

Bidders Conference Minutes

Annual Drydocking CCGS Henry Larsen

March 2, 2020

Attendees:

Colleen Dalton	Supply Specialist	PSPC
George Penney	Contracts Manager	NewDock
Mark Roebbothan	Estimating Manager	NewDock
Steve McInnis	Chief Engineer	CCG
Joseph D'Achille	Vice President	Heddle Shipyard
Mike Chaisson	VMM	CCG
Neil MacDonald	Captain	CCG
Geoff Legge	Chief Officer	CCG
Todd Porter	E&I	CCG

SPECIFICATION ITEMS

Contract related

- Asked for reduction in 9000 hrs, or fixed hourly rate. PSPC explained that the unscheduled hours are based on historical data from past refits of similar work. PSPC looked at current postings on the Buy and Sell for dry dockings and no contracting officers have included a minimum charge out rate.
- Extension of closing date asked for. Closing will be extended to March 20th.
- Refit start date pushed to April 9th due to crew change on 8th

HD-01 :PRODUCTION CHART AND SUBCONTRACTOR ALLOWANCES

No Comment

HD-02 : PRE-REFIT SAFETY MEETING

No Comment

HD-03: SERVICES

Removal of ~~This will include hazardous materials.~~ In the following paragraph in 0.9 Contractor to include garbage removal every day for the length of contract (108 days)with day rate for adjustment purposes.

- .9 Garbage Removal: Garbage containers of 215 cu. ft. (6 m³) minimum capacity shall be provided and used. Contractor to remove garbage from work areas on the ship on a daily basis. This includes all sludge and scale from tank cleaning. The Contractor is responsible for provision of suitable containers and any costs associated with waste disposal regulations that may be in place. **This will include hazardous materials.** The Contractor is to advise of any such provincial or federal regulations or practices at the Pre-Refit Meeting.

HD-04 : SEA TRIALS

3.2 Changed as highlighted

- 3.2** PWGSC Acceptance form 1205 will indicate any deficiencies prior to **found during the** sea trials **to be updated to include any defects found thereafter.** Final payment will not be completed until the deficiencies are addressed.

HD-05 : DRYDOCKING

3.2 Changed as highlighted

- 3.2** Drydocking is to take place **within 7 days immediately** upon the ship arriving at the shipyard to commence refit.

HD-06 : DOCKING PLUGS

No Comment

HD-07 : HULL BUTTS AND SEAMS

No Comment

HD-08 : HULL COATING

Contractor to include cost of 4 lead tests

Contractor to include \$50,000.00 allowance for lead abatement including waste disposal

HD-09 : SEA WATER VENT PIPE REPLACEMENTS

Contractor to include \$10,000.00 allowance for asbestos abatement to be adjusted as required by 1379 Sections 3.13 and 3.14 amended as follows

- 3.1.3.** The contractor will note that galvanizing products are not acceptable in diesel fuel supply systems. The contractor will ensure that the galvanizing is only applied to the internals of the new pipes. **In this case, the pipe sections inside the diesel fuel tanks will have Galvatech 2000 applied to the internals of the pipes. The Galvatech 2000 will be applied as per the manufacturer's instructions including surface preparation. For clarity, the external surface of the vent pipes and associated fittings are to not have any coating applied to the external surfaces. For clarity, in respect to the sea water vent pipes that pass through the diesel fuel tanks, all sections other than noted in 3.1.3 will be hot dipped galvanized.**

3.1.4. The contractor will note that sea water vent pipes passing through the port and stbd sea chests are to only have the galvanizing applied to the inside of the pipes. The external area of the pipes will be coated as per the sea bay and sea chest specification. The contractor will ensure that the galvanizing is only applied to the internals of the new pipes as they pass through the sea chests. In this case, the pipe sections inside the diesel fuel tanks will have Galvatech 2000 applied to the internals of the pipes. The Galvatech 2000 will be applied as per the manufacturer's instructions including surface preparation. For clarity, the external surface of the vent pipes and associated fittings are to be coated as per the sea chest coating spec including surface preparation and coating application and the contractor will price this spec item accordingly. For clarity, in respect to the sea water vent pipes that pass through the sea chests, all sections other than noted in 3.1.4 will be hot dipped galvanized.

HD-10: POTABLE WATER TANKS

3.17 Contractor is to note that Easyflex grey is NOT compatible with potable water systems.

HD-11 : VOID SPACES

No Comment

HD-12 : AUXILIARY MACHINERY SPACE TANK TOP COATINGS

Contractor to include \$6,000.00 for asbestos abatement to be adjusted by 1379.

Contractor to include \$20,000.00 for lead abatement

HD-13 : FUEL OIL AND MISCELLANEOUS TANK SURVEYS

3.3 Contractor to remove and dispose of 4m3 of residue ~~entire contents of the tanks~~. For bidding purposes quote ~~on entire volume of tanks~~. 4m3 with a price per m3 to be adjusted by 1379 as required.

HD-14 : BALLAST TANK INSPECTION AND COATING

1.2 The Contractor shall ~~bid on the removal of the thermal fluid pipes running through the aft peak tank~~, remove the penetrations through the deck in the steering gear compartment and place an insert in the tank top. The contractor shall install blind flanges to the valves to prevent accidental opening of these and spilling in the future.

1379 will be raised for lead testing and abatement, if required.

HD-15 : SEA BAY/SEA CHEST ANODES

3.9 New anodes and panel are to be installed under the direction of a Service Representative from EMCS Industries Ltd. The service representative will be the responsibility of the Contractor. Contractor to include an allowance of \$5000 for travel and per diems for the FSR, to be adjusted by 1379 upon proof of invoice. Contractor to also include 5, 8hr days on site with 4 days travel at the contractors posted rates. All hours to be supported by signed timesheet .

HD-16 : INSTALLATION OF SPLIT AIR CONDITIONERS

Contractor to include \$17,000.00 allowance for the purchase of the Mini-splits with proof of invoice to be adjusted to actual cost. Brand and model specifications to be approved by CCG prior to purchase.

Contractor to include \$5,000.00 for lead abatement to be adjusted by 1379 as required with proof of invoice

Section 815 Existing units to be retained as is. Delete the following

~~Removal surplus equipment~~

~~Remove existing chilled water fan coil units from 405 radio room, 406 electronics room, and 403 ICS room~~

~~Cap off chilled water pipes, generally at deck below and remove chilled water piping in spaces listed~~

HD-17 : MULTIBEAM INSTALL

120.6 Safety

- The following includes a list of locations which must be tested for lead content. ~~The contractor must also include the price of lead paint abatement in these area~~ Contractor to include an allowance of \$50,000 to cover the cost of lead abatement to be adjusted by 1379 as required with proof of invoice:
- The following areas may contain asbestos and must be tested prior to commencing work in the area. ~~The contractor must also include the cost of asbestos abatement in these areas.~~ Contractor to include an allowance of \$20,000 to cover the cost of asbestos abatement to be adjusted by 1379 as required with proof of invoice:

920.1 Echo Sounder Installation – POS MV Inertial Motion Unit

- Weld a steel mounting plate to forward bulkhead ~~frame 82 of AC Chiller Compartment~~ frame 117 of the Halon Room.

HD-18 : HULL SURVEY

Remove following, ABS costs by CCG

~~3.1.1 The Contractor must engage the services of ABS to complete the work. The Contractor and its sub-contractors must hold all data derived from the work of this survey in strictest confidence and must not divulge this data and conclusions to any other third party. The surveyor employed for this particular task should have, at a minimum, 5 years of experience in such tasks and be familiar with ships of such design and structure as a dedicated icebreaker.~~

~~3.1.2 The Contractor must include an allowance of \$10,000 to cover the travel of the Classification Society. Travel and living expenses must be billed at cost without added overhead or profit. The \$10,000 allowance must form part of the overall bid, and must be adjusted by Work Arising action upon receipt of the final FSR invoice supported by copies of all related documentation to verify actual expenses.~~

HD-19 : CHAIN LOCKER SURVEY

Addition to 3.1.1 Contractor will include cost of performing 2 lead samples and pending findings asbestos abatement to be by 1379.

HD-20 : HEELING TANKS SURVEY

No Comment

HD-21 : FUEL OIL TANKS SURVEY

No Comment

HD-22 : SEABAY SEACHEST COATING

No Comment

HD-23 : BUBBLER AND FOAM PUMP PIPING REPAIR

No Comment

HD-24 : ANCHORS AND CHAINS SURVEY

Addition to 3.1 Contractor will include cost of performing 2 lead samples and include \$10,000.00 for lead abatement to be adjusted as required by 1379

H-01 : LIFEBOATS/DAVITS ANNUAL INSPECTION

Addition to 3.1

3.1 The contractor shall include an allowance of \$10000.00 to hire the Palfinger FSR. The contractor will include 100 hours of assistance to the FSR to be supported by timesheet and adjusted by 1379.

H-02 : CARGO HATCHES REPAIR

Heaters will be CCG supply

3.1.13 The contractor shall supply and replace the heating element laying around the hatch tracks to prevent ice from building up and preventing the hatch from operating properly.

H-03 : HELICOPTER FUELING SYSTEM MAINTENANCE

3.4 Silica gel will be supplied by CCG.

H-04 : LIFERAFTS

No Comment

H-05 : ACCOMMODATION HVAC CLEANING

No Comment

H-06 : ACCOMMODATION WASHROOM EXHAUST DUCT CLEANING

No Comment

H-07 : GALLEY RANGE HOOD AND EXHAUST FAN TRUNKING

No Comment

H-08 : LAUNDRY DRYER EXHAUST DUCTWORK CLEANING

No Comment

H-09 : SEWAGE SYSTEM

No Comment

H-10: FIXED FM 200 AND CO2 SMOTHERING SYSTEM INSPECTION

No Comment

H-11 : HANGAR FIRE FIGHTING FOAM REPLACEMENT

Addition to 3.1.8

- 3.1.8. The new unit shall be measured for the foot print support required and beams must be welded to the existing framework in the correct location to enable securing the new system to the existing bedding. Contractor to include \$6000.00 for lead abatement to be adjusted by 1379 as required.

H - 12 : FIRE DETECTION SYSTEMS

No Comment

H-13 : SENIOR ENGINEER'S CABIN REPAIRS

No comment

E-01 : PORT AND STBD STERNSEAL

Addition to 3.1

- 3.1 Contractor is The contractor is required to provide the services of an authorized John Crane Marine Seal FSR during the disassembly and reassembly of the seal. Contractor to include \$5000.00 for FSR travel and accommodations. Contractor to include 10 days on site at the FSR posted rates. Contractor to include 2 yard workers for 10 days of assistance.

E-02 : TAILSHAFT BEARING WEARDOWN PORT AND STBD

No Comment

E-03 : PORT AND STBD SHAFT SURVEY

No Comment

E-04 : PORT TAILSHAFT PILGRIM NUT RENEWAL

- 1.8 The contractor will note that this specification item details the port tailshaft Pilgrim Nut. The condition of the stbd tailshaft Pilgrim Nut is unknown and it is possible the Tyre in that one may also fail. The contractor will include a unit cost to machine off the stbd tailshaft Pilgrim Nut should it become necessary as per the port tailshaft Pilgrim Nut.
- 1.9 Contractor to include \$126k for In-Place Machining travel, living expenses, labour and freight to be adjusted by 1379 on proof of timesheet and invoice. Contractor to include the cost of 2 personnel for 14 days for assistance to the Inplace Machining FSR. Contractor must include labour for shipping equipment into and out of vessel.

E-05: HANGER UNIT HEATER REPLACEMENT

No issues

E-06 : DIESEL FUEL PURIFIER PIPING MODIFICATION

No Comment

E-07 : RELIEF VALVE CERTIFICATION

Amended spec given to contractor to include 8 new relief valves for a total of 25

E-08: ANNUAL REFRIGERATION SYSTEMS INSPECTION

No Comments

E-09 : MACHINERY SPACE BILGE CLEANING

In 2.3 Remove **Area of Auxiliary Machinery Room 202 m2**

E-10 : THERMAL FLUID UNITS MAINTENANCE

Remove following

- 1.1** The intent of this specification is to service the 2 Fulton thermal fluid units. **The contractor will be responsible for all cost associated with the labor/ travel and accommodations portion of the overhaul.** All parts owner supply

E-11 : BUBBLER COMPRESSOR INSTALL

- 3.8** The contractor is to note that lead abatement will be required for all steel that is cut or paint coatings removed from steel. **Removed steel that does not have coating disturbed does not have to be abated. The contractor will include the cost of abatement in their bid. Contractor will include a \$10,000.00 for lead abatement to be adjusted by 1379.**
- 3.16** The contractor is to provide new MCT Brattburg transit blocks for all cabling passing through bulkheads. **There are 4 cables passing through 7 bulkheads P102-3, P102-4 and 2 ethernet cables.**
- 3.21** The contractor will note that the new power feed for 4160volt motor will enter at the top of the motor. The contractor is supplying this cable. **The ~ cable length is 20 meters per motor for a total of 40 Meters.**

E-12 : PORT WINDLASS BRAKE BAND REPAIR

No Comment

E-13 : BUBBLER CHECK VALVES REPLACEMENT

No Comment

E-14 : BUBBLER VALVE OVERHAUL

No Comment

L-01 : MACHINERY SPACE FAN OVERHAULS

Remove Just the Incinerator exhaust fan overhaul

Incinerator Compartment Exhaust Fan (MCC# 4, P507-6)

Location: Frame 83, Port , Navigational Bridge Deck

Make / Supplier : Novenco / Stork Werkspoor

Type: Tube Axial (TEAO)

Fan Diameter: 463mm

Static Pressure: 20 mm W.C.

Volume: 57 m³/min

Motor: Hawker Siddeley (TEAO)

¾ HP @ 575/3/60Hz/1800 – 1200 RPM

Frame: 145T

Serial #: 581108-3

Bearings: Drive end (6205 2RS) Non-Drive end (6203 2RS)

L-02 : SIPROTEC RELAY TESTING

3.4 The contractor will be responsible to cover all costs associated with Siemens services. Contractor to include \$3000.00 in travel and accommodation's costs to be adjusted by 1379 on proof of invoice¹

L-03 : TV DISTRIBUTION REPLACEMENT

All cables are CCG supplied.

L-04 : SEATEL TVRO INSTALL

No Comment

L-05: PRE-MAGNETIZATION TRANSFORMERS INSTALL

Amended spec introduced at bidders conference. Both transformers now to be located on ports side, NGR resistors relocated and Card test panel to be removed

L-06 : STEERING GEAR MOTOR OVERHAULS

No Comment

Pricing Data Sheet

CCGS Henry Larsen

Item	Description	Unit Cost	Total Cost (inc allowances)
HD-01	Production Chart		\$
HD-02	Pre-Refit Safety Meeting		\$
HD-03	Services		\$
	.1 Berthing		\$
	.2 Gangways (2 in total)		\$
	.3 Potable Fresh Water: 8 m3 x 108 days x \$ _____/ per m3		\$
	.4 Fire Main		\$
	.5 Cooling Water Connections		\$
	.6 Sewage Connection		\$
	.7 Oily Bilge Water: 20m3 x \$ _____/per m3		\$
	.8 Electrical Shore Power: 8,100 kwh x 108 days x \$ _____/per kwh		\$
	.9 Garbage Removal : 108 days x \$ _____/day rate		\$
	.10 Deck Protection		\$
	.11 Cranage: 50 lifts x \$ _____/per lift		\$
	Total cost for services listed in HD-03		\$
HD-04	Sea Trials		\$
HD-05	Drydocking		\$
HD-06	Docking Plugs		\$
HD-07	Hull Butts and Seams		\$
	3.4 Unit cost for gouging: 1,000 linear feet x \$ _____/ cost per linear feet		\$
	3.4 Unit cost for grinding: 1,000 feet x \$ _____/cost per feet		\$
	3.5 Unit cost for bead feet of weld: 5,000 bead feet x \$ _____/ cost per bead feet		\$
	3.9 Unit cost for NDT tests: 5 x \$ _____/per test		\$
HD-08	Hull Coating		\$
	3.11 Unit cost per m2 blasting bare steel: 810 m2 x \$ _____/cost per m2		\$
	3.21 Unit cost for touchup: 810 m2 x \$ _____/cost per m2		\$
	4.3 Unit cost for manlift : 10 hours x \$ _____/hourly rate		\$
	3.4 Cost for shelter		\$
	Cost for 4 lead tests: 4 x \$ _____/per test		\$
	Allowance for Lead Abatement		\$50,000.00
	Markup on allowance (max 10%)	_____ %	\$

Item	Description	Unit Cost	Total Cost (inc allowances)
HD-09	Sea Water Vent Pipe Replacements		\$
	Allowance for asbestos abatement		\$10,000.00
	Markup on allowance (max 10%)	_____ %	\$
HD-10	Potable Water Tanks		
	3.1.1 Unit cost for power tooling & coating: 60 m2 x \$ _____/cost per m2		\$
HD-11	Void Spaces		\$
	3.1.6 Unit cost for blast/coating: 745m2 x \$ _____/cost per m2		\$
HD-12	Auxiliary Machinery Space Tank Top Coating		\$
	Allowance for asbestos abatement		\$6,000.00
	Mark up on allowance (max 10%)	_____ %	\$
	Allowance for lead abatement		\$20,000.00
	Mark up on allowance	_____ %	\$
HD-13	Fuel Oil and Miscellaneous Tank Surveys		\$
	3.3 Unit cost for residue removal/disposal: 4m3 x \$ _____/cost per m3		\$
HD-14	Ballast Tank Inspection and Coating		\$
HD-15	Sea Bay/Sea Chest Anodes		\$
	3.9 Allowance for FSR (Travel and living only)		\$5,000.00
	3.9 Mark up on allowance (max 10%)	_____ %	\$
	3.9 FSR per diem rate: 5 days x 8 hr day x \$ _____/hourly rate		\$
HD-16	Installation of Split Air Conditioners		\$
	Allowance for units		\$17,000.00
	Mark up on allowance (max 10%)	_____ %	\$
	Allowance for lead abatement		\$5,000.00
	Mark up on allowance (max 10%)	_____ %	\$
HD-17	Multibeam Install		\$
	120.6 Allowance for lead abatement		\$50,000.00
	120.6 Mark up on allowance (max 10%)	_____ %	\$
	120.6 Allowance for asbestos abatement		\$20,000.00
	120.6 Mark up on allowance (max 10%)	_____ %	\$
HD-18	Hull Survey		\$
	3.4.3 Unit cost for shots: 5,000 x \$ _____/per group of 10 shots		\$
	3.4.4 Allowance for travel of the NDT Specialist		\$10,000.00
	3.4.4 Markup on allowance (max 10%)	_____ %	\$
	3.5.3 Unit cost for removal of deck head panels: 200m2 x \$ _____/cost per m2		\$
	3.5.3 Removing and re-installing misc items in deckhead panels at 100 per.		\$
	3.5.6 Unit cost for coating renewals: 50m2 x \$ _____/cost per m2		\$

Item	Description	Unit Cost	Total Cost (inc allowances)
	3.5.7 Unit cost for removal & disposal: 50m3 x \$ _____/cost per 10m3		\$
HD-19	Chain Locker Survey		\$
	3.1.7 Unit cost of bare steel: 75m2 x \$ _____/cost per m2		\$
HD-20	Heeling Tanks Survey		\$
HD-21	Fuel Oil Tanks Survey		\$
HD-22	Sea bay /Sea chest Coating		\$
	3.1.2 Unit cost for repair/coating: 40m2 x \$ _____/cost per m2		\$
	3.1.6 Unit cost for SS countersunk screws supply/install : 75 x \$ _____/cost per screw		\$
HD-23	Bubbler and Foam Pump Piping Repair		\$
HD-24	Anchors and Chains Survey		\$
	3.1 Cost to perform 2 lead samples		\$
	3.1 Allowance for lead abatement		\$10,000.00
	3.1 Markup on allowance (max 10%)	_____ %	\$
H-01	Lifeboats/Davits Annual Inspection		\$
	3.1 Allowance for FSR		\$10,000.00
	3.1 Markup on allowance (max 10%)	_____ %	\$
	3.1 Assistance of FSR 100 hrs x \$ _____/per hr		\$
	3.1.4 Allowance for hydraulic parts		\$10,000.00
	3.1.4 Markup on allowance (max 10%)	_____ %	\$
H-02	Cargo Hatches Repair		\$
	3.1.2 Allowance for FSR		\$10,000.00
	3.1.2 Markup on allowance (max 10%)	_____ %	\$
	3.1.15 Allowance for hardware		\$4,000.00
	3.1.15 Markup on allowance (max 10%)	_____ %	\$
H-03	Helicopter Fueling System Maintenance		\$
H-04	Liferafts		\$
	3.4 Allowance for FSR		\$16,000.00
	3.4 Markup on allowance (max 10%)	_____ %	\$
H-05	Accommodation HVAC Cleaning		\$
H-06	Accommodation Washroom Exhaust Duct Cleaning		\$
H-07	Galley Range Hood and Exhaust Fan Trunking		\$
H-08	Laundry Dryer Exhaust Ductwork Cleaning		\$
H-09	Sewage System		\$
	3.2.1 Unit cost for coating: 40m2 x \$ _____/cost per m2		\$
H-10	Fixed FM200 and CO2 Smothering System Inspection		\$
H-11	Hanger Fire Fighting Foam Replacement		\$
	3.1.8 Allowance for lead abatement		\$6,000.00
	3.1.8 Markup on allowance (max 10%)	_____ %	\$
	3.1.1 Allowance for FSR		\$5,000.00

Item	Description	Unit Cost	Total Cost (inc allowances)
	3.1.1 Markup on allowance (max 10%)	_____ %	\$
H-12	Fire Detection Systems		\$
H-13	Senior Engineer's Cabin Repairs		\$
	3.1.14 Unit cost for planking : 300 sq ft x \$ _____/cost per sq ft		\$
	3.1.15 Allowance for replacing damaged dexotex		\$4,000.00
	3.1.15 Markup on allowance (max 10%)	_____ %	\$
	3.1.15 Unit cost to replace sq m for damaged dexotex	\$	
E-01	Port and Stbd Stern seal		\$
	3.1 Allowance for FSR (travel and living only)		\$5,000.00
	3.1 Markup on allowance (max 10%)	_____ %	\$
	3.1 FSR onsite work : 10 days x \$ _____/day rate		\$
	3.1 Assistance to FSR: 2 workers x 10 days x _____/day rate		\$
E-02	Tailshaft Bearing Wear-down Port and Stbd		\$
E-03	Port and Stbd Shaft Survey		\$
	3.48 Unit cost for fit: 3 fits x \$ _____/per fit		\$
E-04	Port Tailshaft Pilgrim Nut Renewal		
	1.9 Allowance for FSR		\$126,000.00
	1.9 Markup on allowance (max 10%)	_____ %	\$
	1.9 Assistance to FSR: 2 people x 14 days x \$ _____/day rate		\$
E-05	Hanger Unit Heater Replacement		\$
E-06	Diesel Fuel Purifier Piping Modifications		\$
	3.1.11 Unit cost per pipe bracket fab & fitting: 30 pipe brackets x \$ _____/cost per pipe bracket		\$
E-07	Relief Valve Certification		\$
E-08	Annual Refrigeration Systems Inspection		\$
E-09	Machinery Space Bilge Cleaning		\$
E-10	Thermal Fluid Units Maintenance		\$
	3.2 Allowance for FSR (travel & living only)		\$5,000.00
	3.2 Markup on allowance (max 10%)	_____ %	\$
	3.2 FSR services 5 days x 2 persons x 10 hour day x \$ _____/hourly rate		\$
E-11	Bubbler Compressor Install		\$
	3.5 Allowance for asbestos abatement		\$35,000.00
	3.5 Markup on allowance (max 10%)	_____ %	\$
	3.7 Unit cost for pin: 200 x \$ _____/cost per pin		\$
	3.8 Allowance for lead abatement		\$10,000.00
	3.8 Markup on allowance (max 10%)	_____ %	\$

Item	Description	Unit Cost	Total Cost (inc allowances)
E-12	Port Windlass Brake Band Repair		\$
E-13	Bubbler Check Valves Replacement		\$
E-14	Bubbler Valve Overhaul		\$
	3.1.7 Allowance for new fastening hardware		\$5,000.00
	3.1.7 Markup on allowance (max 10%)	_____ %	\$
L-01	Machinery Space Fan Overhauls		\$
L-02	Siprotec Replay Testing		\$
	3.4 Allowance for FSR (travel & living only)		\$3,000.00
	3.4 Markup on allowance (max 10%)	_____ %	\$
L-03	TV Distribution Replacement		\$
	3.1.4 Unit cost for supply/install 1 ROXTEC S 6 x 1		\$
L-04	Seatel TVRO Install		\$
L-05	ABB Premagnetization Transformer Installs		\$
L-06	Steering Gear Motor Overhauls		\$
	Total Cost (taxes extra)		\$