



## RETURN BIDS TO:

## RETOURNER LES SOUMISSIONS À:

Bid Receiving Public Works and Government  
Services Canada/Réception des soumissions  
Travaux publics et Services gouvernementaux  
Canada

Pacific Region

401 - 1230 Government Street  
Victoria, B.C.

V8W 3X4

Bid Fax: (250) 363-3344

## REQUEST FOR PROPOSAL DEMANDE DE PROPOSITION

### Proposal To: Public Works and Government Services Canada

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

### Proposition aux: Travaux Publics et Services Gouvernementaux Canada

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

### Comments - Commentaires

### Vendor/Firm Name and Address

Raison sociale et adresse du  
fournisseur/de l'entrepreneur

### Issuing Office - Bureau de distribution

Public Works and Government Services Canada - Pacific  
Region  
401 - 1230 Government Street  
Victoria, B. C.  
V8W 3X4

<b>Title - Sujet</b> Pumps Training Systems	
<b>Solicitation No. - N° de l'invitation</b> W0103-197748/A	<b>Date</b> 2018-12-12
<b>Client Reference No. - N° de référence du client</b> W0103-197748	
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$XLV-592-7643	
<b>File No. - N° de dossier</b> XLV-8-41085 (592)	<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> <b>on - le 2019-01-25</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Pacific Standard Time PST
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Grieve, Bronwen	<b>Buyer Id - Id de l'acheteur</b> xlv592
<b>Telephone No. - N° de téléphone</b> (250) 514-3757 ( )	<b>FAX No. - N° de FAX</b> ( ) -
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> National Defence Canada See herein	

Instructions: See Herein

Instructions: Voir aux présentes

<b>Delivery Required - Livraison exigée</b> See Herein	<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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## **PART 1 - GENERAL INFORMATION**

### **1.1 Security Requirements**

There is no security requirement applicable to the Contract.

### **1.2 Requirement**

The requirement is detailed under Article 6.2 of the resulting contract clauses.

### **1.3 Debriefings**

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

### **1.4 Trade Agreements**

The requirement is subject to the provisions of the World Trade Organization Agreement on Government Procurement (WTO-AGP), the North American Free Trade Agreement (NAFTA), the Canada-European Union Comprehensive Economic and Trade Agreement (CETA), and the Canadian Free Trade Agreement (CFTA).

### **1.5 epost Connect service**

This bid solicitation allows bidders to use the epost Connect service provided by Canada Post Corporation to transmit their bid electronically. Bidders must refer to Part 2 entitled Bidder Instructions, and Part 3 entitled Bid Preparation Instructions, of the bid solicitation, for further information.

## **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](#) (2018-05-22) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

### **2.2 Submission of Bids**

Bids must be submitted only to 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:

*Address:*

*Bid Receiving Public Works and Government Services Canada  
Pacific Region  
401-1230 Government Street  
Victoria, BC  
V8V 3X4*

*epost Connect email:*

[TPSGC.RPReceptiondessoumissions-PRBidReceiving.PWGSC@tpsgc-pwgsc.gc.ca](mailto:TPSGC.RPReceptiondessoumissions-PRBidReceiving.PWGSC@tpsgc-pwgsc.gc.ca)

*Bids/Offer will be not be accepted if emailed directly to this email address. This email is to initiate an ePost Connect conversation, as detailed in the Standard Instructions.*

*Bid Facsimile number:*

*(250) 363-3344*

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

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

### **2.4 Applicable Laws**

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

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

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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.

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## PART 3 - BID PREPARATION INSTRUCTIONS

### 3.1 Bid Preparation Instructions

- If the Bidder chooses to submit its bid electronically, Canada requests that the Bidder submits its bid in accordance with section 08 of the 2003 standard instructions. Bidders must provide their bid in a single transmission. The epost Connect service has the capacity to receive multiple documents, up to 1GB per individual attachment.

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

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

- If the Bidder chooses to submit its bid in hard copies, Canada requests that the Bidder submits its bid in separately bound sections as follows:

Section I: Technical Bid (1 hard copy)  
Section II: Financial Bid (1 hard copy)  
Section III: Certifications (1 hard copy)

If there is a discrepancy between the wording of the soft copy on electronic media and the hard copy, the wording of the hard copy will have priority over the wording of the soft copy.

- If the Bidder is simultaneously providing copies of its bid using multiple acceptable delivery methods, and if there is a discrepancy between the wording of any of these copies and the electronic copy provided through epost Connect service, the wording of the electronic copy provided through epost Connect service will have priority over the wording of the other copies.

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

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

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

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

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

#### Section I: Technical Bid

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

## Section II: Financial Bid

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

### 3.1.1 Electronic Payment of Invoices – Bid

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Annex “F” Electronic Payment Instruments, to identify which ones are accepted.

If Annex “F” 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.

### 3.1.2 Exchange Rate Fluctuation

C3011T (2013-11-06), Exchange Rate Fluctuation

### 3.1.3 SACC Manual Clauses

## Section III: Certifications

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

## 3.2 Tables of Bid Deliverables

### 3.2.1 Mandatory Bid Deliverables

Regardless of requirements specified elsewhere in this bid solicitation and its associated Statement of Work, the following are the only mandatory documents that must be submitted with the response at the time of bid closing. The Bidder must be compliant on each item to be considered responsive.

No	Part	Article	Description	Condition	Document provided
<b><u>Section I- Technical Bid</u></b>					
1		Front page	<b><u>Invitation to Tender</u></b> document part 1 page 1, completed and signed	Mandatory with the bid	<input type="checkbox"/>
2	Annex D	ALL	Supporting Technical Information, Brochures, Written Narrative (as required)	Mandatory with the bid	<input type="checkbox"/>
<b><u>Section II- Financial Bid</u></b>					
1	Annex E	ALL	<b><u>Annex E</u></b> Financial Bid Presentation Sheet	Mandatory with the bid	<input type="checkbox"/>

### 3.2.2 Supporting Deliverable Requirements



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If the following information which supports the bid is not submitted with the Bid; it may be requested by the Contracting Authority, and if requested it must be provided within 48 hours of the written request:

No	Part	Article	Description	Condition	Document provided
1	Part 2	2.4	Applicable Laws (if applicable)	48 hours of written request	<input type="checkbox"/>
2	Part 6	6.5.3	Contractor representative	48 hours of written request	<input type="checkbox"/>
3	Annex G		Annex G Information required for the Verification of Integrity Provisions	48 hours of written request	<input type="checkbox"/>

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

### **4.1 Evaluation Procedures**

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

#### **4.1.1 Technical Evaluation**

##### **4.1.1.1 Mandatory Technical Criteria**

Refer to Annex "D".

#### **4.1.2 Financial Evaluation**

*SACC Manual* Clause [A0220T](#) (2014-06-26), Evaluation of Price

### **4.2 Basis of Selection**

#### **4.2.1 Basis of Selection – Mandatory Technical Criteria**

*SACC Manual* Clause [A0031T](#) (2010-08-16), Basis of Selection – Mandatory Technical Criteria

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## 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 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.

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

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

#### 5.2.1 Integrity Provisions – Required Documentation

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real procurement agreement of the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/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.

## 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 Security Requirements

6.1.1 There is no security requirement applicable to the Contract.

### 6.2 Statement of Work

The Contractor must provide the items detailed under the "Statement of Work" at Annex "A"

### 6.3 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.

#### 6.3.1 General Conditions

[2010A](#) (2018-06-21), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

#### 6.3.2 Supplemental General Conditions

[4009](#) (2013-06-27), Professional Services – Medium Complexity, apply to and form part of 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 April 30, 2019 inclusive

#### 6.4.2 Delivery Date

All the deliverables must be received on or before March 29, 2018.

#### 6.4.3 Delivery Points

Delivery of the requirement will be made to delivery point(s) specified at Annex "A", Section 3.3.1 of the Contract.

### 6.5 Authorities

#### 6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Bronwen Grieve  
Public Works and Government Services Canada  
Acquisitions and Compensation  
Address: 401 – 1230 Government Street  
Victoria, BC V8W 3X4  
Telephone: 250-514-3757  
E-mail address: [Bronwen.Grieve@tpsgc-pwgsc.gc.ca](mailto:Bronwen.Grieve@tpsgc-pwgsc.gc.ca)

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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.

In the event you are unable to contact the above noted Authority, please contact: [PAC.VICCA@pwgsc-tpsgc.gc.ca](mailto:PAC.VICCA@pwgsc-tpsgc.gc.ca)

### 6.5.2 Project Authority

The Project Authority for the Contract is: *(will be inserted at time of 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.

### 6.5.3 Contractor's Representative

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_

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

## 6.6 Payment

### 6.6.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price as specified in Annex "B" for a cost of \$ \_\_\_\_\_. Customs duties are included 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 approved, in writing, by the Contracting Authority before their incorporation into the Work.

### 6.6.2 Limitation of Price

SACC Manual clause C6000C (2017-08-17), Limitation of Price

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### 6.6.3 Single Payment

SACC Manual clause [H1000C](#) (2008-05-12), Single Payment

### 6.6.4 Electronic Payment of Invoices – Contract

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

- a. Direct Deposit (Domestic and International);
- b. Electronic Data Interchange (EDI);
- c. Wire Transfer (International Only);

### 6.7 Invoicing Instructions

The Contractor must submit invoices in accordance with the section of the General Conditions titled Invoice Submission.

**Invoice is to be made out to:**

TBD

**Electronic invoice is to be sent for verification to:**

[PAC.MARINE@pwgsc-tpsgc.gc.ca](mailto:PAC.MARINE@pwgsc-tpsgc.gc.ca)

Attention: Bronwen Grieve

Please note the file number in the subject line of the email.

### 6.8 Certifications and Additional Information

#### 6.8.1 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 Applicable Laws

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

### 6.10 Priority of Documents

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

- a) the Articles of Agreement;
- b) the supplemental general conditions [4009](#) (2013-06-27), Professional Services – Medium Complexity;
- c) the general conditions [2010A](#) (2018-06-21), General Conditions - Goods (Medium Complexity);
- d) Annex A, Statement of Work;
- e) Annex B, Basis of Payment;
- f) Annex C, Insurance
- g) the Contractor's bid dated \_\_\_\_\_

### 6.11 SACC Manual Clauses

SACC Manual clause [A9062C](#) (2011-05-16), Canadian Forces Site Regulations

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SACC Manual clause **B1501C** (2006-06-16), Electrical Equipment

SACC Manual clause **B7500C** (2006-06-16), Excess Goods

#### **6.12 Insurance Requirement**

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

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

The Contractor must forward to the Contracting Authority within ten (10) days after the date of award of the Contract, a Certificate of Insurance evidencing the insurance coverage and confirming that the insurance policy complying with the requirements is in force. 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.

## **ANNEX "A"**

### **STATEMENT OF WORK**

#### **1.0 SCOPE**

##### **1.1 Purpose**

The purpose of this Statement of Work (SOW) is to describe the requirements and work effort required from the Contractor by the Department of National Defence (DND) for the supply of items and its installation hook-up and the necessary support to meet the requirements for the acquisition of the Pumps Training Systems (with Multiple Pumps on Bench).

##### **1.2 Background**

Several critical systems on board Her Majesty's Canadian Ships are fundamentally hydraulic in function, and pump systems are a major part of that function. Expert knowledge and competency in the practical application and repair of various pumps and its system of operation is essential to maintaining the capability and reliability of a Canadian Warship.

The Naval Training Development Centres (NTDC) require improvement of schools' capabilities and output in providing the instructor and students an up to date training platform that integrates an instructional package, hands-on exercises, as identified by DND **QSP** (Quality Standard and Plan) in the operation of various Pumps systems.

The Naval Training Development Centre (Pacific) at Canadian Forces Base, NADEN, running the current Maritime Technology Trade training program now requires the acquisition of Sixteen (16) Pumps Training Systems (supply, delivery, offloading, installation and on-site support training) for the Naval Fleet Schools in the Atlantic and Pacific regions. The equipment must have features required to adequately teach Naval personnel Pumps maintenance, repair and operations.

The practical experience and skills set acquisition from such learning creates the value for the readiness of well-trained technical Naval officers to be deployed for duty on board any of Her Majesty's Canadian Ship (HMCS). This acquisition will leverage process efficiencies that will improve quality.

##### **1.3 Intended Use**

The Department of National Defence (DND) has a requirement to procure Pumps Training Systems that will enable practical learning and skills acquisition by The Royal Canadian Naval personnel for readiness of duty to be deployed for any of Her Majesty's Canadian Ship (HMCS) operation. Eight (8) of the Pumps Training Systems will be installed at The Naval Fleet School Pacific, CFB Esquimalt Victoria British Columbia while the other eight (8) will be for The Naval Fleet School Atlantic CFB Halifax located in Halifax, Nova Scotia.

This Equipment will be used to offer students hands-on (practical) training in pump operation principles and associated maintenance tasks such as pump installation, lubrication, shaft alignment, inspection, and component replacement. Students will learn how to start-up, operate, and troubleshoot industrial pumps in different configurations and become familiar with the equipment.



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Acquisition of this equipment will enhance the Naval Fleet Schools capabilities and equip The Royal Canadian Navy for real life support.

## 2.0 APPLICABLE DOCUMENTS

### 2.1 References

2.1.1 The following references are provided with the Request for Proposal. Where mentioned, the following Standards must be used for the preparation of deliverables to the extent specified in this SOW:

2.1.1.1 DND Specifications, Standards, and Publications:

REFERENCE	PROMULGATION	REFERENCE TITLE
QSP-USQ LS Martech Mech PO EO 002.02	2018-03-10	MAINTAIN FLUID SYSTEM COMPONENTS

### 2.2 Order of Precedence

2.2.1 In the event of a conflict between the content in this SOW and the referenced documents, the content of this SOW takes precedence.

## 3.0 GENERAL REQUIREMENTS

### 3.1 Scope of Work

3.1.1 The Contractor must supply the PUMPS TRAINING SYSTEMS (with MULTIPLE PUMPS mounted on Bench or platform - 'the Equipment') that meet all the requirements as detailed and identified within the Annex A1 Technical Specification of Requirement and Annex A2 Teaching Requirements.

### 3.2 Requirements

The Deliverables are hereby described in detail including the description of the required goods, applicable specification/data and the specific delivery location to satisfy Need.

The Contractor must supply the following:

- a) Supply, deliver, un-load, **sixteen (16) Pumps Training Systems' Equipment** that meet all technical requirement and operational teaching requirements and standards as provided; **Eight of the units shall be supplied to each of the specified** delivery locations in the Canadian Forces Base (CFB), Esquimalt, Victoria BC and Canadian Forces Base (CFB), Halifax, Nova Scotia;

Each unit must be accompanied with:

- (i) pump training manual,
- (ii) student/ Instructor's
- (iii) courseware/handbook,
- (v) Job sheets/Work order, and
- (iv) student lab material and textbooks.

- b) Install **eight (8) Pump Training Systems' Equipment at each of the specified** delivery locations in the Canadian Forces Base (CFB), Esquimalt, Victoria BC and Halifax, Nova Scotia respectively.
- c) Provide for and conduct On-site support / operational (use and maintenance) training of Client User (DND) Pump or Fluid system instructors as listed in section 5.0 Deliverables.
- d) All equipment must be supported by Supplier with 2 years operational spares associated with OEM warranty.
- e) Functional and Teaching Requirements containing comprehensive requirements are outlined in:
  - 1. Annex A1: TECHNICAL SPECIFICATION OF REQUIREMENT (TSOR) ATTACHMENT.
  - 2. Annex A2: TEACHING REQUIREMENT ATTACHMENT.
- f) All goods must be delivered by the Client required on site (ROS) date of March 29, 2019.

### 3.3 **Tasks**

- 3.3.1 The Contractor must deliver eight (8) of the units to each of the following locations:

Department of National Defence  
Canadian Forces Base, Esquimalt  
Naval Fleet School (Pacific)  
Building 92 Fluid Power Laboratory, NADEN  
Victoria, BC V9A 7N2, Canada

AND

Department of National Defence  
Canadian Forces Base, Halifax  
Naval Fleet School (Atlantic)  
Building S- 37  
Halifax, NS B3K 5X5, Canada

- 3.3.2 The Contractor must unpack the Pumps Training Systems and remove all packaging material from DND premises.
- 3.3.3 The Contractor must perform the installation of all **sixteen (16) Pumps Training Systems' Equipment** at the Client-User (DND) premises as specified above and as designated by the Project Authority, and ensure that all electrical products provided are certified and approved for safe/operational use in accordance with the Canadian Electrical Code Part 1 before its delivery by a certified organization accredited by the Standards Council of Canada.
- 3.3.4 The Contractor must provide eight (8) hardcopies and one (1) electronic copies of the User and System Manuals in English and French to EACH of the delivery locations.
- 3.3.5 The Contractor must provide with their bid a Plan or Schedule to meet/satisfy the Required delivery date (March 29, 2019) as specified for the requirements, showing (timelines) dates for the delivery of (i) the equipment (Pumps Training SYSTEMS), (ii) installation of the Pumps Training SYSTEMS, and (iii) the On-site training of DND instructors' to acquire competence/capability to operate equipment.

### 3.4 **Constraints**

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3.4.1 The Pumps Training Systems' equipment 'On-site' instructor or operator training to be offered by Vendor or contractor must take place as quoted by the contractor and as a deliverable/part of the firm requirements, at the Canadian Forces Base Esquimalt and Halifax locations identified as destinations by the Project Authority, and as in this statement of work, to completely have satisfied all requirements (Complete delivery).

3.4.2 Instructor training must occur between Monday and Friday from 0800 hrs to 1600 hrs.

3.4.3 The Contractor or their resources must provide their own meals, accommodations and travel to and from the training sites.

### 3.5 DND

### Support

3.5.1 DND will provide a suitable instructional space for the contractor to deliver training on site at CFB Esquimalt and CFB Halifax locations at their scheduled dates.

## 4.0 ACCEPTANCE PROCESS AND CRITERIA

### 4.1 General

- 4.1.1 Acceptance ensures that each **Pump Training System Equipment** has been produced and verified in accordance with all the requirements of the Contract.
- 4.1.2 The Contractor must provide at point of receipt for acceptance, all source documents with all other necessary documentation for operation and maintenance of equipment.

## 5.0 DELIVERABLES

### 5.1 Delivery Table

Item	Item Description	Quantity	UNIT	Delivery date	Delivery location
1	<b>Supply Pumps Training Systems (with MULTIPLE pumps mounted on Bench) to meet requirements.</b>	8	PC	March 29, 2019	CFB Esquimalt Pacific(P)
2	<b>Supply Pumps Training Systems (with MULTIPLE pumps mounted on Bench) to meet requirements.</b>	8	PC	March 29, 2019	CFB Halifax Atlantic(A)
3	Install Equipment (Plug and Play)	16	PC		CFB (P/A)
4	<b>On-site operational training (Train DND instructors for competence and capability to operate and handle the Equipment;</b>  <i>Within 2-5 business days after final delivery and installation.</i>	2	DAYS		CFB (P/A)

### 5.2 IMPORTANT NOTES:

#### 5.2.1 Instructional/Teaching Requirements:

- The Pumps Training Systems' Equipment must SATISFY the Pumps teaching requirements as specified in Annex A2.

#### 5.2.2 COURSEWARE

The student curriculum consists of fully illustrated student manuals containing job sheets and /or work orders. Job sheets include a description of the objectives, and a detailed list of steps required to attain the objectives. Work orders can be used to evaluate students. They cover the same topics as the job sheets, but without the detailed list of steps. The instructor guides contain the calculation and measurement results as well as the answers to questions.

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**Typical Pump Applications:-**

*Centrifugal: Transfer, process, cleaning, irrigation, filtration, and feed pumps.*

*External Gear: High-pressure applications such as hydraulic applications.*

*Sewage Grinder/Septic: Are used to pump raw sewage and solid waste materials distances over 1000 feet and or pumping up lifts over 30 feet.*

*Metering: Used where two or more liquids must be proportioned or where mixture ratios must be controlled.*

*Screw: Used in Marine installations to pump high-pressure viscous fluids.*

*Lobe: Are used in food applications because they handle solids without damaging the product. A gentle pumping action minimizes product degradation.*

*Piston: High pressure cleaning and spraying of water, soap, and detergents. Applications include car washes, farms, home, industrial spraying, and pressure washing.*

*Pneumatic Diaphragm: Fluids with particles, and various liquids, which are highly viscous, volatile, corrosive or toxic. Used in the food industry to pump sliced fruit, sausage, chocolate.*

*Stuffing-Box Centrifugal: Refiners, pulpers, separators, vacuum pump, agitators, condensate pumps, boiler feed and recirculation pumps, mixers, steam vessel s boiler, fire pumps.*

*Vane: Carbonated beverage dispensers, espresso coffee machines, lubrication spraying, insecticides spraying, car wash soap dispensing.*

**e Learning Formats: The courseware shall be made available in the following e-learning format for computer based approach use: STAND-ALONE, AVAILABLE ON CD-ROM. This format runs on a web browser and does not require any management system.**

## ANNEX "A1"

### TECHNICAL SPECIFICATION OF REQUIREMENT

#### GENERAL REQUIREMENTS

##### Scope of Work

##### Contents

- 1.0. Operating Conditions
- 2.0. Standard Requirements (functional)
- 3.0. Quality
- 4.0. Packaging
- 5.0. Installation and Training
- 6.0. Warranty/2 yrs Running Spares

##### 1.0 Operating Conditions

The DND requires initial sixteen (16) pcs of Pumps Training Systems. The Basic system introduces students with maintenance tasks such as pump installation, shaft alignment, wiring, operation, inspection, maintenance, troubleshooting, and component replacement. It also introduces students to the measurement of the pumping circuit parameters, pump characteristics curves, and how to use a variable speed drive. The system includes a bench, centrifugal pump with base and motor, variable speed drive, instruments, and tools. It also includes a transparent cover that allows observation of cavitation and air ingestion in the pump. Equipment networking functionality is not required as each unit when monitored electronically shall act independently (Standalone). Equipment shall also be able to perform simulation operations with faults finding functionality (fault finding is intended as a guide only and should not be construed to cover all possible faults or in which order or sequence they could be encountered while operating the system)

##### 2.0 Standard Requirements (functional):

- 2.1 The supplied units must be designed with portability in mind and must be constructed with wheels (casters) for ease of movement, and the bench having adequate spaces for the storage and ease of functional use of the components.
- 2.2 The units must use North American standard 110/120 volt 50/60 hertz power.
- 2.3 Safety Relief valves must be incorporated in the design for each unit (for positive displacement pumps)
- 2.4 A transparent cover is to be supplied with the Pedestal centrifugal pump to observe the effect of cavitation and air ingestion in the pump.
- 2.5 All components must meet industrial safety standards, ISO9001.
- 2.6 Each unit must include the following components:
  - 2.6.1 Pump Bench (1)
  - 2.6.2 Pump Storage(1)
  - 2.6.3 Pump Universal Base Assembly(1)
  - 2.6.4 Emergency Stop Station(1)
  - 2.6.5 Pedestal Centrifugal Pump(1)
  - 2.6.6 Paddle Wheel Flowmeter (High Range)(1)
  - 2.6.7 Alignment kit (Basic)(1)
  - 2.6.8 Pyrometer(1)
  - 2.6.9 Clamp-On Ammeter(1)
  - 2.6.10 Mechanical Seal Repair Kit (Pedestal Centrifugal Pump)(1)
  - 2.6.11 Hoses and Accessories(1)
  - 2.6.12 Tool Kit(1)
  - 2.6.13 AC Drive(1)

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- 2.6.14 Expanding Work Surface (Large)(1)
  - 2.6.15 Storage/Work Surface(1)
  - 2.6.16 Flow Control Valve(1)
  - 2.6.17 Pressure Gauge (Digital, High Range)(1)
  - 2.6.18 MULTIPLE Pump Training System Add-On(1): C-Face Centrifugal Pump, Mechanical Seal Repair Kit (C-Face Centrifugal Pump), Hoses&Accessories
  - 2.6.19 SECOND Drive Option Add-on (1): GFCI auxiliary Power Outlet/AC Drive
  - 2.6.20 External Gear Pump(1)
  - 2.6.21 Vane Pump(1)
  - 2.6.22 Flexible Impeller Pump(1)
  - 2.6.23 Progressive Cavity Pump(1)
  - 2.6.24 Peristaltic Pump(1)
  - 2.6.25 Pneumatic Diaphragm Pump(1)
  - 2.6.26 Metering Pump Add-On(1)
  - 2.6.27 Piston Pump(1)
  - 2.7 The Pumps Training Systems units must include the following manuals, training literature, software, and documentation:
    - 2.7.1 Single Pump Systems (Job Sheets-Student)
    - 2.7.2 Single Pump Systems (Job Sheets-Instructor)
    - 2.7.3 Single Pump Systems (Work Orders- Student)
    - 2.7.4 Single Pump Systems (Work Orders- Instructor)
    - 2.7.5 Multiple Pump Systems (Job Sheets-Student)
    - 2.7.6 Multiple Pump Systems (Job Sheets-Instructor)
    - 2.7.7 Multiple Pump Systems (Work Orders-Student)
    - 2.7.8 Multiple Pump Systems (Work Orders-Instructor)
    - 2.7.9 Pumps Training Systems (Manuals on CD-ROM)
    - 2.7.10 Textbook- Pump Handbook (Student Manual).
  - 2.8 **Physical features**
    - 2.8.1 Equipment unit must be engineered for ease of use. Pump bench fabrication is a sturdy welded steel frame mounted on four casters with brake and made to have perforated work surfaces with drip-tray connected to the reservoir.
    - 2.8.2 Easy and accurate system of quick-lock fixations to mount and remove the components effortlessly into the perforations of the work surface.
  - 2.9 **Electrical Requirement:**
    - 2.9.1 The Pumps Training System units must be supplied and installed ready to run (Plug n Play) on 110/120 Volt, single Phase, 50/60 Hz power.
    - 2.9.2 The entire system must be supplied to DND-Naval Fleet Schools' destinations with Canadian Standards Association (CSA) certified
    - 2.9.3 Connected via National Electrical Manufacturers Association (NEMA) standard plugs/connectors (cannot require permanent wired connections to power sources)
    - 2.9.4 Require 6.1m power cord via National Electrical Manufacturers Association (NEMA) for flexibility of use.
  - 2.10 **Equipment Certifications:** ISO 9001, 14001, CSA etc.
  - 2.11 **Safety and Operation Labeling**
    - 2.11.1 Any pinch points, hazard areas, operator safety concerns, and moving components are clearly labeled in English.
    - 2.11.2 Operating instruction labels are clearly identified and printed in English.
  - 3.0 **Quality**
    - 3.1 **Performance Guarantee**
      - 3.1.1 The supplier will have to guarantee Equipment performance shall be fit-for-purpose, meeting all general requirements as stated in this Technical Requirements section.
      - 3.1.2 If the Pumps Training Systems (Equipment) do not meet the specified performance, the supplier will take the necessary remedial action to achieve the specified performance at no cost to the purchaser.



- 3.1.3 The Equipment must be designed and constructed to be free from defects in manufacturing and workmanship, as well as environmentally safe.

**4.0 Packaging**

- 4.1 All machines, components, and accessories including the Pump benches must be packaged, crated, or boxed to ensure no damage is sustained by equipment during the transport, loading, unloading, or general handling of equipment prior to the final installation.

**5.0 Installation and On-Site equipment operational Training AT Destinations**

- 5.1 Units must be supplied Plug and Play at Destinations (respective Naval Fleet Schools Atlantic/Pacific), Eight units installed at each destination specified.
- 5.2 On-site operational Training for unit handling must be conducted within 2-5 days of final delivery and installation to acquaint DND Student Instructors scheduled to attend with the safe operational and preventive maintenance capabilities, and acquaint them with circuit setup, design functionalities and operability for teaching the courseware associated with the equipment. Minimum two (2) days on-site training is considered adequate starting 8am to 4pm daily (business hours).

**6.0 Warranty/2yrs Operational Spares**

- 6.1 All Equipment supplied shall be covered by its manufacturer's warranty from defects in design, materials and workmanship. Supplier shall quote applicable warranty period and coverage. The warranty shall be the manufacturer's standard commercial warranty, which shall conform to all the requirements of the contract. Acceptance of the manufacturer's standard commercial warranty shall not minimize the rights of the Government under clauses in the contract, and in any conflict that arises between the terms and conditions of the contract and manufacturer's warranty, the terms and conditions of the contract shall take precedence. The warranty period shall commence from the date of acceptance.
- 6.2 **All Equipment be supported by the Supplier with a minimum of 2 years operational spares associated with OEM warranty.**

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## ANNEX "A2"

### TEACHING REQUIREMENT

#### ***PO 002 MAINTAIN FLUID SYSTEM COMPONENTS***

##### ***EO 002.02 Maintain Pumps***

1. Performance. Maintain Pumps
2. Standard. The trainee, adhering to equipment and personal safety precautions, shall independently maintain pumps, In accordance with references by:
  - a. Troubleshooting pumps, to include:
    - (1) Investigating faults; and
    - (2) Identifying faults.
  - b. Repairing pumps, to include:
    - (1) Gathering resources;
    - (2) Disassembling components;
    - (3) Repairing components; and
    - (4) Assembling components.
3. Instructional Methods.
  - a. Interactive lecture; and
  - b. Demonstration – performance.

#### ***PART III – ENABLING CHECK NOTES***

4. Trainees will work in pairs at a pump trainer and a fault will be incorporated into the trainer. The fault will need to be identified, pump repaired and then tested after it is replaced back into the trainer.
  - a. Testing pumps, to include:
    - (1) Verifying operation; and
    - (2) Returning to operation.
5. Teaching Points.

**EO 002.02 Maintain Pumps**

Teaching Point	Sub Teaching Points	Instructional Technique (Time in min)			Method	Refs	Comments
		T	D	P			
TP1 Explain the operation of pumps and components, by:							
a. Describing the operation of reciprocating pumps, to include: (1) Different pumping elements; (2) Types of reciprocating pumps and their applications; and (3) Radial piston variable type pump.	45			IL	A4, A83, A119, A122	Exploded 3D schematic of all pump types showing internal makeup and flow animation	
b. Describing the operation of centrifugal pumps, to include: (1) Characteristics of centrifugal pumps; (2) Classes of centrifugal pumps with respect to flow: i. Impellers; ii. Stages; iii. Casing type; and iv. Number of suction ports. (3) Applications of centrifugal pumps; and	45			IL			
c. Describing the purpose and construction of wear rings.	10			IL			
d. Explaining the sealing arrangement for pump shafts, to include: (1) The function and construction of stuffing boxes, their packing material, and applications; (2) The purpose of lantern rings in a stuffing box; (3) The operation of mechanical seals, to include: i. Function and construction; ii. Types; and iii. Applications. (4) The precautions and requirements regarding pumps that use mechanical seals; and (5) Possible causes of mechanical seal leaks.	85						
e. Describing the types of pump shaft bearings and bushings.	15			IL			
TP 2 Troubleshoot pumps and components, by:							
a. Investigating faults, to include: (1) Reading data, to include: i. Machinery logs; ii. Instrument readings; and iii. Historical data. (2) Analyzing data by: i. Comparing gathered data to	25	25	25	IL/DP	A4, A83, A119, A122		

technical publications; and (3) Investigate eating/hanging/shock mount arrangements. (AMT0520).						
b. Identifying faults to include: (1) Troubleshooting pumps to include: i. Centrifugal pump; ii. Sewage macerator pump; iii. Screw pump; iv. Gear pump; v. Vane pump; vi. Piston pump; and vii. Lobe pump. (2) Troubleshooting seating/hanging/shock mount arrangements (AMT0830); and (3) Inspect shock mounts (AKT0780).		50	100	DP		
TP3 Repair pumps and components, by:						
a. Gathering resources, to include: (1) Adhering to proper lock-out/tag-out procedures; (2) NOT APPLICABLE – DND will be responsible for the material presented to trainees for reviewing all Safety and Environmental concerns with regards to the pump system.		25	25	DP		
b. Disassembling pump and components to include: (1) Disassembling pump to include: i. Centrifugal pump; ii. Sewage macerator pump; iii. Screw pump; iv. Gear pump; v. Vane pump; vi. Piston pump; and vii. Lobe pump. (2) Disassembling mechanical linkage; (3) Disassembling mechanical seal; (4) Measure wear of mechanical seal; (AKT1290) (5) Disassembling bushing; and (6) Disassembling seating/hanging/shock mount arrangements (AMT0080)		100	200	DP	A4, A83, A119, A122	Trainees will work in pairs with one pump trainer per pair
c. Repairing pump and components to include: (1) Repairing pump to include: i. Centrifugal pump; (AKT1460) ii. Sewage macerator pump; (AOT0070) iii. Screw pump (AKT2190); iv. Gear pump; v. Vane pump;		100	200	DP		

vi. Piston pump; and vii. Lobe pump. (2) Repairing mechanical linkage; (AKT1990) (3) Repair mechanical seal (AKT2000); (4) Repair bushings (AKT1440); and (5) Repairing seating/hanging/shock mount arrangements (AMT0690)						
d. Assembling pump and components to include: (1) Assembling pump to include: i. Centrifugal pump; ii. Sewage macerator pump; iii. Screw pump; iv. Gear pump; v. Vane pump; vi. Piston pump; vii. Lobe pump; (2) Assembling mechanical linkage; (3) Assembling mechanical seal; (4) Assembling bushing; and (5) Assembling seating/ hanging/shock mount arrangements (AMT0080).		50	150	DP		
e. Aligning the pump shaft with the prime mover shaft, to include: (1) Identifying the misalignment condition: i. Angular misalignment; ii. Offset misalignment; iii. Combination; iv. Softfoot (ordinary and angular); v. Misalignment due to thermal change; and vi. Runout (eccentric and angular). (2) Using the proper alignment methods: i. Rough alignment using straightedge and feeler (taper) gauge; ii. Rim and face dialing; iii. Cross dialing; iv. Graph method; v. Reverse reading dialing and vi. Laser.	50	50	150	IL/DP		
TP4 Test Pump and components, by:						
a. Verifying operation to include: (1) Ensuring system is fully re- assembled; (2) De-isolate the system components; (3) Testing pumps, to include: i. Centrifugal pump; ii. Sewage macerator pump (AOT1800);		50	50	DP	A4, A83, A119, A122	Trainees will work in pairs with one pump trainer per pair

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<ul style="list-style-type: none"> <li>iii. Screw pump;</li> <li>iv. Gear pump;</li> <li>v. Vane pump;</li> <li>vi. Piston pump; and</li> <li>vii. Lobe pump.</li> </ul> <p>(4) Evaluate pump function to include:</p> <ul style="list-style-type: none"> <li>i. Centrifugal pump;</li> <li>ii. Sewage macerator pump (AOT0360);</li> <li>iii. Screw pump;</li> <li>iv. Gear pump;</li> <li>v. Vane pump;</li> <li>vi. Piston pump; and</li> <li>vii. Lobe pump.</li> </ul>						
<p>b. Returning to operation to include:</p> <ul style="list-style-type: none"> <li>(1) Ensuring tools and PPE are properly stored;</li> <li>(2) Ensuring Lock-out/Tag-out is completed; and</li> <li>(3) Inform superiors that the system is fully restored.</li> </ul>	15	25	25	IL/DP		

## ANNEX "B"

### BASIS OF PAYMENT

#### Note to Bidders:

This section is provided for sample purposes only and should not be filled out by bidders as part of their financial bid submission. Bidders must complete Annex "E" Financial Bid Presentation Sheet.

Pricing offered must be in Canadian dollars, Applicable Taxes excluded, DDP destination, Canadian customs duties and excise taxes included.

No further charges will be allowed.

Item	Item Description	Quantity	UNIT	Delivery date	Delivery location	Unit Price	Extended Price
1	<b>Pumps Training Systems (with MULTIPLE pumps mounted on Bench) as per Annex “A”</b>	8	Each	March 29, 2019	CFB Esquimalt Pacific(P)	\$	\$
2	<b>Pumps Training Systems (with MULTIPLE pumps mounted on Bench) as per Annex “A”</b>	8	Each	March 29, 2019	CFB Halifax Atlantic(A)	\$	\$
3	Install Equipment (Plug and Play)	16	Each		CFB (P/A)	\$	\$
4	<b>On-site operational training (Train DND instructors for competence and capability to operate and handle the Equipment)</b>  <i>Within 2-5 business days after final delivery and installation.</i>	2	DAYS		CFB (P/A)	\$	\$
5	Delivery – Incoterms 2000 DDP to Victoria, BC						\$
6	Delivery – Incoterms 2000 DDP to Halifax, NS						\$
<b>Total (GST/HST not included) (CAD\$)</b>							<b>\$</b>

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## **ANNEX "C"**

### **INSURANCE REQUIREMENT**

#### **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.



**ANNEX "D"**

**MANDATORY TECHNICAL CRITERIA**

The Bidder **MUST** indicate if it **MEETS (YES)** or **DOES NOT MEET (NO)** each element in the table below.

The Bidder **MUST PROVIDE** documentation to demonstrate compliance with each MANDATORY CRITERIA showing well organized cross-reference to justify their claim.

Item	MANDATORY TECHNICAL CRITERIA	YES	NO	Remark/Reference
1	Pumps Training Systems equipment must be in line with the relevant QSP referenced under the Applicable documents and outlined in the Teaching requirements' Annex A2.			
2	The Pump Trainer components must be readily available to be easily replaced with typical pump applications (one for one exchange as required), which will enable typical pump applications to be fitted in accordance with the courseware topics coverage as per Annexes A1 and A2.			
3	The Pumps Training System units must be 110/120 Volt, single Phase, 50/60 Hz input power.			
4	All equipment must include: <ul style="list-style-type: none"><li>• Voltage warning signs for safety;</li><li>• electric power cord length of minimum 6.1metres(20feet) in accordance to ANSI/NEMA standards.</li></ul>			
5	All equipment must be supported by Supplier with 2 years operational spares associated with OEM warranty.			
6	Equipment operating conditions must use electronic functionality to test students for troubleshooting skills on faulty components.			
7	Equipment must exclude networking functionality and able to act as standalone (independently) when monitored electronically.			
8	Equipment must perform simulation operations with faults finding functionality.			

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9	Equipment must be Canadian Standards Association (CSA) certified and meet NEMA standards			
10	Equipment must be constructed with portability in mind; consisting of a sturdy welded steel frame mounted on four heavy duty casters with brake.			
11	The Bidder <b>MUST PROVIDE</b> documentation and schematic drawings for equipment proposed in their technical submission with all physical characteristics and system specifications.			

## ANNEX "E"

### FINANCIAL BID PRESENTATION SHEET

#### Note to Bidders:

Bidders must submit firm unit prices for each item listed below to be given further consideration. A financial bid addressing only a portion of the requirement will be declared non-responsive.

**The financial bid of the successful bidder will form the Basis of Payment of the resulting contract.**

Pricing offered must be in Canadian dollars, Applicable Taxes excluded, DDP destination, Canadian customs duties and excise taxes included.

No further charges will be allowed.

Item	Item Description	Quantity	UNIT	Delivery date	Delivery location	Unit Price	Extended Price
1	<b>Pumps Training Systems (with MULTIPLE pumps mounted on Bench) as per Annex “A”</b>	8	Each	March 29, 2019	CFB Esquimalt Pacific(P)	\$	\$
2	<b>Pumps Training Systems (with MULTIPLE pumps mounted on Bench) as per Annex “A”</b>	8	Each	March 29, 2019	CFB Halifax Atlantic(A)	\$	\$
3	Install Equipment (Plug and Play)	16	Each		CFB (P/A)	\$	\$
4	<b>On-site operational training (Train DND instructors for competence and capability to operate and handle the Equipment;</b>  <i>Within 2-5 business days after final delivery and installation.</i>	2	DAYS		CFB (P/A)	\$	\$
5	Delivery – Incoterms 2000 DDP to Victoria, BC						\$
6	Delivery – Incoterms 2000 DDP to Halifax, NS						\$
<b>Total (GST/HST not included) (CAD\$)</b>							<b>\$</b>

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## **ANNEX "F"**

### **ELECTRONIC PAYMENT INSTRUMENTS**

The Bidder accepts any of the following Electronic Payment Instrument(s):

- ( ) Direct Deposit (Domestic and International);
- ( ) Electronic Data Interchange (EDI);
- ( ) Wire Transfer (International Only);

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## ANNEX "G"

### INTEGRITY PROVISIONS – LIST OF DIRECTORS

Please provide list of names of the following entities, according to the ownership nature of the company

1. For a Corporation - each current member of the Bidder's Board of Directors;

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2. For a Partnership, General Partnership or Limited Partnership - the names of all current partners;

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3. For a Sole Proprietorship or an individual doing business under a firm name - the name of the sole proprietor or individual;

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4. In the case of a joint venture - For a Joint Venture - the names of all current members of the Joint venture;

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5. For an individual - the full name of the person

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