CCGS Terry Fox
Vessel Life Extension (VLE)

Industry Engagement

October 05, 2021

12:30 EST

Agenda

Item	Objective	Speaker
Opening Remarks	• Orientation and logistics • Introduce the key players in the procurement process to Industry • Objectives and background	Marc Baril
Project Overview	• Overview of the project scope and considerations • Project Milestones • Bidder Conference & Site Visits	Madeleine Pandini
Project Implementation	• Initial Work Period • VLE Work Period • Warranty Periods • Deliverables	Madeleine Pandini
Questions		
Joint Venture	• Bid Requirements • PBN • Evaluation Criteria	Madeleine Pandini
Indigenous Participation Component	• Objective • Direct & Indirect Benefits • Contact	Dolores Coelho
Questions		

Agenda

Item	Objective	Speaker

Evaluation Process	• Basis of Selection
	• Phase Bid Compliance Process
	  ○ Financial Bid
	  ○ Technical Bid Eligible Mandatory Criteria
	  ○ Completion of the Evaluation Process
		Madeleine Pandini

Questions		
Deliverables	• At Bid Closing • Prior to Contract Award (If requested) • After Contract Award (Prior to Kick Off Meeting)	Madeleine Pandini
Evaluation Criteria	• Mandatory Requirements	Madeleine Pandini
Questions		
BREAK (10 minutes)		
Financial Evaluation	• Pricing Data Sheet – Known Work • Total Life Cycle Cost • Financial Evaluation Formula • Basis of Payment • Progress Payments/Milestone Payments	Madeleine Pandini
Questions		

Agenda

Item	Objective	Speaker
Statement of Work	• Refer to Annex ‘A’	Madeleine Pandini
Single System Supplier and Integrator		Madeleine Pandini
Technical Data Package		Madeleine Pandini
3D Scans	• Hull • Interior Machinery Spaces • Tanks • Hull Bottom Dent Survey	Myles Washburn
Questions		
Contract Deliverables	• Preliminary Design Review / Critical Design Review • Drawing and Document Register • ITP	Madeleine Pandini
Questions		
Closing Remarks		Marc Baril

Opening Remarks

- Orientation and logistics
- Introduction of participants
- Background and overview of VLE program
  - Recent contract awards
  - Upcoming requirements
- A copy of this presentation and questions and answers that arise from this engagement will be posted in English and French on Buyandsell.gc.ca
- This session will be recorded in order to accurately capture questions and answers to be posted after the event.

Marine Procurement Outlook

- The next Marine Procurement Outlook is taking place on Wednesday, November 3, 2021 in Vancouver, BC as part of the Business Opportunities Conference hosted by Association of BC Marine Industries (ABCMI)
- Event time: 16:00-18:50 EST
- We are planning an in person event with a virtual option for participants (login information to follow)
- Presented by PSPC together with our partner departments CCG, DND, RCMP, TC and ISED as well as BC Government

Objectives

- ⇨ Provide an overview of the Terry Fox VLE requirement
- ⇨ Provide an overall status on latest schedule
- ⇨ Provide information on key elements of the requirement
- ⇨ Facilitate the opportunity to respond to questions and comments and gather feedback

Disclaimer

This presentation contains information regarding an upcoming request for proposal/solicitation that the Government of Canada may choose to undertake.

This document is not a bid solicitation and that there are no commitments with respect to future purchases or contracts. This will not necessarily result in the award of any contract. As a result, potential suppliers of any goods or services described as part of this engagement should not reserve stock or facilities, nor allocate resources, as a result of any information contained in this presentation. **Funding has not yet been approved for this project and the Solicitation and Contract Award may not be issued.**

Information and opinions presented here reflect our current knowledge and directions as of the date presented. Nothing should be construed as being finalized, a commitment or a final decision by Canada regarding the Terry Fox VLE.

CCGS Terry Fox Project Team

Madeleine Pandini, CCGS Terry Fox VLE Contracting Authority
Public Services and Procurement Canada (PSPC)

Don Hartery, CCGS Terry Fox VLE Technical Authority
Canadian Coast Guard (CCG)

Dolores Coelho, Indigenous Participation Component Authority
Indigenous Services Canada (ISC)

Project Overview – CCGS Terry Fox VLE

- CCG requires a Vessel Life Extension (VLE) refit and repowering of the CCGS Terry Fox.
- The requirement includes the purchase of large components as well as their subsequent installation during dry-docking, including the Propulsion Engines, Clutches, Gearboxes, Shaft generators and Cranes.
- Other new equipment installations include the bubbler compressor, firefighting mist system, fire detection system, fire system piping, bow mooring winches, watertight and weather doors, windows/skylight, various piping and valves, air compressors and receivers, ICS, various control systems, alarm and monitoring systems, etc.

Project Overview – CCGS Terry Fox VLE

- Commissioning, as well as sea tests and trials are included in VLE work

- The VLE will also include selected regulatory work and re-certifications, including:
  - surveys/inspections
  - maintenance of the hull, superstructure, bulwark, bilge, stern thruster, tail shafts, propellers, rudder, valves, sea bays, sea chests, void spaces, cranes, pumps, motors, pipe tunnel, tanks, firefighting systems, various electrical equipment, etc.
- The VLE dry-docking work must be carried out at a docking facility located in Eastern Canada (ON, QC, NB, NS, NL, PEI).

Project Milestones

Milestones	Target Dates
RFP Issued	October 2021
Bid Closing	April 2022
Evaluation completion	June 2022
Contract Award	July 2022
Initial Work Period	July 2022 to March 2023
Vessel Work Period	April 2023 to July 2024
90-day Warranty Period Expiration (for vessel work)	October 2024
1 year Warranty Period Expiration (for purchased components)	July 2025

Bidder's Conference & Site Visit(s)

Site Visit #1

November 30th, December 1st, and December 2nd, 2021, at 9:00 AM (Optional)

Bidders Conference

December 6th, 2021, at 9:00 AM (Virtual)

Site Visit #2

To be Confirmed

Details to follow.

Project Implementation

Implementation of the proposed contract will begin immediately following contract award in July 2022

- Initial Work Period expected to last eight months and which includes the procurement of long-lead items, engineering and planning.
- The subsequent VLE Vessel Work Period, performed at the shipyard, is to occur from April 2023 to July 2024.
- Warranty period.

Project Implementation

Period	Description	Contractor Activity
Initial Work Period	An eight-month period, starting at contract award June/July 2022 and ending in April 2023 with the vessel's arrival at the shipyard	1) Project kickoff meeting and major equipment requisition review 2) Preliminary Design Review 3) Critical Design Review 4) Arrival and storage of some equipment

Initial Work Period - Deliverables

Period	Deliverables
Initial Work Period	• Purchase of four engines & clutches, two gearboxes, control and monitoring systems, pumps, winches, sewage equipment, incinerator, cranes, auxiliary systems equipment, shaft generators and current regulation • Purchase of valves, instruments, electrical navigation equipment, pipe and steel, etc. • Inspection test plan development • Schedule refinement • Refinement of document and drawing registers (including classification society and/or Transport Canada Marine Safety certifications and approvals) • Delivery/review of engineering details for work prior to PDR and CDR

Project Implementation

Period	Description	Contractor Activity
Vessel Work Period	Vessel Work Period at the shipyard, from April 2023 to July 2024	1) Pre-Refit Meeting 2) Drydocking 3) Arrival of long lead equipment items 4) Functional testing/ commissioning 5) Sea Trials and final acceptance

Vessel Work Period - Deliverables

Period	Deliverables
Vessel Work Period	• Replacement of propulsion systems consisting of engines, clutches, gearboxes, shaft generators, alarm and control systems, spare parts, vessel integration • Replacement of pumps, winches, sewage equipment, incinerator, cranes, auxiliary systems equipment, shaft generators and current regulation, valves, instruments, electrical navigation equipment, pipe and steel • Unforeseen work on vessel • Completion of regulatory work items • Inspection test plan implementation and completion • Delivery of items on the document and drawing registers • Delivery of class and TCMS certificates and approvals • Crew training to explain VLE changes to vessel

Warranty Periods

Period	Description	Deliverables
VLE Work Warranty Holdback Period	90-day period following successful sea trials and final acceptance of work	• Warranty period on work completed on the vessel prior to holdback release
Equipment Warranty Holdback Period	365-day period following successful sea trials and final acceptance of work	• Warranty period on all new equipment prior to holdback release

Questions?

Joint Venture Requirement

The procurement strategy provides partnering opportunities for all Canadian suppliers through joint venture or prime-sub-contractor arrangements with an Eastern Canada shipyard, as the physical VLE work must be carried out at a dry-docking facility located in Eastern Canada.

Joint Venture Requirement

Definition: A joint venture is an association of two or more parties who combine their money, property, knowledge, expertise or other resources in a single joint business enterprise, sometimes referred as a consortium, to bid together on a requirement. (SACC 2003 Item 17)

- Bidders who bid as a joint venture must indicate clearly that it is a joint venture and provide the following information:
  a. the name of each member of the joint venture;
  b. the Procurement Business Number of each member of the joint venture;
  c. the name of the representative of the joint venture, i.e. the member chosen by the other members to act on their behalf, if applicable;
  d. the name of the joint venture, if applicable.
- If the information is not clearly provided in the bid, the Bidder must provide the information on request from the Contracting Authority.
- The bid and any resulting contract must be signed by all the members of the joint venture unless one member has been appointed to act on behalf of all members of the joint venture.
  - If a dissolution were to occur the contractor would be in default and the contract would have to be terminated.

Creation of a Joint Venture PBN

1. Step 1 of the registration for a JV account MUST be created by a Supplier Registration Information (SRI) system administration agent.
2. The BN of the lead company (or operator) is used to create a new account for the joint venture (JV).
3. All members of the joint venture should have a PBN.
4. The Legal name field must show the names of all companies participating in the JV.

Introduction – Supplier Registration Information – buyandsell – Public Works and government Services Canada (contractscanada.gc.ca)

Joint Venture – Meeting Evaluation Criteria

A Bidder may meet the evaluation criteria as a joint venture in one of the following three ways:

a) Where the Bidder is a joint venture with existing experience as that joint venture (and certain experience is specified to be an evaluation criterion), the Bidder may submit the experience that it has obtained as that joint venture.

b) A joint venture Bidder may rely on the experience of one of its members to meet any evaluated technical criterion of this bid solicitation.

c) A joint venture member cannot pool its experience with the other joint venture member to satisfy a single technical criterion of this bid solicitation. However, a joint venture member can pool its individual experience with the experience of the joint venture itself.

Canada will not accept any bid by a joint venture composed of more than 2 members.

Indigenous Participation Component (IPC)

This procurement presents an opportunity to generate wealth in Indigenous communities and close socio-economic gaps through Indigenous hiring, training and skills development.

CCGS Terry Fox VLE IPC is 1.5%, Government Objective 5%

The IPC is a mechanism designed to meet the Government of Canada's objectives of encouraging Indigenous socio-economic development through federal contracting opportunities.

IPC: Direct & Indirect Benefits

Direct Benefits: Direct Benefits are transactions incurred by the Contractor during performance of the Work that include:

- **Indigenous Business Subcontracting:** Subcontracting a portion of the Work, or goods or services required by the Contractor to deliver the Work, to a qualified Indigenous Business.
- **Indigenous Employment:** Full-time, Part-time and Casual employment of Indigenous persons.
- **Indigenous Training and Skills Development:** Training opportunities and skills development for Indigenous persons, such as on-the job training, or in-house training.

Indirect Benefits: Indirect Benefits are relevant socio-economic measures, other than Direct Benefits.

- **Examples:** specialized training, career development, scholarships, and community outreach programs to help local Indigenous communities meet their economic development needs.

Indigenous Procurement Authority

Indigenous Services Canada (ISC)

Dolores Coelho, Senior Program Officer

dolores.coelho@sac-isc.gc.ca

Questions?

Basis of Selection & Evaluation Procedure

Basis of Selection – <u>Lowest Evaluated Price</u>

- To be declared responsive, a bid must comply with all the requirements of the bid solicitation (including Deliverables and Certifications) and meet all mandatory criteria (including Mandatory Technical Requirements).

Evaluation Process

- The selection will be based on the lowest evaluated price, provided all the mandatory elements have been declared as being responsive.
- All of the requirements are mandatory and will be evaluated with a pass or fail.
- The bid evaluation incorporates the <u>Phased Bid Compliance Process</u> intended to increase competition and deliver best value to Canada by decreasing the likelihood of non-compliant bids.

The Phased Bid Compliance Process (PBCP)

- PBCP is not bid repair.
- Bidders and Offerors have an opportunity to provide missing financial information that was omitted in their proposal.
- It is the assessment for compliance with Eligible Mandatory Requirements.
- Allows Bidders and Offerors to demonstrate compliance for eligible mandatory criteria that may be complicated, new or different from current industry standards.
- Allow Bidders and Offerors to learn and improve on the quality of their proposals.

How the Phased Bid Compliance Process Works

The Process uses three phases to examine bid compliance:

- Phase I, required financial information for PBCP
- Phase II, eligible mandatory criteria for PBCP
- Phase III, completion of the Evaluation Process

PBCP Phase I: Financial Bid

- The PSPC Procurement Officer must review the financial proposal for required financial information.
- All bidders with incomplete required financial information will be notified and given a limited amount of time to provide the missing financial information in order to become compliant.
- Only the requested missing financial information can be provided by the bidder.
- If providing this new financial information changes the final price, the change in the total price will be permitted.
- No changes to financial information will be permitted after this Phase.

PBCP Phase II: Technical Bid Eligible Mandatory Criteria

- Bids with complete financial information will be assessed against technical Eligible Mandatory Requirements
- Any proposed equivalent products will be reviewed. A No-Substitute list will be provided in a RFP Annex.
- All bidders will be issued a Compliance Assessment Report (CAR).
- The CAR will indicate:
    - compliance with all eligible mandatory criteria or
    - that the bid has not yet met compliance.
- Bidders will be notified of the eligible mandatory criteria they have yet to demonstrate compliance in the CAR.

PBCP Phase II: Technical Bid Eligible Mandatory Criteria (continued)

- All bidders whose bid do not yet demonstrate compliance will have a chance to provide additional or new information in response to the CAR.
- Subsequent changes as a result of the new or different information should be noted.
- All Bidders will be given the same amount of time to provide additional or new information to try to achieve compliance.

PBCP Phase III: Completion of the Evaluation Process

- Responses to CARs will be assessed to determine if compliance has been achieved.
- Bids that do not demonstrate compliance may be given no further consideration.
- Bids that are compliant will continue in the evaluation process.
- The evaluation process will continue until completed.

Questions?

Deliverables

1. Deliverables at Bid Closing
2. Deliverables prior to contract award
3. Deliverables after Contract Award, before Kick Off Meeting

Deliverables/Certifications – At bid closing

Item	Description
1	Request for Proposal document part 1 page 1 completed and signed
2	Completed Financial Bid Presentation Sheet
3	Completed Pricing Data Sheet and Milestones dates
4	Completed Mandatory Technical Requirements (include supporting evidence for compliance)
5	**Completed Additional Information on Selected Equipment**
6	Changes to Applicable Laws as per clause 2.4. If any, indicate the substitute name of a Canadian province or territory in Section III of the Bid submission
7	Integrity Provisions
8	Federal Contractors Program for Employment Equity
9	**Indigenous Participation Component Certification Forms, Annex K (include in Section III);**
10	Proof of good standing with Worker's Compensation Board

Deliverables/Certifications – At bid closing

Item	Description
11	Proof of valid Labor Agreement or similar instrument covering the work period, as per clause 6.6 (include in Section III);
12	Fueling and Disembarking Procedures, as per clause 6.8 (include in Section III);
13	Valid ISO 9001-2015 Certification, as per clause 6.9 (include in Section III);
14	Objective evidence of documented Health and Safety System, as per clause 6.10 (include in Section III);
15	Objective evidence of documented Fire Protection, Fire Fighting and Training Procedure, as per clause 6.11 (include in Section III);
16	Insurance Requirements, as per clause 6.13 (include in Section III);
17	Example of its Quality Control Plan, per clause 6.17 (include in Section III);
18	Details of Environmental Emergency Response Plan, Details of Formal Environmental Training as per Clause 6.19 (include in Section III);

Deliverables Prior to Contract Award (if requested)

Item	Description	Due By
1	Financial Capability	Within 5 working days of the request
2	Commitment letters from specified subcontractors indicating the number of resources available for different periods	Within 10 working days of the request
3	Confirmation of personnel and names to add to contract	Within 5 working days of the request

Deliverables after Contract Award (prior to Kick Off Meeting)

Description	Due By
Contract Financial Security	5 working days after CA
The Contractor's Quality Control Plan	5 working days after CA
Insurance requirements as per Annex "D"	10 Working Days after contract award
The list of Government specialized loaned equipment that the Contractor intends to request.	10 working days after contract award

Evaluation Criteria – Mandatory Requirements

Mandatory requirements ensure that minimum qualifications are met or exceeded, for the following categories:

a. **Shipyard infrastructure and refit experience**
b. **Project management team experience**
c. **Engineering team experience**
d. **Equipment suppliers' experience and capability**
e. **Bidder's use of contract management tools and quality assurance**
f. Financial security and capability
g. Certifications

Mandatory Technical Requirements – Shipyard Experience

Item No.	Requirement
M1a	The Bidder's shipyard must be fully-operational year-round and be able to accommodate the CCGS Terry Fox.
M1b	The proposed shipyard must be located in Eastern Canada (ON, QC, NB, NS, PE, NL)
M2	Docking Facility Certification - The Bidder's Dry-dock facility must be demonstrated to have the capacity to remove the vessel from the water, and subsequently return the vessel to the water.
M3	Docking Facility – capacity for equipment manipulation (i.e. engine removal/installation per the SOW in Annex A) with access
M4	Docking Facility – cranage capacity
M5a	The Bidder's shipyard must have refitted five (5) vessels of a similar size in the last three years i.e. where the vessels' gross tonnage is at least 3800 t.
M5b	The Bidder's shipyard must have conducted Vessels refits valued above $5M on at least 2 vessels in the past 3 years.
M5c	The Bidder's shipyard must have conducted Vessels refits that were completed over at least 6 months, on 2 vessels in the past 5 years.

Mandatory Technical Requirements (continued)

M6	Include the Bidder shipyard Preliminary Work Schedule for the VLE work period. Note that the schedule must work in cohesion with the dates listed in - Delivery Schedule.

The Bidder must provide a Preliminary Work Schedule that must include (minimum) target dates for each of the following significant events:

a) Commencement date of Vessel Work as defined at Article 7.3.2;
b) Period to be in Dry-Dock;
c) Start and completion dates for each individual specification item (i.e. like 10.2 or 15.11) presented in Annex “A” – SOW;
d) FSR Scheduling;
e) Completion date of Vessel Work as defined at Article 7.3.2;
f) Period of Care & Custody by the shipyard;
g) Resumption of custody by Canada;
h) Dock and Sea Trials Period.

Each individual specification item, must show:

a) the main work breakdown structure (WBS) to the system and component level (WBS 3).
b) the workforce deployment plan, or labour loading, for the following disciplines: Steelwork; Piping; Mechanical; Electronics; Controls/Instrumentation.

The Bidder must indicate the source for the labour resources required to support the labour loading (in-house, subcontractor(s) name, supplier).

Mandatory Technical Requirements (continued)

M7	List of subcontractors performing the Work
M8	For the Bidder shipyard work - The shipyard Bidder’s welders and any welding sub-contractors must be certified to CSA W47.1 by the Canadian Welding Bureau.

Mandatory Technical Requirements – Project Management Services(M9 – M18)

Project Management Team must provide for the effective control of the project elements including, but not limited to:

i. Project Management;
ii. Quality Assurance;
iii. Engineering;
iv. Planning and Scheduling;
v. Vessel Supervision.

Mandatory Technical Requirements – Project Management Services

Job titles used in this section are for clarity within this document only. The Bidder is free to choose job titles that suit its organization.

1. Project Manager (Full Time)
2. Single System Supplier Integrator (SSSI) (Full Time)
3. Quality Assurance, Inspection and Testing Manager (Full Time)
4. Schedule Planner (Full Time)
5. Vessel Supervisor/Superintendent (Full Time)
6. Safety Officer/Occupational Health and Safety Specialist
7. Document Control (Full Time)
8. Cost Estimation Specialist (at shipyard)
9. Procurement Team requirements (2 individuals)

Mandatory Technical Requirements – Project Management Services

Engineering Team requirements

The Bidder must have an in-house engineering capability (or a contractual agreement in place with an established Canadian marine design engineering firm), including a variety of staff engineers/technicians belonging to the provincial professional engineering association or other certification. A minimum of eight individuals must be included on this team:

1) Senior Naval Architect Engineer
2) Senior Marine Systems Engineer
3) Senior Marine Engineer
4) Senior Electrical Engineer
5) Senior Controls and Instrumentation Engineer
6) Senior Draftsperson (mechanical and electrical/electronics/instrumentation – 2 individuals)
7) Cost Estimation Specialist

Mandatory Technical Requirements (continued)

Item No.	Requirement – **Equipment suppliers' experience and capability**

This part of the evaluation is intended to ensure certain minimums for Equipment suppliers' experience and capability

(examples: years of experience, after service support)

Questions?

Pricing Data Sheet Summary – Known Work

SOW Sections	Description	Total Hours	Total Labour Cost	Total Material Cost	Total FSR & Subcontractor Cost	Total Firm Price
1.0	1.0 GENERAL REQUIREMENTS - Rev 0	0	$ -	$ -	$ -	$ -
10.0	10.0 SAFETY & SECURITY - Rev 0	0	$ -	$ -	$ -	$ -
11.0	11.0 HULL & RELATED STRUCTURES - Rev 0	0	$ -	$ -	$ -	$ -
12.0	12.0 PROPULSION AND MANEUVERING - Rev 0	0	$ -	$ -	$ -	$ -
13.0	13.0 ELECTRICAL POWER GENERATION - Rev 0	0	$ -	$ -	$ -	$ -
14.0	14.0 ELECTRICAL POWER DISTRIBUTION - Rev 0	0	$ -	$ -	$ -	$ -
15.0	15.0 AUXILLIARY SYSTEMS - Rev 0	0	$ -	$ -	$ -	$ -
16.0	16.0 DOMESTIC SYSTEMS	0	$ -	$ -	$ -	$ -
17.0	17.0 DECK EQUIPMENT/SHIP SUPPORT SYSTEMS	0	$ -	$ -	$ -	$ -
18.0	18.0 VESSEL COMMUNICATIONS AND NAVIGATION	0	$ -	$ -	$ -	$ -
19.0	19.0 INTEGRATED CONTROL SYSTEMS	0	$ -	$ -	$ -	$ -
TOTALS		**0**	**$0.00**	**$0.00**	**$0.00**	**$0.00**

Annex H - Milestones

ITEM No.	MILESTONE	PERCENTAGE of PS components' TOTAL PRICE	FIRM AMOUNT ($)	HOLDBACK ($), 10%	CALENDAR DAYS AFTER CONTRACT AWARD	Actual Date
1	Propulsion System (PS, Part B, Section 12) ORDER PLACEMENT	12%		0		
2	PRELIMINARY DESIGN REVIEW, PDR	5%		0		
3	PS PRODUCTION START ASSEMBLY	5%		0		
4	CRITICAL DESIGN REVIEW, CDR	5%		0		
5	PS COMPLETION OFF ASSEMBLY	5%		0		
6	PS FAT	10%		0		
7	PS DELIVERY & ACCEPTANCE	15%		0		

Financial Evaluation

A)	Known Work (including Milestone Payments) For work as per Financial Bid Presentation Sheet –Pricing Data Sheet for a FIRM PRICE of:	$____
B)	Unscheduled Work - Estimated price <u>for evaluation purposes only</u>. There is no minimum or maximum amount of unscheduled work nor is there a guarantee of such unscheduled work in the Contract: <u>B1. Unscheduled Engineering Work</u> __ person-hours x $ __ per engineering hour for a PRICE of: <u>B2. Unscheduled Engineering Work (Time and a half premium)</u> __ person-hours x $ __ per engineering hour for a PRICE of: <u>B3. Unscheduled Engineering Work (Double time premium)</u> __ person-hours x $__ per engineering hour for a PRICE of: <u>B4. Other Unscheduled Work</u> __ person-hours x $__ per hour for a PRICE of: <u>B5. Unscheduled Work (Time and a half premium)</u> __ person-hours x $__ per hour for a PRICE of: <u>B6. Unscheduled Work (Double Time premium)</u> __ person-hours x $__ per hour for a PRICE of:	$____ $____ $____ $____ $____ $____ $____

Financial Evaluation

C)	Daily Service Fees - <u>For evaluation purpose only</u>: __ working days, on dock x $ __ firm daily service fee __ non-working days, on dock x $ __ firm daily service fee __ working days, alongside x $ __ firm daily service fee __ non-working days, alongside x $ __ firm daily service fee	$_____ $_____ $_____ $_____
D)	Cost of Financial Security Type of Financial Security	$_____
E)	**TOTAL LIFE CYCLE COST** (for evaluation purposes only)	$_____
F)	Vessel Transfer Cost - <u>For evaluation purpose only</u> Shipyard facility location	$_____
G)	PRICE FOR EVALUATION [A + B + C + D + E + F] for a PRICE FOR EVALUATION (applicable taxes excluded)	$_____

Financial Evaluation – Total Life Cycle Cost of Engines

TOTAL LIFE CYCLE COST (for evaluation purposes only)	
Extended Life Length: 15 years	
Running hours per year: _____ hours	
Establish the Cost (in Canadian dollars) of the following, over the extended life length for the vessel:	
TABLE 1	Cost of engine supplier recommended maintenance for the first fifteen (15) years
TABLE 2	Transport Canada Marine Safety (TCMS) five (5) Year Inspections Cost
TABLE 3	Major Overhaul (s)
TABLE 4	Specific Fuel Oil Consumption
TABLE 5	Specific Lubricating Oil Consumption
TABLE 6	Engine Supplier Recommended Lube Oil Changes

Financial Evaluation Formula Summary

The total evaluated price includes the sum of:

a. the firm price determined by the bidder for the known work described in the statement of work (i.e. the combined cost of the major components and subsequent VLE refit);

b. the operating costs for the proposed propulsion system;

c. an anticipated amount of unscheduled hours costed at the bidder's submitted firm hourly rates (i.e. X hours of regular unscheduled work, Y hours of overtime (x1.5) unscheduled work, and Z hours of overtime (x2) unscheduled work); and

d. an anticipated amount of unscheduled engineering hours costed at the bidder's submitted firm hourly rates (i.e. U hours of regular unscheduled engineering work, V hours of overtime (x1.5) unscheduled engineering work, and W hours of overtime (x2) unscheduled engineering).

e. Cost of financial security

f. Vessel Transfer costs

Basis of Payment – Firm Price

- In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a Firm Price for the Known Work.

No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Specifications, will be authorized or paid to the Contractor unless such design changes, modifications or interpretations have been authorized in writing, by the Contracting Authority prior to their incorporation in the Work.

Terms of Payment – Progress Payments

1. Canada will make progress payments towards the amount indicated for Known Work (no more than once a month, for costs incurred in the performance of the Work, up to ninety (90%) percent of the amount claimed and approved by Canada.
2. The ten (10%) percent Holdback minus the Warranty Holdback (5%) will be released in accordance with the payment provisions of the Contract upon the following:
    a) The Final Work Acceptance occurred; and
    b) A claim for the payment has been submitted.

Terms of Payment – Milestone payments

Milestone Payments for the Purchase of components

1. Canada will make milestone payments in accordance with Milestone Payment Schedules up to ninety (90%) percent of the amount claimed and approved by Canada
2. The ten percent (10%) Holdback minus the Warranty Holdback (5%) will be released in accordance with the payment provisions of the Contract upon the following:
    - The Final Work Acceptance occurred and
    - A claim for the payment has been submitted

Questions?

Statement of Work (SOW)

Refer to annex ‘A’ for an itemized summary of the Statement of Work.

For reference this information is included at the end of the presentation.

Differences with the CCGS Terry Fox VLE

1. Large procurement items in this contract like 4 Main engine 4265 kw each, 2 gearboxes, 40-ton crane etc.
2. Pre engineering for design for installation examples: 4 new main engines, 2 gearboxes, (1) 40-ton crane, tow pin and shark jaws.
3. Single System Supplier Integrator (SSSI).

Single System Supplier and Integrator (SSSI)

The Contractor must arrange for supply and integration of both new and existing machinery, systems and equipment by a Single System Supplier and Integrator (SSSI).

The SSSI may be the contractor, a subcontractor, an engine supplier, or an engineering company.

Single System Supplier and Integrator (SSSI)

The SSSI is responsible for the integration of all the following specification items:

- ✓ 12.1 Propulsion Machinery – Main engines, clutches, gearboxes and all associated auxiliary machinery upgrades and all associated control and individual component safety and monitoring systems.
- ✓ 13.1 Shaft Alternators Replacement and Frequency Stabilization
- ✓ 14.2 Switchboard Upgrades and Power Management System
- ✓ 14.3 Motor Control Centers Upgrade
- ✓ 19.1 Propulsion Control Systems Replacement
- ✓ 19.2 Central Control Alarm & Monitoring System Replacement
- ✓ 19.5 MCR Console Refurbishment

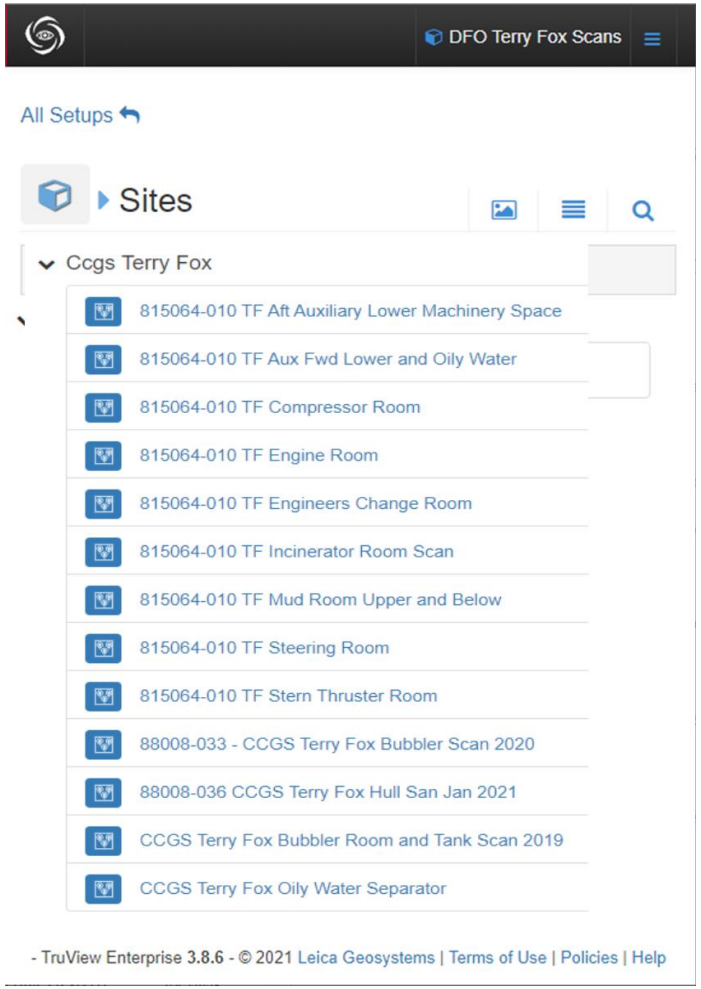
Sample Technical Data Package Indices

VLE SPEC - Terry Fox 2023		
Document Number	**Title**	**Revision Number**
Section 10 - Safety & Security		
10.2-1	HARDING - JCS922-02B General arrangement Plan - NOREQ-LBT 700T Lifeboat	C
10.2-2	JYL85-00(LBT 700) General arrangement - JYL85 Gravity Luffing Arm Type Davit	0
10.2-3	MSC-402(96) (1)	
10.2-4	UK20203 Model Hydraulic Schematic	0

VLE SPEC - Terry Fox 2023

Drawing Number	Drawing Name	Revision Number	Pages	Format Provided by CCG
Section 10 - Safety & Security				
1-07-54-9	Ice Breaking Siren And Light System	2	01/01	.tif
1-07-80-44	Galley Ventilation Shutdown & Dry Chemical Release System	3	01/01	.tif
1-07-80-45	Oil Pumps & Ventilation Shutdown System	4	01/01	.tif
1-07-81-9	Fire Detection System DK Plan Machinery Flat & Tank Top Sheet 1	4	01/01	.tif

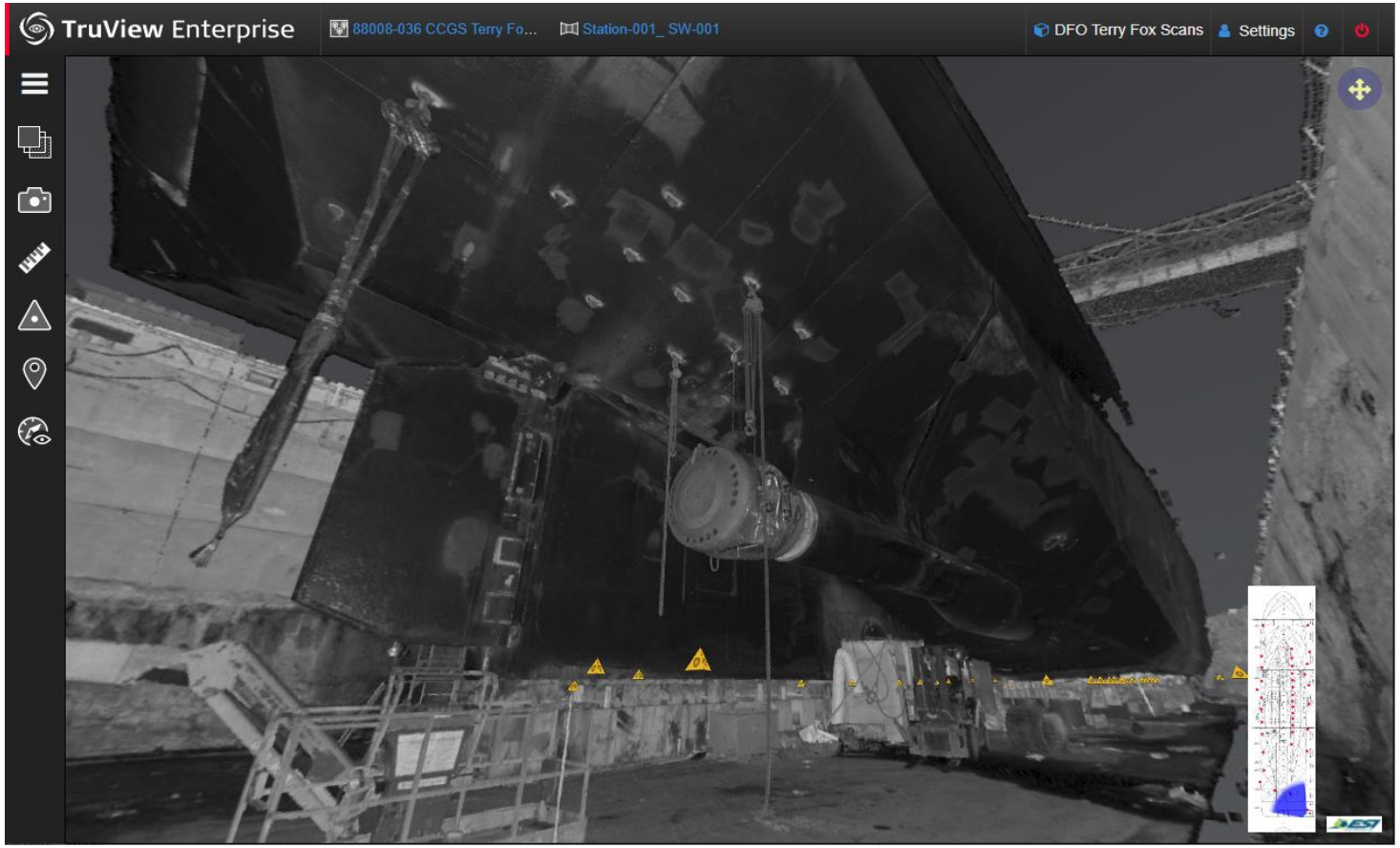
3D Scan: TruView Enterprise Website



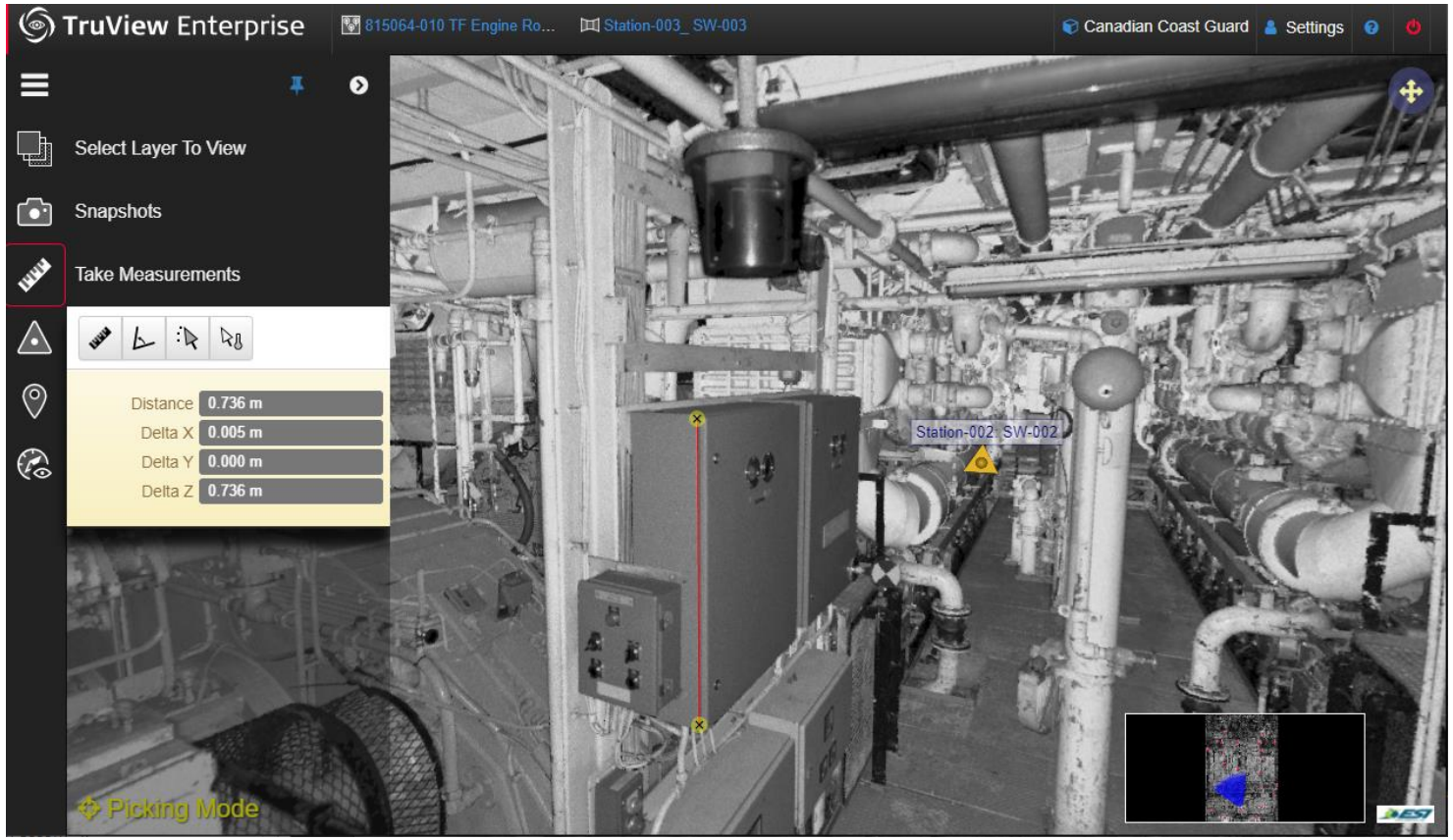
- TruView Enterprise website can be used to determine approximate distances and coordinates, etc., and is usually used as a planning and viewing tool.
- TruView Enterprise Web Link: http://TruView.epco.ca
- Username: DFOTFScans
- Currently this site is used internally at CCG
- Access to the site will be made available to the bidders.
- It is likely the bidder(s) will arrange for more areas to be scanned.

3D Scan, Hull

Scan of the outer hull is available

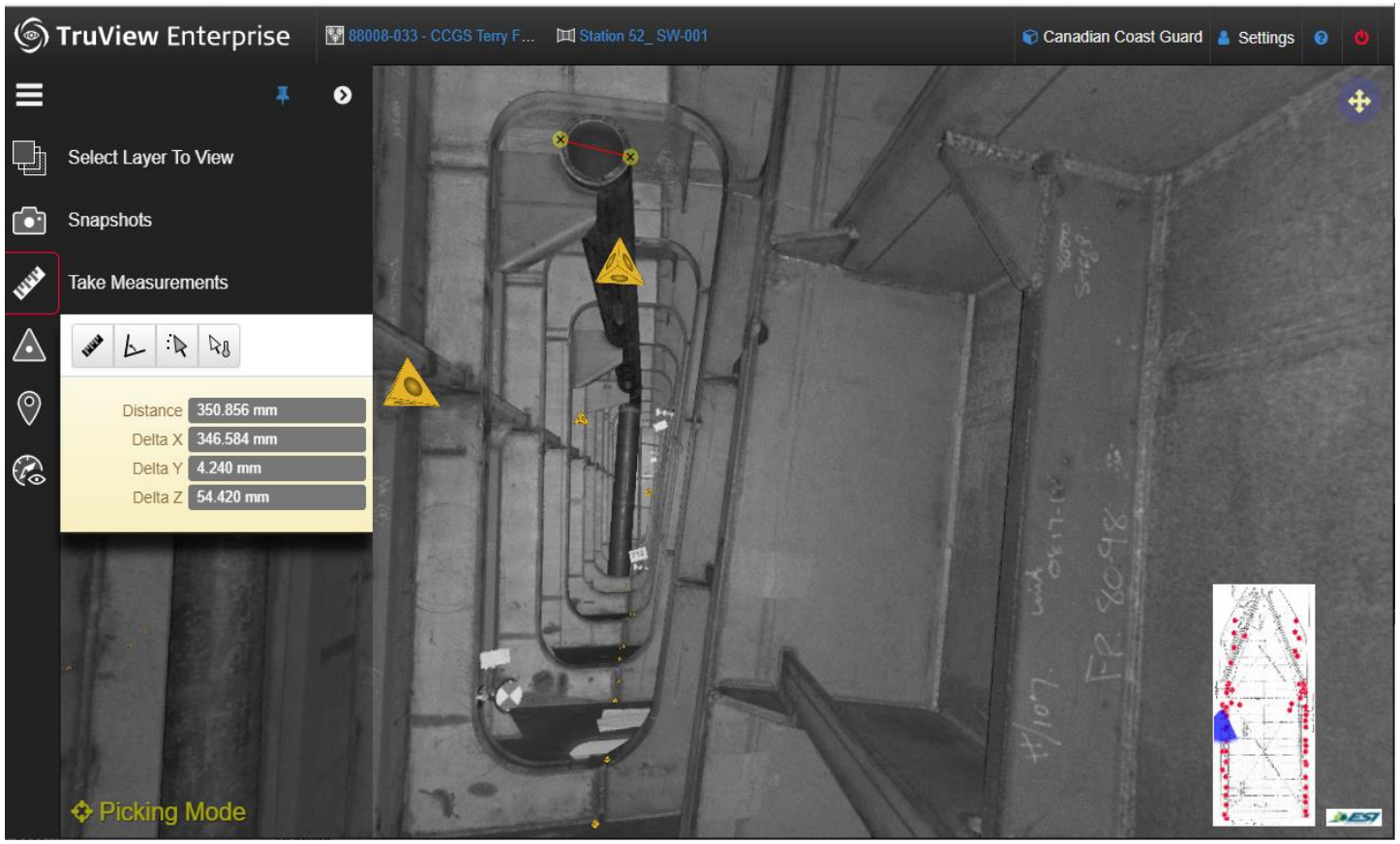


3D Scan, Interior Machinery Spaces



- Aft Auxiliary Lower Machinery Space
- Aux Fwd Lower and Oily Water
- Compressor Room
- Engine Room
- Engineers Change Room
- Incinerator Room Scan
- Mud Room Upper and Below
- Steering Room
- Stern Thruster Room
- Terry Fox Bubbler Scan 2020
- Terry Fox Bubbler Room and Tank Scan 2019
- CCGS Terry Fox Oily Water Separator

3D Scan, Tanks



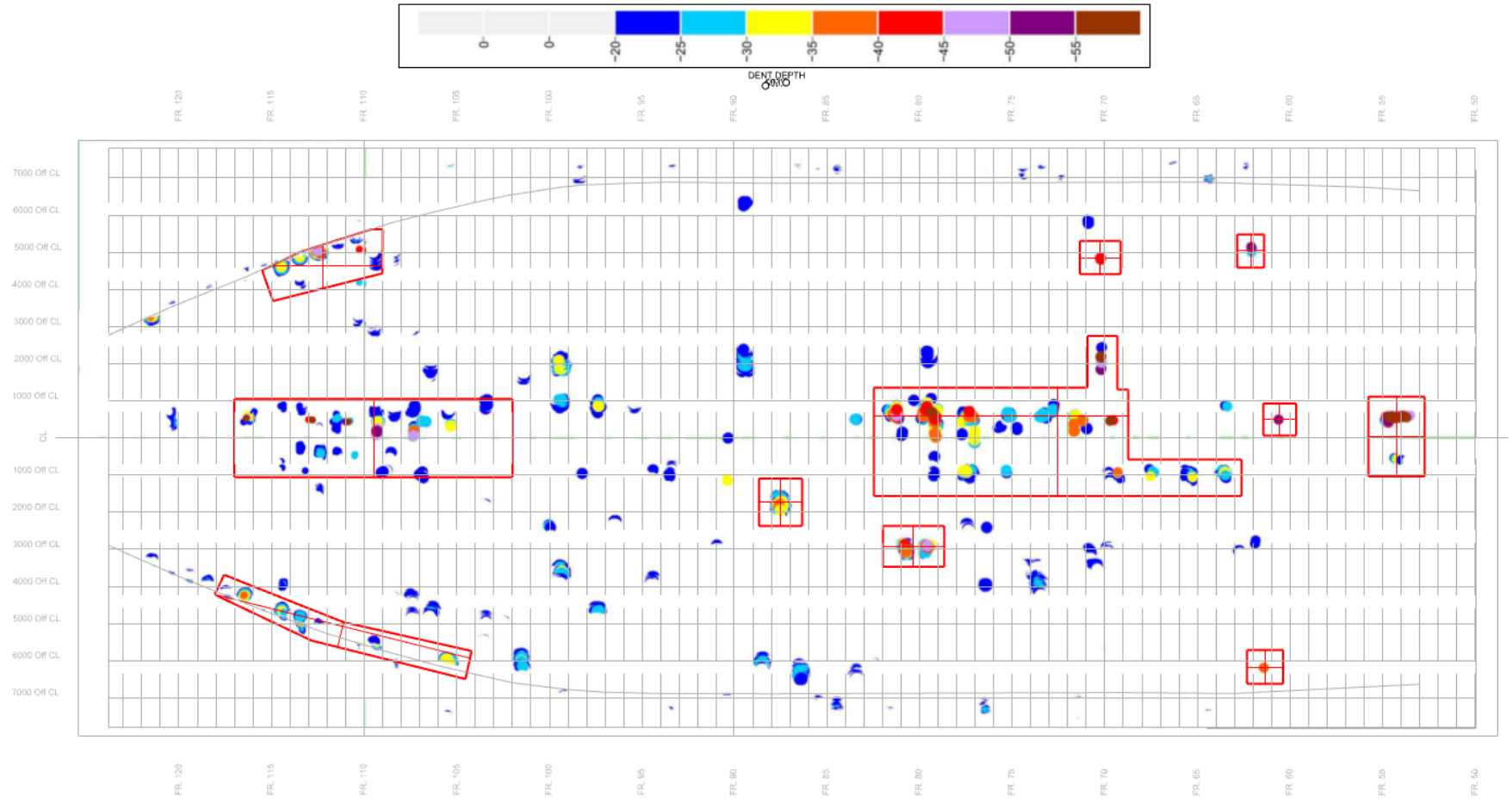
- Terry Fox Bubbler Scan 2020
- Terry Fox Bubbler Room and Tank Scan 2019

3D Scan, Hull Bottom Dent Survey

A survey of the hull bottom has been developed to assist in determining the extent of steel replacement.

1. The 3D scan data has been processed to show depth of the dents relative to colour.
2. Frame lines are overlaid to show dent position.
3. Weld seams are overlaid for information.
4. Areas currently considered for replacement shown outlined in red.

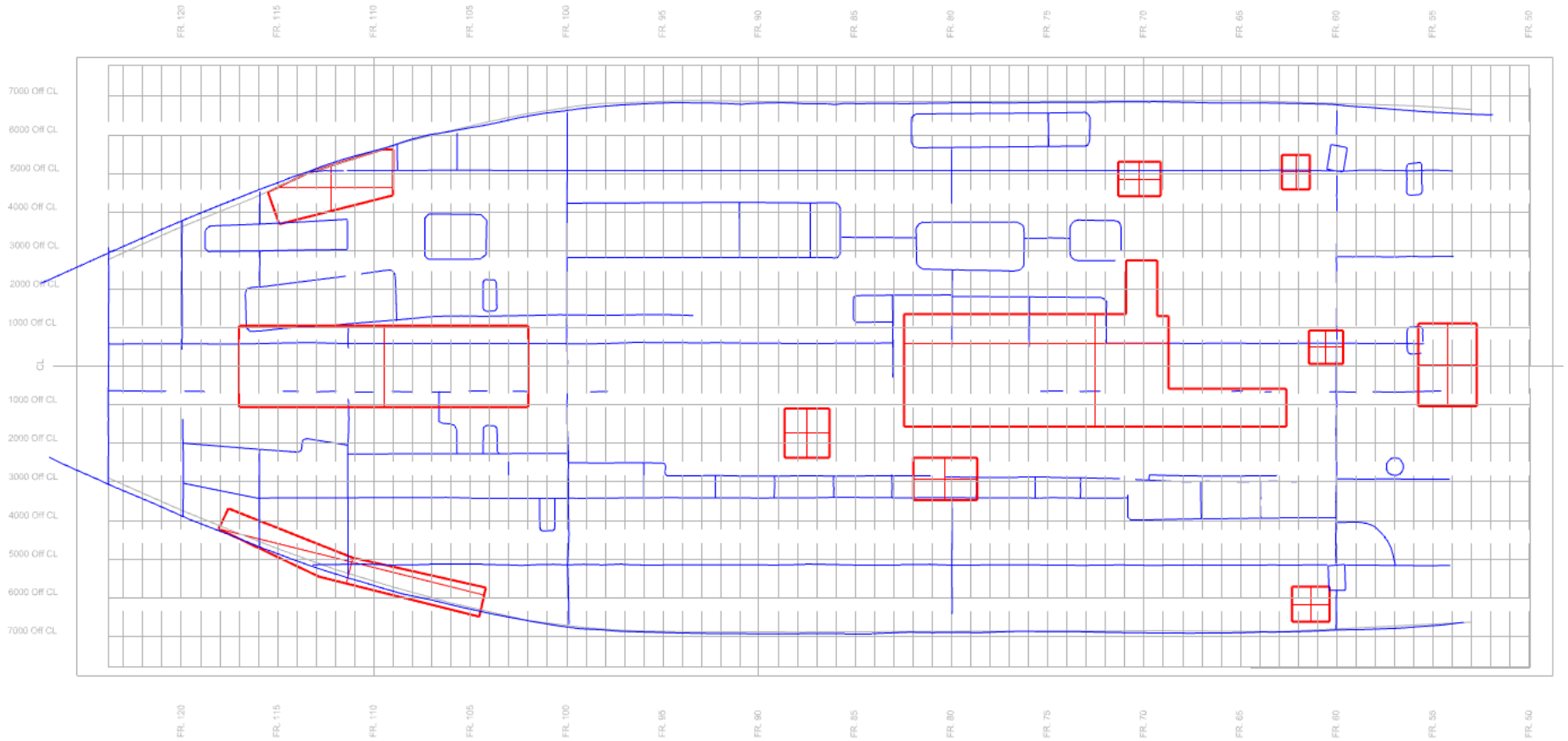
3D Scan, Hull Bottom Dent Survey



Dents between frames that are less than 20mm have been hidden for clarity:

- 500mm frame spacing.
- Dents shown are between 20mm to 55mm.
- Thickness of plate to be replaced is 20mm.
- Most of the new plate is on centerline, when the ship dry docks the block plan will need to be adjusted.

3D Scan, Hull Bottom Dent Survey



- Weld lines from 3D scan shown in blue
- Plate proposed to be replaced outlined in red

Questions?

CONTRACT DELIVERABLES – PDR & CDR		
ITEM	**Preliminary Design Review Meeting & Data Package**	**Critical Design Review Meeting & Data Package**
12.1 Propulsion Machinery Replacement	1. Preliminary Electrical schematics/design for the PS and the vessel; 2. Preliminary Electrical hardware for the PS and the vessel; 3. Preliminary Software Architecture/Design; 4. Preliminary Vibration Analysis for the PS with its sub-base and vessel's base and structure; 5. Preliminary Structural drawings/design for the PS and the vessel structure; 6. Preliminary Mechanical drawings/design for the PS and the vessel; 7. Preliminary Mechanical hardware for the PS and the vessel; 8. Preliminary Aux systems drawings/design for the PS and the vessel & Major components datasheets; 9. Preliminary Heat Rejection Analysis for the central cooling system; 10. Preliminary Auxiliary hardware for the PS and vessel;	1. Final Electrical schematics/design for the PS and the vessel; 2. Final Electrical hardware for the PS and the vessel; 3. Final Software Architecture/Design; 4. Final Vibration Analysis for the PS with its sub-base and vessel's base and structure; 5. Final Structural drawings/design for the PS and the vessel structure; 6. Final Mechanical drawings/design for the PS and the vessel; 7. Final Mechanical hardware for the PS and the vessel; 8. Final Auxiliary systems drawings/design for the PS and the vessel & Major components datasheets; 9. Final Heat Rejection Analysis for the central cooling system; 10. Final Auxiliary hardware for the PS and vessel;

Contract Deliverable – Drawing Register

DRAWINGS REGISTER	
LATEST DATE REVISED :	
VESSEL:	CCGS
PROJECT TITLE:	
PROJECT NUMBER	
REFIT/VLE START DATE:	
REFIT/VLE PROJECTED END DATE:	
SHIPYARD:	
CLIENT:	CCG

SPECIFICATION SECTION AND DRAWING/DOCUMENT TITLES:	DRAWING No.	Revision # of Drawing	Pages of Drawing (ie. 1 of 52)	DRAWING FORMAT PROVIDED TO CONTRACTOR	DRAWING FORMAT TO BE PROVIDED TO CCG	DRAWING BY	DRAWING start date	DRAWING released date	DATE CCG APPROVED	DATE TO ABS	ABS APPROVAL DATE
PART A											
GR 1.0 General Reference and Requirements											
GR 2.0 GENERAL TECHNICAL											
GR 3.0 MECHANICAL											
GR 4.0 ELECTRICAL AND ELECTRONICS											

Contract Deliverable - ITP Template

Canadian Coast Guard

Agreement - Signature & Date

CGTA/CGIA:

Contractor:

References/Drawings/Comments/:

Inspection and Test Plan (ITP)

Contractor Name: ABC1 Repairs Inc.

Vessel Name: CCGS Terry Fox

Standards and Regulations: as per section 2

Specification Number and Item Description: Spec # XXXXX Item 11.2 Hull Welding Inspection & Repairs

Spec. Section No.	Inspection Point & Acceptance Criteria	Inspection Points (IP) - Acceptance & Responsibility							
		CGTA/CGIA		Contractor		Class		NACE	
		IP	Signature	IP	Signature	IP	Signature	IP	Signature
2.1.1	Carried out a hull inspection and determine the areas that require weld renewal.	H		H		W		N/R	N/R
2.1.1	Joint welds built up to the original level by ABS approved welding techniques with approved materials.	W		H		W		N/R	N/R
2.1.3	Any fuel tanks close to welding are gas freed and certified for entry/hot work after they remove and dispose of any remaining fuel in accordance with applicable regulations.	W		H		N/R	N/R	N/R	N/R
2.1.4	Any butts and seams failing in way of ballast/void tanks with coated internals have their internal paint work touched up in way of heat damage. Gas freed and certified the tank for entry/hot work to carry out the coating repairs.	W		H		N/R	N/R	N/R	N/R
2.1.7	Upon completion of all work, NDT (X-Ray or equivalent NDT inspections) has been carried out by a qualified technician in areas chosen by the attending ABS Surveyor.	W		H		W		N/R	N/R
5.1.1	Final report has been received.	RE		H		N/R	N/R	N/R	N/R

Template 1 Rev.0

Inspection Points

H - Hold - Work must not proceed until point is signed N/R - Not Required
W - Witness - Task must be witnessed
M - Monitor - Task must be monitor
CT - Certification - Certificates must be provided prior the commencement of work
RE - Report - Reports and/or certificates must be provided upon the completion of work

Responsibilities

CGTA/CGIA - Coast Guard Technical/Inspection Authority
CE - Vessel Chief Engineer
Contractor - Organization responsible for the execution of the project
Class - Regulatory class (ABS, TCMS, etc.)
Other - any other entity involved in the execution of the listed tasks

***Contractor is responsible for the completion of this ITP. Contractor must follow outlined inspection points and must collet all require signatures at the appropriate time.

Contact Information / Informations de contact

Public Services and Procurement Canada

Acquisitions Program (AP) / Services publics et Approvisionnement Canada

Programme d'acquisitions (PA)

Refit, Logistic and Small Vessels Construction Sector

(RLSVCD) / *Directions des radoubs, de la logistique et de la construction des petits navires (DRLCPN)*

Madeleine.Pandini@tpsgc-pwgsc.gc.ca

Questions?

Closing Remarks

Annex ‘A’

Itemized Summary of the Statement of Work

Part A: Statement of Work (SOW) General Requirements

SECTION	SECTION TITLE
GR1	General Requirements and contract section requirements
GR2	General Technical
GR3	General Mechanical
GR4	General Electrical
GR5	Electro -Magnetic Interference
GR6	Documentation
GR7	Inspection, Tests and Trials
GR8	Stability
GR9	Berthing and Docking
GR10	Services
GR11	Field Service Representative Requirements
GR12	Integration and Power Management

Part B: Statement of Work (SOW)

SECTION	SECTION TITLE
10.0	Safety & security
11.0	Hull & related structures
12.0	Propulsion & maneuvering systems
13.0	Electrical power generation
14.0	Electrical power distribution
15.0	Auxiliary systems
16.0	Domestic systems
17.0	Deck equipment/ship support systems
18.0	Vessel communications & navigations
19.0	Integrated control systems

Part B: 10.0 Safety and Security

SECTION	SECTION TITLE
10.1	Life Raft Recertification
10.2	Lifeboat & Miranda Davit Annual Inspection
10.3	Fire Detection System Replacement
10.4	Fire Fighting Equipment Recertification
10.5	Watertight Door Replacement
10.6	Fire Main & Monitor Piping System Replmt
10.7	Local Application Fire Fighting System Installation
10.8	Safety Relief Valves
10.9	Fog Horn Installation
10.10	FM200 System Modification
10.11	FM200 System Monitoring

Part B: 11.0 - Hull and Related Structures

SECTION	SECTION TITLE
11.1	Hull Cleaning
11.2	Hull Inspection
11.3	Hull and Structural Steel Repairs
11.4	Hull Protection System Service
11.5	Sea Chests & Sea Bays
11.6	Sea Chest & Bay Protection System Service
11.7	RO Suction Sea Chest
11.8	Fender Repairs
11.9	Hull Coating
11.10	Sea Valves and Connections
11.11	Main Deck Plating Repair

Part B: 11.0 - Continued…

SECTION	SECTION TITLE
11.13	Superstructure and Decks Coating
11.14	Internal Steel Repair (Air Trunk)
11.15	Void & Miscellaneous Tanks
11.16	Vent & Sounding Pipes
11.18	Forward Mast Replacement
11.19	Aft Bulwark Replacement
11.20	Window & Skylight Replacement
11.21	Window Wiper Replacement
11.22	Forward Stores Hatch Replacement
11.23	Weather Door Replacement
11.25	Logistics Office Renovation

Part B: 11.0 - Continued…

SECTION	SECTION TITLE
11.26	Void Space Conversion
11.27	Alleyway Deck Coverings Replacement
11.28	Bilge Cleaning
11.29	Galley Renovation
11.30	Central Stores Rebuild
11.31	Focsle Deck Storage Locker Installation
11.32	Noise Abatement

Part B: 12.0 Propulsion & Maneuvering Systems

SECTION	SECTION TITLE
12.1	Propulsion Machinery Replacement
12.2	Bubbler Compressor Replacement
12.3	Bubbler Piping Replacement
12.4	Bubbler Piping Cofferdam Construction
12.5	Rudder, Stock & Carrier Bearing Inspection
12.6	Steering Gear & Control Upgrade
12.8	Stern Thruster Maintenance
12.9	Propellers Service
12.10	Tailshafts & Stern Tubes
12.11	Rope Guards
12.12	Tailshafts Weardown
12.13	Intermediate Shafts & Bearings
12.14	CPP System Service

Part B 13.0: Electrical Power Generation

SECTION	SECTION TITLE
13.1	Shaft Alternators & Frequency Stabilization

Part B 14.0: Electrical Power Distribution

SECTION	SECTION TITLE
14.1	Electrical System Analysis
14.2	Switchboards Upgrade
14.3	Motor Control Centers Upgrade
14.4	Electrical Distribution Panels Service
14.5	TEP Inverter Replacement
14.8	Megger Survey
14.9	Thermal Scan Survey

Part B: 15.0 Auxiliary Systems

SECTION	SECTION TITLE
15.1	Sea Water Piping System Replacement
15.2	Bilge & Ballast System Piping Replacement
15.3	Ballast Tanks
15.4	Pump/Motors Replacements
15.8	Fuel Oil Transfer Equipment Replacement
15.10	Fuel Oil Tanks
15.12	Compressed Air System
15.16	Lube Oil Tanks

Part B: 16.0 Domestic Systems

SECTION	SECTION TITLE
16.1	Domestic Water System Piping Replacement
16.2	Domestic Water System Equipment Replacement
16.3	Domestic Water Tanks
16.4	Sewage Treatment Plant Replacement
16.6	Sewage & Grey Water System Replacement
16.7	Fridge Plant Replacement
16.8	Fridge Space Refurbishment
16.9	Electronics Room AC Replacement
16.10	Incinerator Replacement & Upgrade

Part B: 16.0 Continued…

SECTION	SECTION TITLE
16.11	Machinery Space Ventilation Maintenance
16.12	HVAC Systems Duct Cleaning
16.13	Galley Air Conditioning Installation
16.14	Galley Exhaust System Maintenance
16.15	Galley Exhaust Fan Silencer Installation
16.16	Machinery Space Fan Maintenance
16.17	Natural Ventilation Refurbishment
16.18	Steernng Gear Compartment ventilation modification
16.19	Wheelhouse Ventilation System Replacement

Part B: 17.0 Deck Equipment/Ship Support Systems

SECTION	SECTION TITLE
17.1	40 Ton deck Crane Replacement
17.2	Deck Machinery Mechanical Service
17.3	Deck Machinery Electrical
17.4	Stern Roller Service
17.5	Mooring Winch Installation
17.6	Stores Crane Replacement
17.7	Bollard Replacement
17.8	Anchors and chain inspection
17.9	Windlass
17.10	Chain Locker inspection
17.11	5 Ton Crane inspection
17.12	Towing Outfit

Part B: 18.0 Vessel Communications & Navigation

SECTION	SECTION TITLE
18.1	Internal Communication System Upgrade
18.2	AIS replacement
18.3	Auto pilot replacement
18.4	Distance measuring system upgrade
18.6	VHF-DF
18.7	CCTV (Camera System)
18.9	Gyro Compass

Part B: 19.0 Integrated Control Systems

SECTION	SECTION TITLE
19.1	Propulsion Control System Upgrade
19.2	Alarm & Monitoring System Replacement
19.5	MCR Console Refurbishment
19.7	Wheelhouse Layout & Console Rework