

**City of Fond du Lac, Wisconsin**  
**Wastewater Collection and Treatment System**  
**Clarifier Rehabilitation**  
**Tank #1**  
**Addendum No. 2**  
**March 29, 2012**

**Need for Addendum:** To address issues and to clarify issues discussed at a pre-bid meeting held in Fond du Lac, Wisconsin on March 15, 2012

**This addendum consists of this page and the following pages in succession:**

Revised Schedule of Values to reflect contingency and work on removal of baffle plates.

**Addition:** Contingency items and technical specifications for concrete repair.

**Addition 2:** Technical specifications for baffle plate and drawing for baffle and weir detail.

1. **Clarification:** Dimensions of the tank were requested. Measurement of the tank is the responsibility of the Contractor. No adjustment to contract price may be claimed after the first day of on-site work. Without assuming responsibilities, the following dimensions were measured:
  - A. Diameter inside wall of clarifier 95 ft.
  - B. Height from floor to bottom of launder 11 ft.
  - C. Diameter to outside of insides launder wall 90 ft.  
i.e. bottom of launder is 30 in.
  - D. Height of launder wall is 3 ft.
  - E. Trough dimensions may found on the drawing you were given at the pre-bid
  
2. **Clarification:** Series FSS 45 DCF may be substituted for Series FSS 45 DC based on environmental conditions.
  
3. **Clarification:** There is a coating on the inside wall of the launder.  
**Question 1 from Spectrum:** Does the coating on the trough wall have to be totally removed?  
**Answer:** Yes  
**Addition 3:** Technical Specifications – Add parts 3.19, 3.20, and 3.21 to Section 09 97 23.10 Concrete Coating Surface Preparation.  
The concrete was painted recently and is believed to be an epoxy and lead/chrome free. There will be no on-site disposal of waste.
  
4. **Clarification:** Use mesh screens or other environmental aids to protect center well. No abrasive debris, old or new paint, or other project byproducts may enter the center well.

5. **Clarification:** In gates and restrooms are open 7:00 A.M. to 3:30 P.M. during the week. Work may continue longer but “Exit Only” gates are to be used.
6. **Question 2:** Regarding water blasting, there is “reclaimed water” and city water available. City water would have a cost associated with it; reclaimed water would not. I checked with the plant, and they use this water for their chillers, as well as other areas. It has ½ part/million chlorine and 5-10 parts/million solids. I will be checking with the manufacturer as well.

Answer: Reclaimed water may be used.

7. **Question 3:** The spec says we need the concrete surface to test out at a minimum pH of 10. Is this correct? How do we get to a pH of 10 if the pH is near neutral (7) after blasting? Second, how do we price additional blasting if we get to sound concrete, but need to blast further to achieve a certain pH? Third, are there any other criteria associated with testing? Fourth, who is responsible for testing (including payment)?

Answer: A pH of 10 is required. After blasting to sound concrete, you should be at a higher pH than 7.0. SSPC has revised guidelines from 9.0 to 10.0 and DIXON agrees. Continue blasting until pH is achieved. Second, pricing is Contractor’s responsibility. Third, any other criteria associated? Do not understand, test methods are specified. Fourth, testing is a specified responsibility of the Contractor. DIXON will witness tests.

There were no further questions or issues raised at the prebid meeting or pre-question period.

8. **Section 09 97 23.10 Concrete Coating Surface Preparation replace part as follows:**

Part 1.04 B Concrete Trough: Abrasive blast clean to remove all existing epoxy coating and all existing epoxy mortar in trough area

9. **Section 09 97 23.10 Concrete Coating Surface Preparation replace part as follows:**

Part 3.02 A Abrasive blast clean may be used to remove required contaminated concrete and is required for existing epoxy coating and existing epoxy mortar system in the trough.

10. **Section 09 97 23.10 Concrete Coating Surface Preparation replace part as follows:**

Part 3.03 A Remove the weirs and the sealant on the weirs, the baffles, trough cover supports, and trough doors. The top section (lip) of the outer wall can remain in place.

**11. Section 09 97 23.10 Concrete Coating Surface Preparation replace part as follows:**

Part 3.03 B Each section must be marked and reinstalled in the exact same location. Once reinstallation of the weirs, baffles, trough cover supports, and trough door is complete reinstall with a compatible sealant between the gap where the weirs and the concrete meet in the inner trough area.

**12. Section 09 97 23.13.05 Wastewater - Polyurea – Alternate replace part as follows:**

Part 1.01 A Coating of Concrete Walls and Trough (See Section 09 97 23.10, Part 1, 1.03 C. Concrete Wall, D. Trough)

**13. Section 09 97 23.13.05 Wastewater - Polyurea – Alternate replace part as follows:**

Part 3.04 Surface Preparation

- A. High pressure water clean and abrasive blast clean per Section 09 97 23.10, Part 1, 1.04 B and Part 3, 3.02 A.
- B. Blow down all surfaces to remove all spent abrasives and saw cut dust, or wash down residue.
- C. Review the cracks or spalls with the on-site inspector.

This Schedule of Values was designed to work with the Engineer's Proposal/Agreement form. It still needs to be filled out. It is not a requirement to bid both systems. This number is used in the Proposal Form and will identify which system you prefer and is your bid.

**SECTION 00 43 73**  
**SCHEDULE of VALUES**

**1.01 PART 1**

A. Bidder agrees to perform all work in the following sections as described in the Contract Documents, including all labor and material for the following Schedule of Values – Section 09 97 23:

1. POLYUREA COATING SYSTEM – SIDE WALLS FROM FLOOR UP TO AND AROUND TROUGH AND BEHIND WEIRS

\_\_\_\_\_ \$ \_\_\_\_\_

Or

2. FIBER REINFORCED EPOXY SYSTEM – SIDE WALLS FROM FLOOR UP TO AND AROUND TROUGH AND BEHIND WEIRS

\_\_\_\_\_ \$ \_\_\_\_\_

3. REMOVAL and REINSTALLATION OF WEIRS AND BAFFLES and RESEALING the GAP WHERE WEIRS MEET THE UPPER PORTION of the CONCRETE TROUGH in the INTERIOR TROUGH AREA

\_\_\_\_\_ \$ \_\_\_\_\_

PRICE SECTION 09 97 23 INCLUDING #1 OR #2 PLUS #3:

\_\_\_\_\_ \$ \_\_\_\_\_

4. POLYUREA COATING SYSTEM – INTERIOR TROUGH FROM WEIRS DOWN TO FLOOR OF TROUGH, FLOOR OF TROUGH and BACKWALL of TROUGH

\_\_\_\_\_  
\$

Or

5. FIBER REINFORCED EPOXY SYSTEM - INTERIOR TROUGH FROM WEIRS DOWN TO FLOOR OF TROUGH, FLOOR OF TROUGH and BACKWALL of TROUGH

\_\_\_\_\_  
\$

6. REMOVAL and REINSTALLATION OF TROUGH COVERS

\_\_\_\_\_  
\$

PRICE SECTION 09 97 23 INCLUDING #4 OR #5 PLUS #6:

\_\_\_\_\_  
\$

GRAND TOTAL PRICE FOR SECTION 09 97 23 INCLUDING #1 OR #2 PLUS #3 AND #4 OR #5 PLUS #6

\_\_\_\_\_  
\$

FOR BID EVALUATION PURPOSES BOTH SYSTEMS ARE CONSIDERED EQUALS AND WILL NOT BE CONSIDERED AS THE BASIS OF AWARD.

BONDS SHALL BE BASED ON THE TOTAL BID INCLUDING CONTINGENCY.

**1.02 TOTALS**

A. Total Base Bid is to match total Base Bid price supplied in Bid/Agreement form.

**1.03 BID BOND**

A. Bid Bond shall be based on 10% of the total.

B. If bidders submit on both Base and Alternate, the Bid Bond shall be based on total Base Bid (including Additives).

C. If bidder submits either Base or Alternate only, the Bid Bond shall be based on the total of that bid only (including Additives).

#### **1.04 WEIGHTED BIDS**

- A. Bidder/contractor is advised that, if in the opinion of the owner or engineer, if the Schedule of Values is not an accurate reflection of cost of items, the owner will adjust individual costs to more balance costs. Total will not be changed.

#### **1.05 MISTAKES**

- A. Total of Schedule of Values should equal lump sum bid. If addition of individual items does not match total, then each individual items will be proportionately changed to reflect total of values to match lump sum bid.
- B. A mistake in addition for schedule items cannot be used to increase lump sum bid. Individual items will be proportionately changed downward to reflect lump sum price.
- C. A mistake in Schedule of Values may be used as evidence of error in any request to withdraw bids because of error. Approval of request to withdraw bids is covered in the prebid information. This section is not intended to conflict any portion of the bid package. This section is only to reflect one of the reasons to withdraw bids. Approval of bid withdrawal will be based solely on the owner's interpretation of the severity of the mistake.

#### **1.06 CHANGES in SCHEDULE of VALUES by OWNER**

- A. The owner reserves the right to delete any line item at their sole discretion for any reason, budgetary or other. All contract general costs should be evenly distributed over these items (mobilization, demobilization, bonds, etc.)
- B. The bidder/contractor is advised not to overload any specific deletable line item. It could result in loss of profit if the overload item is deleted.
- C. This deletion of items or not including additives is an expressly stated reservation (a contractually agreed automatic negotiation). This reservation applies to the three lowest responsible and responsive bidders. Any deletion of specific line item will be completed before selection of the lowest acceptable contractor. Change will be reflected in the Notice of Award.

**Contingency:** Include line item of contingency at \$3,000. This figure is to be included in the bonded total. Contingency is in place primarily for crack and minor concrete repair, and will be paid on a per unit repair as listed in the attached section. The total sum of the contingency is not expected to be needed or paid. Any surplus remains with the Owner. Any excess requires a Change Order.

## **PART 1 – PRODUCTS**

### **2.01 CRACK REPAIRS**

- A. Mortar Cast Series 218 – Tnemec.
- B. SikaTop 111 Plus – 2 component polymer – modified, cementitious, screed mortar, plus FerroGard 901 Penetrating Corrosion Inhibitor.

### **2.02 SPALL REPAIRS**

- A. Mortar Cast Series 218 – Tnemec.
- B. SikaTop 111 Plus – 2 component polymer – modified, cementitious, screed mortar, plus FerroGard 901 Penetrating Corrosion Inhibitor.

## **PART 2 – EXECUTION**

### **3.01 CRACK REPAIRS**

- A. Router the crack to  $\frac{3}{4}$  in. wide x 1 in. deep. Router to be a U-shape; a square or V-notch is not acceptable. Remove all loose dirt and debris from the routed area by low pressure water cleaning at 4,000 psi.
- B. Apply product to a clean surface, the repair area is to be Saturated Surface Dry (SSD) with no standing water.
- C. Mix in accordance with manufacturer's recommendations.
- D. Apply scrub coat or bonding agent to the surface as required by the manufacturer.
- E. Apply using a rubber float or mason brush.
- F. The quantity of 40 lin. Ft. is a dummy figure based on the last inspection and the time period since then. The owner reserves the right to increase or decrease the quantity, including elimination of the item. This item pays \$30.00 per linear foot. Cracks shall be identified and quantified by Engineer.

### **3.02 SPALL REPAIRS**

- A. Apply product to a clean surface, the repair area is to be Saturated Surface Dry (SSD) with no standing water.
- B. Mix in accordance with manufacturer's recommendations.
- C. Apply scrub coat or bonding agent to the surface as required by the manufacturer.
- D. Apply using a rubber float or mason brush.

- E. Square cut edge of spalls.
- F. Do not exceed manufacturer's recommended application thickness per coat.
- G. Allow manufacturer's required time between multiple applications.
- H. The quantity of 15 square feet by average 1 inch depth is an estimate based on possible problems after blasting. The Owner may adjust this quantity up or down based on conditions encountered. This item will be paid at \$50 per square foot at 1 inch depth. Money will be paid from contingency.

**3.03 EXPOSED REBAR – LESS THAN HALF OF STEEL EXPOSED**

- A. After blasting and before surface rust reforms, paint exposed steel with 3 mils dry film thickness of system compatible primer from the same manufacturer.
- B. Payment will be \$3/l.f. of painting.

**3.04 EXPOSED REBAR – MORE THAN 60% OF STEEL REBAR or WIRE EXPOSED**

- A. Continue blasting or chip out concrete behind wire to expose 100% of wire.
- B. Coat wire all around.
- C. Pack spall repair material behind and over the wire or rebar.
- D. Payment will be \$20/repair. Spall repair over repaired rod or bar will be completed and paid as spall repair in addition to repair of rebar. However, the Engineer must identify whether a spall repair is needed or just the coating program.

## **6.01 BAFFLE PLATE AND WEIR PLATE REPLACEMENT**

- A. Remove baffle plate continuously around the clarifier. Mark each section sequentially for replacement.
- B. Remove wall brackets for baffle and identify for reinstallation. Plug bolt holes for use during reinstallation.
- C. After coating is complete reinstall brackets and baffle plates.
- D. Remove weir plates and rubber backing and protect holes for reinstallation.
- E. After coating is completed install new  $\frac{1}{16}$  in. thick neoprene gasket and reinstall weirs level at original elevation.

## **SECTION 09 97 23.10**

### **CONCRETE COATING SURFACE PREPARATION**

#### **3.01 HAZARDOUS WASTE DISPOSAL**

- A. Contract directly with a licensed hazardous waste hauler who is properly licensed in the State of Wisconsin to haul hazardous material.
- B. Transport the debris for treatment to a licensed hazardous waste disposal site.
- C. The contractor will not be paid any retainage until paperwork has been submitted, including submittal of the hazardous waste manifest. Any original of the hazardous waste manifest shall be returned to the owner.
- D. Remove all hazardous waste from the site within thirty (30) days of completion of the blasting portion of the project.
- E. Disposal of hazardous waste is the difference between the hazardous and non-hazardous waste disposal costs. Contractor shall submit documentation from the landfill verifying the unit cost increase for hazardous waste disposal.

#### **3.02 WASTE DISPOSAL – NON-HAZARDOUS**

- A. If after testing of the spent abrasive material the TCLP tests indicate the abrasive is not a hazardous waste, dispose the abrasive in a waste disposal facility.
- B. All waste shall be handled by a licensed hauler. Supply the owner with all proper documentation of the final disposal site. The actual bill of lading and all manifests will be required prior to any payment.
- C. Payment for non-hazardous waste disposal is incidental to interior or exterior painting.

#### **3.03 WASTE DOCUMENTATION**

- A. Supply proper documentation of storage, transportation, and treatment, or disposal of the waste to the owner. The owner will retain sufficient funds to pay for hazardous waste transportation, treatment, and any possible fines until all documentation has been received. This retainage will be held, even if the waste has tested non-hazardous.



*Asymmetrical*

WALL w/ Baffle Plates

N 0' 7  
3-22

SECTION 2  
5-22  
SCALE: 3" = 1'-0"

R = 47'-6" Dia = 95'

