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Gatineau, Québec K1A 0S5

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**

Ship Refits and Conversions / Radoubss et  
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11 Laurier St. / 11, rue Laurier

6C2, Place du Portage

Gatineau, Québec K1A 0S5

<b>Title - Sujet</b> CCGS Cape Roger and CCGS Cygnus VLE	
<b>Solicitation No. - N° de l'invitation</b> F7049-200079/A	<b>Amendment No. - N° modif.</b> 012
<b>Client Reference No. - N° de référence du client</b> F7049-200079	<b>Date</b> 2021-02-11
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$MD-045-28005	
<b>File No. - N° de dossier</b> 045md.F7049-200079	<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 Standard Time EST <b>on - le 2021-02-26</b> Heure Normale du l'Est HNE	
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Hora, Bharat	<b>Buyer Id - Id de l'acheteur</b> 045md
<b>Telephone No. - N° de téléphone</b> (343) 551-4942 ( )	<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

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

**Solicitation Amendment # 12 is issued to:**

- 1) Respond to Vendor Questions
- 2) Modify Section 6.4 Docking Facility
- 3) Modify Annex A, Multiple Sections
- 4) Upload Documents

**1) Respond to Vendor Questions:**

**AA) Questions related to Solicitation Document and general questions**

**6.4 Docking Facility**

Q. Are there any exclusions or considerations on the dock certification outside the two year window, that would exempt a facility having a docking certificate within the last 2 year window requirement? Please advise on exemption requirements.

A. The requirement is changed to 5 years. This is reflected now in the amendment.

**General:**

Q. When will we receive the Pricing Data Sheet? Can we suggest to just keep it very simple? A simple Pricing Data Sheet with the main items numbers and description with a total amount per main item at the end. To have seen in bidder conference what Canada is working as a Pricing Date Sheet, I believe it is maybe a too much and complicated for a bid.

Q. We are waiting for the pricing data sheets. When can we have them?

Q. Will a pricing data sheet be made available soon?

A. The Pricing Data Sheet has been changed to make it simpler and accommodate the shipyards' requests. This is now being uploaded on Buy and Sell.

**BB) Questions related to Annex A of Solicitation Document**

**L-21 Seatel TVRO and Vessel Link Antenna Installation:**

Q. We need to know the type of cable and lengths to provide in items 3.4.7, 3.4.8, 3.5.6 and 3.5.7

A. Shipboard approved, class approved cables, AC 3C 1.5 mm<sup>2</sup> and DC 2C 2.0 mm<sup>2</sup>. Lengths: 3.4.7 – 30 m, 3.4.8 – 30 m, 3.5.6 – 20 m, 3.5.7 – 20 m.

**L-19 : Alarm and Monitoring System Upgrade:**

Q. Is the work described in 3.1.1.2 to 3.1.1.6 included in the 140 hour allowance or must be added in

excess?

A. The requirements from 3.1.1.2 to 3.1.1.6 do not get covered by the 140 hours. They should be quoted by the bidder as separate.

**L-07 Gyrocompass Upgrade :**

Q1. Who provides RS422 Data Distribution Unit # 74850?

A1. An existing unit will be re-used that is mentioned in 3.2.4 Equipment Removal

Q2. Are the cables to be supplied to 2.4.6 per vessel or for both vessels?

A2. The Contractor to supply cables as per 2.4.6 for each vessel.

Q3. The cables at 3.3.22, 3.3.8 and 3.2.17 are included in the quantities at 2.4.6?

A3. 3.3.22 – Yes, they are included in quantities, per vessel

3.3.8 – No, these cables are to be re-routed

3.2.17 – Yes, they are included in quantities, per vessel

**L-06 Wire Transit Repairs:**

Q. Is the photo folder mentioned in 3.2.1 available? Otherwise what obstructs that we must consider in 3.3.1

A. The photos for the Cygnus have been uploaded to the share point server, the link for which was sent to all the shipyards in early December 2020.

There are no photos available of the Cape Roger to include.

**L-05 Main Switchboard Breakers Inspection:**

Q. We need to know the amperage of the 10 circuit breakers

A. The amperage of the circuit breakers are now reflected in the amendment.

**HD19 Thru Hull Fittings – CCGS Cape Roger Only:**

Q1. What are the diameters / lengths of the shell fittings at 3.1.1?

A1. A chart is added with the information and this is now reflected in the amendment.

Q2. Are they all accessible in the compartments or are they in tanks?

A2. All are accessible from the vessels' spaces. No tank entry is required.

Q3. Plan / photo available? 2 or 4 hull supports / stiffeners?

A3. A chart is added with the information and this is now reflected in the amendment.

Q4. Insulation to consider? What is the footprint or the equipment to be removed / protected for access to the work? Is the plating insulated in line with the fittings and plating supports to be replaced?

A4. Contractor to bid as if there was no insulation fitted. Any insulation to be removed/replaced will be addressed via PSPC 1379 action.

#### **HD-18 Sea Connection and Storm Valves**

Q. 3.1.10 The Contractor must be responsible for any leaks detected during testing of overhauled valve and repaired on their own cost. Testing will be done in the shop or after installation? Due to the age of the ship, contractor may not be able to source repair kits for the butterfly valves. Repair might be by replacing.

A. Valves must be bench tested in the shop prior to installation. If the Contractor is not able to source repair kits for existing butterfly valves a PSPC 1379 will be raised to cover the cost of new valves. This is reflected now in the amendment

#### **HD-17 Bilge Keel Fabrication and Install – CCGS Cape Roger Only**

Q. Is the plating insulated in the engine room of couple 30-39 and in the refrigeration / wastewater treatment room couple 56 forward to the right of the hot works for the removal / installation of the new anti-roll keels?

A. Contractor to bid as if there was no insulation fitted. Any insulation to be removed/replaced will be addressed via PSC 1379 action.

#### **HD-16 Hull Plate and Frame Repair:**

Q. Which of the 2 vessels does this damage to the hull of fr31-33 apply to?

A. We know that this damage exists on the Cape Roger, however we would like this bid for both vessels in the event we find damage on the Cygnus after inspection.

If no damage on the Cygnus, a credit can be applied using PSPC 1379 action.

#### **HD-13 Superstructure Steel Replacement and Painting:**

Q. We must know the location of the steel plate in item 3.1.9 to be able to bid

A. There is no known wasted plate at this time and is included in the event that wasted plate is found during blasting.

#### **HD-09 Transverse Bow Thruster Overhaul:**

Q. The photo of the power pack does not give any information about the pump inside. Need the

specification of the pump mentioned in 3.1.19 to evaluate the work.

A. Specifications - Pump: 9.7 Ltr/min, Operating pressure: 38 Bar, RPM: 1200, Make: Vickers, Model: GPC-2-8-E3R-10

#### **HD-01 Services :**

Q. What are the FSRs required for the tests in item 3.1.19? Are these hourly budgets included in their respective allocation?

A. The FSR's required during seatrials are :

1. Main Engine Overhaul FSR
2. Madsen Diesel FSR
3. Wartsila Propulsion (shaft, CPP and Pedestal Bearing)
4. Electrical FSR performing alternator overhauls.
5. Contractors Representatives
6. ABS Class Surveyors

These hours are not included in the respective allowances.

#### **H-50 Grey and Black Water Piping Replacement and H-56 Fire Main Piping Replacement:**

Q. Can you identify the type of material and nomenclature to use?

Q. H-50 - Can We have a material list? A material list will ensure we have everything captured to estimate the system.

A. The lengths of the pipes have been mentioned in an earlier amendment. Material Specification uploaded to Sharepoint.

The material for H-50 and H-56 will be Seamless Steel Pipe, galvanized dipped after fabrication. This is reflected now in the amendment.

#### **H-51 Fuel Piping Replacement :**

Q1. Does the work only take place in the engine room as mentioned in 3.2.1?

A1. Yes, this fuel piping is only located in the Engine Room

Q2. Can We have a material list? A material list will ensure we have everything captured to estimate the system

A2. The lengths for the pipes have been mentioned in an earlier amendment. Material Specification is uploaded to the share point server, the link for which was sent to all the shipyards in early December 2020. Piping Material: Seamless steel pipe- Black 1-1/4"- and smaller Schedule 80, 1-1/2"- and larger Schedule 40. This is reflected now in the amendment.

#### **H-50 and all specification asking for galvanization for the piping:**

**Q.** Please provide what type material is to be used and information to why we need to wash and purge pipes that are being galvanized.

**A.** All pipes to be galvanized must be Seamless Steel (sch 40 or sch 80) as per the changed requirement. Pipes must be washed and purged prior to galvanizing to remove any impurities/dirt that may affect the galvanizing process.

**H-49 - Domestic water system piping replacement:**

**Q.** Can We have a material list? A material list will ensure we have everything captured to estimate the system.

**A.** Material Specification is uploaded to the share point server, the link for which was sent to all the shipyards in early December 2020.

**H-49 Domestic water system piping replacement & H-45 Hot Water System Piping Replacement**

**Q.** The pipes have to be washed with hot water and alkaline solution even if it is super-chlorinate?

**A.** Yes, the pipes still have to be washed with hot water and alkaline solution.

**H-48 Sea Water Piping Replacement:**

**Q1.** The French and English estimate differ for the type of material to be used, please confirm.

**A1.** The material used is: Seamless steel pipe - Galvanized after fabrication. 1-1/4"- and smaller Schedule 80, 1-1/2"- and larger Schedule 40. This is now reflected in the amendment.

**Q2.** Can We have a material list? A material list will ensure we have everything captured to estimate the system

**A2.** Seamless steel pipe- Galvanized after fabrication. 1-1/4"- and smaller Schedule 80, 1-1/2"- and larger Schedule 40. See picture of material specification uploaded to Sharepoint Folders. Pipe sizes and lengths were provided in an earlier amendment.

**H-47 - Bilge and Ballast System Piping Replacement**

**Q.** Can We have a material list? To estimate the entire system off of the DWG, will not accurately capture all the fittings needed

**A.** Seamless steel pipe- Galvanized after fabrication. 1-1/2"- and smaller Schedule 80, 2"- and larger Schedule 40. This is now reflected in the amendment. See picture of material specification uploaded to Sharepoint Folders.

**H-46 - Fresh Water Cooling Piping Replacement,**

**Q.** Can We have a material list? A material list will ensure we have everything captured to estimate the system. All the fittings, probes, etc. would be captured. What kind of chemicals are in the fresh water

coolant system? How much volume?

A. Seamless steel pipe- Galvanized after fabrication. 1-1/4"- and smaller Schedule 80, 1-1/2"- and larger Schedule 40. This is now reflected in the amendment. The lengths and sizes for the pipes were mentioned in an earlier amendment. The volume and chemicals for the engines systems was mentioned in an earlier amendment too. See picture of material specification uploaded to Sharepoint Folders.

#### **H-45 - Hot Water System Piping Replacement**

Q1. Can We have a material list, it is very difficult to estimate with much accuracy with a single line drawing. Given a material's list, especially with the copper Nickel, we can work with the single line drawing and do a cost. Do you ave a sketch on your penetrations so we can price what material is used?

A1. There are various penetrations used onboard the ships. CG will accept ABS Class approved penetrations. 2 Pictures of current penetrations have been uploaded to the share point server, the link for which was sent to all the shipyards in early December 2020. Material Specification also uploaded to the Sharepoint server.

Q2. Can you confirm which of the premises named in the French or English specifications is the right one to consider, front or rear?

A2. Request that the bidder please specify the exact line item that is being referred to, as it is not clear to us.

#### **H-45 à H-51 et H-56 - Various Piping Systems :**

Q1. Cannot quote from piping diagrams. Are as-built plans and material lists available?

A1. The lengths for the pipes and material have been provided in this and previous amendments. Also, the material specifications have been posted on sharepoint server.

Q2. Need to know the quantities of valves, penetrations, strainers and filters, insulated piping?

A2. CG does not have a known quantity for valves, penetrations, filters etc.

Q3. Is CCG open to creating allowances to cover these items in the absence of the requested information?

A3. No allowance can be created for this item.

#### **H-34 Bridge Deck Steel Renewal – CCGS Cape Roger Only:**

Q. Can you specify the type of NDT for this item?

A. Dye Penetrant testing is required for this item

### H-32 Aft Deck Crane Install – CCGS Cygnus Only:

Q. In the interests of fairness for all bidders, is it possible to leave the existing bridge crane in Newfoundland or to start again at the end of the contract to avoid the cost of returning the crane specified in item 3.1. 3?

A. CG will make arrangements to return the removed crane back to CG Base in St John's. Contractor must bid on removing from vessel and providing crane to lift (may be two different lifts) on CG arranged transport. This is reflected now in the amendment.

### H-31 Aft Deck Crane Install – CCGS Cape Roger Only and H-32 Aft Deck Crane Install – CCGS Cygnus Only:

Q1. Need to know the quantities and types of fluids / oils for the 2 cranes.

A1. A table outlining the different mineral oils that can be used in the cranes is being given below. Please allow for 250 Litres of fluid per crane.

Hydraulic Oils	
Manufacturer	Mineral Oils
AGIP	Arnica32
ARAL	Vitam VF32
AVIA	Avia Fluid HVI 32
CASTROL	Hyspin AWH 32
DEA	Aston HVLP 32
FINA	Hydran TSX32
FUCHS	Renolin B HVI32
MOBIL	Mobil DTE 13M
OMV	HLP M32
SHELL	Tellus T32
TEXACO	Rando HDZ32
TOTAL	Equivis ZS32
VALVOLINE	Ultramax HVLP32
WINTERSHALL	Wiolan HVG32

Q2. Possible to see images of the ceiling / walls of the premises to the right of the deck openings to be cut out?

A2. Cape Roger: The pictures for what is visible from the outside deck have been uploaded to the share point server, the link for which was sent to all the shipyards in early December 2020.

The crane base will be over top of the escape hatch space, back deck, and smoking room.

Cygnus – Pictures have been uploaded to the share point server, the link for which was sent to all the shipyards in early December 2020.



Q3. In the interests of fairness, can we create an allowance to cover the expenses of the representative of Palfinger Marine Crane?

A3. Due to there being Palfinger Representatives available across the country, CG will not be adding an allowance for the Palfinger FSR.

#### **H-31 Aft Deck Crane Install – CCGS Cape Roger Only:**

Q. Need to know the type / model / length of the power cable in item 3.1.3

A. All cables must be Marine Approved Cable and Contractor must bid on supplying and installing 20m of each cable for the power requirements as listed below.

Main Power Supply to the HPU Starter Panel = 460Vac/3Ph./60Hz.

Secondary Power supply to the HPU starter Panel = 120Vac/1Ph./60Hz.

Instrument Power Supply to Crane operator console (FLVK) & Crane = 24Vdc.

#### **H-23 :**

Q. Can you confirm that the item is indeed cancelled, it does not appear in the English quote.

A. Confirm that this item is indeed cancelled

#### **H-21 Gearbox and Clutch Survey:**

Q. What is the type / grade / amount of oil to provide in item 3.1.10?

Q. Gearbox & clutch overhaul: Please provide the required amount of oil/coolant to be disposed/purchased and the type to be purchased.

A. We have uploaded the lubrication chart to the share point server, the link for which was sent to all the shipyards in early December 2020, as mentioned in the previous amendment. This lubrication chart has the oil type/ grade and amount used in the system.

#### **H-20 Ballast Tanks Inspection:**

Q1. What are the total areas of the tanks to be considered?

A1. The Contractors Engineering Dept must calculate the area based on information provided.

Q2. Is a stripe coat required? Can you confirm that only one coat will be applied?

A2. The Contractor must apply one coat of Amercoat 240 at 6-8Mils DFT, apply one stripe coat to all welds and sharp edges and apply one final coat 6-8 Mils DFT to entire area. This is reflected now in the amendment.

### **H-17 Ventilation Trunk Cleaning:**

Q. Need Cygnus ventilation duct plans

A. We have 2 drawings and they have been uploaded to the share point server, the link for which was sent to all the shipyards in early December 2020.

### **H-16 Refrigeration System Annual Leak Testing:**

Q. Can you allocate an allowance to cover the costs of repairing leaks and reloading gas still unknown in item 3.1.2

A. Any leaks detected and the related repairs, including adding gas will be covered via PSPC 1379 action. This is now reflected in the amendment.

### **H-10, H-11, H-13 and H-18 – Various :**

Q. Is all the work described in these elements covered by the allowances in hours granted H-18 3.1.7, H-13 3.1.1.3, H-11 3.1.3 and H-10 3.1.2.2

A. All FSR work will be covered under these hourly allowances. Any additional work required by the Contractor must be bid as per the Specification. Any work arising will be covered by PSPC 1379 action.

### **H-08, H-09 et H-20 - Various**

Q. The plans / photos / videos provided do not allow the calculation of surfaces, this is the 4th request for information for this item, please provide the surfaces to be considered (m2) or the structural plans for each of the areas of bilges, tanks drinking water and ballast tanks that will allow us to perform these calculations. Our engineering department thanks you for your cooperation.

A. We have already mentioned and provided what is available with us. The Contractors Engineering Dept must calculate the m2 based on information provided.

### **H-08 Bilge Cleaning :**

Q1. What is the total area (m<sup>2</sup> or ft<sup>2</sup>) to be cleaned in the machine room?

A1. The Contractors Engineering Dept must calculate the bilge area based on information provided.

Q2. How much residual oil to pump?

A2. Contractor to bid on removing 7m<sup>3</sup> of residual oil/water mixture prior to cleaning and provide a unit cost per m<sup>3</sup> for any additional oil/water mixture required to be removed. This is reflected now in the amendment.

Any fluid removal as a result of bilge cleaning is to be The Contractors responsibility.

## **2) Modify Section 6.4 Docking Facility**

**Delete (in its entirety):**

### **6.4**

**Insert:**

### **6.4 Docking Facility**

Before contract award, the successful Bidder may be required to demonstrate to the satisfaction of Canada that the certified capacity of the docking facility, including any means or conveyance to remove the vessel from the water, is adequate for the anticipated loading in accordance with the related dry docking plans and other documents detailed in the Contract. The successful Bidder will be notified in writing and will be allowed a reasonable period of time to provide detailed keel block load distribution sketches and blocking stability considerations, along with the supporting calculations to show the adequacy of the proposed docking arrangement.

At the time of bid closing the Bidder must provide current and valid certification of the capacity and condition of the docking facility to be used for the Work. The certification must be provided by a recognized consultant or classification society and must have been issued within the past **five (5)** years.

Although a dry docking facility may have a total capacity greater than the vessel to be docked, the weight distribution of the vessel may cause individual block loading to be exceeded. Also, while the physical dimensions of a dry docking facility may indicate acceptability for docking of a specific vessel, other limitations such as spacing of rails on a marine railway, concrete piers or abutments adjoining the dry dock may, preclude the facility from being considered as a possible dry docking site and render the bid non-responsive.

At the time of bid closing, the Bidder must provide proof that they have sufficient crane capacity to lift tonnage included in Annex A as it relates to specification items.

**Refer to Annex "J1" for Deliverables/Certifications**

## **3) Modify Annex A, Multiple Sections**

### **AA) At L-05 Main Switchboard Breakers Inspection**

**Delete (in its entirety):**

#### **3.1.3**

**Insert:**

**3.1.3** Breakers requiring inspection are:

#### **3.1.3.1 CCGS Cygnus**

Stbd S/S Generator #1 Control Rm – Merlin Gerin Masterpact NW08 H1 – **Rated 800 AMPS**

Port S/S Generator #2 Control Rm - Merlin Gerin Masterpact NW08 H1 – **Rated 800 AMPS**

Main Tie Breaker Control Rm - Merlin Gerin Masterpact NW08 H1 – **Rated 800 AMPS**

Shore Power Breaker Control Rm - Merlin Gerin Masterpact NW08 H1 – **Rated 800 AMPS**

Emerg Generator Emerg Gen Rm - Merlin Gerin Masterpact NW08 H1 – **Rated 800 AMPS**

### **3.1.3.2 CCGS Cape Roger**

Stbd S/S Generator – **Schneider Masterpact NW08H2 800 AMP**

Port S/S Generator – **Schneider Masterpact NW08H2 800 AMP**

Emerg Tie – Westinghouse, Series C, Type KD – **400 AMP**

Emerg Feed Back – Westinghouse, Series C, Type KD - **400 AMP**

Shore Power Breaker – Cutler Hammer Series C, Type KD – **300 AMP**

**EMERGENCY GENERATOR BREAKER- Schneider Masterpact NW08H2 800 AMP**

## **BB) At HD-20 Tailshaft, Bearings, Propeller And Mechanisms**

**Delete (in its entirety):**

### **3.4.2**

**Insert:**

**3.4.2** Clearance measurements are to be taken on the propulsion shafting in way of the forward and aft shaft bearings. Shaft surface finishes in way of the bearings must be checked to ensure a surface texture finish of N4 or better as per ISO 1302:2002. The Contractor shall include in the bid, a total of 32 hours for the purpose of polishing with an hourly rate thereafter for the purpose of adjustments.

Adjustments will be made through 1379 action upon the presentation of invoices.

**3.4.2.1** The Contractor must clean the sterntube of any sludge or debris that may be present. Forward and aft sterntube bearings must be cleaned, measured and inspected by CG TA and ABS Class Surveyor. Measurements must be taken on the bore of each bearing in the vertical and horizontal direction at four equal points along the length of the bearing to check for ovality and uneven wear patterns.

**3.4.2.1.1** The Contractor must bid on removal of existing Thordon Bearings and cleaning of the sterntube/chockfast in these areas. The Contractor must bid on installing new CG Supplied Thordon Bearings if required after inspection. Any machining required on the CG Supplied Bearings will be adjusted via PSPC 1379 action.

## **CC) At HD19 Thru Hull Fittings – CCGS Cape Roger Only:**

**Delete (in its entirety):**

### **3.2**

**Insert:**

**3.2 Location and other details**

**3.2.1** See chart in section 3.1.1 and 3.1.2 for location

**3.2.2** See chart below for various details

Location	Pipe Size	Supports	Length	Remarks
<b>3.1.1.1</b> Grey Water Overboard	2.5"	4	6"	
<b>3.1.1.2</b> Sewage Overboard	3.5"	4	5.5"	Support close to FW tank
<b>3.1.1.3</b> Port Aft Scupper	3.5"	4	6"	
<b>3.1.1.4</b> Stbd Aft Scupper	3.5"	4	6"	
<b>3.1.1.5</b> Port Fwd Scupper	3"	Not verified	Not verified	
<b>3.1.1.6</b> Stbd Fwd Scupper	3"	Not verified	Not verified	
<b>3.1.1.7</b> Port Bilge pump overboard	3"	4	6"	
<b>3.1.1.8</b> Port generator overboard	3"	4	6"	
<b>3.1.1.9</b> Stbd generator overboard	3"	4	6"	
<b>3.1.1.10</b> Stbd Gearbox overboard	2"	4	8"	Under generator deck
<b>3.1.1.11</b> Port RO Overboard	3"	4	6"	
<b>3.1.1.12</b> Stbd RO	3"	4	6"	

Overboard				
<b>3.1.1.13</b> Stbd OWS Overboard	2"	4	7"	
<b>3.1.1.14</b> Stbd bilge injection overboard -	5"	4	7"	Support close to sea chest
<b>3.1.1.15</b> Stbd boiler blowdown	1.5"	4	6"	
<b>3.1.1.16</b> Port ME overboard	8"	4	15.5"	Under generator deck
<b>3.1.1.17</b> Stbd ME Overboard	8"	4	15.5"	Under generator deck
<b>3.1.1.18</b> Bilge/Ballast Pump Overboard	5"	4	7"	
<b>3.1.1.19</b> General service pump overboard	5"	4	5"	

#### DD) At HD-18 Sea Connection and Storm Valves

**Delete (in its entirety):**

##### 3.1.9

**Insert:**

**3.1.9** All valves must be reassembled with Contractor supplied new gaskets, valve stem packing, and nuts of original material, and blanks and plugs, if any used by the Contractor must be removed. Valves must be bench tested in the shop prior to installation. If the Contractor is not able to source repair kits for existing butterfly valves a PSPC 1379 will be raised to cover the cost of new valves.

#### EE) At H-56 Fire Main Piping Replacement

**Delete (in its entirety):**

##### 3.1.6

**Insert:**

**3.1.6** The Contractor must replace all fire main piping from fire pumps located in Engine Room to all spaces with fire main supply as per attached drawings. The length of new piping to be taken as total 750

feet for bidding purpose and the contractor must bid a unit cost per linear ft. Fire Main Material: **Piping must be seamless steel. Galvanized after fabrication. 2" and larger is Schedule 40 and 1-1/2" and smaller is Schedule 80 pipe.** Pipe sizes and lengths: 1½" –200 ft; 2"-150 ft; 2½"-200 ft; 3"-200 ft. Any necessary adjustments will be through PSPC 1379 action.

#### **FF) At H-51 Fuel Piping Replacement**

**Delete (in its entirety):**

**3.1.6**

**Insert:**

**3.1.6** All new piping, fitting and penetration must be supplied by The Contractor and all sizes to be as per original systems. Piping must be seamless steel. **1-1/4"- and smaller Schedule 80, 1-1/2"- and larger Schedule 40.** The length of new piping to be taken as total 700 feet for bidding purpose and the contractor must bid a unit cost per linear ft. Pipe sizes and lengths: ½" –50 ft; ¾" -100 ft; 1"-200 ft; 1½"-100 ft; 2"-250 ft . Any necessary adjustments will be through PSPC 1379 action.

#### **GG) At H-50 Grey and Black Water Piping Replacement**

**Delete (in its entirety):**

**3.1.6**

**Insert:**

**3.1.6** The Contractor must replace all grey and black water piping from fixtures located in the accommodations to the point of connection to either the sewage treatment plant or an overboard discharge valve. **All Piping must be Schedule 40 seamless steel. Galvanized after fabrication.** The length of new piping to be taken as total 4000 feet for bidding purpose and the contractor must bid a unit cost per linear ft. Pipe sizes and lengths: 1¼"-1000 ft; 2"-750 ft; 3"-500 ft; 3½"-250 ft; 4"-500 ft; 5"-500 ft; 6"-500 ft. Any necessary adjustments will be through PSPC 1379 action

#### **HH) At H-48 Sea Water Piping Replacement**

**Delete (in its entirety):**

**3.1.6**

**Insert:**

**3.1.6** All new piping, fitting and penetration must be supplied by The Contractor and all sizes to be as per original systems. The length of new piping to be taken as total 1000 feet for bidding purpose and the contractor must bid a unit cost per linear ft. **Piping must be seamless steel. Galvanized after fabrication. 1-1/4"- and smaller Schedule 80, 1-1/2"- and larger Schedule 40.** Pipe sizes and lengths: 1½" –175 ft; 2"-125 ft; 2½"-125 ft; 3"-300 ft; 5"- 250ft; 8"-25 ft. Any necessary adjustments will be through PSPC 1379 action.

#### **JJ) At H-47 Bilge and Ballast System Piping Replacement**

**Delete (in its entirety):**

**3.1.6**

**Insert:**

**3.1.6** All new piping, fitting and penetration must be supplied by The Contractor and all sizes to be as per original systems. Piping must be seamless steel. **Galvanized after fabrication. 1-1/2" - and smaller Schedule 80, 2" - and larger Schedule 40.**

**KK) At H-46 Fresh Water Cooling Piping Replacement**

**Delete (in its entirety):**

**3.1.6**

**Insert:**

**3.1.6** All new piping, fitting and penetration must be supplied by The Contractor and all sizes to be as per original systems. Piping must be seamless steel. **Galvanized after fabrication. 1-1/4" - and smaller Schedule 80, 1-1/2" - and larger Schedule 40.** The length of new piping to be taken as total 600 feet for bidding purpose and the contractor must bid a unit cost per linear ft. Pipe sizes and lengths: 1/2" –100 ft; 1" -100 ft; 1 1/4" -150 ft; 3" -100 ft; 4" - 150ft. Any necessary adjustments will be through PSPC 1379 action.

**LL) At H-32 Aft Deck Crane Install – CCGS Cygnus Only:**

**Delete (in its entirety):**

**3.1.3**

**Insert:**

**3.1.3** The Contractor must bid on removing the crane and all its parts from the vessel and providing crane to lift (may be two different lifts) on CG arranged transport. CG will make arrangements to return the removed crane back to CG Base in St John's

**MM) At H-20 Ballast Tanks Inspection**

**Delete (in its entirety):**

**3.1.8**

**Insert:**

**3.1.8** The Contractor must bid on coating tanks as follows:

Fore Peak Tank, Trim Tank, Aft Peak Tank, #1 DB Tanks (P&S) and #3 DB Tanks (P&S)

**The Contractor must apply one coat of Amercoat 240 at 6-8Mils DFT, apply one stripe coat to all welds and sharp edges and apply one final coat 6-8 Mils DFT to entire area.**

**NN) At H-16 Refrigeration System Annual Leak Testing**

**Delete (in its entirety):**

**3.1.2**

**Insert:**

**3.1.2** The Contractor must provide the services of a certified refrigeration contractor to perform the annual leak testing and oil changes on all systems listed in Part 2 – References. If any leak is found, the same to



be informed to the CG TA and rectified as required, and gas charged in the system also as required. Any leaks detected and the related repairs, including adding gas will be covered via PSPC 1379 action.

#### **PP) At H-08 Bilge Cleaning**

**Delete (in its entirety):**

##### **3.1.3**

**Insert:**

**3.1.3** The Contractor must power wash the main engine room bilge and shaft tunnel. All areas must be high pressure (3000 psi minimum) hot water washed and degreased. The Contractor to bid on removing 7m<sup>3</sup> of residual oil/water mixture prior to cleaning and provide a unit cost per m<sup>3</sup> for any additional oil/water mixture required to be removed for adjustment via PSPC 1379 action. Any fluid removal as a result of bilge cleaning is to be The Contractors responsibility.

#### **4) Upload Documents Mentioned in 1) Above**

File name on Buyandsell.gc.ca: Pricing Data Sheets

**End of Solicitation Amendment #12**