



# MANATEE COUNTY

March 3, 2010

All Interested Bidders:

SUBJECT: Invitation for Bid #10-0824-OV  
5<sup>th</sup> Clarifier at the Southwest Water Reclamation Facility  
Bradenton, FL (Project No. 6037282)

## ADDENDUM #1

**Bidders are hereby notified that this Addendum shall be acknowledged on page 00300-1 of the Bid Form and made a part of the above named bidding and contract documents. Bids submitted without acknowledgement of the Addendum will be considered incomplete.**

The following items are issued to add to, modify, and clarify the bid and contract documents. These items shall have the same force and effect as the original bidding and contract documents, and cost involved shall be included in the bid prices. Bids to be submitted on the specified bid date, shall conform to the additions and revisions listed herein.

**Bidders Note:** The deadline for clarification requests is **March 5, 2010, 5:00 PM.** Questions received after the date shall not be considered.

**Attachment #1** – URS Memorandum dated March 3, 2010 responding to questions received at the Pre-Bid / Information Conference held on February 17, 2010. (10 Total Pages)

**Attachment #2** – URS Memorandum dated March 3, 2010, providing the "Construction Cost Estimate". (1 Total Page)

Bidders: It is important to note that Manatee County Government is currently receiving competitive bids which are up to 50% lower than the Engineers' Estimate.

Financial Management Department – Purchasing Division  
1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205  
Phone: 941-708-7527 – Fax: 941-708-7544

LARRY BUSTLE \* DR. GWENDOLYN Y. BROWN \* JOHN R. CHAPPIE \* RON GETMAN \* DONNA G. HAYES \* CAROL WHITMORE \* JOE  
MCCLASH

*District 1*

*District 2*

*District 3*

*District 4*

*District 5*

*District 6*

*District 7*

March 3, 2010  
Invitation for Bid #10-0824-OV / 5<sup>th</sup> Clarifier  
at the Southwest Water Reclamation Facility  
Bradenton, FL (6037282)  
Page 2 – Addendum #1

Additional questions resulting from the Pre-Bid Meeting held on February 17, 2010.

**Question 1:** Are there any MBE / WBE requirements for this project?

**Response 1:** Bidders reference Section 00010, Information to Bidders, page no. 00010-10, Article A.27, titled MBE/WBE.

**Question 2:** What is the anticipated start date?

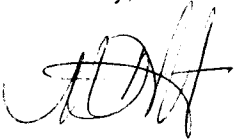
**Response 2:** Notice to Proceed will be issued approximately 6 -8 weeks after receipt and approval of the bids.

If you have submitted a bid prior to receiving this addendum, you may request in writing that your original, sealed bid be returned to your firm. All sealed bids received will be opened on the date stated.

**END OF ADDENDUM #1**

Bids will be received at the **Manatee County Purchasing Division, 1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205 until 2:00 P.M. on March 17, 2010.**

Sincerely,



R. C. "Rob" Cuthbert, CPM, CPPO  
Purchasing Division Manager

Ov  
Attachments – (13 Total Pages)



# Memorandum

Date: March 3, 2010

To: Olga Valcich, Manatee County Purchasing Department

CC: Jeff Streitmatter, Manatee County Project Management

From: David A. Wilcox, P.E.

Subject: **Text for Addendum No. 1  
IFB 10-0824-OV 5<sup>TH</sup> Clarifier at the Southwest Water Reclamation Facility  
(6037282)**

**ATTACHMENT #1**

## Items Discussed at Pre-Bid Meeting, February 17, 2010

1. The 5<sup>th</sup> Clarifier and new WAS & RAS Pump Station shall be tested, approved, and placed in operation before Clarifiers 1 & 2 are taken out service for work on the Clarifiers 1 & 2 RAS/WAS Pump Station. (Refer to Construction Phasing on Sheet G-2.)
2. During construction, the Aeration Basin Effluent Channel will be in service, thus, the Contractor will need to isolate the end of the channel for installation of the proposed slide and gate and construction of the proposed Effluent Channel Extension.
3. Since the Plant RAS system will be active during construction and it currently includes no isolation valves, a line stop is required on the 20-inch RAS line during the modifications to the Clarifiers 1 & 2 RAS/WAS Pump Station. (Refer to Sheet C-3 for lines stop location.)
4. The Contractor shall coordinate with Plant personnel regarding any items impacting Plant operations. The Contractor shall maintain access for operations personnel to all components of the treatment facility. During construction of the 5<sup>th</sup> Clarifier, construction will be underway on the 10 MG Tank project in a remote area of the Plant.
5. Sheets E10 and E-11, Monitoring & Control Wiring Termination Diagrams SCADA Cabinet 'SP-1'. The Contractor shall provide and install all hardware. Manatee County has contracted with McKim & Creed to provide the SCADA Integration and Control Programming for the proposed clarifier mechanism, pumps, VFDs, and flowmeters. The Contractor shall be required to coordinate with McKim & Creed and the County to provide all information necessary for this work. The Contractor shall notify M&C six weeks prior to completing all related equipment installation, wiring, terminations, calibrations, and testing. At that time, M&C will begin the SCADA development activities. Following completion of the SCADA development activities and within one week of notification by the Contractor that all related equipment has been confirmed ready for commissioning, M&C will be on-site to perform the SCADA integration and commissioning activities. It is anticipated that commissioning activities will be completed within four weeks.

**Questions from Pre-Bid Meeting, February 17, 2010**

**Question 1:** Are all roads within the Plant suitable for concrete trucks and cranes?

**Response 1:** The Plant roads are used by maintenance and construction equipment. However, if they are damaged by the Contractor's equipment they must be repaired at no additional cost to the County.

**Question 2:** What is the status of the Building Permit? Is there a fee due?

**Response 2:** The Engineer pre-applied for the Building Permit (permit #09120235). All reviews are completed and the permit is ready for issuance once the Contractor provides his information and pays the balance due, \$825.00.

**Question 3:** Is there somewhere to store excavated dirt?

**Response 3:** Refer to the Overall Site Plan on Sheet C-1 for the Staging Area located east of the project area and the existing Chlorine Building. The staging area can be used for storage of excavated soil. If excess material is stored in this staging area, a silt fence barrier must be installed around the area perimeter. The Contractor shall haul any excess soil off-site prior to completing the project.

**Question 4:** How deep is the Aeration Basin Effluent Channel?

**Response 4:** Sheet S-3, Detail 3, Effluent Channel Extension. The Aeration Basin Effluent Channel is 6.73 feet deep. The top of wall elevation is 28.73 and the bottom of channel elevation is 22.00. The typical water elevation in the channel is 24.00.

**Question 5:** What is the elevation of the proposed roof over the Pump Station?

**Response 5:** The finished floor elevation of the new RAS & WAS Pump Station is 18.5 (Refer to Sheets C-2 and S-5). The roof has an 8" slope. At the lower roof edge, the top of the roof is 12'- 0" from the top of the slab or elevation 30.5. At the higher roof edge, the top of the roof is 12'- 8" from the top of the slab or elevation 31.17. (Refer to Sheet S-4 for roof plan.)

**Question 6:** Is the new duct bank solid concrete?

**Response 6:** Sheet E-2, Electrical Site Plan, Duct Bank details. Per the profile, due to piping conflicts, the first portion of duct bank will be shallow. Duct Bank Section A for shallow installations requires the conduit to be at least 12" below grade with concrete encasement from grade down. Duct Bank Section B illustrates typical installation where there are no conflicts and the conduit can be placed at least 24" below grade.

**Question 7:** Is there an option for a poured in place tank?

**Response 7:** The clarifier tank shall be of pre-stressed concrete construction. A poured-in-place concrete tank will not be considered.

**Question 8:** Will temporary utilities be provided?

**Response 8:** The Contractor is responsible for all fees associated with temporary utilities, including electric, water, and sanitation per specification Section 01510, Temporary and Permanent Utilities, Page No. 01510-1 and 01510-2.

**Question 9:** Can we dispose of dewatering discharge in the existing drainage system?

**Response 9:** Dewatering discharge shall be sediment free and disposed of into the existing Plant drainage system.

**Question 10:** Will the County pay for material testing?

**Response 10:** Refer to specification Section 01410, Testing and Testing Laboratory Services.

**Question 11:** Are both General Contractor and Underground Utility Contractor licenses required?

**Response 11:** Refer to Section 0020, Basis of Award, Page No. 00020-2, Article B.03 Qualification of Bidders. The minimum license requirement for this project is a General Contractor. An Underground Utility Contractor license is no longer required.

### **On the Drawings**

#### Sheet M-1, Clarifier Plan, Section and Details

Drive Platform Callout

Delete "1 1/2 " Alum. I-Bar Grating (Banded)"

Replace with "3/8" Aluminum Checkered Floor Plate"

#### Drawing M-2, Clarifier Details

Detail 5, Center Pier and Sump

Delete "20" RAS Pipe, 1'-8" DIA (316L S.S.), 3/16" Wall Thickness"

Replace with "20" RAS Pipe, 1'-8" DIA (Sch 20), 3/8" Wall Thickness"

### **In the Specifications**

#### Section 02002, Concrete Pressure Pipe Tapping

Add attached section

#### Section 11227 Clarifier Equipment

2.09, A

Delete "The walkway surface shall be fiberglass grating."

Replace with "The walkway surface shall be aluminum grating."

2.11, B

Delete "A minimum 20-inch diameter by 1/4-inch wall thickness RAS sludge return pipe shall be provided..."

Replace with "A 20-inch diameter, schedule 20 steel pipe (3/8-inch wall thickness) RAS sludge return line shall be provided..."

2.20, A

In both locations, Delete "and given one coat of manufacturer's epoxy primer 2-3 MDFT."

In both locations, Replace with "and shop primed with Tnemec Series 1 Omnithane (a modified aromatic polyurethane primer), or equal, at 2.5-3.5 mils DFT."

#### Section 11295, Coplastix Slide Gates

1.01, A

Delete "...as manufactured by Ashbrook Corporation, Houston, Texas."

2.05, A

Delete "Slide gates shall be Coplastix as manufactured by Ashbrook Corporation, Houston, Texas, or equivalent."

Replace with "Slide gates shall be Coplastix as manufactured by Ashbrook Corporation of Houston, Texas, Composite as manufactured by Hambaker of Houston, Texas, or equivalent."

Section 13200, Prestressed Concrete Tank

2.01, A

Delete "The tank construction company shall be the Crom Corporation, Gainesville, Florida, or approved equal."

Replace with "The tank construction company shall be The Crom Corporation of Gainesville, Florida, Precon Corporation of Gainesville, Florida, or approved equal."

Section 16269, Variable Frequency Controllers

2.01, A

Delete "The AC Drive shall be provided by Schneider Electric or prior approved equal. Substitutions must be submitted in writing three weeks prior to original bid date with supporting documentation demonstrating that the alternative manufacturer meets all aspects of the specifications herein."

Replace with "The AC Drive shall be provided by Schneider Electric or approved equal."

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**SECTION 02002**

**CONCRETE PRESSURE PIPE TAPPING**

**PART 1 GENERAL**

**1.01 DESCRIPTION OF WORK**

- A. Install tapping saddle and valve for connection of new 30-inch ductile iron pipe to existing 54-inch prestressed concrete cylinder pipe (PCCP).

**1.02 RELATED WORK**

- A. Section 02064 - Modification to Existing Structures, Piping and Equipment
- B. Section 02615 - Ductile Iron Pipe and Fittings
- C. Section 02617 - Installation and Testing of Pressure Pipe
- D. Section 02640 - Valves and Appurtenances

**1.03 QUALITY ASSURANCE**

- A. The Tapping Contractor shall have experience with similar size taps of prestressed concrete pipe in the last five years.
- B. Furnish the services of the PCCP manufacturer (Price Brothers/Hanson Pressure Pipe 678-428-2484) for two (2) days to supervise the tapping procedure.

**1.04 SUBMITTALS**

- A. Materials and Shop Drawings:
  - 1. Copies of all materials required to establish compliance with the specifications shall be submitted to the Engineer. Submittals shall include the following:
    - a. Certified drawings and data.
    - b. Literature on drawings describing the equipment and showing all-important details of construction and dimensions.
- B. Operating Instructions: Operating and maintenance shall be furnished to the Engineer.

## **1.05 DELIVERY, STORAGE, AND HANDLING**

### **A. Delivery at Site**

1. All materials, which will not be installed the same day as delivered to the site, shall be stored in the appropriate manner in the original manufacturer's packaging. Each package shall have an identifying mark and a complete list showing contents. Loose items with no original packaging shall be boxed to protect the products from scratches, abrasion, or breakage.

### **B. Protection Prior to Installation**

1. All products shall be protected from excessive heat and from moisture during storage and handling.
2. All plastic materials shall be stored out of direct sunlight.

## **PART 2 PRODUCTS**

### **2.01 TAPPING VALVE**

- A. Refer to Specification Section 02640, Valves and Appurtenances, article 2.18, A.

### **2.02 FLANGED TAPPING SLEEVES FOR PCCP**

#### **A. Materials**

1. Saddle Plate shall be manufactured from ASTM A283 Grade C Steel or equal.
2. Straps shall be manufactured from ASTM A 276 Type 304 Stainless Steel.
3. Gasket shall have a broad, flat sealing surface and shall be manufactured of a material suitable for secondary effluent.
4. Flange to be connected to valve shall be manufactured in accordance with AWWA C207 Class D. Flanges larger than 12inch diameter shall have an alignment recess suitable for accepting the alignment lip of the tapping valve.
5. Waterway shall be lined with fusion-bonded epoxy to a minimum thickness of 15 mils in accordance with AWWA C213.
6. All other steel shall be coated with a fusion-bonded epoxy coating.



7. Bolts, studs and nuts shall be stainless steel 18-8 type 304.

C. Features

1. Sleeve shall be designed for an operating pressure of 150 psi.
2. The sleeve shall have a separate gland, which allows the sleeve to be installed, and the annular space between the pipe and the sleeve to be grouted, prior to cutting the prestressed wires.
3. Foam or rubber grout gaskets and hard rubber spacers shall be used to provide an annular space between the pipe and the sleeve. Grout horns shall be furnished to facilitate grouting of the annular space.
4. The annular space shall be grouted with a suitable Portland Cement grout. The grout shall be allowed to set prior to cutting any prestressing wires. Any accelerant used in the grout shall not be deleterious to prestressing wire.
5. The pressure plate shall be adequately braced to eliminate vibration & flexing of the plate while the tapping machine is operating.
6. The machined gasket groove on the pressure plate must be consistently positioned about throat of tapping gland waterway. However, ID of the gasket groove must be set back a minimum of 1 inch from the waterway to allow dispersal of forces generated by gasket compression. Gasket grooves machined in a circle and then rolled to an elliptical shape will not be allowed.
7. All waterway welds shall be dye-penetrant inspected or hydrostatically shop tested for water tightness.
8. The gland shall be equipped with load bearing set screws to transfer thrust loads from the branch piping to the sleeve.
9. A three-flange configuration shall be used on all outlets above twelve-inch to allow for valve bypass.
10. Welding the gland to the steel cylinder of the pipe to provide a watertight seal shall not be permitted.
11. The sleeve shall be encased in a minimum of one inch of Portland cement mortar or concrete for corrosion protection after the tap.
12. The sleeve shall be Hanson Pressure Pipe or approved equal.

## PART 3 - EXECUTION

### 3.01 SADDLE INSTALLATION AND TAPPING OPERATION

- A. Prior to ordering material:
1. Determine from pipeline owner and/or pipe manufacturer's records the following:
    - a. Manufacturer
    - b. Year of manufacture,
    - c. Outside diameter of pipe barrel,
    - d. Steel cylinder outside diameter, and
    - e. Internal working pressure
  2. Excavate, expose, and clean the exterior of the pipe at the location of the tap.
    - a. Measure barrel circumference.
    - b. Chip mortar coating away exposing the prestressing wire to determine depth of mortar coating. Be careful to not damage the prestressing wire.
    - c. Patch the mortar coating and then backfill the pipe.
- B. Performing the Tap
1. Excavate and clean pipe in area where saddle is to be installed. Remove any irregularities extending beyond the normal contour of the pipe surface. Check all measurements to be certain saddle is correct size for the pipe.
  2. Position gland on the pipe and mark the area where the mortar coating is to be removed.
  3. Remove gland and set aside. Carefully remove mortar coating from area where tap is to be made - exposing but not damaging the prestressing wires.
  4. Check to make certain all grout gaskets are in place around the edge of the saddle and over the opening in the mortar coating (with the grouting openings up). Install the straps. Tighten straps with only sufficient torque to lightly compress and seal the grout gaskets, alternating from one side of the saddle to the other - starting at the outside straps and working in toward the center.
  5. Pour portland cement grout into the grout horns in the saddle filling the space between the saddle and the pipe. Strike the saddle with a hammer to vibrate

- the grout into place. After the grout has set, again tighten the bolts on the straps.
6. Carefully cut and remove the exposed prestressing wires. Then remove the exterior portion of the concrete core exposing the steel cylinder. Clean the steel cylinder surfaces of any remaining concrete. (Note: If there is a weld seam on the cylinder of the pipe in the area of the tap, carefully flatten the weld so that the tapping gland gasket will seal on it. Do not grind the weld.)
  7. Check the gasket in the gland to make certain it is undamaged and is in its retaining groove. Remove any tape used to secure the gasket in place during shipment.
  8. Install the four threaded studs in the saddle outlet to assist in properly aligning the gland. Install the gland in the saddle outlet so that the contour of the gasket seat exactly matches the contour of the steel cylinder. Install the remainder of the draw bolts. Check the gasket seat and all alignments. Tighten the draw bolts evenly to compress the gland gasket. A feeler gauge can be used to check gland gasket position during tightening. When completely tightened there should be approximately 1/8 inch between the gasket seat and the steel pipe cylinder.
  9. After installation of the tapping gland, tighten the load bearing set screws located between the draw bolts of the outer circle. This locks the gland in place and transfers any loading from the outlet onto the saddle and away from the cylinder.
  10. Install the tapping valve utilizing the inner circle of studs and nuts furnished with the gland (for tap outlets 12 inch and smaller). For tapping outlets 14 inch and larger, a three flange configuration is used (two draw flanges and the flange for mating the tap valve). It is strongly recommended that fully threaded studs and nuts be used to connect the valve, as the flange configuration may not allow for the use of bolts. Valve shall be properly braced/blocked prior to releasing tension from lifting equipment.
  11. Use water to pressure test the gland gasket seal, flange gaskets, and tapping valve to assure all joints are tight and gaskets properly seated. Pressure test to 50 psi.
  12. Mount the tapping machine to the tapping valve. Open the valve completely. Advance the cutter by means of the hand screw through the open valve. Apply power, and the pilot drill will begin to cut the cylinder. Resistance will increase when the shell cutter contacts the pipe cylinder. When the automatic feed screw has advanced to a predetermined distance, the cut is

complete. Tap completion is verified by advancing cutter manually to verify there is no resistance to rotating cutter.

13. Withdraw the cutting head past the gate and close the valve. Disconnect the tapping machine.
14. Upon completion of the tap, pour a Portland cement mortar mix (two parts sand, one part Portland cement) into the opening between the gland and the saddle, and into the grouting hole in the saddle neck, completely filling the space around the gland. Encase the saddle in a protective coating of Portland cement mortar or concrete to a minimum thickness of 1 inch over the entire assembly including the straps.
15. Provide a permanent support beneath the valve (36" x 36" x 12" thick with 10 x 10 wwf).

### **3.02 MANUFACTURER'S REPRESENTATIVE**

- A. Furnish the services of the PCCP manufacturer (Price Brothers/Hanson Pressure Pipe 678-428-2484) for two (2) days to supervise the tapping procedure.

**END OF SECTION**



**ATTACHMENT #2**

March 3, 2010

To All Bidders

**Subject: 5<sup>th</sup> Clarifier at the Southwest Water Reclamation Facility**

The "construction cost estimate" for the new 5<sup>th</sup> Clarifier at the Southwest Water Reclamation Facility is \$3,950,000.00 (three million, nine hundred fifty thousand dollars and no cents)

This construction cost estimate was determined as of December 3, 2009. The construction cost estimate is based on the original specifications and drawings issued December 2009. Changes to the specifications subsequent to the original documents by addenda to this bid may not be accounted in this construction cost estimate.

Sincerely,

**URS Corporation Southern**

A handwritten signature in black ink, appearing to read "D. Wilcox", written over a faint, illegible background.

David A. Wilcox, P.E.  
Project Manager  
Water/Wastewater Group  
Engineer of Record for 5<sup>th</sup> Clarifier at the SWWRF

cc: Tim Hochuli, Director, Project Management Department  
Bruce Simington, Senior Project Manager  
Jeff Streitmatter, Project Manager  
Sue Sandhoff, Fiscal Services Manager  
Manatee Co. Project File: 6037282  
URS File 12008492(6300)