

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE	PAGE OF PAGES 1
2. AMENDMENT/MODIFICATION NO. 0002		3. EFFECTIVE DATE 13-Aug-2002	4. REQUISITION/PURCHASE REQ. NO. W25PHS-2144-8417	5. PROJECT NO.(If applicable)	
6. ISSUED BY CONTRACTING DIVISION WANAMAKER BUILDING 100 PENN SQUARE EAST PHILADELPHIA PA 19107-3390		CODE DACW61	7. ADMINISTERED BY (If other than item 6) US ARMY ENGINEER DISTRICT, PHILADELPHIA POC: SANDRA FLETCHER WANAMAKER BUILDING 100 PENN SQUARE EAST PHILADELPHIA PA 19107-3390		CODE E5CTCSGF
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)			X	9A. AMENDMENT OF SOLICITATION NO. DACW61-02-R-0042	
			X	9B. DATED (SEE ITEM 11) 16-Jul-2002	
				10A. MOD. OF CONTRACT/ORDER NO.	
				10B. DATED (SEE ITEM 13)	
CODE	FACILITY CODE				
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS					
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input checked="" type="checkbox"/> is extended, <input type="checkbox"/> is not extended.					
<p>Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods:</p> <p>(a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.</p>					
12. ACCOUNTING AND APPROPRIATION DATA (If required) DESIGN, CONSTRUCT, TEST AND DELIVER (1) STEEL CRANE					
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.					
A.THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.					
B.THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).					
C.THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:					
D.OTHER (Specify type of modification and authority)					
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.					
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)					
THIS AMENDMENT EXTENDS THE 15 AUGUST 2002 PROPOSAL DUE DATE AT 4:00 PM TO 23 AUGUST 2002 AT 4:00 PM.					
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.					
15A. NAME AND TITLE OF SIGNER (Type or print)			16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
_____ (Signature of person authorized to sign)		BY _____ (Signature of Contracting Officer)			

SECTION SF 30 – BLOCK 14 CONTINUATION PAGE

INSTRUCTIONS FOR USING AMENDED PAGES

1. Pages provided by amendment are to be substituted into the original Request For Proposal (RFP) document. Where an existing page number is provided as part of the amendment, the amended page is to be inserted and the original page with the same number discarded. Where a new page is provided, such as C-XX-A, it is to be added to the RFP document. Pages not addressed by amendment remain unaffected.

2. The amended pages use a Redline/Strikeout technique to show changes from the last issue of the page and simplify the contractor's effort in locating the changes. The technique works as follows:

a. Text that is *added* appears as underlined, and is also indicated by margin revision marks. This text must be considered by the contractor in preparing a bid.

b. Text that is *deleted* appears as ~~strikeout, and is also indicated by margin revision marks~~. Text so designated has been deleted and only appears to allow contractors to quickly determine "what has been deleted". This text should be disregarded by the contractor in preparing a bid.

c. Text that does not have the above appearance has *not* been altered.

d. In some cases, an alphabetical character has been added to a page number, to create a new page that allows room for a replacement page or "overflow" text.

INDEX OF CHANGES

<u>PAGES</u>	<u>CHANGED BY</u>	<u>REV I.D. NO</u>
INSTRUCTIONS/INDEX-1	Amendment 0002	12 August 2002
C-48	Amendment 0002	12 August 2002
C-59	Amendment 0002	12 August 2002
C-60	Amendment 0002	12 August 2002
C-63	Amendment 0002	12 August 2002

3. Questions from prospective bidders and responses from the Government are as follows:

a. Q - *We are finding that the barge will need to be longer (depending on which crane is used) to meet the stability criteria set forth in the specifications. Should we propose and quote the 55' length barge as specified or the new length that meets the requirements?*

- b. Response to above: The length is flexible to meet the performance requirements of the Solicitation, noting the possibility of multiple cranes, which result in different stability characteristics. The 55' length shown is provided to display one feasible approach at the first stage of the design process. The vessel described in the offer must meet the performance specification and the proposed price should reflect any change in the conceptual design presented in the RFP.
 - c. Q – *Does the COE prefer the crane in the center of the barge or at one end?*
 - d. Response to above: The longitudinal location of the crane must satisfy the required loads listed in Clause C540 C. as amended, with the same reach/hook height over the side and end of barge as shown on the Solicitation drawing. For example, the proposal must be capable of lifting at least 12-KP at 80-foot reach (95-foot radius) beyond the bow and 69-foot reach (95-foot radius) beyond the side of the barge with at least a 110-foot boom length. An arrangement with the crane center of rotation more than 15-feet from the bow will require a longer boom length to meet the performance specification.
 - e. Q – *If you require us to add to the length, which end would you like us to add the length to?*
 - f. Response to above: The response to question (c) answers this question.
4. Please indicate receipt of this amendment on Standard Form 33 (SOLICITATION, OFFER AND AWARD) as Amendment No. 0002. Failure to acknowledge all amendments may be cause for rejection of the proposals.

Crane shall be rated in accordance with either ANSI B30.8 or API 2C (3.1.2 Dynamic Rated Load)

The fully revolving load ratings shall be based on 5-degree crane trim (offlead), 2-degree crane list (sidelead), and 20-MPH adverse wind.

The fixed lift over the bow load ratings shall be based on a ~level deck condition of the vessel with 1-degree crane trim (offlead), 1-degree crane list (sidelead), and 20-MPH adverse wind.

C. REQUIRED LOADS

An intermittent clamshell fully revolving capacity rating for boom lengths between 90-110-feet is required. Ratings shall make allowance for anticipated machine list. Efficient use of a 2-CY general-purpose bucket filled to the line of plate with 130-LBS/CF materials is required for the 110-foot boom length.

Main hoist fully revolving required loads for lift work in KP (1,000-pounds) with the 110-foot boom length are as follows:

- 12-KP at 95-foot radius with 80-feet reach over the bow.
- 34-KP at 35-foot radius with 15-feet reach over the bow.

D. PREFERRED LOADS

The preferred lift capacity for every mode of operation is that which would fully utilize crane strength at the vessel stability limits. This capacity would also exceed the load requirements by a reasonable margin to allow for additional future growth.

E. OPERATIONAL TEST

At the end of successful dock trials, the vessel shall be overload tested in still water conditions at 100% of the crane design load. With the test load freely suspended and the crane fully revolving, the crane trim and list shall not exceed the design requirements during the testing. Transference of ballast during this test shall not be permitted.

F. BOOM

A lattice type sectional boom shall be provided with projected length from pivot to boom point main hoist sheave pin centerline of at least 110-feet. Boom inserts shall be provided to change the length to 90-feet.

A boom point extension shall be provided with 2-intermittent clamshell sheaves mounted at the point. All sheaves shall have anti-friction bearing mounted.

Label plates shall be attached to all valves, manifolds, and pumps to indicate the system and function of the equipment.

For valves, the label plates shall be installed over the stem of the hand wheel, where possible, and shall indicate the direction of opening (or closing). The nameplate shall be 14 gauge (or heavier) brass with ¼ inch high engraved letters filled with black paint.

All piping and hoses shall be marked at each termination and at each watertight bulkhead penetration to indicate service and flow direction.

C625 ELECTRICAL POWER PLANT

One (1) diesel generator set rated to provide a 25% excess of power requirements shall be provided. The engine shall be resiliently mounted by the engine manufacturer on vibration isolators to a skid sub-base, as a self-contained unit to be bolted on the foundation on the main deck. This should allow easy removal of each generator set by disconnecting electrical wiring, unbolting the respective skid from the foundation, and off-loading from the barge with the crane. Pick-up points for lifting, shall be provided on the top of each diesel generator set. The diesel generator set shall be located such that it can be removed as a single unit through a soft patch provided in the generator room overhead.

The elastomer vibration mounts to isolate engine vibration, shall be sized and selected for a maximum 20 percent transmissibility.

The generator set shall be sized based on the electrical load analysis and rated to provide a 25% excess of power requirements.

The generator set shall be rated for continuous operation at 480 VAC, 60 hertz, 3-phase, 0.8 power factor. The generator shall have a NEMA 2 enclosure and be self-ventilated. The generator shall be static regulated and brushless excited, designed to match the performance of the engine that drives it. The generator shall be equipped with a space heater. The generator shall be capable of operating with a 10% overload for two hours out of every twenty-four hours. The voltage dip on the generator shall not exceed 25 percent of 0.5 hp/kW, Code G, motor starting across the line. Transient reactance shall not exceed 25%.

The diesel engine shall be 4-cycle, radiator cooled, suitable for No. 2 diesel oil fuel, and having dry exhaust.

If the generator is greater than or equal to 100-kw, then the ~~The~~ diesel generator shall be built to and approved by ABS, and shall be supplied with ABS certificates.

The diesel generator set shall have the following features:

- ~~1200 RPM, 60 hertz~~ (lower RPM preferred)
- Dry type air cleaner and service indicator.
- Battery starting 24 VDC, (batteries shall be provided in battery box).
- Local and remote controls Start/Stop and Emergency Stop. Remote controls to be located outside of the Machinery Space entrance door.
- Throttle control governor, cranking cycle with adjustable 1-60 sec. crank/rest periods.
- Local gauges: Fuel Oil Pressure, Lube Oil Pressure, Water Temperature, Tachometer, Engine Run Hour Meter.
- Local alarms and shutdowns due to:
 - low Lube Oil Pressure
 - low Lube Oil level
 - high Cooling Water Temperature
 - overspeed Trip
 - overcrank.

The generator shall have a dedicated voltage regulator mounted in the switchboard. The voltage regulator shall be a solid-state, volts-per-hertz voltage regulator, capable of maintaining steady state regulation within 1 percent of rated voltage from no load condition to 110 percent rated load condition. The voltage regulator shall include a voltage-adjusting rheostat with a plus and minus 10 percent adjustment range.

The diesel engine Crankcase Vent shall be similar to Nelson Ecovent Recirculator with manometer and drain back to the engine sump. The engine crankcase shall include a weather-tight, oil-tight, lube oil electric heater for maintaining the sump temperature between 40 degrees F and 60 degrees F during cold weather when the engine is not running. The generator set engine oil sump shall be fitted with a ball valve and quick disconnect fitting so that oil can be added to or drawn from the sumps.

C630 FUEL OIL SYSTEM

The fuel oil system shall consist of:

- Main fuel oil tank
- Supply and return lines to the users.
- Tank fill stations
- Crane fill station

The main fuel oil tank capacity is at least 5,000-gallons at 6-inch ullage. The tank shall be located as shown on the contract arrangement drawing and shall be provided with a spill containment device underneath and a valved stripping connection having a cap or plug. Fuel oil shall be transferred from the main tank to the crane fill station, as necessary; fuel oil from the generator engines shall be returned directly to the main fuel tank. The main tank shall be complete with inspection openings and all necessary connections for fill, supply, return, drain, vent, and gauges.

handles fitted with stops or detents for open and closed positions to indicate valve open and valve closed positions.

Flexible hose connections shall be suited for temperatures up to 250 degrees F and pressures to 20 psig. Exposed piping shall be insulated for protection of personnel and nearby equipment.

C. VENTS

All cooling systems shall be vented at the main deck level to allow for removal or bleeding off of trapped air from the cooling systems. Vents shall be equipped with ball type shut-off valves that may be locked in the closed position.

D. SYSTEM SIZING REQUIREMENTS

During Final Design, the Contractor shall perform engineering to size the engine cooling pumps and radiators based on the final selection of the diesel generator engines. The ~~radiators coolers~~ shall be sized in accordance with the engine manufacturer's recommendations. ~~The coolers shall be sized to cool the full generator output at a vessel forward speed of 0 knots and the water temperature of 95 degrees F.~~ The contractor shall provide auxiliary expansion tanks and/or larger jacket water pumps if required to handle the cooling system volume.

C645 RAW WATER SYSTEM

The raw water system is combined with the fire main system and described in Clause C675.

C650 EXHAUST SYSTEM

A dry exhaust system shall be provided for the generator engine. The system shall consist of ASTM A106 steel piping and fittings and a residential type, hospital grade, spark-arresting stainless steel silencer similar to Nelson located on the main deck and enclosed in either a stack or an expanded metal cage. All piping and fittings exposed to the weather shall be stainless steel.

The stainless steel exhaust outlet shall be provided with a rain flap cover that closes automatically when not in use (i.e. counterweight), and the outlet shall be turned up to minimize noise on the deck. The rain flaps shall direct the fumes away from the flow path of any inlet ventilation air openings on the deck.

Stainless steel expansion joints shall be provided, and shall be located as close to the engine's exhaust outlet as possible, and elsewhere as needed. The expansion joints shall minimize transmission of engine vibration to the exhaust line, and prevent overstressing of the engine connecting flanges, anchor points, and piping due to exhaust pipe weight, thermal expansion and relative movement of engine and exhaust components. The joints shall use multi-ply bellows construction.