



CITY OF CUMBERLAND, MARYLAND

PHASE 1 CSO STORAGE FACILITY AT THE WASTEWATER TREATMENT PLANT
CITY PROJECT NO. 01-10-WWTP

ADDENDUM NO. 2

September 27, 2016

The following Addendum is issued on the above-captioned date hereby contains revisions, clarifications, and information pertinent to the bid of the **Phase 1 CSO Storage Facility at the Wastewater Treatment Plant**, City of Cumberland Project No. 010-10-WWTP and shall supplement, amend and become part of the Bidding Documents and Construction Specifications for the aforesaid Bid. All bids shall be based on this addendum, in accordance with the Bidding Documents. Acknowledge receipt of this Addendum in the space provided on the Proposal. **Failure to do so may subject bidder to disqualifications.**

I. CLARIFICATIONS

1. **Question:** *"The substantial completion contract time of 760 days (25 months) is not feasible. The more appropriate duration is 36 months. Please consider increasing the contract duration."*
Answer: Project duration to substantial completion of 760 days will remain.
2. **Question:** *"If a contractor works overtime to meet the schedule, who pays the inspection charge?"*
Answer: The inspection charge above and beyond 45 hours per week will be the responsibility of the contractor. See clarifications in Section II. below.
3. **Question:** *"The soil boring layout plan does not show the junction chamber. It appears just to be a printing error. Please reissue."*
Answer: The boring plan in its entirety is included on drawing Sheet 4, C00.01.
4. **Question:** *"Specification Section 03300 Paragraph 3.07.A requires the maximum vertical distance on wall pours to be 12'. This will impact the schedule and also increase the cost of the project. Can the walls of the CSO storage tank be placed full height?"*
Answer: See response to Question 27 contained in Addendum #1.
5. **Question:** *"Specification section 03300 Paragraph 3.07.A requires the maximum horizontal distance on slab pours to be 35'. Can the contractor pour size be from the slab edges to the expansion joints. If not can he pour each expansion joint quadrant in four*



pours. This would make the max distance around 56 feet. Does this 35' requirement apply to the CSO suspended slab since this slab is above the tank high water level?"

Answer: See response to Question 27 contained in Addendum #1.

6. **Question:** *"Does the city/county have a location to dispose of excess excavated material? Could excess material be disposed of in the low area east of the existing plant?"*

Answer: See response to Question 10 contained in Addendum #1.

7. **Question:** *"Reference Sheet #5 note 2 -- Can flow from this line be isolated? What is the material of the cap?"*

Answer: Once the flow is re-routed as shown on C00.03, the pipe can be removed/abandoned as shown. The cap is to be a conical-shaped, cast iron body pipe plug with expandable rubber diaphragm.

8. **Question:** *"Reference Section C-C on Sheet 18 Note 10 -- Does the existing junction box have a screen that needs to be removed?"*

Answer: The existing junction chamber does not currently have a screen. The screen will be added as a part of this project.

9. **Question:** *"Sheet 72 indicates we should retain existing wall rebar for lap splice. Sheet 76 indicates drill and grout dowels. Is it the contractors option?"*

Answer: It is not the contractor's option. Some locations require only drilling and grouting, other instances require drilling and grouting as well as retaining the existing rebar. See Details 1 through 3 on S03.08 (Sheet 77) for further information.

10. **Question:** *"Is the proposed shoring wall on the western edge of the CSO tank a necessity or are alternate construction methods such as backfilling against the tanks permissible?"*

Answer: Shoring along the western edge of the CSO tank is not specifically required. That side or portion thereof may be excavated as a slope and the zone backfilled upon completion.

11. **Question:** *"For reasons of conduit/painting, is the CSO facility an "indoor application"? 16130-3.1B states that indoor applications (unless otherwise noted) to be Rigid Aluminum conduit- We take that to be everywhere inside buildings/structures other than the 3 areas noted on the dwgs (CSO facility/wet well/odor control room) which are called out as being Rigid Galvanized Steel on the dwgs. -- Class1- Division 1 - Is this correct? "*

Answer: It is correct to provide RGS conduit in CSO Facility/odor control/wet well area as shown on drawings and PVC coated RGS on main feeder per note 7 on drawing E00.02.

12. **Question:** *"Painting of conduits- Do you want Aluminum Rigid Conduits painted since they do not meet the exception list in 09960-1.02B2a of anodized aluminum? Do you have a paint spec? "*

Answer: Painting is not required on Aluminum Conduit.

13. **Question:** *"Painting Rigid Galvanized Conduits in Class 1-Division 1 areas- is painting advised in the explosion areas where the threads are not sealed? Paint may actually seal the threads and defeat the purpose of Class 1-Division 1. "*

Answer: Painting is not required on RGS.

14. **Question:** *"Are the light gauge trusses at the pump station supposed to be figured as bearing continuously on top of the precast concrete planks? It appears that is the case for the higher roof, but is a bit unclear for the lower roof. Please confirm. "*

Answer: The light gauge trusses may bear on the precast concrete planks or span from wall to wall. The specifications for the precast concrete planks and light gauge trusses are performance based for delegated design. Whichever case is chosen by the designer must be taken into account for the design of both elements (trusses and planks). Refer to specification section 05400 paragraph 1.03 B.4 and section 03412 paragraph 1.04 A.

15. **Question:** *"The plans show the trusses spaced at 2'-0" o.c., but the specs state that the maximum truss spacing is 4'-0". Please confirm that 2'-0" o.c. as the plans show is the maximum spacing allowed. "*

Answer: Maximum truss spacing shall be 24".

16. **Question:** *"The fencing specs call for aluminized wire and coil wire but galvanized posts and rail material for permanent fence and construction temp fence. The detail drawing for the fence (C00.13) shows the permanent fence corner posts as black coated. This drawing also shows a fence component table with steel and aluminum material. Note #7 states that vinyl clad steel should be black in color. Please clarify the type of materials to be used for the temporary and permanent fencing. Also clarify the requirement for the vinyl coating. "*

Answer: The permanent fence to adhere to the details on C00.13. The fence and posts are to be black vinyl clad. The temporary fence materials can be steel or aluminum. Vinyl coating is not required on the temporary fencing.

17. **Question:** *"Spec 4810 lists the requirements for the face brick but does list a manufacturer or color. Can this be provided for the bid? "*

Answer: Brick selection will be part of the submittal process. Per the exterior finish schedule drawing A00.03, it is the design intent for the brick to match the masonry of the adjacent wastewater treatment plant. Owner will identify a specific sampling of brick from the



treatment plant to match. If not, the contractor will match the brick of the wastewater treatment building closest to the new pump station. Carry a unit allowance of \$750/1000.

18. **Question:** *"Addendum #1 answered the question regarding the bituminous dampproofing for the CMU walls. Section 1/S02.08 shows an air barrier with a leader pointing to the outside of the CMU wall. Can you clarify if an air barrier is required?"*
- Answer:** An air barrier is not required.
19. **Question:** *"The diameter $D = 28.375$ " for the VTSH (16" model). A lot of the HI specifications refer to the Diameter (D) multiplied by some constant so I will keep to that format."*
- Answer:** An average diameter $D = 30$ " was used for the wet well trench design calculations.
20. **Question:** *"Fairbanks needs more information about the influent piping going into the sump. We need to know the velocity of the liquid exiting the pipe to determine the ogee radius (shown as 4'-9"). This will change depending on the liquid velocity."*
- Answer:** The inlet flow velocity will depend on the water levels inside the storage facility. The maximum velocities will be experienced when draining when the facility is full, or at water elevation of 597 feet, with the effluent discharge invert elevation of 566.75 feet.
21. **Question:** *"The flow splitter height should be $0.38D$ (10.783"). It's shown as 1'-00"."*
- Answer:** An average diameter $D = 30$ " was used for the wet well trench design calculations. The 1'-0" dimension meets the minimum requirement of $0.38D$.
22. **Question:** *"The distance from the bottom of the bell lip to the sump floor should be $0.5D$ (14.19"). It's shown as 15" on the drawing so it's a little high."*
- Answer:** An average diameter $D = 30$ " was used for the wet well trench design calculations. The 1'-0" dimension meets the minimum requirement of $0.5D$.
23. **Question:** *"Hydrocone details are needed as well as the calculated sequent depth, an anti-rotation baffle at the last pump (lengthwise along the height of the pump inside the liquid), and vane layout around the hydrocone. I am assuming these are found in the drawings M00.05 #2 and #3. Please forward them for review."*
- Answer:** The hydrocone details are shown in detail 2/M00.05. The anti-rotation baffle details are shown in detail 3/M00.05.
24. **Question:** *"The last radius of the ogee is acceptable since it's $\geq 1.25D$ (35.47")."*



Answer: An average diameter $D = 30''$ was used for the wet well trench design calculations. The radius of the ogee ramp dimension meets the requirement of the $\geq 1.25D$.

25. **Question:** *"Trench width should be $2D$ (56.75"). Right now it is at 5'-0". "*

Answer: An average diameter $D = 30''$ was used for the wet well trench design calculations. The trench width dimension was determined by the average diameter.

26. **Question:** *"Upper trench walls should be ≥ 60 deg. If they are concrete. "*

Answer: The trench walls are coated concrete. A minimum of 45 deg is permitted for coated concrete.

27. **Question:** *"Paragraph 2.01 of specification section 11286 specifies sluice gates to be made of cast iron. Gates of this size can easily be made of 304 stainless steel. In addition, all of the design parameters as shown on the sluice gate schedule on drawing M01.08 can be met. The fabricated stainless steel sluice gates will be at least 25% less in cost, require smaller actuators and give superior sealing performance and quicker, easier installation. Please consider 304 stainless steel sluice gates. "*

Answer: Substitutions to the specified equipment can be submitted per Specifications after the award of bid.

28. **Question:** *"Please confirm that heat tracing is not required at the potable, non-potable and flushing water lines at the CSO Storage Facility. "*

Answer: Heat tracing is not required.

29. **Question:** *"Please clarify if the insulation specified in Section 15080, Paragraph 2.03 is required on the 1 1/2" flushing water pipe drops in the CSO Storage Facility. "*

Answer: It is not required.

30. **Question:** *"Please clarify if the 1 1/2" hose requirements (quantity, lengths, nozzles) at the flushing water pipe drops. Also clarify if Spec Section 15060, Paragraph 2.15 Flexible Hose and Spec Section 15440, Paragraph 2.03 Hoses applies to flushing hoses. "*

Answer: Provide three (3) set of 50 ft long hoses. Specification Section 15440, paragraph 2.03 applies to the flushing hoses.

31. **Question:** *"Per Spec Section 15060, Paragraph 2.19, please confirm that galvanized pipe supports are suitable for all areas. "*

Answer: Provide stainless steel pipe supports for areas inside of the storage tank and wet well.

32. **Question:** *“Drawing M02.04 shows 36” FRP Duct inside the Pump Station Wet Well. Spec Section 15810 appears to require this duct to be stainless steel. Please clarify.”*

Answer: FRP Duct is correct. See Specification Section 15810, paragraph 2.03 Fiberglass Reinforced Plastic (FRP) Duct for details.

33. **Question:** *“Drawing M02.02 shows a 36” vent line from the pump station wet well. Please clarify if the buried piping is required to be restrained joint.”*

Answer: Restrained joint are not required on the buried 36” vent line.

34. **Question:** *“Drawing M02.02 shows the buried pump station discharges thru the meter vault. Would it be acceptable to restrain the 24” and 36” piping in this area with mega lug glands on mechanical joint fittings?”*

Answer: It is not acceptable to use mega lug glands on the 24” and 36” mechanical joint fittings.

35. **Question:** *“The Spec Section 02600 allows the use of Fiber Reinforced Polymer Pipe for the buried 60” Vent Piping. Is any form of floatation protection required if this pipe material is used?”*

Answer: Floatation protection is not required.

36. **Question:** *“Is a Precast Prestressed option allowed for the storage tank?”*

Answer: No, precast options are not allowed for the cast-in-place storage facility or any other cast-in-place component.

37. **Question:** *“Spec section 10600 states that “The pumps and sufficient piping shall be available on site and ready for mobilization.” I wanted to be clear that this means the contractors are to actually have the bypass pumping equipment on site for the duration of the project, whether they are in use or not.”*

Answer: The Contractor is to have the pumps and piping on the site while working within the Overflow Chamber, where a sudden increase in the flows could result.

38. **Question:** *“The Slag in the spec it is grade 120. We have and use grade 100. Can that be substitute? Aggregate size is 57's, can we substitute with our 67's that we normally use?”*

Answer: Grade 100 GGBFS is acceptable. 67 stone is acceptable. However, the minimum cementitious material content shall be 560 lb/cy if 67 stone is used.

39. **Question:** *”The geotech report, on page 13, states that “rock blasting should include at least 50 feet of the future tank footprint...” . I cannot find this requirement anywhere else in the plans and specs. Are we required to include this “overblasting” in our price?”*

Answer: Yes, overblasting is to be included in the price. Overblasting is shown on C00.05 and Specification Section 02200, Paragraph 3.15.

40. **Question:** *“On drawing C00.05, note #8 references specifications for overblasting. I cannot find overblasting referenced in the specifications. Could you please direct me to it?”*

Answer: See answer for Question #39.

41. **Question:** *“Drawing C00.05 shows and references, with note #8, proposed excavation support. It is also talked about in spec section 02200. Is it not possible to use an open excavation, or a “lay back” excavation, on the West side of the storage facility? It is permitted on the other 3 sides of the excavation. There is enough room for it and it would be inside the temporary fencing of the excavation site, I do understand that it would take up some of our staging area.”*

Answer: A vertical supported excavation is not required along the West Side of the Storage Facility.

42. **Question:** *“Face Brick – Is there a specification on a manufacture or color range? 04810-1.01-C – Allowances states “Face brick is included under face brick allowances as specified in Section 01210 “allowances” - 01210 is not include in the specifications - Please include this section.”*

Answer: See answer to Question #17.

43. **Question:** *Air barrier – A02.08 calls for an air barrier between the wall insulation board and CMU- Is this the dampproofing that was included in Addendum #1 or is this another type of product in addition to the damp proofing?*

Answer: See answer to Question #18.

44. **Question:** *“Addendum #1 –question 16- question was asked about the 2 different waterproofing materials in 07131 and which one to use where- 2.01B calls for 60 mil reinforced by Protecto or Royston and 2.01A does not state “reinforced” and is by AHI/Grace/Henry/Meadows - Which product goes where for waterproofing?”*

Answer: See clarifications to the waterproofing specification section 07131 in Section II. below.

45. **Question:** *“Ref. Specification #16269.2.4.A.1: Is the Pressure Transducer in the VFD enclosure absolutely necessary? This adds a unneeded cost as well as a lot of wiring changes if not used.”*

Answer: Pressure Transducer is required.

46. **Question:** *“Several of the structural drawings call out for “sheet waterproofing and assembly, see specification Section 07131 part 2.01.A and 07131 part 2.01.B specify two*

different types of waterproofing material. Which product is applicable to the each drawing note? Is one product for horizontal application and the other for vertical application?"

Answer: See clarifications to the waterproofing specification section 07131 in Section II. below.

47. **Question:** *"Specification Section 07131 part 1.02.A.3 Molded Sheet Drainage Panels. Please clarify if this is required on the roof top slab, wall or underside foundation floor slab?"*

Answer: See Waterproofing Details on Drawing S00.03 and follow waterproofing manufacturer's recommendations. Per the language in the specification, protection board and sheet drainage panels may be interchanged in vertical applications when approved by waterproofing manufacturer.

48. **Question:** *"Base on the clarification from Addendum 1, pages 1&2, item 12. Please confirm the interior concrete walls and ceiling of the access corridor and all effluent valve areas are not to receive a coating."*

Answer: Confirmed – interior concrete walls and ceilings of the access corridor and effluent valve areas do not require a coating. Provide exterior waterproofing on horizontal and vertical surfaces as indicated in the contract documents.

49. **Question:** *"Specification Section 09960, Part 4.a.3 calls for TNEMEC 63-1500 Filler and Surfacer, the depth of this filler is not noted. What depth of filler/surfacer is required?"*

Answer: Tnemec 63-1500 has been discontinued. Provide Tnemec Series 215 per manufacturer's recommendation (thickness 1/32" to 1/8".)

50. **Question:** *"Drawing A01.01 Stairs 1&2; the note call for these stairs to be concrete filled metal pan stair, drawing S01.04 notes call for these stairs to be aluminum channels (stringer), treads. Are the stairs galvanized steel or aluminum?"*

Answer: Provide aluminum stairs as shown on Structural drawings.

51. **Question:** *"Specification Section 05400 Cold-Formed Steel Roof Trusses. Please clarify the structures, (Pump Station/Ventilation Building or CSO Storage Facility- Stairs 1&2) this specification is applicable to?"*

Answer: Specification Section 05400 applies to all structures with cold formed metal trusses.

52. **Question:** *"Please provide roof framing plan for the Pump Station/Ventilation Building."*

Answer: Roof framing plan for the Pump Station/Ventilation Building is included in the drawing set.

53. **Question:** *“Section 02200, Paragraph 3.15 describes Adjacent Pre-Blasting requirements. It appears that adjacent pre-blasting is only required for 50 feet beyond the west side of the Phase I storage facility. In that the specs make the statement “as indicated on the drawings” and I cannot locate a defined limit of the pre-blasting on the drawings, please confirm that the above understanding is correct.”*

Answer: That is correct. It is shown on drawing C00.05.

54. **Question:** *“Drawing S01.09 indicates #11 dowel bars extending 14’ and 18’ above the base slab. Due to the difficulty of holding these bars in position while pouring the base slab, are Mechanical Splices acceptable for use on the vertical #11 bars being located 3’ above the base slab?”*

Answer: This is acceptable provide the following conditions are met:

1. The mechanical splice couplers shall be capable of developing 125% of the specified yield strength of the reinforcing.
2. 2” clearance shall be maintained between outer face of coupler and face of wall / formwork.
3. Adjacent couplers shall be staggered 3’-0” vertically to maintain required clearance between adjacent reinforcing bars to allow proper concrete flow and prevent a failure plain. Therefore, couplers shall be staggered and placed at 3’-0” / 6’-0” above the base slab.
4. Maintaining specified dowel placement and spacing as noted on drawings is critical to achieve required clearance between splice coupler and adjacent reinforcing and formwork. This is highly critical in areas where reinforcing bars spacing is less than 6” on center.

55. **Question:** *“Can you please get clarification for Section 11310 as follows? The specified Flygt pumps are 15 HP and the language in the paragraphs below refer to the Great & Grey Pumps with 150 HP motor and up.*

1. Paragraph 2.02.D.5.c – Bearing Temp Sensors are not applicable to the specified pump
2. Paragraph 2.03.C.1 – The specified cooling system also applies to large pumps. The specified pumps will be equipped with a stainless steel cooling jacket and will be cooled with a glycol/water mix.
3. Paragraph 2.04.B.1 – The specified pump has a leakage sensor in the stator housing. The leakage sensor in the junction chamber and bearing temp sensors mentioned in this paragraph refer to the large pumps, this pump might not have enough room for the sensor.
4. Paragraph 2.06 – The inside of the discharge connection is not typically painted and not usually specified. – can you please make sure this is not in error?
5. Witness Testing and NPSH Testing:
 - a. We typically don’t see small pumps like this witness tested because the costs of travel exceed the cost of a new pump.
 - b. These are submerged pumps and I didn’t think the NPSH Testing was necessary and has an added cost that won’t have much use for the owner.”

Answer:

1. Bearing temp sensors are not required. See Section II of Addendum #1 for clarification of Specification Section 11310.
2. Provide a cooling jacket.
3. Bearing temp sensors are not required. See Section II of Addendum #1 for clarification of Specification Section 11310.
4. The inside of the discharge connection does not require painting.
- 5.a. We reserve the right to the Owner to witness Factory Testing.
- 5.b. Individual NPSHr Testing of each pump is not required. Provide certified NPSHr values for pump model.

56. **Question:** *“Who provides the Builder Risk? The owner or the contractor? If the contractor, is flood to be an included peril?”*

Answer: The bidders are directed to include the cost of the Builder's Risk insurance with an appropriate flood coverage. The bidders shall include The Mayor and City Council of Cumberland as an additional named insured on this policy.

57. **Question:** *“A delay of one week for the bid date would be greatly appreciated.”*

Answer: Bid date of October 5, 2016 is to remain.

58. **Question:** *“Please provide an address for delivery of bids.”*

Answer: Sealed proposals addressed to the Mayor and City County of Cumberland are to be delivered to the City Clerk's office at City Hall, 57 N. Liberty Street, Cumberland, MD 21502.

59. **Question:** *Section 13342 – Input/Output Point List is indicating 16 point input cards for the DI modules (based on the point numbering in the table). The Instrumentation and Controls 13420, section 2.07 calls out a DI module part number of 140DAI55300. This part number is a 32 point input card. Is the 16 point or 32 point input card preferred? The answer will affect the backplane quantity needed.”*

Answer: 16 Point DI card shall be provided.

60. **Question:** *“Section 13342 – Input/Output Point List is indicating 4 point input cards for the AI modules (based on the point numbering in the table). The Instrumentation and Controls 13420, section 2.07 calls out a AI module part number of 140ACI03000. This part number is an 8 point input card. Is the 4 point or 8 point input card preferred? I am not sure that an equivalent 4 point input card is available. Does the I/O table numbering need to be modified?”*

Answer: 8 Point AI card shall be provided.

61. **Question:** *“Section 13420 – Instrumentation and Controls, section 2.07 does not list a part number for the NRP card listed in the PLC configuration shown in the Control System Network Architecture drawing, I00.02
Is the NRP card needed?
Is 140NRP95400 the correct Schneider part number?”*

Answer: Contractor shall provide the remote IO module 140NRP95400 with required cables, connections and auxiliary devices as required.

62. **Question:** *“Does the Overflow Chamber Control Panel have an OIT? Drawing I00.02, Control System Network Architecture does not show an OIT. Drawing I03.01, Overflow Chamber System Layout does show an OIT.”*

Answer: An OIT display panel is NOT required for the Overflow Chamber Control Panel.

63. **Question:** *“Confirming that bid documents are due in duplicate or one original.”*

Answer: Provide one original and one duplicate of all Bid Documents.

II. REVISIONS TO THE CONTRACT DRAWINGS AND SPECIFICATIONS

1. Drawing S00.03:

DELETE the “Waterproofing Detail 2 At Bottom Slab” in its entirety.

2. Drawing M02.01:

CHANGE the following Submersible Pump Design Criteria (supersedes changes in Addendum No.1):

Supplementary Point Head – 29 FEET

3. Specifications Section 00800, paragraph 16.

ADD the following:

“G. The inspector will be provided at a maximum of 45 hours per week, for times, days and hours listed in the Contract Documents. The Owner and Engineer shall be notified in advance of any overtime work; Owner’s permission may be required for overtime work. Any time over the allotted 45 hours shall be paid by the Contractor at \$94 per hour.”

4. Specifications Section 07131:

DELETE paragraph 2.01.B. and **REPLACE** with the following:

“B. Blindside Sheet Waterproofing: For under slab horizontal applications. Bonded HDPE or Polyethylene Sheet of Blindside Horizontal Applications: Uniform, flexible, multilayered-composite sheet membrane consisting of either, total 46-mil thickness; with the following physical properties:



1. Products: Subject to compliance with requirements, available products that may be incorporated into Work include, but are not limited to, the following:
 - a. Meadows, W.R., Inc.; PRECON.
2. Tensile Strength, Film: 2000 psi minimum; ASTM D 412.
3. Low-Temperature Flexibility: Pass at minus 10 deg F; ASTM D 1970.
4. Peel Adhesion to Concrete: 5 lbf/in. minimum; ASTM D 903, modified.
5. Lap Adhesion: 2.5 lbf/in. minimum; ASTM D 1876, modified.
6. Hydrostatic-Head Resistance: 230 feet; ASTM D 5385, modified.
7. Puncture Resistance: 200 lbf minimum; ASTM E 154
8. Vapor Permeance: 0.01 perms maximum; ASTM E 96/E 96M, Water Method.
9. Water Absorption: 0.5 percent; ASTM D 570.”

ADD the following paragraph:

“3.07 **BLINDSIDE SHEET-WATERPROOFING APPLICATION**

- A. Install bonded blindside sheet waterproofing according to manufacturer’s written instructions.
- B. Horizontal Applications: Install sheet with face against substrate. Accurately align sheet and maintain uniform side and end laps of minimum dimension required by membrane manufacturer. Overlap and seal seams, and stagger and tape end laps to ensure watertight installation.
- C. Corners: Seal lapped terminations and cut edges of sheet waterproofing at inside and outside corners with detail tape.
- D. Seal penetrations through sheet waterproofing to provide watertight seal with detail tape patches or wraps and a liquid-membrane troweling.
- E. Install sheet-waterproofing and auxiliary materials to produce a continuous watertight tie into adjacent waterproofing.
- F. Repair tears, voids and lapped seams in waterproofing not complying with requirements. Tape perimeter of damaged or nonconforming area extending 6 inches beyond repaired areas in all directions. Apply a patch of sheet waterproofing and firmly secure with detail tape.”

5. Specifications Section 13350

ADD the following paragraph:

“2.01 **PROCESS CONTROL SYSTEM HARDWARE AND SOFTWARE ALLOWANCE**

- A. The CSI shall include providing hardware and software through the use of the following allowance as part of the Scope of Work for this project. The allowance shall be a fixed amount and included as part of the price to the Contractor.



- B. The CSI shall be responsible to provide the full sum of the allowance items as directed by the Engineer. Unused portions of the allowance under different categories may be used for other plant control related products or services as directed by the Engineer.
- C. If the total cost of items provided under these allowances is less than the actual allowance, the final contract sum shall be reduced by the difference of the total allowance and the actual product and/or services provided.
- D. The CSI's schedule shall allow at least 4 weeks' time for the Engineer to provide specific product data for allowance items after the receipt of approved control panel and instrumentation shop drawings. The CSI shall provide submittal data on the products specified by the Engineer prior to procurement.
- E. Allowances shall be utilized only for the cost of the products and shipping to the CSI's facility. The CSI's costs for coordinating procurement, submittal, storage, unpacking, configuration, testing and shipping to the job site shall be included in their price to the Contractor with no additional fees provided through the allowance.
- F. Computer Hardware Allowance shall be \$10,000.00 USD."

6. Specifications Section 13420

DELETE paragraph 2.07.A.3. and **REPLACE** with the following:
"PLC P/N: 140CPU31110"

DELETE paragraph 2.08.A.8. in its entirety.

DELETE paragraph 2.08.B. and **REPLACE** with the following:

"The Operator Interface Terminal shall be a Schneider Electric Magelis XBT-GT. The OIT shall be supplied with all necessary HMI software, drivers, and other required development tools."

7. Specifications Section 15810:

CHANGE the paragraph number for "FIBERGLASS REINFORCED PLASTIC (FRP) DUCT" from 2.02 to 2.03.

END of Addendum No. 2