

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE	PAGE OF PAGES 1 7	
2. AMENDMENT/MODIFICATION NO. 2	3. EFFECTIVE DATE 03/14/2012	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)	
6. ISSUED BY Procurement Office George C. Marshall Space Flight Center National Aeronautics and Space Administration Marshall Space Flight Center, AL 35812	CODE PS32-B	7. ADMINISTERED BY (If other than Item 6) John Busbey/256.544.0896 FAX 256.544.9162 Email: john.a.busbey@nasa.gov		CODE PS32-B
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State, and Zip Code)		AUTOMATED INVOICE PAYMENT INFORMATION: (256) 544-5566		
		(x)	9A. AMENDMENT OF SOLICITATION NO. NNM12ZPS004E	
		X	9B. DATED (SEE ITEM 11) 01/26/2012	
			10A. MODIFICATION OF CONTRACT/ORDER NO.	
			10B. DATED (SEE ITEM 13)	
CODE	FACILITY CODE			

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

**X** The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, X is not extended. Offers 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:

- (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.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

(x)	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 is not, X 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.)

**PROJECT:** East Test Area Industrial Water Distribution System.

The purpose of this amendment is to respond to questions, clarification to the specifications and provide information.

Amendment includes: Amendment 2, 7 pages; Attachment 1 Tank Report, 27 pages; and Attachment 2 CERCLA drawing, 1 page.

All terms and conditions of the solicitation remain the same.

The bid date, time and location remains un-changed: bids to be opened on 03/21/2012 at 1:30 p.m. local time at the Huntsville Madison County Chamber of Commerce, located at 225 Church ST, Huntsville, AL 35810.

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)	
		John Busbey	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		BY Original signed by	03/14/2012
		(Signature of Contracting Officer)	

**NASA/MSFC CONSTRUCTION PROJECT:**

**East Test Area Industrial Water Distribution Revitalization – NNM12ZPS004E Amendment 2 Dated March 14, 2012**

**ANSWERS TO BIDDERS QUESTIONS**

**Question 1** – For work to be performed within the boundaries of the CERCLA sites, can historic data be provided for contaminants of concern and relative concentrations for soils in these areas?

**ANSWER to Question 1:**

a. NO. No historic data can be made available on any of the East Test Area Hazardous areas (NOTE! see contract drawing X3 “ETA HAZARDOUS AREAS” for the locations of the four types of areas listed below):

1. There is one Department of Army CERCLA/UXO/CWM area (Contractors shall note that UXO = unexploded ordnance and CWM = chemical warfare material).
2. There is one Department of Army CERCLA area
3. There are several MSFC CERCLA areas
4. There are several MSFC restricted areas

b. Since these plans and specifications were finalized, the Army has halted all digging in their CERCLA/UXO/CWM area.

c. Consequently, Contractors WILL NOT BE REQUIRED NOR WILL THEY BE ALLOWED TO DIG in the Dept. of Army CERCLA/UXO/CWM area.

d. The five Work Items listed below and shown on the attached drawing no. 1 are the major work items affected by the new requirement to do no digging in the Army CERCLA/UXO/CWM area. There may be other work items that are incidental to the project that are not listed below, but no digging will be allowed in the Army CERCLA/UXO/CWM area.

1. Work Item #1 – Line 9- Slip-lining of the existing 30" steel pipe with 24" DR-21 HDPE pipe. No digging allowed or required inside the Army CERCLA/UXO/CWM area.

2. Work Item #2 – Line 8- Slip-lining of the existing 42" steel pipe with 30" DR-21 HDPE pipe. No digging allowed or required inside the Army CERCLA/UXO/CWM area. Note! It is believed that the new HDPE pipe can be pulled through the existing steel pipe including the three bends shown on the attached drawing without having to dig up the bends.

3. Work Item #3 – Line 8- Installation of new Air Release Valve for the 30" HDPE pipe in Work Item #2 above. There is an existing round, concrete valve box containing the existing air release valve. This valve box is a 36-inch diameter concrete pipe, 5-feet deep, set on end. The existing valve must be removed and the new air release valve installed from the confines of this existing valve box. No digging can take place outside this valve box.

4. Work Item #4 – Line 9 – Slip-lining HDPE, installation of ductile iron pipe, reducers and other work south of tank 4562 (shown on drawing C24). In order to stay out of the Army CERCLA/UXO/CWM area, no digging can be done any closer to the road than 5-feet north of the north edge of pavement. This may require moving the large valve shown on drawing C24.

5. Work Item #5 – Moving 580 linear-feet of new 30-inch diameter HDPE pipe out of the Army CERCLA/UXO/CWM area. This move is shown on the attached drawing and will require 650 linear feet of 30-inch HDPE pipe and trenching (instead of 580 L.F.). Note that valves PSV-1-2 and HV-1-2 will need to be installed in the pipe in its new location.

**Question 2** – Does excavation of soils in the CERCLA sites require HAZWOPER training for persons working with or around these materials?

**ANSWER to Question 2:**

a. YES. All work within the three types of areas listed below and shown on drawing X3 will require workers with the 40-hour HAZWOPER training.

1. There is one Department of Army CERCLA area
2. There are several MSFC CERCLA areas
3. There are several MSFC restricted areas

b. Work not in the three areas listed in Item a. above and shown on drawing X3 will not require workers with the 40-hour HAZWOPER training.

**Question 3** – Sheet X4, Project Note #3 states the following “Surplus soil not required for site construction may be spread onsite at a location approved by the COTR . . .” Does this statement apply to soils removed from the CERCLA sites or does that soil require disposal once it has been disturbed?

**ANSWER to Question 3:**

- a. No excavation in the Army CERCLA/UXO/CWM site will be required (see answer to Question 1 above).
- b. However, for excavating in the three areas listed below, any surplus soil must be spread at the same area the surplus soil came from.
  1. There is one Department of Army CERCLA area
  2. There are several MSFC CERCLA areas
  3. There are several MSFC restricted areas

**Question 4** – Is lightning protection systems in Alternate 2 or Alternate 3?

- a. Drawing X1 - Red lined on drawing states Alternate #3, 4, & 5 are to be excluded..
- b. Drawing #E9 – Detail 6 Shows that down leads for lighting protection are to Alt #3.
- c. Drawing E9- Detail 7 – 8 – 9 - Shows that lighting protection shall be Alternate #2.
- d. Drawing E11 - Under general notes shows all air terminals portion of lighting protection shall be in Alternate #3.

**ANSWER to Question 4:** Lightning protection system for the new pump station is required in Base Bid.

**Question 5:** Site for new water tower (Bldg 4566 – Drawing pages C41 & C42) is VERY SMALL. With existing tank and power lines blocking this site, will be able to close the drive in front of the site during erection. We will need the aid of a large crane for erection and the only place possible for placement (during erection) is on the asphalt drive. This will only be for a day or two. If not, we will not be able to build this tower on your specified location.

**ANSWER to Question 5:** Road can be closed for several days by placing a 200-foot long temporary road to the south around crane location. Temporary road shall be constructed from a layer of ALDOT 825B crushed stone base that is 6” thick, 12-foot wide and is compacted and tamped enough to make the road stable for light traffic.

**Question 6:** Any requirements for placing an FAA obstruction light on top of tower?

**ANSWER to Question 6:** YES. Base Bid shall include a standard FAA obstruction light that would normally be required for the new water tank shown in the plans and specs.

**Question 7:** Any requirements for interior lighting for this tower?

**ANSWER to Question 7:** YES. See the following changes to the project specifications and drawings:

**CHANGES TO SPECIFICATIONS**

Section 331615 – WATER STORAGE STEEL TANKS

Part 2.2 A, TANK ACCESSORIES; add the following paragraphs:

9. Lighting

- a. Provide lighting inside the tank pedestal along the ladder system, and inside the access tube inside the tank.
- b. Light fixtures shall be non-metallic compact, 26 watt fluorescent, vapor proof fixtures. Design basis shall be Canlet 6804FWF (wall mounted), and 6804FPF (pendant mounted).
- c. Provide the light fixtures at each landing of the access ladder system, and along the path not to exceed 50 feet between fixtures. Provide a minimum of three of the light fixtures inside the access tube.
- d. Provide a weatherproof, 20-amp, toggle switch inside at the tower entrance for control of the lighting system.
- e. Provide 2#10, 1#10 ground in 3 / 4” conduit between all fixtures, the toggle switch, and to the pullbox outside of the tank.

1. SHEET FAC-NA-CF-E4 – ELECTRICAL SITE PLAN – AREA 3

- a. Change the last sentence of Keyed Notes number 20 to read:  
“PROVIDE 4 #6, 1 #8 G. FOR HEAT TRACE AT TANKS, AND 2#10 FOR LIGHTING INSIDE TANK PEDESTAL (SHARE GROUND).”
- b. Add an underground conduit line between Tank 4562 and the pullbox outside of the pedestal. Attach note that reads:  
“PROVIDE 2#10, 1#10 GROUND IN 3 / 4” CONDUIT BETWEEN THE PULLBOX OUTSIDE OF THE TANK AND THE LIGHT SWITCH INSIDE OF THE TANK PEDESTAL. EXTEND THE BRANCH CIRCUIT TO PANELBOARD 4557-RP-0001 IN BUILDING 4557 AND CONNECT TO BRANCH CIRCUIT 24.”

2. SHEET FAC-NA-CF-E17 – ELECTRICAL SCHEDULES

- a. Change the load description for circuit breaker location 24 of panelboard 4557-RP-0001 to read:  
“Tank 4562 Pedestal Interior Lighting”.

**Question 8:** Reference project specifications page 13 of section 255014, there is reference made to Integrated system commissioning procedures are specified in Section 23 08 00, "Commissioning of HVAC". I cannot locate these procedures or referenced section for HVAC commissioning.

**ANSWER to Question 8:** Formal commissioning of the HVAC is not required in this project. Delete the reference to section 23 08 00.

**Question 9:** Reference drawing # FAC-A-4557-C31, there is a 1 ½ inch Domestic Water meter shown just left of the title block. The note references the UCS specifications for the meter. This meter is not shown to connect to the UCS cards on UCS2. Should it be connected to a UCS card, digital input channel?

**ANSWER to Question 9:** Yes, the meter should be connected to UCS.

**Question 10:** Reference drawing # FAC-A-4557-M3, there is a schematic and sequence of operation given for Constant Volume Single Zone DX Cooling Unit. According to the models of units on sheet M4, this schematic and sequence should apply only to ID# 4557-DXAC0001 and 4557-DXAC0002. The units ID# 4557-DXAC0003 and 4557-DXAC0004 appear to be heat pumps with auxiliary heat. Please confirm and if necessary, provide a schematic and sequence of operation for a heat pump without economizer.

**ANSWER to Question 10:** DXAC0003 and 0004 are PTAC units controlled via "smart" T-stats per Detail 5 on M3. Coordinate with PTAC vendor for connection details.

**Question 11:** The specification, section 262923 calls for Variable Frequency Controllers. There isn't a list of VFC manufacturers provided in the specification. Do you have a list of VFC manufacturers that are desired for this project?

**ANSWER to Question 11:** NO.

**Question 12-** The metal building specifications section 133419-13 2.10 B references compliance with spec section 088000 "Glazing", however that spec section is not included in the specifications for this project. Will this section be added?

**ANSWER to Question 12:** Delete reference to spec section 088000 "Glazing"; bid per plans and specs after this deletion.

**Question 13** – This same spec section 133419-7 2.3 E & F discuss air infiltration for roof and wall panels. Will air barrier and testing be required under this solicitation? If so will those spec sections be added?

**ANSWER to Question 13:** NO. Testing is not required under this solicitation.

**Question 14-** Typically the safety and QC sections specify particular personnel required for these areas and I did not see that in this specification. Will a full time safety and Quality Control personnel be required for this project or will that be up to the contractor to staff appropriately?

**ANSWER to Question 14:** The contractor is to staff in accordance with the safety and quality requirements of Division 01 of the specifications and also with the approved SHE plan.

**Question 15** – The metal building specifications section 133419-6 calls for three specific manufacturers. Are other pre-engineered metal building manufacturers allowed if they can meet the particular specifications?

**ANSWER to Question 15:** YES.

**Question 16** – Could you enquire from the geotechnical engineer if we can use 33% increase in allowable soil bearing capacity for transient (wind and seismic) load cases (for the elevated water tank).

**ANSWER to Question 16:** NO. The tank foundation system should include steel H-piles, end bearing on bedrock.

Add the following subparagraph G to paragraph 1.2 "SYSTEM DESCRIPTION" which is found in specification section 331615 "WATER STORAGE STEEL TANKS":

G. Tank Foundation.

The elevated water tank shall be supported on a foundation consisting of reinforced concrete and end-bearing, steel H-piling driven to refusal on bedrock.

The complete foundation system shall be designed by a licensed professional engineer. The Contractor shall submit the completed foundation drawings and foundation calculations as a submittal to the Government for review and approval before any work begins on the foundation. Refer to paragraph 1.3 in this specification section and to section 013300 "SUBMITTALS" for information on submittals and Government review period. Refer also to section 316216 "STEEL PILES".

The Contractor should refer to soil borings for the tank site shown in the back of the project drawing package on drawing BL2. These boring logs provide information such as depth to bedrock, Standard Penetration Test blow counts and were taken from the Geotechnical report for the tank site. The Geotechnical report is provided in Appendix A in the back of the project specifications.

Also, make the following changes to specification section 316216 "STEEL PILES":

- Delete the last two sentences of paragraph 1.3.A (dealing with test piling) so that the paragraph reads as follows: "A. Bid price shall include furnishing the necessary tools, equipment, material, labor and supervision to install all piling for the elevated storage tank foundation as designed by the tank manufacturer."
- In paragraph 1.5 "SUBMITTALS", Delete the following subparagraph F: "F. Submit final pile load test reports."

Add the following new subparagraph F:

"F. The Contractor shall submit all calculations for design of the foundation for the new tank including design of the steel H-piling, reinforced concrete, earth backfill and any other features of the foundation. This design shall be done in accordance with the latest International Building Code. These calculations shall be submitted on paper and as a pdf file-on-disk. All drawings and sketches used by the foundation engineer shall be included. The calculations shall be checked and initialed by a checker. Both the foundation engineer and the checker shall be licensed engineers and both shall place their seal on the calculations.

- In paragraph 1.6 "QUALITY ASSURANCE", Delete the following subparagraph A.8 "8. Observe pile tests. Determine capacities of test piles."
- Delete entire paragraph 3.12 "PILE TEST PROGRAM" including subparagraph A. through G.

**Question 17** – Reference Specification 283111, 2.9, "DIGITAL ALARM COMMUNICATOR TRANSMITTER"

This section indicates that the system will contain a digital alarm communicator transmitter that is compatible with the NASA MSFC remote central station...

To my knowledge, there is no equipment at MSFC that is capable of receiving information from a digital alarm communicator transmitter. The systems do communicate with MSFC central, but communication is via a Simplex peer to peer dedicated network (can be fiber optic, or copper), not a digital communicator. I am just trying to clarify this.

**ANSWER to Question 17:** Replace section 2.9 "DIGITAL ALARM COMMUNICATOR TRANSMITTER" including sub-sections A through F with the following text:

**2.9 CENTRAL FIRE ALARM NETWORK NOTIFICATION**

A. Initiation of a fire alarm shall automatically cause the fire department to be notified by means as required by that department. The Contractor shall arrange to have the connections made and shall provide materials and labor as required to meet the fire department requirement. The fire alarm system shall be capable of interfacing with Simplex 4120 base fire alarm communication system.

**Question 18:** Reference Drawing E16 "FIRE ALARM SYSTEM RISER DIAGRAM"

The riser indicates "two phone circuits for DACT connection to MSFC Central Station..."

General Note "K" indicates that fiber media modules are to be provided for future application with the Simplex Network, but that the system should be wired and programmed for DACT telephone lines under this contract.

Again, to my knowledge, MSFC has no means to receive signals from a DACT.

General Note "N" indicates that the system shall be by Notifier. This should read "Simplex", as specified in 283111, 2.1.A

**ANSWER to Question 18:** Delete all references to digital alarm communicator transmitter (DACT):

1. On Riser Diagram (bottom left on drawing E16) add the following note: "Provide fiber optic cards for connection to MSFC Central Station network."
2. Change note K of the General Fire Alarm System Notes on drawing E16 to read as follows: "K. PROVIDE A FIBER OPTIC MEDIA MODULE FOR APPLICATION WITH THE MSFC CENTRAL STATION NETWORK."
3. Change note N of the General Fire Alarm System Notes on drawing E16 to read as follows: "N. FIRE ALARM SYSTEM SHALL COMMUNICATE WITH THE NASA MSFC CENTRAL STATION."

**Question 19** – In regards to Spec Section 134100 – Repairs to Steel Tanks. Do you have any recent inspection reports on these tanks?

**ANSWER to Question 19:** YES. This report is attached to these answers as a pdf file.

**Question 20** – In regards to Spec Section 134100 – Repairs to Steel Tanks. Is there a way to quantify the amount of tank repair and pit welding that will be required?

**ANSWER to Question 20:** YES. See the work items below required to be done to EACH TANK (unless noted otherwise). The work items below are in addition to the requirements of specification section 134100 "REPAIRS TO STEEL TANKS".

1. Extend the overflow pipe (22') to the ground and install 4'x4 'x4" concrete splash pad, new flap valve and fill eroded area; provide submittal for approval of installation details with sketches (NOTE! This work item is required only at tank 4552, the east tank).
2. Remove the existing exterior ladder and install a new OSHA approved ladder with cable type safety climb; provide submittal for approval of installation details with sketches.
3. Remove existing interior ladder and install OSHA approved ladder; provide submittal for approval of installation details with sketches.
4. Remove the existing cathodic protection and access plates; weld seal plates on roof where access plates were removed. There are forty, 4" dia. by 0.25-inches thick new seal plates to be welded on the roof. Note that new cathodic protection will NOT be required.
5. Install a new 30" diameter roof hatch (with lock). Locate new hatch on opposite side from existing roof hatch; provide submittal for approval of installation details with sketches.
6. Weld-up and fill pits that exceed ½ the steel thickness and grind smooth for preparation for painting and coating. Assume that existing tank 4552 will require approximately 1000 square inches of this welding repair and that tank 4562 will require approximately 1500 square inches of this welding repair. Also, assume that the 48-inch diameter by 20-foot long level-equalizer line connecting the two tanks (see photo 4 on page 10 of the attached tank report) will require 500 square inches of this welding repair.
7. Remove all silt and dirt from the insides of both tanks and the 48-inch by 20-foot long equalizer line. Assume that the tanks have 12-inch layer of silt on the floor and 4-layer of silt on the walls; assume the equalizer line has 12-inches of silt completely coating the inside surface of its 48-inch diameter.
8. The 48-inch diameter by 20-foot long equalizer pipe shall be surfaced-prepped and painted inside and out in the same manner as the tanks. See specification section 098720 "PAINTING OF STEEL WATER STORAGE TANKS" for the preparation and painting requirements for this equalizer pipe.
9. The Contractor shall grade the dirt around the concrete ring foundation of both tanks to expose the top 8-inches of concrete foundation. This shall be done where needed to keep vegetation and dirt from being in contact with the steel tank. After this, the Contractor shall place a ring of crushed limestone gravel (ALDOT size #57 stone) around the foundation of each tank. This ring shall be 6-inches thick and 2-feet wide to help keep fire ants and weeds away from the steel tank bottom.
10. Care shall be taken to make sure the grading described in item 9 above will allow the site around the tanks to drain with no ponding. All disturbed areas shall be seeded and mulched.

11. The Contractor should note that the following specification sections apply to the repair of each existing tank and the equalization line connecting the tanks:

- Section 098720: PAINTING OF STEEL WATER STORAGE TANKS
- Section 132830: REMOVAL/CONTROL AND DISPOSAL OF PAINT WITH LEAD
- Section 134100: REPAIRS TO STEEL TANKS

12. The Division 31 EARTHWORK and DIVISION 33 UTILITIES specification sections are applicable to pipeline work in the vicinity of both tanks:

**Question 21** – The Alternate # 1 for the refurbishing of the 1,000,000 gallon tanks does not have very specific details as to the scope of work. Spec section 134100-1 has a list of items and is helpful but with over 65K square feet of surface to deal with, is there any way to be more specific about the welding fills, how many bolts at the man way, seam sealer, gaskets? Maybe a unit price for these would be better so that everyone can be compared apples to apples for this scope and it might be more advantageous to the Government to only pay for the actual quantity installed? Otherwise the costs for this will be more inflated due to the lack of information? Just a thought.

**ANSWER to Question 21:** See answer to Question 20. NOTE! If you still have questions after reviewing the Government answer to Question 20 above, please bid as best you can based on the answers to all twelve of these question sets, the plans and the specifications.

**Question 22** – On Page 331100.01-1 Paragraph 1.2B, under summary, You require 401 lining in all ductile iron pipe does this also apply to fittings?

**ANSWER to Question 22:** YES. The lining requirement applies to the fittings as well as to the pipe.

**Question 23** – On Drawing x4 note 8 it states that abandoned piping should be drained and capped with a 2ft concrete plug but the specifications (section 3311100.01 water distribution, paragraph 3.7 PIPED UTILITY ABANDONMENT it calls for the abandoned piping to be drained, then filled with flowable fill. Question; which of these directives are we to assume in our bid?

**ANSWER to Question 23:** Bid per note 8 (CIVIL GENERAL NOTES) on drawing X4 (drain, cap with 2-foot long concrete plug at appropriate places).

Change text of specification section 331100.01, "WATER DISTRIBUTION" paragraph 3.7.A.2. "Piping to Be Abandoned in Place" to read as follows:

"2. Piping to Be Abandoned in Place: Drain piping. Plug with 2-foot long concrete plugs at the appropriate locations to keep dirt and water out of the abandoned pipe."

**Question 24** - Valves CV-4583-2, CV-4583-2, HV-4583-1, and HV-116-5 are not on the plans, should these valves be deleted from the schedule?

**ANSWER to Question 24** : Yes

**ATTENTION: THE LIST BELOW ARE CORRECTIONS TO THE VALVE SCHEDULE.**

- 1: All references to drawing C37 should be deleted.
- 2: Valve CV-103 shall have a FLG-FLG joint.
- 3: Valve HV-116-2 shall have a 20" Nom. Dia.