canada's part to purchase.
										PSPC CA				1	

APPROVED BY:  
DATE:

## APPENDIX 2 DATA ITEM DESCRIPTIONS

DATA ITEM DESCRIPTION	
<b>1. TITLE</b> <b>Implementation Plan</b>	<b>2. IDENTIFICATION NUMBER</b> <b>DID- 01</b>
<b>3. DESCRIPTION</b> The Implementation Plan details the plan that the Contractor will follow in order to meet the objectives of the project. It must detail the procedures for project planning, organizing, directing, monitoring, controlling, providing for the orderly resource management of and reporting on all work with respect to the project. The Implementation Plan is used to provide Canada insight into the Contractor's project management practices and procedures as they apply to the accomplishment of the Work under the Contract.	
<b>4. Application</b> This DID contains the format, content, and preparation instructions for the Implementation Plan as required by the Statement of Work (SOW), Section 2.1 and 2.3.	
<b>5. Data Preparation Instructions</b>	
<b>5.1</b>	<b>Format</b>
5.1.1	The document must be in the Contractor's format, printable on 8.5x11 size paper, and as further described herein. Soft copies must be provided in a PDF format
<b>5.2</b>	<b>Content</b>
5.2.1	The Implementation Plan must, as a minimum, contain the following information:
5.2.1.1	<b>Introduction</b> This section must identify the purpose and scope of the plan. References and terminology used in the plan must be clearly identified.
5.2.1.2	<b>Project Overview</b> This section must clearly identify the project objectives and project deliverables.
5.2.1.3	<b>Project Organization</b> The plan must identify by name all key personnel and clearly indicate lines of responsibility, including the person who will have overall responsibility for the project. An organization chart must be provided stating the roles and responsibilities of all personnel, including subcontractors.
5.2.1.4	<b>Work Plan</b> This section must identify and quantify the work to be done by the Contractor in order to build and deliver the buoys. Detailed descriptions must be provided, along with resource requirements for material and labor. The Work Plan must incorporate intermittent consultations with Canada throughout all phases of the Project.

DATA ITEM DESCRIPTION	
<b>1. TITLE</b> <b>Master Project Schedule</b>	<b>2. IDENTIFICATION NUMBER</b> <b>DID- 02</b>
<b>3. DESCRIPTION</b> The Master Project Schedule details the major project activities and when the Contractor plans on achieving them. It must include all milestones and deliverables. The Master Project Schedule will be used by Canada to provide insight into when the Contractor will accomplish each deliverable of the Work.	
<b>4. Application</b> This DID contains the format, content, and preparation instructions for the Master Project Schedule as required by the Statement of Work (SOW), Section 2.3.	
<b>5. Data Preparation Instructions</b>	
<b>5.1</b>	<b>Format</b>
5.1.1	The document may be in the Contractor's format, and must be printable on 8.5x11 size paper, and as further described herein. Soft copies must be provided in PDF format and MS Project 2010.
<b>5.2</b>	<b>Content</b>
5.2.1	At a minimum, the following information must be included:
5.2.1.1	<i>Purchasing Schedule</i> The Contractor must detail their planned purchasing schedule for all materials to be used in the completion of the Work.
5.2.1.2	<i>Testing Schedule</i> The Contractor must detail their planned testing schedule for all of the tests included in SOW 3.4.
5.2.1.3	<i>Production Schedule</i> The Contractor must detail their planned production schedule.
5.2.1.4	<i>Delivery Schedule</i> The Contractor must detail their planned delivery schedule as per the Contract including all annexes, appendices, and schedules.
5.2.1.5	<i>Government Furnished Equipment (GFE)</i> Contractor must detail in their schedule the planned delivery dates for the GFE (batteries).

<b>DATA ITEM DESCRIPTION</b>	
<b>1. TITLE</b> <b>Meeting Agenda</b>	<b>2. IDENTIFICATION NUMBER</b> <b>DID- 03</b>
<b>3. DESCRIPTION</b> The Project Review Agenda describes what the Contractor must provide Canada with for each Project Review and Control meeting to be submitted at least three business days prior to the scheduled meeting.	
<b>4. Application</b> This DID contains the format and contents for the agenda as required by the Statement of Work (SOW), Section 2.4.	
<b>5. Agenda Preparation Instructions</b>	
<b>5.1 Format</b>	
5.1.1 The document may be in the Contractor's format, and must be printable on 8.5x11 size paper and as further described herein. Soft copies must be provided in PDF format.	
<b>5.2 Content</b>	
5.2.1 At a minimum, the following information must be included:	
<i>Identification</i>	
<i>Purpose (or scope) of the meeting</i>	
This section will provide the report title, Contractor identification and contact information, date, and a list of attendees.	
<i>Status</i>	
The Contractor must provide up-to-date general descriptions and concerns regarding the project, including but not limited to the following contents:	
<ul style="list-style-type: none"> <li>- Current status;</li> <li>- Project changes;</li> <li>- Deliverables;</li> <li>- Dates and deadlines; and,</li> <li>- Action items and next steps.</li> </ul>	

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DATA ITEM DESCRIPTION	
<b>1. TITLE</b> <b>Record of Decisions</b>	<b>2. IDENTIFICATION NUMBER</b> <b>DID- 04</b>
<b>3. DESCRIPTION</b> The Record of Decisions (ROD) describes decisions resulting from the Kickoff and Project Review Meetings as per SOW Section 2.4. The ROD is to be submitted by the Contractor to Canada no more than three business days following each meeting.	
<b>4. Application</b> This DID contains the format and content for the ROD as required by the Statement of Work (SOW), Section 2.4.	
<b>5. Agenda Preparation Instructions</b> <b>5.1 Format</b> 5.1.1 The document may be in the Contractor's format, and must be printable on 8.5x11 size paper, and as further described herein. Soft copies must be provided in PDF format. <b>5.2 Content</b> 5.2.1 At a minimum, the following information must be included: <i>Identification</i> This section will provide the report title, Contractor identification, date, contact information for Contractor and a list of attendees who attended the meeting the ROD is addressing. <i>Minutes taken</i> Documented time, date, location, attendee specific actions, topics discussed, description of formal outcomes. <i>Action items</i> Next steps and actions to be taken and by whom and when.	

DATA ITEM DESCRIPTION	
<b>1. TITLE</b> <b>Welding Plan</b>	<b>2. IDENTIFICATION NUMBER</b> <b>DID -05</b>
<b>3. DESCRIPTION</b> The Welding Plan details the welding procedures that the Contractor will follow in order to complete all of the welding required by the Contract. The Welding Plan is used to provide Canada insight into the Contractor's welding practices and procedures as they apply to the completion of the welding requirements of the Contract.	
<b>4. Application</b> This DID contains the format, content, and preparation instructions for the welding plan as required by the Statement of Work (SOW), Section 3.3.3.	
<b>5. Data Preparation Instructions</b>	
<b>5.1</b>	<b>Format</b>
5.1.1	The document must be in the Contractor's format, printable on 8.5x11 size paper, and as further described herein. Soft copies must be provided in PDF format.
<b>5.2</b>	<b>Content</b>
5.2.1	At a minimum, the following information must be included:
	a. <i>Types and locations of welds</i> This section will outline the type of weld to be used for each specific weld on a particular buoy. The plan should be indicative of pictorial listing the type of weld to be applied to particular locations on the buoys.
	b. <i>Weld Sequence</i> This section will outline the sequence of the welding work, which includes but is not limited to, the specific order (sequence) in which parts will be welded together.
	c. <i>Protective Measures</i> This section will detail the protective measures employed to prevent deformations of steel and protect the integrity of completed welds and fabricated buoy parts.
	d. <i>Testing Details</i> This section will outline the testing procedures and testing sequence as they pertain to welding work.
	e. <i>Recording and reporting procedures</i> Including data collection and analysis techniques to ensure successful welding
	f. <i>Corrective measures</i> This section will outline measures that will be taken to correct any failed or defective welds.

DATA ITEM DESCRIPTION	
<b>1. TITLE</b> <b>Environmental Protection Plan</b>	<b>2. IDENTIFICATION NUMBER</b> <b>DID -06</b>
<b>3. DESCRIPTION</b> The Environmental Protection Plan details the environmental procedures that the Contractor will follow in order to complete all of the Work required by the Contract. The Environmental Protection Plan is used to provide Canada insight into the Contractor's environmental protection and mitigation procedures as they apply to the completion of the requirements of the Contract.	
<b>4. Application</b> This DID contains the format, content, and preparation instructions for the environmental protection plan as required by the Statement of Work (SOW), Section 2.4.1.	
<b>5. Data Preparation Instructions</b>	
<b>5.1</b>	<b>Format</b>
5.1.1	The document must be in the Contractor's format, printable on 8.5x11 size paper, and as further described herein. Soft copies must be provided in PDF format.
<b>5.2</b>	<b>Content</b>
5.2.1	At a minimum, the following information must be included: <ul style="list-style-type: none"> <li>a. <i>Environmental Protection Measures to be employed</i> This section will outline the various measures that the Contractor will employ to protect the environment while conducting the work required for the Contract.</li> <li>b. <i>Waste Management</i> This section will outline the measures taken to reduce, reuse, and recycle waste produced from the Work required by the Contract.</li> </ul>

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DATA ITEM DESCRIPTION	
<b>1. TITLE</b> <b>Health &amp; Safety Plan</b>	<b>2. IDENTIFICATION NUMBER</b> <b>DID -07</b>
<b>3. DESCRIPTION</b> The Health & Safety Plan details the safe work procedures that the Contractor will follow in order to complete the Work required by the Contract. The Health & Safety Plan is used to provide Canada insight into the Contractor's health & safety work practices and procedures as they apply to the completion of the requirements of the Contract.	
<b>4. Application</b> This DID contains the format, content, and preparation instructions for the health & safety plan as required by the Statement of Work (SOW), Section 2.4.1.	
<b>5. Data Preparation Instructions</b>	
<b>5.1</b>	<b>Format</b>
5.1.1	The document must be in the Contractor's format, printable on 8.5x11 size paper, and as further described herein. Soft copies must be provided in PDF format.
<b>5.2</b>	<b>Content</b>
5.2.1	At a minimum, the following information must be included:
	a. <i>Health &amp; Safety Measures to be employed</i> This section will outline the various measures that the Contractor will employ to protect the safety of employees while conducting the Work required for the Contract.
	b. <i>Reporting</i> This section will outline reporting structure and steps for any health and safety incidents.
	a. <i>Personal Protective Equipment</i> This section will outline the various personal protective equipment that the Contractor will provide employees conducting the Work required for the Contract.
	b. <i>Education &amp; Monitoring</i> This section will outline the education and monitoring efforts that the Contractor will employ to ensure that safe work practices are being followed.

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DATA ITEM DESCRIPTION	
<b>1. TITLE</b> <b>Quality Assurance Deliverables</b>	<b>2. IDENTIFICATION NUMBER</b> <b>DID -08</b>
<b>3. DESCRIPTION</b> The Quality Assurance deliverables detail the procedures that the Contractor will follow in order to assure and control the quality of the Work required by the Contract. The Quality Assurance deliverables are used to provide Canada insight into the Contractor's Quality Assurance (QA) and Quality Control (QC) practices and procedures as they apply to the completion of the requirements of the Contract.	
<b>4. Application</b> This DID contains the format, content, and preparation instructions for the QA/QC deliverables as required by the Statement of Work (SOW), Section 3.3.	
<b>5. Data Preparation Instructions</b>	
<b>5.1</b>	<b>Format</b>
5.1.1	The document must be in the Contractor's format, printable on 8.5x11 size paper, and as further described herein. Soft copies must be provided in PDF format.
<b>5.2</b>	<b>Content</b>
5.2.1	At a minimum, the following information must be included: <ul style="list-style-type: none"> <li>a. <i>Steel documentation</i> This section will mill test reports for all steel to be used in the manufacturing of the buoys.</li> <li>b. <i>Coating Sample</i> Per sec 3.3.2, the Contractor is required to submit a samples for all coating types and color variations. Canada to check and validate using a spectrophotometer for compliance with requirements of IALA E-108.</li> <li>c. <i>Welding Certifications</i> The Contractor is to submit copies of the CWB certifications for all welders who will be performing the work. The Contractor must also submit the inspection personnel qualifications and certificates along with inspection procedures.</li> <li>d. <i>Data Sheets</i> The Contractor must provide the technical data sheets and material safety data sheets for all products, components and materials used for the construction and assembly of the buoys.</li> </ul>

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Appendix 2

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DATA ITEM DESCRIPTION	
<b>1. TITLE</b> <b>Test Plan</b>	<b>2. IDENTIFICATION NUMBER</b> <b>DID -09</b>
<b>3. DESCRIPTION</b> The Test Plan details the test procedures that the Contractor will follow in order to complete all testing described by the SOW. The Test Plan is used to provide Canada insight into the Contractor's project management practices and procedures as they apply to the completion of the testing requirements of the Contract.	
<b>4. Application</b> This DID contains the format, content, and preparation instructions for the test plan as required by the Statement of Work (SOW), Section 3.4.1.	
<b>5. Data Preparation Instructions</b>	
<b>5.1</b>	<b>Format</b>
5.1.1	The document must be in the Contractor's format, printable on 8.5x11 size paper, and as further described herein. Soft copies must be provided in PDF format.
<b>5.2</b>	<b>Content</b>
5.2.1	At a minimum, the following information must be included: <ul style="list-style-type: none"> <li>a. <i>Introduction</i> This section will broadly outline the purpose and objectives of the testing to be performed, including relevant terminology and references.</li> <li>b. <i>Test Schedule</i> Including reference to Master Project Schedule included at DID-02</li> <li>c. <i>Test Procedures</i> Including methods, safety precautions, parameters to be measured, pass/fail criteria, and procedure in case of test interruptions</li> <li>d. <i>Test Conditions</i> Including location, test equipment, calibration, operator input, and expected results</li> <li>e. <i>Recording and reporting</i> Including data collection and analysis techniques</li> </ul>

DATA ITEM DESCRIPTION	
<b>1. TITLE</b> <b>Test Report</b>	<b>2. IDENTIFICATION NUMBER</b> <b>DID -10</b>
<b>3. DESCRIPTION</b> The Test Report details the test results that the Contractor will obtain by completing all of the testing described in the Test Plan. The Test Report is used to provide Canada with data that the buoys have successfully passed the tests listed in the Test Plan.	
<b>4. Application</b> This DID contains the format, content, and preparation instructions for the test plan as required by the Statement of Work (SOW), Section 3.4.2.	
<b>5. Data Preparation Instructions</b>	
<b>5.1</b>	<b>Format</b>
5.1.1	The document must be in the Contractor's format, printable on 8.5x11 size paper, and as further described herein. Soft copies must be provided in PDF format.
<b>5.2</b>	<b>Content</b>
5.2.1	At a minimum, the following information must be included for each test for each buoy: <ul style="list-style-type: none"> <li>a. <i>Test Personnel</i> Identify, by name (must be in print and signed) and position, all personnel involved in the conduct, and supervision of the test. All signatures must be dated.</li> <li>b. <i>Item Under Test</i> Identify, by serial number, the asset/item tested and its configuration at the time of test</li> <li>c. <i>Problems Encountered</i> Identify any problems encountered and actions taken. Details for any missed steps, defects or deficiencies discovered during the conduct of the test or trial, along with the actions the Contractor proposes to rectify those deficiencies.</li> <li>d. <i>Test Results</i> Detail all of the results obtained from the test(s) with a statement of the required results being achieved. Reference can be made to attached annexes.</li> <li>e. <i>Welding and Coating Inspections Documentation</i> Supply all inspection documentations with the test reports as applicable. Welding inspection reports must record, but not limited to, the date of inspection, Contractor's name, Buoy model and serial number, inspection organizations name, inspection procedure number, interpretation report number, item, location, all discontinuities including single and accumulated indications, weld acceptance criteria, location of discontinuities and the name, qualification, level and signature of the individuals performing the inspection and interpretation. Inspection reports must reference material type, thickness, joint type and geometry.</li> </ul>

DATA ITEM DESCRIPTION	
<b>1. TITLE</b> <b>Buoy Logbook</b>	<b>2. IDENTIFICATION NUMBER</b> <b>DID-11</b>
<b>3. DESCRIPTION</b> The Buoy Logbook tracks the performance characteristics of an individual Buoy. One logbook must be produced and submitted to Canada per buoy.	
<b>4. Application</b> This DID contains the format, content, and preparation instructions for the Performance Log as required by the Statement of Work (SOW), Section 3.4.3.	
<b>5. Data Preparation Instructions</b> <p><b>5.1 Format</b></p> <p>5.1.1 The document must be a Soft copies must be provided in a PDF format</p> <p><b>5.2 Content</b></p> <p>5.2.1 At a minimum, the following information must be included:</p> <p>a. Front page</p> <p><b>Buoy Information</b></p> <ul style="list-style-type: none"> <li>• Logbook date submission</li> <li>• Applicable Design Drawings version</li> <li>• The Buoy's serial number</li> <li>• Buoy model (ELA 1.3m or ELA 0.7m), color and lettering</li> <li>• Picture of the buoy</li> <li>• Delivery location</li> <li>• Steel batch #s</li> <li>• A record of when the Buoy was delivered to Canada, including all subsequent deliveries if the Buoy is initially rejected by Canada;</li> <li>• A record of the Buoy's acceptance or rejection by Canada.</li> </ul> <p><b>Summary of the applicable modification</b></p> <ul style="list-style-type: none"> <li>• Extract of the MRM (<b>CDRL DID-13</b>) applicable for each Buoy.</li> </ul> <p><b>Electrical system information</b></p> <ul style="list-style-type: none"> <li>• Lantern (model, serial number, colour, Manufacturing date, Installation date)</li> <li>• Battery (model, serial number, colour, Manufacturing date, Installation date)</li> </ul> <p>b. Test Reports Copies of all test reports associated with the Buoy, including:</p> <ul style="list-style-type: none"> <li>• Welding Inspection</li> <li>• Leak Test</li> <li>• Weight and Angle of Stability Test</li> <li>• Coating Inspection</li> <li>• Electrical System Test</li> </ul>	

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DATA ITEM DESCRIPTION	
<b>1. TITLE</b> <b>Shop Drawings</b>	<b>2. IDENTIFICATION NUMBER</b> <b>DID -12</b>
<b>3. DESCRIPTION</b>  The <b>Shop Drawings</b> will provide Canada with the planned construction and production design plans for the Buoy(s). The Drawings, Calculations and Associated Lists details graphic related information to Canada for the purposes of full design disclosure. One shop drawing is required for each buoy size.	
<b>4. Application</b>  This DID contains the format, content and scope requirements relating to preparation and submission of Shop Drawings as required by the Statement of Work (SOW), Section 3.1.2.	
<b>5. Data Preparation Instructions</b>  <b>5.1 Source Document</b> The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendment notices and revisions must be as specified in the Contract.  <b>5.2 Format</b> <i>a.</i> The documents must be provided in a PDF format. Every document must be electronically stamped and signed by a Professional Engineer authorized to practice in Canada.  <b>5.3 Content</b> <b>5.3.1</b> The shop drawings must show, without limitations, all relevant dimensions, mounting and assembly details, and weldment details.  <b>5.3.2</b> The shop drawings must include a welding sequence plan, that includes at minimum the following: <ul style="list-style-type: none"><li>• The General Approach to the buoy fabrication.</li><li>• Order in which parts will be fabricated.</li><li>• Order in which parts will be tac welded.</li><li>• Order in which parts and subassemblies will be welded.</li></ul>	

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DATA ITEM DESCRIPTION	
<b>1. TITLE</b> <b>Master Record of Modifications (MRM)</b>	<b>2. IDENTIFICATION NUMBER</b> <b>DID-13</b>
<b>3. DESCRIPTION</b>  Master Record of Modifications (MRM) will provide Canada a list of all the modifications brought to the drawings.	
<b>4. Application</b>  This DID contains the format, content and scope requirements relating to preparation and submission of MSM as required by the Statement of Work (SOW), Section 3.1.3.	
<b>5. Data Preparation Instructions</b>  <b>5.1 Source Document</b> The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendment notices and revisions must be as specified in the Contract.  <b>5.2 Format</b> The document must be provided in a PDF format.  <b>5.3 Content</b> List of Record of all modifications that contains <ul style="list-style-type: none"><li>• Drawing version on which the modification is made</li><li>• Serial number of buoys affected by modification</li><li>• Short description of the modification</li><li>• Reason for modification (construction modifications, improvement on design, etc.)</li><li>• Date of Canada's approval</li><li>• Identification of the communication between the Contractor and Canada for approbation</li></ul>	

<b>DATA ITEM DESCRIPTION</b>	
<b>1. TITLE</b> <b>Recommended Spare Parts Lists</b>	<b>2. IDENTIFICATION NUMBER</b> <b>DID-14</b>
<b>3. DESCRIPTION</b>	
The Recommended Spare Parts Lists (RSPL) provides recommendations and other information required to assist Canada in decisions regarding the conceivable procurement of spare parts. This list is integral to planning the maintenance (preventive and corrective repair) and support for the buoys.	
<b>4. Application</b>	
This DID contains the format, content, and preparation instructions for the RSPL as required by the Statement of Work (SOW), Section 4.2.	
<b>5. Data Preparation Instructions</b>	
<b>5.1 Source Document</b>	
5.1.1 The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendment notices and revisions must be as specified in the Contract.	
<b>5.2 Format</b>	
5.2.1 The RSPL data must be provided in a Microsoft Excel 2010 spreadsheet, unless otherwise specified by Canada, including the following:	
<b>5.3 Content</b>	
The Contractor's RSPL must contain, at a minimum but not limited to, the following information for each identified recommended spare part:	
a. Item Name;	
b. Manufacturer;	
c. Manufacturer model number;	
d. Manufacturer part number;	
e. Quantity recommended to support a single package over four years of operation;	
f. Quantity recommended for warehousing;	
g. Expiry;	
h. Price per unit;	
i. Lead time when ordering;	
j. Warranty (extended if applicable);	
k. NATO Stock Number (if applicable);	
l. Recommended packaging with consideration of disposability, reuse, recycling, and conservation;	
m. Recommended storage requirements and conditions;	
n. Recommended maintenance (if applicable); and	
o. Identification as a critical spare (as/if applicable)	



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

Canadian  
Coast Guard

Garde côtière  
canadienne

## Integrated Technical Services



Safety First, Service Always



# Four-Season Lighted Navigation Buoys (4SB) Project

## *Annex B*

### *Technical Statement of Requirements*

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## Section 1 GENERAL

### 1.1 SCOPE

1.1.1 This Technical Statement of Requirement (TSOR) document defines the functional and performance-based requirements for the manufacturing of four-season lighted navigation steel buoys (herein after referred to as the 'buoy'). These requirements were established by the Canadian Coast Guard (CCG) to provide improved navigational services along the St. Lawrence River shipping channel, between Montréal and Québec City.

1.1.2 The buoy model to be built under this contract is the ELA 1.0m (ELA stands for *Espar Lumineux Annuel*). Buoys are marked with a unique serial number and are painted with a specialized coating system. A battery and a lantern are installed on each buoy as part of the requirements of this Contract. A detailed list in Appendix A describes the configuration of buoys to be manufactured in terms of serial number, buoy model, coating system, lettering, lantern and battery to install. Note that the batteries will be supplied by Canada to the Contractor as Government Furnished Equipment (GFE).

1.1.3 Each section of the TSOR includes specific requirements for the various stages of buoy manufacturing, and are as follows:

- Section 2 : Manufacture of Buoys
- Section 3 : Surface Preparation and Coating Application
- Section 4 : Electrical System Installation
- Section 5 : Storage and Transportation

1.1.4 Those aforementioned sections refer to the following appendices:

- Appendix A : Buoys List
- Appendix B : Design Drawings of ELA 1.0m
- Appendix C : Coating Systems
- Appendix D : Technical Requirements of Coating System
- Appendix E : Technical Requirements of the Lantern

### 1.2 TERMINOLOGY

1.2.1 The term MUST is used to identify mandatory requirements which form an obligation to be met as part of the Contract.

### 1.3 DESIGN DRAWINGS

All references to "Design Drawings" throughout this Annex are referring to the drawings included at Appendices B.

**Manufacture of Buoys**

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## **Section 2 MANUFACTURE OF BUOYS**

### **2.1 APPLICABLE STANDARDS**

2.1.1 All Work must be performed in accordance with the requirements detailed in this section and with the following standards:

- CSA G40.20-13 General Requirements for Rolled or Welded Structural Quality Steel
- CSA G40.21-13 Construction steel;
- CSA W47.1-2019 Fusion Welding of Steel Company Certification;
- CSA W59-13 Welded Steel Construction (Metal Arc Welding); and
- CSA W48-18 Filler Metals and Allied Materials for Metal Arc Welding.

### **2.2 MATERIALS**

#### **2.2.1 STEEL PLATES AND STRUCTURAL ELEMENTS**

2.2.1.1 All steel plates and structural elements used for the manufacturing of buoys must comply with standard CSA G40.21, Grade 350W or 350WT.

2.2.1.2 The corrosion level of the steel used for manufacturing must be lower than the SSPC-VIS 1 rust grade C.

2.2.1.3 All materials used for construction must be stored in an environment that prevents damage and the formation of any premature corrosion of the steel.

#### **2.2.2 MISCELLANEOUS**

2.2.2.1 Minor component materials, other than the steel plates and structural components specified 2.2.1.1, must comply with the standards and requirements indicated on the design drawings.

### **2.3 METAL FORMING**

2.3.1 All steel plates of the buoys' hull, which would be damaged by cold forming, must be uniformly heated before being formed. These plates must not contain traces of hammer strikes, cracks, defects, notches or imperfections of any kind.

### **2.4 EXPOSED EDGES**

2.4.1 All exposed edges must be trimmed or grinded to break up sharp and cutting edges.

### **2.5 WELDING**

2.5.1 Arc welding fabrication method must be used to assemble all buoys throughout the entire manufacturing process.

2.5.2 All steel welding operations must be performed in accordance with the CSA W59-13 Metal Arc Welding standard.

2.5.3 All supervisors, tack welders, welders and welding operators performing Work pursuant to this Contract must be qualified in accordance with the CSA W47.1-2019 standard.

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### Manufacture of Buoys

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- 2.5.4 Welding electrodes and welding consumables must be certified by the Canadian Welding Bureau (CWB) in accordance with the CSA W48 standard.
- 2.5.5 All welding procedure specifications or welding procedure data sheets must be reviewed and approved by the CWB prior to being used in the manufacturing process.
- 2.5.6 The dimensions and lengths of the welds must not be less than the values specified in the design drawings.
- 2.5.7 Prepared edges must be precise, uniform, and free from any impurities that could affect the quality of the weld.
- 2.5.8 Welded parts must be protected against environmental conditions, including but not limited to wind, rain, and snow during welding.
- 2.5.9 Defective welds must be cut-out and re-welded in accordance with CWB approved procedures.
- 2.5.10 For complete joint penetration (CJP) butt joints, the use of backing steel bars is allowed to facilitate one sided welding.
- 2.5.11 The Contractor must organize and sequence the buoy welding process in order to minimize any residual stresses and deformations. Members must remain free during welding to minimize residual stresses. Welding Plan submittal is detailed in the Statement of Work (DID-05 of Annex A).

## 2.6 HARDWARE COMPONENTS

- 2.6.1 Hardware components (bolts, connectors, adaptors, plugs, collars, pins, gaskets, etc.) must be installed in accordance with the manufacturers' recommendations.

## 2.7 INSCRIPTIONS ON THE BUOYS

- 2.7.1 Upon completion of the assembly work, but prior to surface preparation for the coating application, each buoy must be marked with a serial number as per Appendix A and the CCG's markings as per the design drawings.
- 2.7.2 The markings must be made using a metal arc welding deposit and in the size and locations indicated on the design drawings. The font of the markings must be **Arial** type.

## 2.8 WORKMANSHIP

### 2.8.1 INTERNAL SURFACES

- 2.8.1.1 The inner surfaces of the buoys must be dry and free of traces of all contaminants, including, though not limited to oil, grease, wax, paint, and debris.

### 2.8.2 TOLERANCES

- 2.8.2.1 All parts must be manufactured and assembled to meet the dimensional tolerances of the design drawings. Any deviations from the indicated tolerances must first be proposed in written form to the Technical Authority (TA) and Contracting Authority (CA) for review and acceptance by Canada.

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**Manufacture of Buoys**

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**2.9 WELDING INSPECTION****2.9.1 INSPECTION GENERAL**

2.9.1.1 All welding inspections must be performed as described in this section 2.9 and conducted in accordance with the CDRL item DID-09 and section 3.4 of Annex A.

**2.9.2 INSPECTION PERSONNEL**

2.9.2.1 All ultrasonic and magnetic particles examinations required herein must be performed and the results reported, by an independent third party welding inspector. The Contractor is responsible for subcontracting these services.

2.9.2.2 Third party ultrasonic examination personnel must be certified by Natural Resources Canada (NRCAN) as meeting the qualification requirements of CAN/CGSB 48.9712, Level 2 or 3.

2.9.2.3 Third party magnetic particle inspection personnel must be certified by NRCAN as meeting the qualification requirements of CAN/CGSB 48.9712, Level 2 or 3.

2.9.2.4 Visual inspection personnel must be certified by the CWB to CSA Standard W178.2, Level 2 or 3 having current code endorsements for CSA Standards W47.1-2019 and W59.

**2.9.3 INSPECTION WORK**

2.9.3.1 Inspection procedures and personnel qualification certificates must be submitted to Canada prior to performing inspections of any type.

2.9.3.2 All welds must be subjected to 100% visual inspection.

2.9.3.3 Visual inspection must precede examinations by any other methods required herein.

2.9.3.4 Longitudinal full penetration butt joints of buoy cones and cylinders must be subjected to 100% ultrasonic examination.

2.9.3.5 All CJP butt joints of the top, middle and bottom buoy parts must be subjected to 100% magnetic particles examination using the Direct Current (DC).

**2.9.3.6 Lifting and mooring lugs inspection**

2.9.3.6.1 All CJP welds of the lifting lugs must be subjected to 100% ultrasonic examination and found acceptable by the third party welding inspector.

2.9.3.6.2 All fillet welds of the lifting lugs must be subjected to 100% magnetic particles examination using the Direct Current (DC) method.

2.9.3.6.3 All partial joint penetration welds of the mooring lugs must be subjected to 100% magnetic particles examination using DC method.

**2.9.4 INSPECTION PROCEDURES**

2.9.4.1 Visual inspection procedures must comply with the requirements of ASME BPVC-V: Section V - Non-destructive Examination and CSA W59-13.

2.9.4.2 Third party ultrasonic examination and magnetic particle inspection procedures must comply with the requirements of CSA Standard W59-13.

**2.9.5 THIRD PARTY INSPECTOR ACCEPTANCE CRITERIA**

**Manufacture of Buoys**

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- 2.9.5.1 The Acceptance Criteria for visual inspection by the third party welding inspector, ultrasonic examination and magnetic particles examination must be in accordance with CSA W59-13, Clause 12, except as modified below:
- Pores open to the surface are not permitted in any weld.
  - For welds in material thicknesses greater than 5 mm, undercut must not exceed 1.0 mm.
- 2.9.5.2 “Acceptance” as delineated in Section 2.9.5.1 must not be confused with Canada’s acceptance of the Work per the terms of the Contract, and is solely used in reference to the third party welding inspector’s acceptance criteria for visual inspection.”

## Surface Preparation and Coating Application

### Section 3 SURFACE PREPARATION AND COATING APPLICATION

#### 3.1 APPLICABLE STANDARDS

3.1.1 All surface preparation and coating application work must be performed in accordance with the requirements detailed in this section, with the paint manufacturer's requirements and recommendations and with the following standards:

- SSPC-SP 10/NACE No. 2 (2007) Near-White Blast Cleaning;
- SSPC-PA 2 (2017) Determining Compliance to Required DFT (Dry Film Thickness);
- IALA E-108 (2013) The Surface Colours used as Visual Signals on Aids to Navigation;
- FED-STD-595C Federal Standard 595C Paint Specification.

#### 3.2 COATINGS

##### 3.2.1 PRIMER AND FINISH COATINGS

3.2.1.1 The primer and finish coating products (or equivalents) listed in table 1 must be used for the coating application process. If equivalent products are to be used, those products must comply with the requirements listed in the Appendix D of this Annex.

3.2.1.2 The paint coatings must be prepared according to the colour numbers in standard FED-STD-595C, as identified in Table 1.

**Table 1** Coatings and Colours Required

Manufacturer	Coating Type	Required Products (or equivalent)	Dry film Thickness [mils]	Colour	Colour No. According to Standard FED-STD-595C
PPG Protective & Marine Coatings	Primer	SIGMASHIELD™ 1200	20 - 30	Red	11350
				Green	14193
				Light Grey	N/A
	Finishing	AMERLOCK® 2	6 - 7	Yellow	13655
				Red	11350
		PSX® 700	6 - 7	Green	14193
				Yellow	13655
				Black	17038
		Lettering	PSX® 700	3 - 4	White

#### 3.3 EXECUTION OF THE WORK

##### 3.3.1 BUOY PREPARATION

3.3.1.1 The surface preparation and coating application must be performed prior to lantern and battery installation.

3.3.1.2 All buoy surfaces exposed to water, including though not limited to outer surfaces, the ballast, the surfaces delineating the battery compartment, battery access hatch, and the lantern support plate must be prepared and coated.

3.3.1.3 The hardware components (i.e., connectors, battery mounting rod, mooring rod and screw), netting, surfaces receiving a gasket, the internal surface of the upper compartment

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**Surface Preparation and Coating Application**

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and the flexible pipe must not be altered by the surface preparation and coating application work. There must not be any sandblasting grit inside the buoy compartments and flexible pipe.

**3.3.2 SURFACE PREPARATION**

- 3.3.2.1 Buoy surface preparation must be done in accordance with standard SSPC-SP 10/NACE No. 2.
- 3.3.2.2 After sandblasting, surface roughness must be between 2 and 4 mils.

**3.3.3 PRIMER AND FINISH COATING APPLICATION**

- 3.3.3.1 Coatings (primer, finish, lettering and upper lifting lug) must be applied in accordance with the manufacturer's instructions.
- 3.3.3.2 The Contractor must adhere to the products, colours, and geometries specified in the appropriate coating system in Appendix C and Table 1.
- 3.3.3.3 The finishing coating (PSX® 700 or equivalent) must be applied on the upper part of the buoy only, as shown in the diagrams of Appendix C.
- 3.3.3.4 Before applying the finishing coating (PSX® 700 or equivalent), the buoy surface must be free of dust or any other similar deposit that may occur during the curing period of the primer coat.
- 3.3.3.5 Each coating layer must be applied uniformly.
- 3.3.3.6 The dry film thickness of each coating layer must be in accordance with the requirements listed in Table 1.
- 3.3.3.7 The verification of the dry film thickness must be performed in accordance with standard SSPC-PA 2.
- 3.3.3.8 The main upper lifting lug (identified as A on the coating system), located on the same side of the buoy as the central lifting lug, must only be covered with a light grey SIGMASHIELD™ 1200 primer coat (or equivalent).
- 3.3.3.9 Once the primer and finish coating application is completed, there must be no trace of the wet film gauge or any other imperfections on the buoy.

**3.3.4 COATING INSPECTION**

- 3.3.4.1 The coating inspection must be conducted in accordance with this Annex and section 3.4 of Annex A (Statement of Work).
- 3.3.4.2 The Coating Inspection must be performed by a third party Level 2 inspector of the National Association of Corrosion Engineers (NACE) to assess the surface preparation and coating application work, as per the Statement of Work Section 3.4.1 c. The Contractor is responsible for subcontracting these services.

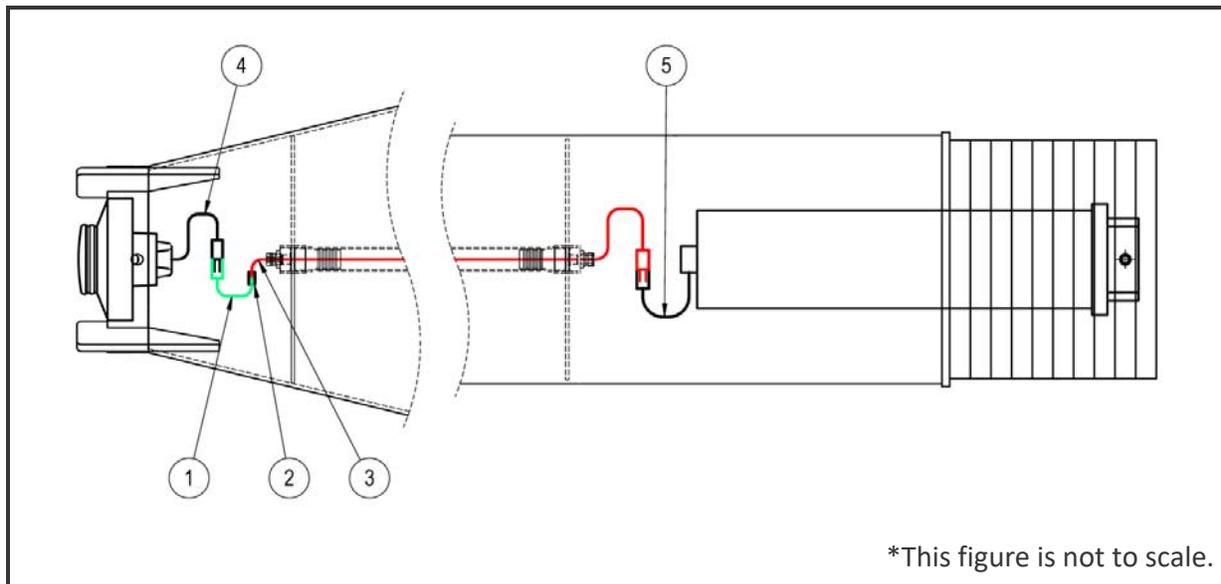
**Electrical System**

**Section 4 ELECTRICAL SYSTEM**

**4.1 GENERAL**

4.1.1 Electrical system installation (Figure 1) includes:

- Installing the electrical cable;
- Installing the battery; and
- Installing and connecting the lantern.



Item No.	Description
1	Connector: RMG-2-FS (female socket) / Cable length: 610 mm
2	Electrical junction
3	Connector: RMG-2-MP (male plug) / Cable length: 9 m
4	Connector: RMG-2-MP (male plug) / Cable length: 1 m
5	Connector: RMG-2-FS (female socket) / Cable length: 610 mm

**Figure 1** Diagram and description of the cabling

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## Electrical System

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### 4.2 SYSTEM COMPONENTS

#### 4.2.1 CABLES

4.2.1.1 All cables used must be CSA certified, UL listed, RoHS compliant and meet the following specifications: All cables used must be CSA certified, UL listed or CE certified, comply with ROHS or ISO 14001, and meet the following specifications:

- RMG connectors moulded with cable;
- SOOW cable type;
- Number of conductors: 2;
- Wire gauge: AWG 18; and
- Nominal outer diameter of cable: 9 mm [0.345"].

#### 4.2.2 LANTERNS

4.2.2.1 Each buoy must be equipped with a lantern of appropriate colour as per Appendix A.

4.2.2.2 The lantern **MPV-LED** manufactured by Sabik (or equivalent) must be used/installed on the buoy.

4.2.2.3 The lantern **MPV-LED** manufactured by Sabik must comply with the requirements listed in Table E-1, Table E-2 and Table E-3 of Appendix F:

If equivalent lanterns are to be used, those lanterns must comply with all the requirements listed in Appendix F.

4.2.2.4 The same lantern model (not withstanding colour variation) must be used for all the buoys within this Contract.

4.2.2.5 In addition to the characteristics indicated in Appendix E, the lantern must be equipped with the following options:

- The lantern must be capable of retrofit for ultra wide vertical divergence lens (20 deg.);
- Bluetooth technology used to program the lantern;
- The lantern must be capable of retrofit for GSM technologies allowing remote monitoring/programming capability.

#### 4.2.3 BATTERIES

4.2.3.1 Unless otherwise indicated, each buoy must be equipped with a battery. The batteries (EGF) will be supplied to the Contractor in proportion to the information of Appendix A (Buoys List).

### 4.3 ELECTRICAL SYSTEM ASSEMBLY

#### 4.3.1 CABLES

4.3.1.1 All the requirements of this section refer to components shown in Figure 1.

4.3.1.2 Before passing cable #3 through the flexible pipe leading to the top of the buoy, it must first be passed through the ½" NPT connector (the stainless steel one).

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**Electrical System**

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- 4.3.1.3 Except electrical junction #2, the cable must not contain any electrical junction.
- 4.3.1.4 The free length of the cable at the bottom of the buoy must be  $2.4 \text{ m} \pm 0.1 \text{ m}$ .
- 4.3.1.5 The extra cable at the bottom of the buoy must be rolled and attached with a plastic tie wrap.
- 4.3.1.6 In accordance with the polarity of the wires, an electrical junction (item #2) must be made using solder sleeve to connect the wire leads of the RMG-2-FS cable (item #1) with the wire leads of the RMG-2-MP cable (item #3). The connection must be robust and waterproof. Precaution must be taken to eliminate any risk of short-circuit during the soldering operation.
- 4.3.1.7 Moisture sealed heat-shrink tubing (with adhesive lining) must be used to cover each of **both wire leads** (item #2). The heat-shrinks used for the wire leads must cover each jacket insulation with an overlapping of at least 6 mm.
- 4.3.1.8 Moisture sealed heat-shrink tubing (with adhesive lining) must be used to cover the **overall junction** (item #2). The heat-shrink used for the overall junction must cover each jacket insulation with an overlapping of at least 75 mm. The minimum wall thickness after shrinking of the heat-shrink tubing must be at least 3 mm. The electrical junction (item #2) must finally be covered with two uniform layers of vinyl electrical insulating tape covering two times the length of the junction.
- 4.3.1.9 Once cable #3 is installed, a dummy RMG-2-FS connector must be mated to the RMG-2-MP connector of cable #3 to protect the male pins.
- 4.3.1.10 The RMG connectors of cables #1 and #3 must be compatible with those of the lantern and battery. Thus, all cables must come from the same cable manufacturer.

**4.3.2 LANTERN**

- 4.3.2.1 The lantern must be connected to cable #1 (Figure 1). The resulting electrical junction must be covered in a uniform layer of vinyl electrical insulating tape.
- 4.3.2.2 The extra cable at the top of the cone must be rolled and attached with a plastic tie wrap.
- 4.3.2.3 Screws must be installed with Loctite® LB 8023 Marine Grade Anti-Seize compound (or equivalent).
- 4.3.2.4 The lantern, the lantern support plate and the gaskets must be installed according to the following tightening torques of Table 2.
- 4.3.2.5 A colored point (red, green, white or yellow) has been inserted on the lantern top, indicating its color as well as the place where the lantern can be programmed by infrared ray. The lantern must be installed on the buoy so that this point is located downwards, in the same direction as the secondary lifting lug of the buoy.

**Electrical System****Table 2** Required Tightening Torques

Part to fix	Part # (screw)	Screw Description	Tightening Torque (Nm)
Lantern Support Plate (09207-PC-024)	09207-PC-026	Hexagonal Head Bolt 3/8" – 24 x 1"	<b>25</b>
Lantern lower part (09207-PC-001)	09207-PC-012	Metric SHC Screw M20 x 2.5 x 60	<b>180</b>
Lantern upper part (09207-PC-001)	N/A.	Metric SHC Screw M12	<b>32</b>

**4.3.3 BATTERY**

- 4.3.3.1 The battery must be secured in the buoy using the mounting rod and cotter pin, as per the design drawings.
- 4.3.3.2 After successful completion of the Electrical System Inspection Test, detailed in the Statement of Work, the battery must be disconnected from the buoy cable. The battery must remain disconnected from the buoy cable during storage and transportation.

**Storage and Transportation**

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**Section 5 STORAGE AND TRANSPORTATION**

**5.1 STORAGE**

- 5.1.1 The buoys must be stored in such a way as to prevent damage to the buoy, including but not limited to, the coating and quality of the steel. The coating applied to the buoy must be protected against all environmental conditions, including but not limited to, prolonged exposure to UV rays.
- 5.1.2 Except during transport, batteries must be stored at temperatures between 10°C and 25°C.

**5.2 TRANSPORTATION AND DELIVERY**

- 5.2.1 The buoys must be delivered to Canada fully assembled except for the battery connection to the lantern.
- 5.2.2 Canada will perform a final visual inspection when the buoys are delivered. The buoys must be free from any dirt that could interfere with the final inspection.

FOUR-SEASON LIGHTED NAVIGATION BUOYS (4SB) PROJECT TECHNICAL STATEMENT OF REQUIREMENTS  
**Appendix A**

**Appendix A BUOYS LIST**

Item #	Serial #	Coating Colour	Lettering	Lantern Colour	Battery	Delivery Destination
001	QC-1.0-001-21	Green	Q73	Green	YES	QUEBEC
002	SO-1.0-002-21	Green	C33	Green	YES	SOREL
003	SO-1.0-003-21	Green	C53	Green	YES	SOREL
004	SO-1.0-004-21	Green	D37	Green	YES	SOREL
005	SO-1.0-005-21	Green	M129	Green	YES	SOREL
006	SO-1.0-006-21	Green	M19	Green	YES	SOREL
007	SO-1.0-007-21	Green	M191	Green	YES	SOREL
008	SO-1.0-008-21	Green	M23	Green	YES	SOREL
009	SO-1.0-009-21	Green	M51	Green	YES	SOREL
010	SO-1.0-010-21	Red	C14	Red	YES	SOREL
011	SO-1.0-011-21	Red	D30	Red	YES	SOREL
012	SO-1.0-012-21	Red	D32	Red	YES	SOREL
013	SO-1.0-013-21	Red	D36	Red	YES	SOREL
014	SO-1.0-014-21	Red	D54	Red	YES	SOREL
015	SO-1.0-015-21	Red	M118	Red	YES	SOREL
016	SO-1.0-016-21	Red	M124	Red	YES	SOREL
017	SO-1.0-017-21	Red	M130	Red	YES	SOREL
018	SO-1.0-018-21	Red	M132	Red	YES	SOREL
019	SO-1.0-019-21	Red	M138	Red	YES	SOREL
020	SO-1.0-020-21	Red	M16	Red	YES	SOREL
021	SO-1.0-021-21	Red	M192	Red	YES	SOREL
022	SO-1.0-022-21	Red	M32	Red	YES	SOREL
023	SO-1.0-023-21	Red	M82	Red	YES	SOREL
024	SO-1.0-024-21	Red	M84	Red	YES	SOREL
025	SO-1.0-025-21	Red	M88	Red	YES	SOREL
026	SO-1.0-026-21	Red	S4	Red	YES	SOREL
027	SO-1.0-027-21	Red	S6	Red	YES	SOREL
028	SO-1.0-028-21	Yellow	PATB	Yellow	YES	SOREL
029	SO-1.0-029-21	Yellow	PATC	Yellow	YES	SOREL
030	SO-1.0-030-21	Yellow	PATG	Yellow	YES	SOREL

FOUR-SEASON LIGHTED NAVIGATION BUOYS (4SB) PROJECT TECHNICAL STATEMENT OF REQUIREMENTS  
**Appendix A**

Item #	Serial #	Coating Colour	Lettering	Lantern Colour	Battery	Delivery Destination
031	SO-1.0-031-21	Yellow	NO Lettering	Yellow	NO	SOREL
032	SO-1.0-032-21	Red-Green-Red	PSH	Red	YES	SOREL
033	SO-1.0-033-21	Red-Green-Red	PSH	Red	NO	SOREL
034	QC-1.0-034-21	Red	NO Lettering	Red	NO	QUEBEC
035	QC-1.0-035-21	Red	NO Lettering	Red	NO	QUEBEC
036	SO-1.0-036-21	Red	NO Lettering	Red	NO	SOREL
037	SO-1.0-037-21	Red	NO Lettering	Red	NO	SOREL
038	SO-1.0-038-21	Red	NO Lettering	Red	NO	SOREL
039	SO-1.0-039-21	Red	NO Lettering	Red	NO	SOREL
040	SO-1.0-040-21	Red	NO Lettering	Red	NO	SOREL
041	SO-1.0-041-21	Red	NO Lettering	Red	NO	SOREL
042	SO-1.0-042-21	Red	NO Lettering	Red	NO	SOREL
043	SO-1.0-043-21	Red	NO Lettering	Red	NO	SOREL
044	SO-1.0-044-21	Green	NO Lettering	Green	NO	SOREL
045	SO-1.0-045-21	Green	NO Lettering	Green	NO	SOREL
046	SO-1.0-046-21	Green	NO Lettering	Green	NO	SOREL
047	SO-1.0-047-21	Green	NO Lettering	Green	NO	SOREL
048	SO-1.0-048-21	Green	NO Lettering	Green	NO	SOREL
049	SO-1.0-049-21	Green	NO Lettering	Green	NO	SOREL
050	SO-1.0-050-21	Green	NO Lettering	Green	NO	SOREL
051	SO-1.0-051-21	Green	NO Lettering	Green	NO	SOREL
052	SO-1.0-052-21	Green	NO Lettering	Green	NO	SOREL

**Appendix B**

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**Appendix B            DESIGN DRAWINGS OF ELA 1.0M**

The buoys must meet the requirements identified in Appendix B.

The contents of Appendix B is contained within the following electronic file:

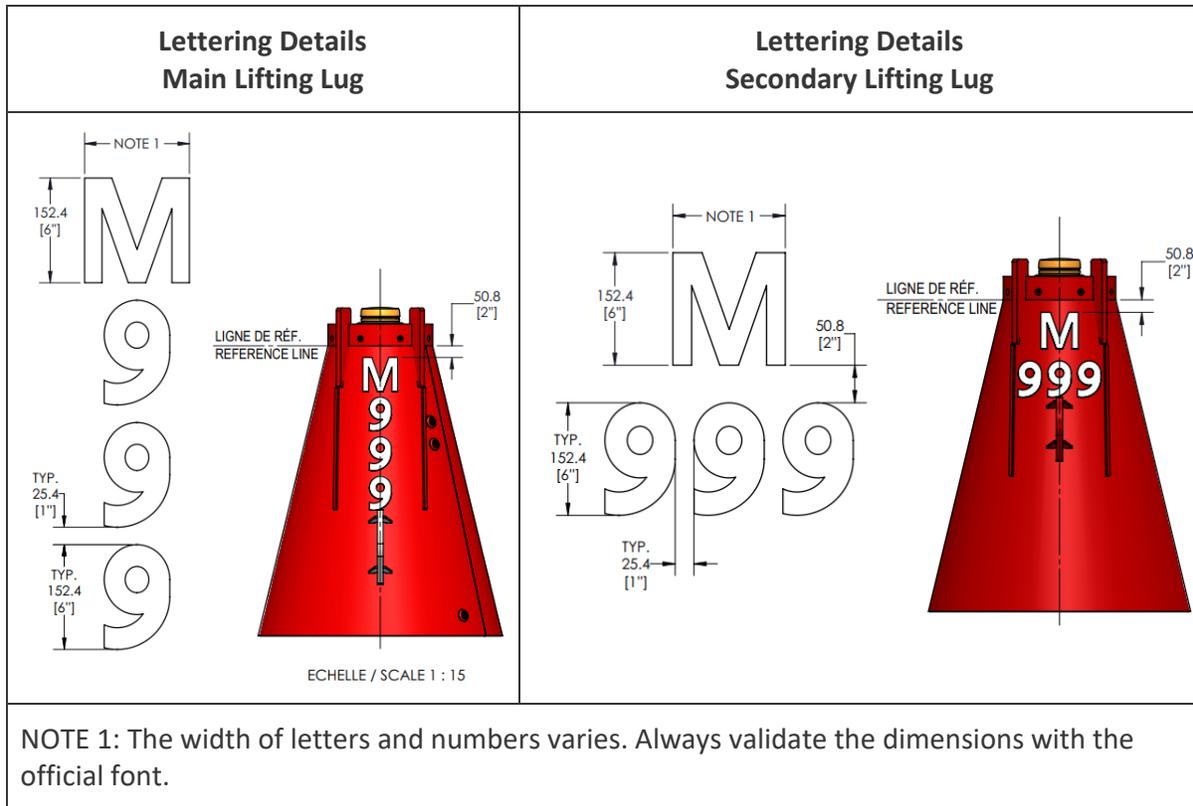
- Drawings\_ELA\_1.0M\_AnnexB\_AppendixB\_ver01.pdf

*The files are available upon request by e-mailing the Contracting Authority. Bidders are required to sign and submit a Non-Disclosure Agreement before they are provided a copy of the files.*

Appendix C

**Appendix C COATING SYSTEMS**

For the ELA 1.0 m buoy, the upper edge of the upper cone is the reference line above the lettering. Two different lettering configurations are required. On the main lifting lug side, the lettering is vertical and on the secondary lifting lug side, the lettering is positioned on 2 horizontal lines. In both cases, the font and size remain the same. See figure below for dimensional lettering requirements. The official font that must be used for lettering is **Arial**.



**Appendix C**

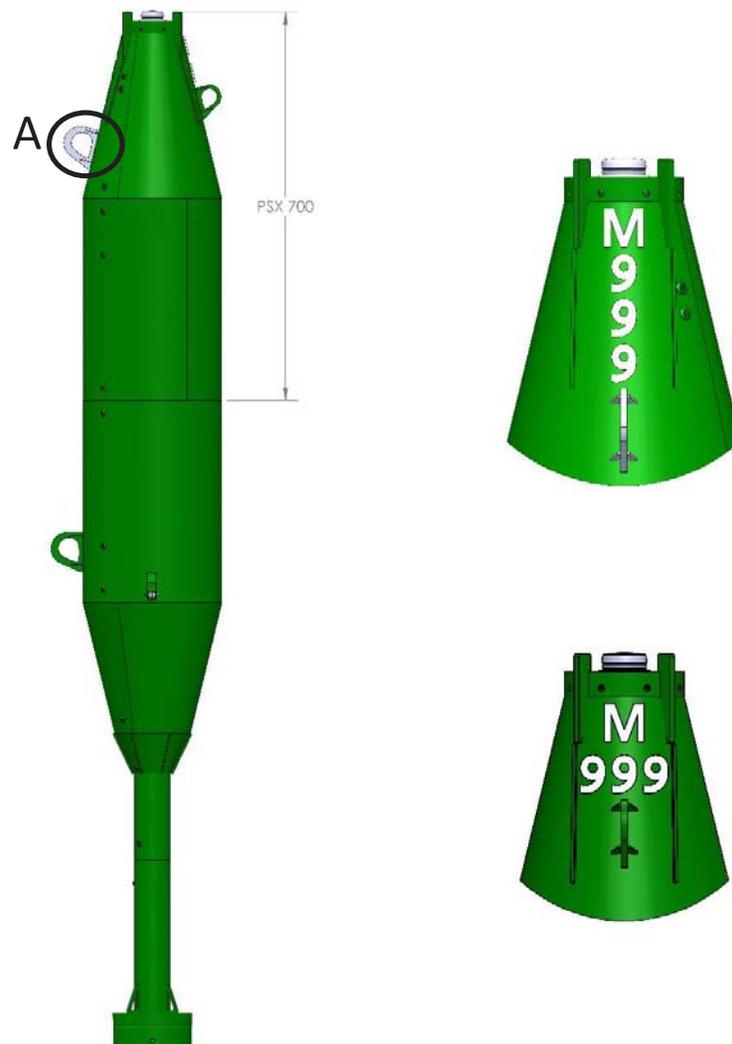
**Coating System – Red ELA 1.0 m Buoy**



	Products (or equivalent)	Colour
Primer coat	SIGMASHIELD <sup>MC</sup> 1200	Red
Finish coat	PSX <sup>®</sup> 700	Red
Lifting lug A coat	SIGMASHIELD <sup>MC</sup> 1200	Light Grey
Lettering coat	PSX <sup>®</sup> 700	White

**Appendix C**

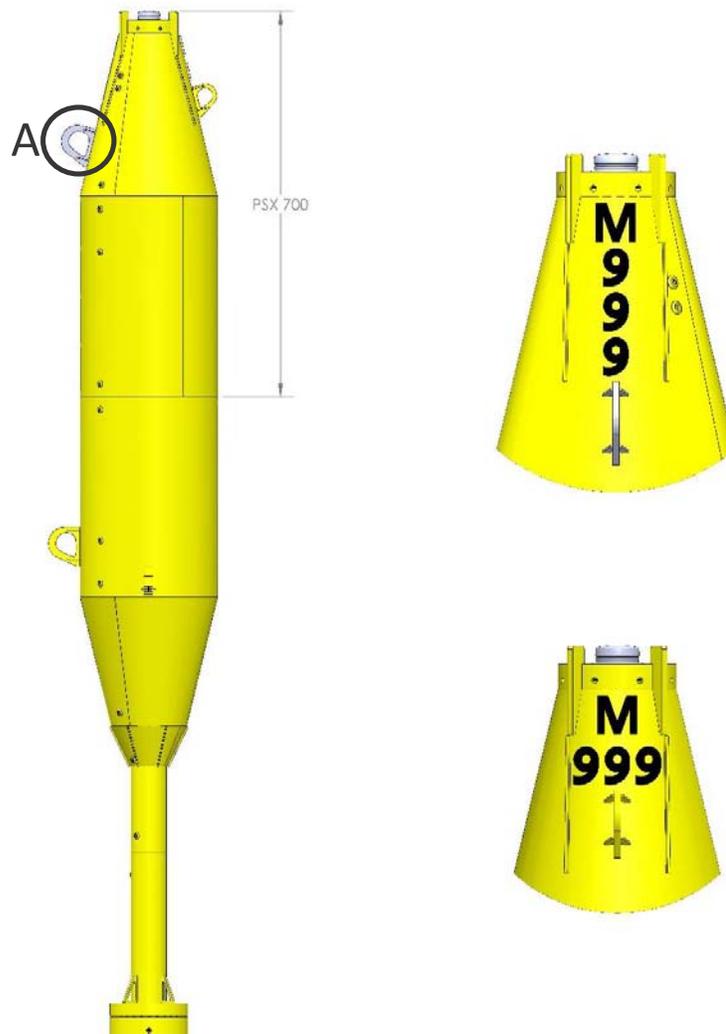
**Coating System – Green ELA 1.0 m Buoy**



	Produits (ou équivalents)	Couleur
<b>Primer coat</b>	SIGMASHIELD <sup>MC</sup> 1200	Green
<b>Finish coat</b>	PSX <sup>®</sup> 700	Green
<b>Lifting lug A coat</b>	SIGMASHIELD <sup>MC</sup> 1200	Light Grey
<b>Lettering coat</b>	PSX <sup>®</sup> 700	White

**Appendix C**

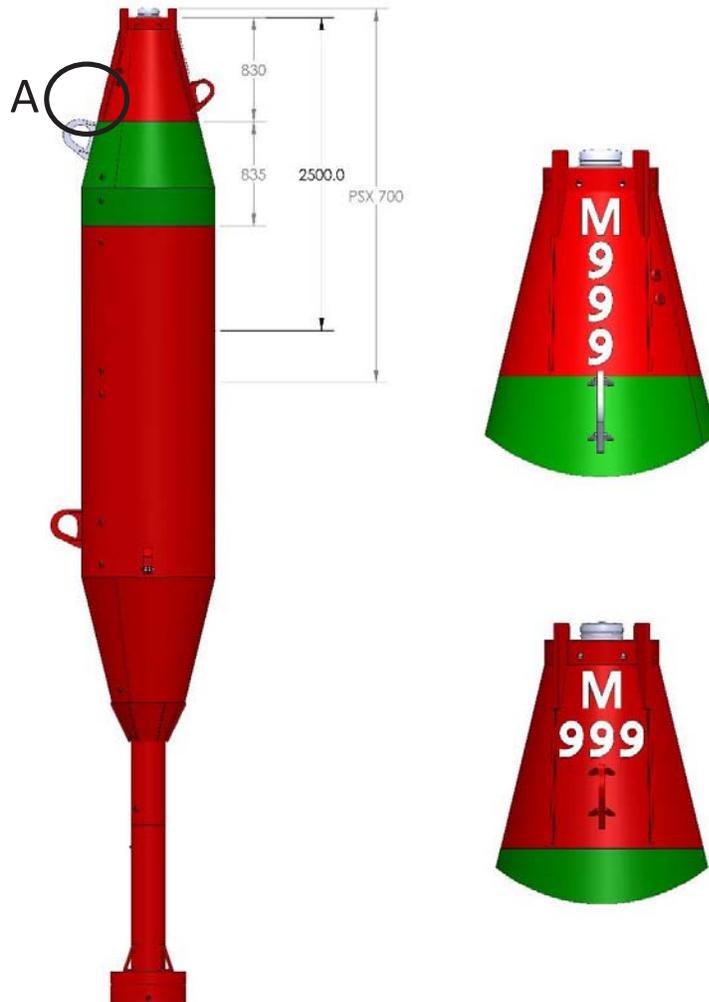
**Coating System – Yellow ELA 1.0 m Buoy**



	<b>Produits (ou équivalents)</b>	<b>Couleur</b>
<b>Primer coat</b>	AMERLOCK® 2	Yellow
<b>Finish coat</b>	PSX® 700	Yellow
<b>Lifting lug A coat</b>	SIGMASHIELD <sup>MC</sup> 1200	Light Grey
<b>Lettering coat</b>	PSX® 700	Black

**Appendix C**

**Coating System – Red-Green-Red ELA 1.0 m Buoy**



	<b>Produits (ou équivalents)</b>	<b>Couleur</b>
<b>Primer coat</b>	SIGMASHIELD <sup>MC</sup> 1200	Red and Green
<b>Finish coat</b>	PSX <sup>®</sup> 700	Red and Green
<b>Lifting lug A coat</b>	SIGMASHIELD <sup>MC</sup> 1200	Light Grey
<b>Lettering coat</b>	PSX <sup>®</sup> 700	White

## Appendix D TECHNICAL REQUIREMENTS OF COATING SYSTEM

**Table D-1 - Mandatory Requirements for coating Equivalency**

Item #	Criteria	Standard	Description of requirement	Proof of compliance*
C-1	<b>Field Testing</b>	N/A	Product must be proven successful† through testing of 2 years in severe ice conditions such as those in the St. Lawrence River or more severe. † in which successful means that the product protected the buoy from rusting (i.e.: after 2 years more than 75% of the buoy was still covered by the coating), and the colour remained in accordance with IALA Recommendation E-108.”	Field test report or Lab test report
C-2	<b>Product Recognition</b>	N/A	The product must be Lloyd’s Register Recognised Abrasion Resistant Ice Coatings (or equivalent)	Lloyd’s Certificate
C-3	<b>Technical requirements</b>	N/A	The product must be: 1. Resin: Epoxy 2. Volume Solids: > 90% 3. Lead-Free 4. Isocyanate-Free	Product specification
C-4	<b>UV Resistance</b>	ASTM D4587-11 Standard Practice for Fluorescent UV-Condensation Exposures of Paint and Related Coatings, cycle 2	After 1,000 hours of exposure, the colour of the product must be in accordance with the requirements of IALA recommendation E-108. The chromaticity region accepted by the CCG for the colour green is limited to “preferred region”.	Lab Test Report
C-5	<b>Impact Resistance</b>	ASTM G14-04(2010)e1 Standard Test Method for Impact Resistance of Pipeline Coatings (Falling Weight Test)	Impact strength immediately after conditioning the test specimens for 24 hours at -2°C salted water (35 grams of NaCl per liter): > 26,000 g-cm ‡ ‡ Minimum impact strength needed to break the coating.	Lab Test Report
C-6	<b>Abrasion resistance</b>	ASTM D4060-14 Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser	Mass loss after 10,000 cycles using CS-10 abrasive wheels under 1 kg : < 0.4 g	Lab Test Report
C-7	<b>Pull-Off Strength</b>	ASTM D4541-09e1 Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers	at 20°C : >= 1,900 psi at -2°C : >= 1,000 psi	Lab Test Report

\* as per Annex 1 to Part 4 of the Bid Solicitation, Technical Bid Evaluation Plan

## Appendix E TECHNICAL REQUIREMENTS OF THE LANTERN

**Table E-1: General performance requirements**

Item #	Criteria	Description of requirement	Proof of compliance*
L-1	<b>Material</b>	The housing material must be corrosion resistant. All material and components used in the assembly of the lantern or provided for its installation must also be selected to prevent corrosion between dissimilar metals.	Submit data
L-2	<b>Overall Dimensions</b>	Overall dimensions must not exceed 300mm (diameter) by (X) 150mm (height <sup>†</sup> ).	Submit data
L-3	<b>Mass</b>	†Height is defined as the distance between the top of the lantern and its flat bottom base sitting on the buoy. The total mass of the lantern (including the lantern support plate, if necessary) must not exceed 35 kg.	Submit data
L-4	<b>Mounting on Buoy</b>	The bottom of the lantern base must be flat and parallel to the lantern's focal plane. Bolt holes must be located directly in the lantern base.	Submit data
L-5	<b>Hardware components</b>	The lantern must be equipped with the hardware and seals required for the lantern's installation. All hardware in A316 stainless steel (hexagon socket head screws, flat washers, and spring lockwashers) must be provided with each lantern such that the lantern can be fixed on its lantern support plate. Refer to the design drawings for the required bolting pattern and bolt sizes.	Submit data
L-6	<b>Electrical connection</b>	The lantern must be equipped with a submersible cable <sup>‡</sup> (1 m ± 0.05 m long) that has an <b>RMG-2-MP connector</b> . ‡This cable must meet the same requirements as the electric cable of the buoy, as detailed in Section 4.	Submit data
L-7	<b>Identification Nameplate</b>	The lantern must be equipped with an identification nameplate indicating the name of the manufacturer, the model number, the color of the light signal, the serial number and year of manufacture. The nameplate must be located so that it can readily be seen at all times without removing or dismantling any part of the lantern.	Submit data
L-8	<b>Operation Frequencies</b>	Lanterns that use rapidly pulsed LED's to provide the light signal must operate at frequencies equal to or greater than 100 Hz. the light provided by the lantern must not appear to the human eye to be flickering.	Submit data
L-9	<b>Reverse Polarity Protection</b>	The lantern system must not experience any damage in the event that the power system is connected in the reverse polarity. The lantern must resume correct operation as soon as the correct polarity is provided.	Submit data
L-10	<b>Over Pressure Protection</b>	A device to prevent the build-up of gas pressure within the lantern above a level that could jeopardize the safety of personnel must be provided. This device must also prevent moisture intake.	Submit data
L-11	<b>Immersion Protection</b>	The lantern must have, at a minimum, a certified Ingress Protection rating for temporary immersion in water (IP68 rating, IEC 60529).	Certified Lab test report
L-13	<b>Power Consumption</b>	The power consumption must not exceed 8.3 Wh/day <sup>§</sup> for red light, and 6.2 Wh/day <sup>§</sup> for green light, when the lantern is set to an effective intensity of 4NM. §Consider 8h/day, a flash characteristic Q1s and a temperature of 20°C.	Lab test report
L-14	<b>Control</b>	Control device and software to set or change lantern characteristics must be provided. The connection to control the lantern must be wireless. A direct form of clear and concise visual feedback must be provided of lantern settings (e.g.: a digital display). While it is acceptable to have default values for programmable values, a change to one programmed value must not return other programmed values to the default value.	Submit data
L-15	<b>Service Life</b>	The minimum average service life of the lantern must be at least 10 years	Data Analysis

\* as per Annex 1 to Part 4 of the Bid Solicitation, Technical Bid Evaluation Plan

**Appendix E**

**Table E-2: Optical Performance Requirements**

Item #	Criteria	Description of requirement	Proof of compliance*
L-16	<b>Color</b>	The light signal provided by the lantern (separate modules for red, green, yellow, and white light signals) must satisfy the chromaticity requirements of IALA E-108 (2008), and must fall within the boundaries of the optimum region.	Lab test report
L-17	<b>Effective Intensity / Luminous Luminous range</b>	Based on a transmissivity factor of 0.74, the lantern (green, red and white colours) must provide an effective intensity <sup>†</sup> that enables the light to reach a nominal luminous range* of 4 nautical miles (NM). For yellow lantern, the required nominal luminous range <sup>‡</sup> is 2 NM. <sup>†</sup> The calculation of the effective intensity is according to IALA E-200-4 (2008). <sup>‡</sup> The Canadian Coast Guard defines nominal range as the luminous range calculated with a visibility of 10 NM and a threshold of detection of 0.67 cd. A nominal range of 2 and 4 NM requires an effective luminous intensity of 5 and 36 cd respectively.	Lab test report
L-18	<b>Vertical Divergence</b>	The lantern must produce a light signal with a minimum vertical divergence of 10 degrees (5.0° above, 5.0° below) as measured between the 50% intensity points. The peak intensity of the beam must fall within ±1° of the horizontal plane defined by the lantern base.	Lab test report
L-19	<b>Uniformity of Output</b>	The lantern must produce an omnidirectional horizontal fan beam. The peak intensity of the beam in any direction in the focal plane must not vary from the mean by more than ±25%. The intensity profile about any lens moulding seams must not be less than 60% of the mean horizontal output over an angle of not more than 2°.	Lab test report
L-20	<b>UV Resistance</b>	Exposure to Ultraviolet must cause minimal degradation in optical color of the lens. Exposure to Ultraviolet must cause minimal material breakdown of the lens and housing.	Submit data

\* as per Annex 1 to Part 4 of the Bid Solicitation, Technical Bid Evaluation Plan

**Table E-3: Additional Equipment Requirements**

Item #	Criteria	Description of requirement	Proof of compliance*
L-21	<b>Date Clock</b>	The lantern must be programmable to turn itself OFF for approximately three (3) months and resume normal operation on a selection of pre-programmed dates.	Submit data
L-22	<b>Tilt Switch</b>	The lantern must be equipped with a tilt switch such that if the buoy is stored on its side, the lantern will cease operation. Once the buoy returns to an upright position, the lantern will return to normal operation. The tilt switch must activate at 45 +15/-25 degrees. The date clock must not be affected.	Submit data
L-23	<b>Daylight Sensor</b>	The lantern must switch on and off at sunset and sunrise, respectively. The lantern must switch on whenever the ambient illumination, measured on a horizontal plane, falls below 75 lux ± 25 lux.	Submit data
L-24	<b>Continuous Dark Function</b>	The lantern must switch off after 24 hours of continuous operating and switching back on when the photocell sees the sun. The date clock must not be affected.	Submit data
L-25	<b>Cut-off Voltage</b>	The lantern must be programmable to turn itself off at a specified cut-off voltage.	Submit data

FOUR-SEASON LIGHTED NAVIGATION BUOYS (4SB) PROJECT TECHNICAL STATEMENT OF REQUIREMENTS  
**Appendix E**

<b>L-26</b>	<b>Characteristic Control</b>	Each lantern must be capable of producing, as a minimum, the standard CCG flash characteristics, as detailed in <i>The Canadian Aids to Navigation System</i> (CCG, 2011), and must include circuitry to permit field selection of any desired characteristic. The timing of the light signal must be within +/-10% of the rated values.	Submit data
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\* as per Annex 1 to Part 4 of the Bid Solicitation, Technical Bid Evaluation Plan

**Table E-4: St. Lawrence River Condition Testing Equivalencies**

Item #	Criteria	Description of requirement	Proof of compliance*
L-27	<b>Impact Resistance</b>	When installed on the buoy, the lantern must be strong enough such that it can withstand all applicable ice forces while the buoy is submerged below the ice. Its profile must be such that as the buoy is submerged, the ice edge will not dislodge or harm the lantern.	Field test report
L-28	<b>Mechanical Strength</b>	The lantern must be strong enough to withstand a tensile test <sup>†</sup> in which a static load is slowly increased up to a value of 80 kN. <sup>†</sup> The main housing and the upper cover of the lantern must be placed in grips and slowly pulled until a load cell in line with the pulling equipment indicates a value equal to or greater than 80 kN. It is not necessary that the complete lantern assembly be part of the test (lens or electronics can be removed).	Lab test report
L-29	<b>Operational Temperature Range</b>	The lantern must be capable of operating when exposed to temperatures from -30°C to +40°C.	Lab test report or Field test report
L-30	<b>Salt Air and Seawater Spray</b>	The lantern must be capable of operating when under continuous exposure to salt air and seawater spray.	Submit data
L-31	<b>Shock Resistance</b>	The lantern must be capable of operating when under continuous exposure to shock as a marine aid to navigation. The lanterns must be tested in accordance with MIL-STD-202-213 Electronic & Electrical Component Parts, Test Condition H (USDOD, 2015b). Shock tests are performed as soon as possible after removing the lantern from a one-hour soak at -20 °C.	Lab test report
L-32	<b>Vibration</b>	The lantern must be capable of operating when under continuous exposure to vibration as a marine aid to navigation.	Lab test report
L-33	<b>Electromagnetic Compatibility</b>	The lantern must not be susceptible to interference from radiating devices normally found in the marine environment. This includes signals from VHF radio and marine radars. The lanterns must be tested in accordance with the Conducted Susceptibility Test (IEC, 2008a) at V <sub>rms</sub> =10 V and the Radiated Susceptibility Test (IEC, 2010) at 10 V/m.	Lab test report

\* as per Annex 1 to Part 4 of the Bid Solicitation, Technical Bid Evaluation Plan

**ANNEX "C"**

**TASK AUTHORIZATION FORM PWGSC-TPSGC 572**

**Task Authorization  
Autorisation de tâche**

<b>Instruction for completing the form PWGSC - TPSGC 572 - Task Authorization (Use form DND 626 for contracts for the Department of National Defence)</b>	<b>Instruction pour compléter le formulaire PWGSC - TPSGC 572 - Autorisation de tâche (Utiliser le formulaire DND 626 pour les contrats pour le ministère de la Défense)</b>
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**Contract Number**  
Enter the PWGSC contract number.

**Numéro du contrat**  
Inscrire le numéro du contrat de TPSGC.

**Contractor's Name and Address**  
Enter the applicable information

**Nom et adresse de l'entrepreneur**  
Inscrire les informations pertinentes

**Security Requirements**  
Enter the applicable requirements

**Exigences relatives à la sécurité**  
Inscrire les exigences pertinentes

**Total estimated cost of Task (Applicable taxes extra)**  
Enter the amount

**Coût total estimatif de la tâche (Taxes applicables en sus)**  
Inscrire le montant

**For revision only**

**Aux fins de révision seulement**

**TA Revision Number**  
Enter the revision number to the task, if applicable.

**Numéro de la révision de l'AT**  
Inscrire le numéro de révision de la tâche, s'il y a lieu.

**Total Estimated Cost of Task (Applicable taxes extra) before the revision**  
Enter the amount of the task indicated in the authorized TA or, if the task was previously revised, in the last TA revision.

**Coût total estimatif de la tâche (Taxes applicables en sus) avant la révision**  
Inscrire le montant de la tâche indiquée dans l'AT autorisée ou, si la tâche a été révisée précédemment, dans la dernière révision de l'AT.

**Increase or Decrease (Applicable taxes extra), as applicable**  
As applicable, enter the amount of the increase or decrease to the Total Estimated Cost of Task (Applicable taxes extra) before the revision.

**Augmentation ou réduction (Taxes applicables en sus), s'il y a lieu**  
S'il y a lieu, inscrire le montant de l'augmentation ou de la réduction du Coût total estimatif de la tâche (Taxes applicables en sus) avant la révision.

**1. Required Work: Complete sections A, B, C, and D, as required.**

**1. Travaux requis : Remplir les sections A, B, C et D, au besoin.**

**A. Task Description of the Work required:**

**A. Description de tâche des travaux requis :**

Complete the following paragraphs, if applicable. Paragraph (a) applies only if there is a revision to an authorized task.

Remplir les alinéas suivants, s'il y a lieu : L'alinéa (a) s'applique seulement s'il y a révision à une tâche autorisée.

(a) Reason for revision of TA, if applicable: Include the reason for the revision; i.e. revised activities; delivery/completion dates; revised costs. Revisions to TAs must be in accordance with the conditions of the contract. See Supply Manual 3.35.1.50 or paragraph 6 of the Guide to Preparing and Administering Task Authorizations.

(a) Motif de la révision de l'AT, s'il y a lieu : Inclure le motif de la révision c.-à.-d., les activités révisées, les dates de livraison ou d'achèvement, les coûts révisés. Les révisions apportées aux AT doivent respecter les conditions du contrat. Voir l'article 3.35.1.50 du Guide des approvisionnements ou l'alinéa 6 du Guide sur la préparation et l'administration des autorisations de tâches.

(b) Details of the activities to be performed (include as an attachment, if applicable)

(b) Détails des activités à exécuter (joindre comme annexe, s'il y a lieu).

(c) Description of the deliverables to be submitted (include as an attachment, if applicable).

(c) Description des produits à livrer (joindre comme annexe, s'il y a lieu).

(d) Completion dates for the major activities and/or submission dates for the deliverables (include as an attachment, if applicable).

(d) Les dates d'achèvement des activités principales et (ou) les dates de livraison des produits (joindre comme annexe, s'il y a lieu).

---

**B. Basis of Payment:**

Insert the basis of payment or bases of payment that form part of the contract that are applicable to the task description of the work; e.g. firm lot price, limitation of expenditure, firm unit price

**C. Cost of Task:****Insert Option 1 or 2:****Option 1:**

Total estimated cost of Task (Applicable taxes extra): Insert the applicable cost elements for the task determined in accordance with the contract basis of payment; e.g. Labour categories and rates, level of effort, Travel and living expenses, and other direct costs.

**Option 2:**

Total cost of Task (Applicable taxes extra): Insert the firm unit price in accordance with the contract basis of payment and the total estimated cost of the task.

**D. Method of Payment**

Insert the method(s) of payment determined in accordance with the contract that are applicable to the task; i.e. single payment, multiple payments, progress payments or milestone payments. For milestone payments, include a schedule of milestones.

**B. Base de paiement :**

Insérer la base ou les bases de paiement qui font partie du contrat qui sont applicables à la description du travail à exécuter : p. ex., prix de lot ferme, limitation des dépenses et prix unitaire ferme.

**C. Coût de la tâche :****Insérer l'option 1 ou 2****Option 1 :**

Coût total estimatif de la tâche (Taxes applicables en sus) Insérer les éléments applicables du coût de la tâche établies conformément à la base de paiement du contrat. p. ex., les catégories de main d'œuvre, le niveau d'effort, les frais de déplacement et de séjour et autres coûts directs.

**Option 2 :**

Coût total de la tâche (Taxes applicables en sus) : Insérer le prix unitaire ferme conformément à la base de paiement du contrat et le coût estimatif de la tâche.

**D. Méthode de paiement**

Insérer la ou les méthode(s) de paiement établit conformément au contrat et qui sont applicable(s) à la tâche; c.-à.-d., paiement unique, paiements multiples, paiements progressifs ou paiements d'étape. Pour ces derniers, joindre un calendrier des étapes.

---

**2. Authorization(s):**

The client and/or PWGSC must authorize the task by signing the Task Authorization in accordance with the conditions of the contract. The applicable signatures and the date of the signatures is subject to the TA limits set in the contract. When the estimate of cost exceeds the client Task Authorization's limits, the task must be referred to PWGSC.

**3. Contractor's Signature**

The individual authorized to sign on behalf of the Contractor must sign and date the TA authorized by the client and/or PWGSC and provide the signed original and a copy as detailed in the contract.

**2. Autorisation(s) :**

Le client et (ou) TPSGC doivent autoriser la tâche en signant l'autorisation de tâche conformément aux conditions du contrat. Les signatures et la date des signatures appropriées sont assujetties aux limites d'autorisation de tâche établies dans le contrat. Lorsque l'estimation du coût dépasse les limites d'autorisation de tâches du client, la tâche doit être renvoyée à TPSGC.

**3. Signature de l'entrepreneur**

La personne autorisée à signer au nom de l'entrepreneur doit signer et dater l'AT, autorisée par le client et (ou) TPSGC et soumettre l'original signé de l'autorisation et une copie tel que décrit au contrat.

---



## Task Authorization Autorisation de tâche

Contract Number - Numéro du contrat

Contractor's Name and Address - Nom et l'adresse de l'entrepreneur	Task Authorization (TA) No. - N° de l'autorisation de tâche (AT)
	Title of the task, if applicable - Titre de la tâche, s'il y a lieu
	Total Estimated Cost of Task (Applicable taxes extra) Coût total estimatif de la tâche (Taxes applicables en sus) \$

Security Requirements: This task includes security requirements  
Exigences relatives à la sécurité : Cette tâche comprend des exigences relatives à la sécurité

No - Non     Yes - Oui    If YES, refer to the Security Requirements Checklist (SRCL) included in the Contract  
Si OUI, voir la Liste de vérification des exigences relative à la sécurité (LVERS) dans le contrat

### For Revision only - Aux fins de révision seulement

TA Revision Number, if applicable Numéro de révision de l'AT, s'il y a lieu	Total Estimated Cost of Task (Applicable taxes extra) before the revision Coût total estimatif de la tâche (Taxes applicables en sus) avant la révision \$	Increase or Decrease (Applicable taxes extra), as applicable Augmentation ou réduction (Taxes applicables en sus), s'il y a lieu \$
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**Start of the Work for a TA : Work cannot commence until a TA has been authorized in accordance with the conditions of the contract.**    **Début des travaux pour l'AT : Les travaux ne peuvent pas commencer avant que l'AT soit autorisée conformément au contrat.**

### 1. Required Work: - Travaux requis :

A. Task Description of the Work required - Description de tâche des travaux requis	See Attached - Ci-joint <input type="checkbox"/>
B. Basis of Payment - Base de paiement	See Attached - Ci-joint <input type="checkbox"/>
C. Cost of Task - Coût de la tâche	See Attached - Ci-joint <input type="checkbox"/>
D. Method of Payment - Méthode de paiement	See Attached - Ci-joint <input type="checkbox"/>

Contract Number - Numéro du contrat

## 2. Authorization(s) - Autorisation(s)

By signing this TA, the authorized client and (or) the PWGSC Contracting Authority certify(ies) that the content of this TA is in accordance with the conditions of the contract.

En apposant sa signature sur l'AT, le client autorisé et (ou) l'autorité contractante de TPSGC atteste(nt) que le contenu de cette AT respecte les conditions du contrat.

The client's authorization limit is identified in the contract. When the value of a TA and its revisions is in excess of this limit, the TA must be forwarded to the PWGSC Contracting Authority for authorization.

La limite d'autorisation du client est précisée dans le contrat. Lorsque la valeur de l'AT et ses révisions dépasse cette limite, l'AT doit être transmise à l'autorité contractante de TPSGC pour autorisation.

\_\_\_\_\_  
Name and title of authorized client - Nom et titre du client autorisé à signer

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
PWGSC Contracting Authority - Autorité contractante de TPSGC

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## 3. Contractor's Signature - Signature de l'entrepreneur

\_\_\_\_\_  
Name and title of individual authorized - to sign for the Contractor  
Nom et titre de la personne autorisée à signer au nom de l'entrepreneur

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**ANNEX "1" to PART 3 OF THE BID SOLICITATION**

**ELECTRONIC PAYMENT INSTRUMENTS**

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

- VISA Acquisition Card;
- MasterCard Acquisition Card;
- Direct Deposit (Domestic and International);
- Electronic Data Interchange (EDI);
- Wire Transfer (International Only);
- Large Value Transfer System (LVTS) (Over \$25M)

## ANNEX 2 to PART 3 OF THE BID SOLICITATION

### BIDDER'S CHECKLIST

This checklist is included in the bid solicitation to assist Bidders in the preparation of their bid. Before submitting their bid, Bidders should use this checklist to help ensure all mandatory documentation and/or information are provided prior to bid closing.

Bidders must note that the checklist is a tool and does not remove any obligation on the Bidder to complete the requirements of the bid solicitation, including those which may not be listed in this checklist. The onus is on the Bidder to provide any of the mandatory documentation and/or information indicated in the bid solicitation as failure to do so will render the bid non-responsive without any further consideration.

Bidders are not required to provide this checklist with their bid.

	Bid Solicitation Reference	Documentation / Information to be provided with the Bid	Comments	Included with the Bid
1.	2003 Standard Instructions - Goods or Services - Competitive Requirements	Cover Page of the Request For Proposals and all Amendments are signed and included with the Bid.	Best practice.	
2.	Article 2.3 Former Public Servant	Certification with requested information, if applicable.	Best practice.	
3.	Article 2.5 Applicable Laws	Certification with requested information, if applicable.	Best practice.	
4.	Article 3.1 Bid Structure	Canada requests that Bidders provide their bid in separate sections; Technical Bid, Financial Bid, Certifications	Best practice.	
5.	Article 3.1.2.1 Substantial Information	Bidders should provide with their technical bid, a document indicating clearly where the substantial information can be found for each of the mandatory criterion identified in the Technical Bid Evaluation Plan (Annex 1 to Part 4 of the Bid Solicitation).	Best practice.	
6.	Article 3.1.3.4 Delivery Dates	Bidders must submit their delivery dates in accordance with Schedule B.	Mandatory with the bid.	
7.	Article 4.1.3 Phase I: Financial Bid	Bid must include all information required by the solicitation, including comprehensive responses to all bid criteria	Mandatory with the bid.	
8.	Article 4.1.2 Phase II: Technical Bid	Bid must include all information required by the solicitation.	Mandatory with the bid.	
9.	Article 5.1.1 Integrity Provisions - Declaration of Convicted Offences	Bidder must provide with its bid, if applicable, the Integrity declaration form.	Mandatory with the bid, if applicable.	
10.	Article 5.1.2 Certification of Compliance	Bidder must submit a signed and completed Certification of Compliance (Annex 2 to Part 4 of the Bid Solicitation)	Mandatory with the bid.	
11.	Article 5.1.3 Welding Certification	Bidder must provide required information, as applicable.	Not mandatory by bid closing. Must be provided prior to contract award.	
12.	Article 5.2.1 Integrity Provisions - Required Documentation	Bidder must provide required information, as applicable.	Not mandatory by bid closing. Must be provided prior to contract award.	
13.	Article 5.2.2 Federal Contractors Program for Employment Equity	Submit a completed Annex 1 to Part 5 of the Bid Solicitation.	Not mandatory by bid closing. Must be provided prior to contract award.	

14.	Article 5.2.3.2 Insurance Requirements	Bidder must submit required information, as applicable	Not mandatory by bid closing. Must be provided prior to contract award.	
15.	Article 6.5.4 Contractor's Representative	Bidders should include Contractor Representative contact information`.	Best practice.	



## Integrated Technical Services



# ANNEX D

## Technical Bid Evaluation Plan

### *Four-Season Lighted Navigation Buoys (4SB) Project*

*Four Season Buoy*

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## **SECTION 1: INTRODUCTION**

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### **1.1 PURPOSE**

This document defines the criteria that will be used to evaluate the technical portion of the bid submitted in response to the Solicitation for the procurement of four season lighted navigation steel buoys in the St. Lawrence River shipping channel between Québec City and Montréal.

### **1.2 SCOPE**

This document and the associated appendices contain a description of the technical evaluation process, identify all the mandatory requirements to be evaluated, how each requirement will be scored, and defines the information required from the Bidder for its technical bid to be evaluated.

The technical portion of the bid submitted in response to the Solicitation will be evaluated as detailed within this technical evaluation plan, and the evaluation matrices that are included in Appendix A of this document.

## SECTION 2: TECHNICAL BID EVALUATION

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### 2.1 EVALUATION METHOD

By submitting a bid, the Bidder certifies that it meets all of the requirements of the Solicitation, including those identified in the Statement of Work (SOW) and Technical Statement of Requirements (TSOR).

The technical portion of the bid will be evaluated using Mandatory Criteria.

Mandatory criteria (M) are defined as requirements that must be met in order for the bid to be further considered for financial evaluation. Mandatory criteria listed in Appendix A refer to criteria that will be evaluated on a Compliant/Non-compliant basis only. The bid must provide evidence or substantiation as specified. Failure to meet a mandatory criterion will render the bid non-responsive, and it will be given no further consideration. If the bid meets all mandatory criteria, only then will the bid undergo the financial evaluation by the Contracting Authority.

### 2.2 RESPONDING TO EVALUATION CRITERIA

Bidders must note that this document must be read in conjunction with the SOW and TSOR to ensure the requirements are fully understood in the context of the section of the SOW and TSOR from which they have been extracted.

For each mandatory criterion (M1 to M8, inclusive), the bid must comply with the information stipulated in the criterion. The bid must clearly demonstrate how each criterion is met through the indicated method of compliance (refer to 2.2.1), and should respond with a 'YES' or 'NO' in the 'Compliant' column. Additionally, the bid should provide the appropriate cross-reference where the information is located in the bid in the 'Bid Cross-Reference' column.

Canada will evaluate only the documentation provided with the bid. Canada will not evaluate information such as references to Web site addresses where additional information can be found, or technical manuals or brochures not submitted with the bid.

### Method of Compliance

The following methods, as indicated in the "Method of Compliance" column of Appendix A, will be used to define the minimum information required in the bid to substantiate each requirement:

**Field test report:** The bid must provide a field test report certified, signed and/or stamped by an accredited person/firm or testing facility. The field test report must provide verification (field experiment) of the performance of the specified piece of equipment to demonstrate how the proposed equipment fully complies with the requirements.

**Lab test report:** The bid must provide a lab test report certified, signed and/or stamped by an accredited person/firm or testing facility. The lab test report must provide verification

(laboratory experiment) of the performance of the specified piece of equipment to demonstrate how the proposed equipment fully complies with the requirement.

**Submit data:** The bid must provide technical data in sufficient detail to demonstrate how the proposed equipment fully complies with the requirement. The technical data could take the form of calculations, measurements and/or simulations. All technical data must be signed and stamped by a Professional Engineer.

**Product Specification:** The bid must provide a detailed technical description of the specified piece of equipment, including, though not limited to physical dimensions and material properties of the equipment, to illustrate how the proposed equipment fully complies with the requirement.

**Data Analysis:** The bid must provide a detailed technical or engineering analysis in sufficient detail to demonstrate how the proposed equipment fully complies with the requirement. The data analysis must include full calculations as required to support the data analysis. Data analysis and calculations must be signed off by a licensed Professional Engineer.

**Certification:** The bid must provide a letter produced by an accredited person/firm or equipment manufacturer that provides verification of the performance of the specified piece of equipment to demonstrate how the proposed equipment fully complies with the requirement.

**Bidder's Resume:** The Bidder's Resume must provide details of the experience credentials that make the proposed firm qualified to undertake the work. Experience credentials must include a list of completed project achievements along with start and end dates, value of project, scope of work, end result and references to attest to the credentials. Contact information (phone/email) for references must be provided. A reference must be provided for at least 2 projects over \$10 million.

**Project Manager's Resume:** The Project Manager's Resume must provide details of the experience credentials that make the proposed person qualified to undertake the work. Experience credentials must include a list of academic and completed project achievements along with start and end dates, value of projects, scope of work, end result and references to attest to the credentials. Contact information (phone/email) for references must be provided. A reference must be provided for at least 2 projects over \$10 million.

**Statement of Compliance:** The bidder must supply a signed statement conforming compliance of the proposed products with the specified requirements.

## APPENDIX A MANDATORY CRITERIA

Item	Mandatory Criteria	Evaluation Factor/Reference	Method of Compliance	Compliant (Yes/No)	Bid Cross Reference												
M 1	<p>The proposed Coating system must be per the table below:</p> <table border="1"> <thead> <tr> <th>Manufacturer</th> <th>Coating Type</th> <th>Required Products (or equivalent)</th> </tr> </thead> <tbody> <tr> <td rowspan="3">PPG Protective &amp; Marine Coatings</td> <td>Primer</td> <td>SIGMASHIELD™ 1200</td> </tr> <tr> <td rowspan="2">Finishing</td> <td>AMERLOCK® 2</td> </tr> <tr> <td>PSX® 700</td> </tr> <tr> <td></td> <td>Lettering</td> <td>PSX® 700</td> </tr> </tbody> </table> <p>For the proposal of an <b>equivalent</b> product, the bidder must demonstrate how the proposed product meets <u>all</u> requirements and specifications of the Coating system as per Appendix D of Annex B, Technical Statement of Requirements.</p>	Manufacturer	Coating Type	Required Products (or equivalent)	PPG Protective & Marine Coatings	Primer	SIGMASHIELD™ 1200	Finishing	AMERLOCK® 2	PSX® 700		Lettering	PSX® 700	Annex B (TSOR): 3.2 & Appendix D	<p>If proposing the coating system listed in Annex B (TSOR) Table 1; required method of compliance is Statement of Compliance and Product Specification</p> <p>If proposing an equivalent coating system, required method of compliance is Certification, Statement of Compliance and Product Specification.</p>		
Manufacturer	Coating Type	Required Products (or equivalent)															
PPG Protective & Marine Coatings	Primer	SIGMASHIELD™ 1200															
	Finishing	AMERLOCK® 2															
		PSX® 700															
	Lettering	PSX® 700															
M 2	<p>Must use the following Lantern:</p> <ul style="list-style-type: none"> <li>MPV-LED manufactured by Sabik.</li> </ul> <p>If using this forementioned lantern, it must comply with all requirements listed in Table E-1, Table E-2 and Table E-3 of Appendix E of Annex B, Technical Statement of Requirements.</p> <p>For the proposal of an <b>equivalent</b> product, the bidder must demonstrate how the proposed product meets <u>all</u> requirements listed in Table E-1, Table E-2, Table E-3 and <b>Table E-4</b> of Appendix E of Annex B, Technical Statement of Requirements.</p>	Annex B (TSOR): 4.2.2 & Appendix E	<p>If proposing a lantern listed in Annex B (TSOR) 4.2.2.3; required method of compliance is Statement of Compliance and Product Specification.</p> <p>If proposing an equivalent lantern, required method of compliance is Statement of Compliance, Product Specification, Field Test Reports and Lab Test Reports</p>														

Technical Bid Evaluation Plan

**Rated Criteria**

Item	Mandatory Criteria	Evaluation Factor/Reference	Method of Compliance	Compliant (Yes/No)	Bid Cross Reference
M 3	Project Manager must have successfully managed (completed all required deliverables per the requirements and stipulations set out in the applicable contract(s)) at least two projects valued at 10 million dollars or more in the last ten years.	Annex A (SOW) 2.2 and Proven Experience	Project Manager's Resume		
M 4	The Bidder must have 10 years of experience manufacturing steel goods.	Proven Experience	Bidder's Resume		
M 5	The Bidder's Quality Management System must be certified in ISO 9001:2015 - Quality Management Systems as specified in the SOW	Annex A (SOW) 3.2.1	Certification		
M6	As specified in section 3.2.2 of the SOW, the Bidder must provide a valid copy of its certificate from the Canadian Welding Bureau (CWB) acknowledging that he is certified to CSA Standard W47.1, <b>Division 1</b> .	Annex A (SOW) 3.2.2	Certification		
M7	The Bidder must have requested copies of the Design Drawings from the Contracting Authority during the bid solicitation period, as per Appendix B and C of Annex B, Technical Statement of Requirements.	Appendix B of Annex B	Verification with the Contracting Authority that a fully completed and signed Non-Disclosure Agreement (NDA) was submitted by the Bidder.		

**ANNEX 2 TO PART 4 OF THE BID SOLICITATION**

**CERTIFICATION OF COMPLIANCE**

As a Bidder, we have been given the opportunity to provide feedback on the content of the technical requirements for the Four-Season Buoy (4SB) procurement (Solicitation F7047-210014).

We have also thoroughly reviewed and understood the requirements of the complete Solicitation.

By signing this "Certification of Compliance", we certify that we will satisfy the requirements for which this certificate was required as proof of compliance during the Request for Proposals stage, and that our products and services to be delivered against the resulting contract will comply with these same requirements.

Company Name of the Bidder: \_\_\_\_\_

Name of Bidder's Authorized Representative: \_\_\_\_\_

Signature of Bidder's Designated Authority: \_\_\_\_\_

Date: \_\_\_\_\_

## ANNEX 1 to PART 5 OF THE BID SOLICITATION

### FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY – CERTIFICATION

I, the Bidder, by submitting the present information to the Contracting Authority, certify that the information provided is true as of the date indicated below. The certifications provided to Canada are subject to verification at all times. I understand that Canada will declare a bid non-responsive, or will declare a contractor in default, if a certification is found to be untrue, whether during the bid evaluation period or during the contract period. Canada will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with any request or requirement imposed by Canada may render the bid non-responsive or constitute a default under the Contract.

For further information on the Federal Contractors Program for Employment Equity visit [Employment and Social Development Canada \(ESDC\) – Labour's](#) website.

Date: \_\_\_\_\_(YYYY/MM/DD) (If left blank, the date will be deemed to be the bid solicitation closing date.)

Complete both A and B.

A. Check only one of the following:

- A1. The Bidder certifies having no work force in Canada.
- A2. The Bidder certifies being a public sector employer.
- A3. The Bidder certifies being a federally regulated employer being subject to the Employment Equity Act.
- A4. The Bidder certifies having a combined work force in Canada of less than 100 permanent full-time and/or permanent part-time employees.

A5. The Bidder has a combined workforce in Canada of 100 or more employees; and

- A5.1. The Bidder certifies already having a valid and current Agreement to Implement Employment Equity (AIEE) in place with ESDC-Labour.

**OR**

- A5.2. The Bidder certifies having submitted the Agreement to Implement Employment Equity (LAB1168) to ESDC-Labour. As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity (LAB1168), duly signing it, and transmit it to ESDC-Labour.

B. Check only one of the following:

- B1. The Bidder is not a Joint Venture.

**OR**

- B2. The Bidder is a Joint venture and each member of the Joint Venture must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification. (Refer to the Joint Venture section of the Standard Instructions)

**APPENDIX 1**  
**Price Certification – Task Authorization**

The following certification must be duly executed by the Contractor prior to the issuance of the Task Authorization:

**Price Certification**

The Contractor certifies that the price proposed

- a. is not in excess of the lowest price charged anyone else, including the Bidder's most favoured customer, for the like quality and quantity of the goods, services or both;
- b. does not include an element of profit on the sale in excess of that normally obtained by the Bidder on the sale of goods, services or both of like quality and quantity;
- c. does not include any provision for discounts to selling agents; and
- d. is based on costs computed in accordance with *Contract Cost Principles* 1031-2.

**Discretionary Audit**

1. The following are subject to government audit before or after payment is made:
  - a. The amount claimed under the Contract, as computed in accordance with the Basis of Payment, including time charged.
  - b. The accuracy of the Contractor's time recording system.
  - c. The estimated amount of profit in any firm-priced element, firm time rate, firm overhead rate, or firm salary multiplier, for which the Contractor has provided the appropriate certification. The purpose of the audit is to determine whether the actual profit earned on a single contract if only one exists, or the aggregate of actual profit earned by the Contractor on a series of negotiated contracts containing one or more of the prices, time rates or multipliers mentioned above, during a particular period selected, is reasonable and justifiable based on the estimated amount of profit included in earlier price or rate certification(s).
  - d. Any firm-priced element, firm time rate, firm overhead rate, or firm salary multiplier for which the Contractor has provided a "most favoured customer" certification. The purpose of such audit is to determine whether the Contractor has charged anyone else, including the Contractor's most favoured customer, lower prices, rates or multipliers, for like quality and quantity of goods or services.
2. Any payments made pending completion of the audit must be regarded as interim payments only and must be adjusted to the extent necessary to reflect the results of the said audit. If there has been any overpayment, the Contractor must repay Canada the amount found to be in excess.

Company Name of the Contractor: \_\_\_\_\_

Name of the Contractor's Representative: \_\_\_\_\_

Signature of Contractor's Representative: \_\_\_\_\_

Date: \_\_\_\_\_