### October 15, 2015 BOARD OF COUNTY COMMISSIONERS ORANGE COUNTY, FLORIDA

#### ADDENDUM NO. 3 IFB NO. Y15-771 PH ORANGE COUNTY SOUTH WATER RECLAMATION FACILITY PHASE V IMPROVEMENTS

### BID OPENING: November 3, 2015 at 2:00 PM

This addendum is hereby incorporated into the bid documents of the project referenced above. The following items are clarifications, corrections, additions, deletions and/or revisions to and shall take precedence over the original documents. Additions are indicated by <u>underlining</u>, deletions are indicated by <u>strikethrough</u>.

### The bid opening date remains unchanged at November 3, 2015.

### A. SPECIFICATIONS

- 1. Section 11613 Paragraph 2-7.09, delete "stainless steel" and replace with "carbon steel".
- Section 11613 Paragraph 2-7.09, delete "Tri-Vent Series TKZ" and replace with "<u>Tri-Vent Series TKM</u>".
- 3. Section 11613 Paragraph 2-7.09, delete "Filters shall include qty (4)..." and replace with "Filters shall include qty (1)...".
- 4. Section 11613 Paragraph 2-7.09; insert the following at the end of the 4th paragraph: "<u>Pre-filter wraps shall be equipped with a Velcro closure and wrapped around the high efficiency elements</u>".
- 5. Section 11613 Paragraph 2-7.09, delete "Tap locations specified on drawings." and replace with "Tap location shall be downstream of the filter cartridges."
- Section 11243, paragraph 2-5.01.06, delete "The backwash system shall include a pump" and replace with "the backwash system shall include 2 pumps as indicated on the drawings (Sheet M-32)".

7. Section 13500A, delete lines 329, 336, and 343in its entirety. Delete lines 331, 338, and 345 in its entirety and replace with the following:

331	15C	DPIT	101	INLET FILTER DIFFERENTIAL PRESSURE	DIFFERENTIAL PRESSURE INDICATING TRANSMITTER	4-20 mA	BY SUPPLIER	11613	I-18	BY EQUIPMENT SUPPLIER
338	15D	DPIT	101	INLET FILTER DIFFERENTIAL PRESSURE	DIFFERENTIAL PRESSURE INDICATING TRANSMITTER	4-20 mA	BY	11613	I-18	BY EQUIPMENT SUPPLIER
345	15E	DPIT	101	INLET FILTER DIFFERENTIAL PRESSURE	DIFFERENTIAL PRESSURE INDICATING TRANSMITTER	4-20 mA	BY SUPPLIER	11613	I-18	BY EQUIPMENT SUPPLIER

- Section 11363, paragraph 1.08.C.1.b, delete "The formula for calculation of the liquidated damages is: LD = \$86,000 × (APD-GPD), where GPD is 25 lb/dry ton feed solids." And replace with "The formula for calculation of the liquidated damages is: LD = \$86,000 × (APD-GPD), where GPD is 35 lb/dry ton feed solids."
- Section 13530 2-1.05, delete "The PLCs shall be the Siemens model S71516-4 without exception" And replace with <u>"PLCs shall be the Siemens model S71516-3</u> <u>PN/DP, without exception.</u>"
- 10. Section 15075-4, Part 2.J delete the following: Caps shall be high-density polyethylene, color orange. The caps shall be filled with an anticorrosive lubricant to prevent nuts and bolts from rusting and corroding. Lubricant shall be suitable for use in potable water. Caps shall withstand temperatures from -40°F to 200°F. Caps shall be suitable to use in exposed, buried, and submerged service conditions. Products: Sap-Seal Products, Inc.; Advance Products and Systems, Inc., "Radolid"; or equal.
- 11. Section 15114-S01, delete the lines for SGATE-100 and SGATE-104 in their entirety.
- 12. Section 13564 2-2.17-5, delete "The manufacturer shall be Cerlic, Model CATμP." and replace with "The manufacturer shall be Cerlic, Model CBX."
- 13. Section 13120, Paragraph 1-1, delete "The pump manufacturer shall be responsible for furnishing the variable frequency drives as specified under Division 11 specifications. The pump manufacturer shall coordinate with the PEC Supplier for installation of the variable frequency drives." And replace with "The variable frequency drives shall be supplied by the Electrical Contractor. The Electrical Contractor shall coordinate with the PEC Supplier for installation of the variable frequency drives."

- 14. Section 16110, Paragraph 2-1.05, delete "EYSR retrofit sealing fittings shall be installed in rigid metal conduit systems in hazardous locations, in vertical or horizontal positions, indoors or outdoors as manufactured by Cooper Crouse Hinds or equal." And replace with "EYS sealing fittings and EYSR retrofit sealing fittings shall be installed in hazardous locations as shown on the drawings, as manufactured by Cooper Crouse Hinds or equal."
- 15. Section 16670, Paragraph 1-1, delete "A Lightning Protection System shall be provided and installed for all structures greater than five (5) feet above grade level." And replace with "<u>A Lightning Protection System shall be provided and installed for</u> those structures indicated on the drawings with lightning protection requirements."
- 16. Section 15119-9, Part 3.A is revised by adding SGATE-120 to the Service Conditions Table:

Equipment Tag	Application	Fluid	Open/Close or Modulating	Separate (Remote) Control Station Required?	Fail Position on LOS
<u>SGATE-120</u>	Slide Gate	<u>Water</u>	Open/Close	No	<u>Last</u>

- 17. Section 11613, Paragraph 1-1, delete the following: "A future remote I/O rack shall be provided for Southwest and Southeast basin valves, flow meters, and DO probes. Refer to Section 13550 for control descriptions for each aeration system".
- 18. Section 11613-15, 2-6.01.03, delete the last sentence in the third subparagraph: "Each vent pipe shall be terminated outside and provided with a screen vent cap."
- 19.11613-6, 1-3.01, delete: "Predicted Maximum Free Field Noise Levels: Sound pressure level in 85 dBA at each octave band measured in shop, 3 feet from blower". And replace with: "Predicted Maximum Free Field Noise Levels: Sound pressure level in 92 dBA at each octave band measured in shop, 3 feet from blower."

### C. DRAWINGS

- 1. Note 3 on Sheet C-12 shall be deleted.
- 2. On Sheet I-18, the TIT/TE instrument on each inlet filter shall be replaced with a DPIT.

- 3. Add the following note to Sheet M-32: "5. Equipment manufacturer to provide maintenance personnel access to all equipment requiring routine maintenance. Code compliant, fixed access platforms and shall be provided for maintenance personnel for equipment not readily accessible from ground or floor level. Use of portable step ladders to access equipment for routine maintenance will not be acceptable. Routine maintenance is generally defined as maintenance recommended on a quarterly or more frequent basis. Design of the platforms will be the responsibility of the contractor and shall be constructed of 304 stainless steel or aluminum."
- 4. Sheet G-4, Note 24 is revised as follows, "All Buried piping shall be constructed as shown on the plans. A minimum cover of 36 inches shall be maintained on all buried piping, where it is not otherwise specified on plans or indicated by the engineer. All direction changes in the pipe both horizontal and vertical shall be by joint deflection unless otherwise noted or indicated by the engineer. Joint deflection shall not exceed 50% of manufacturers recommended deflection for ductile iron and steel pipe. No deflection shall be allowed on PVC pipe."
- 5. Sheet I-23, delete Control Panel text that states "PPL-LCP per spec 11721" and replace with "PPL-LCP per spec 11165".
- 6. Sheet C-14 is revised to illustrate a Sidewalk Detail per Detail C/CD-3 in lieu of the Exterior Equipment Pad per Detail D/SD-4, along the entire east side of the South Plant Blower Building.
- 7. Sheet SD-8, Beam Schedule, Beam B7 shall be revised from 12"x18" to be 16"x18".
- Sheet E-41, North Blower Plant Blower Control Wiring Schematic: delete note 8 "Typical equipment and wiring for North Plant Blowers 1, 2, 3, 4 and 5. Blower No. 5 RVSS is existing" and replace with "Typical equipment and wiring for North Plant Blowers 1, 2, 3 and 4. Blower No. 5 RVSS is existing".
- 9. Sheet E-61, North Plant No. 1 BNR Basin Electrical Plan, Aeration Basin No. 5, FE/FIT-123: replace homerun designation "C1" with "I1".
- 10. Sheet E-62, North Plant No. 2 BNR Basin Partial Electrical Plan -1, Pass 2, Anoxic Zone, Mixer MXL-MXP-242: replace homerun designation "MCC-USRB" with "MCC-USAB".
- 11. Sheet E-1: Replace Sheet E-1 in its entirety with the attached Sheet E-1 issued as part of this addendum.

- 12. Sheet E-3: Replace Sheet E-3 in its entirety with the attached Sheet E-3 issued as part of this addendum.
- 13. Sheet E-6: Replace Sheet E-6 in its entirety with the attached Sheet E-6 issued as part of this addendum.
- 14. Sheet E-7: Replace Sheet E-7 in its entirety with the attached Sheet E-7 issued as part of this addendum.
- 15. Sheet E-8: Replace Sheet E-8 in its entirety with the attached Sheet E-8 issued as part of this addendum.
- 16. Sheet E-9: Replace Sheet E-9 in its entirety with the attached Sheet E-9 issued as part of this addendum.
- 17. Sheet E-10: Replace Sheet E-10 in its entirety with the attached Sheet E-10 issued as part of this addendum.
- 18. Sheet E-12: Replace Sheet E-12 in its entirety with the attached Sheet E-12 issued as part of this addendum.
- 19. Sheet E-13: Replace Sheet E-13 in its entirety with the attached Sheet E-13 issued as part of this addendum.
- 20. Sheet E-14: Replace Sheet E-14 in its entirety with the attached Sheet E-14 issued as part of this addendum.
- 21. Sheet E-15: Replace Sheet E-15 in its entirety with the attached Sheet E-15 issued as part of this addendum.
- 22. Sheet E-17: Replace Sheet E-17 in its entirety with the attached Sheet E-17 issued as part of this addendum.
- 23. Sheet E-22: Replace Sheet E-22 in its entirety with the attached Sheet E-22 issued as part of this addendum.
- 24. Sheet E-23: Replace Sheet E-23 in its entirety with the attached Sheet E-23 issued as part of this addendum.
- 25. Sheet E-24: Replace Sheet E-24 in its entirety with the attached Sheet E-24 issued as part of this addendum.
- 26. Sheet E-25: Replace Sheet E-25 in its entirety with the attached Sheet E-25 issued as part of this addendum.

- 27. Sheet E-26: Replace Sheet E-26 in its entirety with the attached Sheet E-26 issued as part of this addendum.
- 28. Sheet E-27: Replace Sheet E-27 in its entirety with the attached Sheet E-27 issued as part of this addendum.
- 29. Sheet E-34: Replace Sheet E-34 in its entirety with the attached Sheet E-34 issued as part of this addendum.
- 30. Sheet E-38: Replace Sheet E-38 in its entirety with the attached Sheet E-38 issued as part of this addendum.
- 31. Sheet E-39: Replace Sheet E-39 in its entirety with the attached Sheet E-39 issued as part of this addendum.
- 32. Sheet E-40: Replace Sheet E-40 in its entirety with the attached Sheet E-40 issued as part of this addendum.
- 33. Sheet E-42: Replace Sheet E-42 in its entirety with the attached Sheet E-42 issued as part of this addendum.
- 34. Sheet E-43: Replace Sheet E-43 in its entirety with the attached Sheet E-43 issued as part of this addendum.
- 35. Sheet E-47: Replace Sheet E-47 in its entirety with the attached Sheet E-47 issued as part of this addendum.
- 36. Sheet E-49: Replace Sheet E-49 in its entirety with the attached Sheet E-49 issued as part of this addendum.
- 37. Sheet E-57: Replace Sheet E-57 in its entirety with the attached Sheet E-57 issued as part of this addendum.
- 38. Sheet E-58: Replace Sheet E-58 in its entirety with the attached Sheet E-58 issued as part of this addendum.
- 39. Sheet E-63: Replace Sheet E-63 in its entirety with the attached Sheet E-63 issued as part of this addendum.
- 40. Sheet E-70: Replace Sheet E-70 in its entirety with the attached Sheet E-70 issued as part of this addendum.
- 41. Sheet E-71: Replace Sheet E-71 in its entirety with the attached Sheet E-71 issued as part of this addendum.

- 42. Sheet E-78: Replace Sheet E-78 in its entirety with the attached Sheet E-78 issued as part of this addendum.
- 43. Sheet E-79: Replace Sheet E-79 in its entirety with the attached Sheet E-79 issued as part of this addendum.
- 44. Sheet E-80: Replace Sheet E-80 in its entirety with the attached Sheet E-80 issued as part of this addendum.
- 45. Sheet E-81: Replace Sheet E-81 in its entirety with the attached Sheet E-81 issued as part of this addendum.
- 46. Sheet E-83: Replace Sheet E-83 in its entirety with the attached Sheet E-83 issued as part of this addendum.
- 47. Sheet E-85: Replace Sheet E-85 in its entirety with the attached Sheet E-85 issued as part of this addendum.
- 48. Sheet E-88: Replace Sheet E-88 in its entirety with the attached Sheet E-88 issued as part of this addendum.
- 49. Sheet E-89: Replace Sheet E-89 in its entirety with the attached Sheet E-89 issued as part of this addendum.
- 50. Sheet E-90: Replace Sheet E-90 in its entirety with the attached Sheet E-90 issued as part of this addendum.
- 51. Sheet E-94: Replace Sheet E-94 in its entirety with the attached Sheet E-94 issued as part of this addendum.
- 52. Sheet E-100: Replace Sheet E-100 in its entirety with the attached Sheet E-100 issued as part of this addendum.
- 53. Sheet E-105: Replace Sheet E-105 in its entirety with the attached Sheet E-105 issued as part of this addendum.
- 54. Sheet E-106: Replace Sheet E-106 in its entirety with the attached Sheet E-106 issued as part of this addendum.
- 55. Sheet E-107: Replace Sheet E-107 in its entirety with the attached Sheet E-107 issued as part of this addendum.

### D. BIDDER QUESTIONS

 Drawings and specs do not agree on piping restrained joint (RJ) and deflection at pipe joints. Specification 15240, page 4, calls for 100% RJ for all piping joints. Drawing G-4 also calls for 100% RJ for all piping. On drawing CD-2, there is a RJ table for pipe sizes up through 48". I am assuming we will make all piping fully restrained? And if so, will you please specify whether or not pipe with 54" diameter and larger should be a manufacturer's restrained joint.

> All new piping shall be installed with mechanical restraint. Specification Section 15240-4, Part 2.M.3 states the following, "All buried joints are to be restrained." Drawing G-4, Note 17 states the following, "Restrained joints shall be provided for all piping joints." Existing piping requiring a new connection is to be mechanically restrained per the lengths noted on Detail D/CD-2. Reference Drawing C-19, Note 7 which states the following," All existing piping requiring a new connection is to be mechanically restrained per Detail D/CD-2. The General Contractor shall verify the existing piping is mechanically restrained per Detail D/CD-2". Please reference Specification Section 15240-4, 2.M.4 and Part 2.N regarding the type of restraint devices permissible on the project.

2. Will you please confirm whether all pipe joints should have zero deflection or not?

Reference Specification Section 15240-6, Part 3.E which states the following, "No pipe deflection of buried piping is allowed unless approved by the County's Representative. Approval will be on a case by case basis." Please refer to item C.4 for a revision related to this question.

3. The Instrument Device Schedule list AE for Dissolved Oxygen 263 A and B, 264 A and B, 265 A and B, and 266 A and B the AIT associated with these elements call for suspended Solids. Drawing I-10 show TSS and NH4 on a TSS transmitter with adjacent Dissolved Oxygen 262,259, 256, and 253. Please clarify which sensors go with multi-channel transmitters 263, 264, 265, and 266.

AE-263A, AE-264A, AE-265A, AE-266A are all TSS elements. Change the "Service Description" in the device schedule for these elements to "TOTAL SUSPENDED SOLIDS". AE-263B, AE-264B, AE-265B, AE-266B are all NH4 elements. Change the "Service Description" in the device schedule for these elements to "AMMONIUM". AIT-263-266 are Multi-Channel

Transmitters such that each AIT will accept a TSS sensor and a NH4 sensor. The NH4 I/O at the top of I-10 should read "AMMONIUM" not "AMMONIA".

4. Drawing I-28, note 4, relates to existing switches. Please provide Manufacturer and model # of existing switch in Existing panel 04A, 05A, and 08A.

Siemens 6GK5408-4GP00-2AM2 with 4 6GK5991-1AB00-8AA0.

5. Section 13530 2-1.05 calls for a Siemens S71516-4 CPU "without exception". Siemens informs me they have a S71516-3 or a S71518-4. Please clarify which is required.

S71516-3 PN/DP, without exception. Please refer to item B.9 for a revision related to this question.

6. Reference specification 02232. In addition to the typical roadways, there is approximately 2,000 SY of pavement repair required (detail F/CD-3). Can shell-rock be used in lieu of limerock as the base course for the typical roadways and pavement repair?

No.

7. Reference specification 02276. Can crushed 57 recycle concrete or 57 limestone be used in lieu of FDOT 57 stone?

No. Substitute material and equipment may be considered after execution of the contract in accordance with Part C-Instructions to Bidders, Paragraph 7.

8. Reference specification 02778. Part 3.B requires a crushed rock base of 4in or more under each curb, gutter or sidewalk. The sidewalk detail C/CD-3 does not call for a crushed rock base. As long as the sub-grade is properly compacted, is a crushed rock base required under the sidewalks, curbs and gutters?

> Crushed rock based material for Concrete Curbs, Gutters and Sidewalks is not required. Please reference the revision to Specification Section 02778-2, Part 3.B as follows; After the subgrade for curbs, sidewalks, and roadway slabs is compacted and at the proper grade, spread crushed rock base material. Sprinkle with water and compact. Top of the compacted gravel shall be at the proper level to receive the concrete. Compact crushed rock base 4 inches or more of compacted crushed rock base material.

# 9. Reference detail A/C-2, note 1. Please confirm that the 2in structural course (two lifts) is (2) 1in lifts totaling 2in thick and not (2) 2in lifts.

Correct, the type S-1 asphalt shall be constructed in two (2) lifts each of 1inch thickness of S-1 totaling 2 inches of asphalt.

# 10. Reference note 2 on C-12. The note calls for hydro-seed. Where does this apply?

Hydro-seed is not allowed. Please reference Note 4 on Drawing C-2, Note 28 on Drawing G-4 and Specification Section 02810. All disturbed areas are to be grassed with the placement of sod. Please refer to item C.1 for a revision related to this question.

## 11. Reference demo drawings D-11 and D-12. Please confirm the concrete thickness of the existing EQ pond to be demolished.

The 1989 Record Drawing C-8 from the SWRF Phase I Record Drawings illustrate the concrete thickness per Sections 1 and 2 (See Attachment EQ Pond and Detail). However, the Engineer cannot confirm the accuracy of the thickness of the existing concrete. Reference General Note 4 on Drawing G-4 regarding the responsibilities of the General Contractor regarding field verification of the work and the information utilized by the Engineer in preparation of the Contract Documents, such as Record Drawings.

# 12. Reference drawing D-33. Please confirm the gradation and thicknesses of the filter media to be removed.

The filter media has a depth of approximately 24".

# 13. Reference drawing D-6. Please confirm the chemical storage tanks to be demolished are empty.

The existing chemical storage tanks are currently abandoned in place. It is uncertain if the tanks are completely empty, or devoid of any chemical residues, residual volumes, etc... Therefore the Contractor shall include provisions to dispose of any additional volume of chemical in the existing tanks in accordance with the requirements of all County, State and Federal jurisdictional authorities.

# 14. Reference drawing D-36 note 4. Please confirm the intent is to demolish the (2) concrete slabs shown on the NW corner of the structure.

The slabs associated with the piping shown on drawing D-36 are to be demolished.

15. Contract Article 18 – Payment and Completion – Progress Schedule (page F-32) requires 10% minimum float time to be included in the critical path for unforeseen conditions. We request that an additional 105 days be added to the Substantial Completion time and 108 days be added to the Final Completion time to account for the 10% float.

No change will be made to the contract time.

16. Section 01340 – Web Based Controls System – Part 1-1.01 – Project Controls - requires fiber optic cable to be installed from the Administration Building to the Contractor's and Owner's field offices near the South Effluent Pump Station. Is there a closer point of connection for the fiber optic cable?

There is fiber already installed in the proposed location for the trailers to be used by the Contractor.

17. Section 01340 – Web Based Controls System – Part 1-1.02 – Submittals – requires the contractor to provide six (6) Contract Manager user licenses in Orange County Utilities' name. Will Orange County Utilities provide these licenses as they have on other projects?

Modifications to the requirements of Contract Manager will be included in a future addendum.

18. Please clarify if we are required to include flood and wind coverage in our builder's risk policy. These particular perils are listed as excluded "causes of loss" in Exhibit D part B.1.g. The need to include these coverages could be interpreted either way, so we are asking for a clarification to eliminate any uncertainty and insure that all bidders include the necessary costs.

Answer: Yes, wind and flood are required as covered causes of loss under the builders' risk policy.

19. Due to the complexity of this project, sequencing, by-pass pumping, yard piping, we ask for a two (2) week postponement of the bid date.

This bid opening date has been modified. Bid opening is now November 3, 2015 at 2:00 PM.

20. Please confirm that the thread protection caps, Radolids, specified in section 15050, Part 2 J. are not required for this project.

Threaded Caps for Protection of Nut and Bolt Threads is not required for the project. Please refer to item B.10 for a revision related to this question.

21. Please confirm that the quotes provided under Appendix C and D of the documents have been included as the basis of the Engineer's Estimate and are for bidder's informational use only. These are not the values to be carried in the basis of bid and each bidder is responsible to collect current pricing from each applicable vendor.

Yes, the quotes provided are for information only.

22. "Instrument Device Schedule" list air flow transmitters 111, 114, 117, 120, 123, 126, and 129 as 18" elements. Drawing I-08 show the pipe size as 10". Please clarify.

Refer to mechanical sheets for pipe sizes. The pipe size is 10 inches as shown on M-10.

23. "Instrument Device Schedule" list air flow transmitters 211 (18"), 212 (12"), 213 (10"), 214 (18"), 215 (10"), 216 (10"), 217 (16"), 218 (10"), 219 (8"), 220 (18"). 221 (12"), and 222 (10") as element size. Drawing I-10 shows these sizes to be the pipe size for the meter. Please clarify.

As stated in Section 13562, the insertion length is one half of the pipe diameter thus allowing the bidder to price the correct length insertion meter.

### 24. What is the operating pressure and temperature for the aeration system?

The operating pressure is 8.4 psig and the temperature shall be less than 300F, as stated in Specification 11613.

25. The maximum full load motor speed requirement for the Clarifier 3 WAS pumps is listed as 1200 RPM in Table 11311-A of the specification for this project. The pump we would like to submit to this application meets/exceeds all other performance requirements; however the full load motor speed is 1750 RPM. Is there a possibility for relief on the 1200 RPM requirement? In order to reduce any effect of the increased pump speed on component wear, we plan to offer hardened impellers and volutes.

No. Specifications will not be modified.

26. In reviewing the ITB, page 46 lists the required MWBE Forms to submit with the bid, however, the following form is not included: "M/WBE Survey, Attachment C-4". Will this be distributed via Addendum?

See Addendum 2.

# 27. Will Centrisys be included in the pre-approved manufacturer list for the Centrifuges?

No. Substitute material and equipment may be considered after execution of the contract in accordance with Part C-Instructions to Bidders, Paragraph 7.

28. Section 11243-1-5. Each filter disk is comprised of six (6) individual segments of frames and cloth media socks. Please confirm that "1 complete set" consists of 6 frames and cloths for one disk of one filter.

"One Complete Set" as listed in Specification 11243-1-5. Spare Parts consists of all parts necessary to furnish one filter.

29. If motors and gearboxes require routine maintenance, and are not accessible from the outside tank side walls, the equipment manufacturer shall provide an internal access platform between the tank side walls and the motors and gearboxes.

Please refer to item C.3 for a revision related to this question.

30. Section 11243-2-5.01.02. If the wet weight of the filter disk segment is greater than 50 pounds, a lifting mechanism shall be provided by the equipment manufacturer.

No change will be made in the specification.

31. Section 11243-2-5.01.06. The backwash system shall include two pumps per filter.

Please refer to item B.6 for a revision related to this question

32. Section 11243-2-5.01.06. Because of the fouling that can be caused by stringy material, non-full port valves such as butterfly valves or plastic valves are not acceptable. Please remove "metallic industrial butterfly valves with 115/230 volt, 1 phase, 60/50 Hz open/close electric actuators" from this paragraph.

No change will be made in the specification.

33. Section 11243 Paragraph 2-6.01 in page 7 states "A control panel for each filter shall be installed on the walkway near the filter at a location approved by the Engineer." In this case a junction box will be mounted and factory installed conduit between filter mounted devices and the junction box will

be provided. Please revise to add the following sentence to the end of this paragraph: Conduit between the remote panel and the junction box will not be factory installed.

No change will be made in the specification.

34. Section 11243-2-2.08 Submersible Pressure Sensing Level Transmitters: Revise to add WIKA LH-10, Mercoid, IFM Effector PX Series as equals.

No. Substitute material and equipment may be considered after execution of the contract in accordance with Part C-Instructions to Bidders, Paragraph 7.

35. Section 11243 3-3.03. Field Performance Test (Effluent Quality). .....Performance test shall be conducted within 60 days after startup following a sufficient time for upstream process stabilization, shall be run for a minimum of five days and shall demonstrate that the system performs in accordance with the requirements specified herein.

No change will be made in the specification.

36. Section 11243-3-3.03.01: The performance requirements of the filtration process is not met if any of following scenarios occurs: filter continuous backwash, bypass, or overflow.

No change will be made in the specification.

37. Section 11243-2-6.01: Only online/offline selector switches will be required in addition to the operator interface.

No change will be made in the specification.

38. As it relates to the painting scope and spec section 09940 Protective Coatings, is there any way in an addendum there can be some clarification to what structures receive coatings to the exterior, interior and submerged concrete portions?

Coatings were clarified in Addendum 1.

39. Article 8, INSURANCE REQUIREMENTS, Pollution Legal Liability Coverage indicates "Contractor agrees to maintain Contractor's Pollution Legal Liability with a limit of not less than \$1,000,000 per occurrence on a per project basis." a. Is it the Owner's intention that the Contractor provide a project specific policy? b. If so, would the owner consider accepting coverage provided by the Contractor's corporate pollution policy, with a limit of \$5,000,000 or \$10,000,000? This would eliminate the additional cost related to a project specific policy and provide a higher coverage limit.

Project specific coverage would be preferable. However, a corporate pollution policy with a limit of not less than \$10,000,000 would be acceptable.

40. Sheet M-19 details 8" bollards along the edge of the new slab on grade, adjacent to the existing North Clarifiers 1 & 2 RAS Pumping Station. Detail G/CD-2 is referenced, for these bollards, but does not seem to exist. Please provide this detail or further clarification of the length and installation requirements for these bollards.

> The reference to "Detail G/CD-2 8" Bollard (Typ)" is incorrect. Drawing M-19 should be revised to reflect the correct detail reference "Detail C/CD-1 6" Bollard (Typ)".

41. Sheet C-11 details a small 5'x5' area of sidewalk located to the south of the retaining wall at the North Clarifier No. 3 RAS/WAS Pumping Station. Sheet S-20 and Section 3/S-22 appear to indicate a larger footprint for this sidewalk. Which plan view of the sidewalk should apply?

Drawing C-11 is correct. The 5'X5' area of sidewalk is for the landing at the base of the staircase illustrated on Drawing S-20.

42. Note #7, on Sheet C-2, indicates that concrete pads for electrical equipment are to be constructed per Detail J/SD-2, without a thickened edge. All exterior electrical equipment pads, however, appear to be detailed as D/SD-4 exterior equipment pads. Which of these two details should apply to exterior electrical equipment pads? Please clarify.

> Paving Grading and Drainage Notes on Drawing C-2 are general notes pertinent to the project. Unless Noted Otherwise within the Paving, Grading and Drainage Drawings, construct concrete pads for electrical equipment per Detail J/SD-2, without a thickened edge.

43. Section B/S-19 indicates that the air pipe supports, located on the east side of the South Plant Blower Building, are placed within sidewalk. Sheet C-14 contradicts this, by indicating that a 10" thick exterior equipment pad (Detail D/SD-4) is to be placed along the entire east side of the building. Please clarify.

Please refer to item B.6 for a revision related to this question.

44. Sheet C-14 details 6" steel bollards at each side of the overhead door entrances to the South Plant Blower Building. Sheets A-2 and A-4 indicate triangular concrete barriers, in lieu of the bollards, at these doorways. Which of these two different options should be used? Please provide a detail for the concrete barriers if they are to be utilized?

The bollards around the exterior of the South Electrical Building shall be the 6" Bollards per Detail C/CD-1 as illustrated on Drawing C-14.

45. The "Enlarged Mixer Platform Plan", shown on Plan Detail 3/S-8, shows typical platform construction consisting of C-4.1 columns and B-7 beams. Both, this Detail and Section 14/S-12, appear to show the typical B-7 beams as 16" wide, by scale. This also seems to coincide with the 16" diameter C-4.1 columns, per Column Schedule D/SD-8, that support them. Beam Schedule A/SD-8 indicates that the B-7 beams are to be only 12" wide. Please clarify the intended design width of the B-7 beams.

Please refer to item B.7 for a revision related to this question.

46. Due to the size and complexity of this project, we request that the bid date be extended by two weeks to November 3, 2015.

This bid opening date has been modified. Bid opening is now November 3, 2015 at 2:00 PM.

47. Section 16110-3, specifies the use of EYSR retrofit sealing fittings in hazardous areas. Electrical plans calls for the use of EYS sealing fittings. Please clarify which fitting shall be used.

EYS sealing fittings and EYSR retrofit sealing fittings shall be provided as shown on the drawings. Please refer to item B.14 for a revision related to this question.

48. SGATE-120 on the schedule listed in Section 15114 shows electric actuator. The electric actuator schedule in Section 15119 does not list SGATE-120. Please confirm if SGATE-120 has an electric actuator.

SGATE-120 has an electric actuator, as shown on Drawing C-36. Please refer to item B.16 for a revision related to this question.

49. SGATE-100 and SGATE-104 are listed on the schedule in Section 15114 and states to See Drawings. These gates are not called out on the drawings. Drawing M-15 detail for the mixing chimney shows two gates. Is one of these SGATE-104? Drawing M-13 shows two mixing chimneys. Does the

mixing chimney which does not have a detail have a slide gate, and is it SGATE-100? Please confirm where SGATE-100 and SGATE-104 are located on the drawings.

SGATE-100 and SGATE-104 do not exist. Please refer to item B.11 for a revision related to this question.

50. Per Section 11214 3.F.3 and 4, both services specify a minimum Shaft Diameter of 1-15/16 inches. However, Flowserve can provide the pumps with a 1-11/16 inches diameter shaft. Will this be allowed?

No. Substitute material and equipment may be considered after execution of the contract in accordance with Part C-Instructions to Bidders, Paragraph 7.

51. Per Section 11214 2.N.1, will 416 SS Pump shaft and coupling materials be allowed?

No. Substitute material and equipment may be considered after execution of the contract in accordance with Part C-Instructions to Bidders, Paragraph 7.

52. Section 11243, 1-6. WARRANTY AND BONDS. Manufacturer shall provide a two-year performance bond, a supply bond and a five-year extended warranty including parts and labor in lieu of lack of experience (installations) of size comparable to the South Water Reclamation Facility. Refer to Specification Section 01700 for standard warranty requirements. It does not state the percentage amount of the performance and supply bonds required. Since these bonds must be provided by the manufacturer and not the bidding contractor, can you please clarify if the bonds required are for 100% of the equipment value, or if different, the actual percentage amount required?

Clarification on this item will be provided in a future addendum.

53. Sheet E-26 shows six new buckets to be added to existing MCC-USPA & USPB, my gear suppliers need to know what the model, manufacturer and type of these MCC's.

Refer to revised Sheet E-26 issued as part of this addendum.

54. Sheet E-23 note 5 & E-24 note 7 identify equipment to be supplied by the Centrifuge Supplier, does this note include the three disconnect switches within the box?

No, this note does not include the three disconnect switches within the box. Refer to revised Sheets E-23 and E-24 issued as part of this addendum.

55. Sheet E-39, the Centrifuge Control Wiring Diagram, shows eight (8) e-stops. Are these e-stops to be supplied by the Centrifuge Supplier or the Electrical Contractor?

> Emergency stop switches for the Centrifuge and Gravity Belt Thickeners shall be provided by the Centrifuge Supplier, Gravity Belt Thickener Supplier. Emergency stop switches for the Belt Filter Presses shall be provided by the Electrical Contractor.

56. Confirm that one (1) additional spare of each size power and control conduit is required to be added to all duct banks on this project per Section 16110 3-1.

Confirmed.

57. Per Section 16670 it is our interpretation that two (2) separate L.P. Certifications, L.P.I. & U.L. Labels, are required on this project. Is this correct?

Yes, this is correct. Refer to Sheet E-108, Detail 4 for additional information.

58. Per Section 16670 the Scope of Work indicates that L.P. should be installed on all structures greater than five (5) feet above grade level. Would this include the any existing plant structures or only the structures that are indicated on the drawings that require L.P.?

Lightning protection system is required for those structures indicated on the drawings. Please refer to item B.15 for a revision related to this question.

59. Are all underground conduits to be concrete encased, including a single conduit for area lighting?

Yes.

60. In regards to the Orange County WRF Polymer Feed System Section 11720: I am inquiring about the reference to Section 16370 Variable Speed/ Frequency Drives. Does this apply to the polymer feed Pumps? And if so can you name a manufacture and model number that would meet these specifications? Our standard equipment would not meet all of the specifications.

As stated in Section 11720, the metering pump shall be Moyno Model #34401 ZM47083, Netzsch "Model NM-021\*1L", or Seepex "Model BN-12." The products of other manufacturers are not acceptable.

61. Section 13563 2-2.21 Sludge blanket Level Monitor list Hach sonatax with SC1000 Universal Controller. Section 13564 2-2.17 Sludge Blanket Interface Level Detector list Cerlic Model CAT-up. Please Clarify.

Section 13563 2-2.21 does not apply and should be disregarded. Section 13564 2-2.17 is the applicable specification. Please refer to item B.12 for a revision related to this question.

62. On the P&IDs I-20 and I-21 it is indicated that there is a "PROFINET" connection to the Polymer Feed Pump control Panels from the Gravity Belt Thickeners Control Panels. However, there is no mention of "PROFINET" or Ethernet interface in the Polymer Feed Pump Section 11720. There is mention of 4-20mA input to control motor speed and speed 4-20mA output to the Gravity Belt Thickeners. Is there an Ethernet interface requirement for the Polymer Feed Pumps Control Panels?

All VFDs are required to have a PROFINET port.

63. Section 11363, Page 1:Lubricant cooling system: We would like to state that both main and conveyor bearings for all Alfa Laval centrifuges are grease lubricated and therefore Lubricant cooling system is not applicable to our machines. We ask the main bearings grease lubrication to be acceptable.

Substitute material and equipment may be considered after execution of the contract in accordance with Part C-Instructions to Bidders, Paragraph 7.

64. Section 11363, Page 1: We recommend supplying an automatic grease lubrication system to grease the main bearings.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

65. Section 11363, Page 9: Lubrication: We recommend supplying an automatic grease lubrication system to grease the main bearings.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

66. Section 11363, Page 10: Main motor: Alfa Laval centrifuges will be supplied with energy savings features. One of them is that the centrifuges require a smaller main motor because utilizes a separate main motor for the bowl and a separate motor for the internal scroll. For this reason we request to reduce the minimum size of the main motor to 125 HP.

No. Substitute material and equipment may be considered after execution of the contract in accordance with Part C-Instructions to Bidders, Paragraph 7.

67. Section 11363, Page 10: Connections: The feed connection to the centrifuge is a 3 inch 150 lb. flange connection. The feed tube also includes a one (1) inch NPT connection for polymer.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

68. Section 11363, Page 10: Bowl length: The bowl length of the proposed centrifuge is 108 in and meets the intention of the spec.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

69. Section 11363, Page 10: Lube oil cooling water: We would like to state that both main and conveyor bearings for all Alfa Laval centrifuges are grease lubricated and therefore lube oil cooling water is not necessary in our machines.

> No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

## 70. Section 11363, Page 11: Scroll-V-Belts: The proposed Alfa Laval centrifuge operates on a Direct Drive system and therefore it does not require V-belts.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

71. Section 11363, Page 12: Warranty: Alfa Laval's warranty covers defects in materials and workmanship for 18 months after startup or beneficial use or 24 months after shipment whichever comes sooner and we reserve the right to review operating and maintenance records to ensure compliance.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

72. Section 11363, Page 13: Performance Bond: Alfa Laval will provide a Performance Bond equal to 100% of the purchase order, but we cannot accept the length of the time the bond will remain in effect. We cannot guarantee the centrifuges will comply with the specified performance criteria for 18 months after acceptance. Sludge characteristics, Operation new strategy, etc., will change the performance of the equipment, therefore after approval of the Performance Testing report by the Engineer, our performance guarantee will expire.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

73. Section 11363, Page 14: Polymer: It looks like there is a typo in the amount of polymer specified under liquidated performance damages for dewatering centrifuges. It should be 35 lb active polymer/dT instead as on page 11, instead of 25. Please confirm.

The amount of polymer specified under liquidated performance damages should state 25 lb active polymer per dry ton feed solids. Please refer to item B.8 for a revision related to this question

74. Section 11363, Page 15: Lubrication system: Please refer to page 1 comment.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

75. Section 11363 Page 16: Lubrication system: Please refer to page 1 comment.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

76. Section 11363 Page 16: B-10 Life: Alfa Laval uses SKF's New Life Theory for bearing life calculations. This meets the DIN ISO 281 requirements which meet/exceed the requirements the B10 standard. We request this calculation to be acceptable and included as alternative calculation.

No comment. Substitute material and equipment may be considered after execution of the contract in accordance with Part C-Instructions to Bidders, Paragraph 7.

77. Section 11363 Page 16: Case protection solids: The centrifuges proposed by Alfa Laval will be supplied with a stainless steel wear liner to protect the casing against solids discharge abrasion.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

78. Section 11363 Page 17: Lubrication system: Please refer to page 1 comment.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

79. Section 11363, Page 17: Power Tubes: The centrifuges will come with power tubes to save energy and to help the operation of the centrifuge. The change of the pond depth can be done in less than 1 hour.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

80. Section 11363, Page 18: Lubrication system: Please refer to page 1 comment.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

81. Section 11363, Page 18: B-10 Life: Alfa Laval uses SKF's New Life Theory for bearing life calculations. This meets the DIN ISO 281 requirements which meet/exceed the requirements the B10 standard. We request this calculation to be acceptable and included as alternative calculation.

No Comment. Substitute material and equipment may be considered after execution of the contract in accordance with Part C-Instructions to Bidders, Paragraph 7.

# 82. Section 11363, Page 19: Double walled case: The centrifuge is supplied with a case that will meet the noise limitation.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

83. Section 11363, Page 19: Flushing the case: Alfa Laval provides a solidswear liner in the casing as standard that prevents the solids sticking to the cover rendering the casing flushing unnecessary. None of the Alfa Laval machines supplied for the Environmental application feature a casing flush. We respectfully ask for this request to be removed.

No. Substitute material and equipment may be considered after execution of the contract in accordance with Part C-Instructions to Bidders, Paragraph 7.

### 84. Section 11363, Page 20: Connections: Please refer to page 10 comment.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

# 85. Section 11363, Page 20: Service factor: The service factor for both motors will be 1.0 since the motors are inverter duty with VFD operation.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

### 86. Section 11363, Page 21 Scroll-V-Belts: Please refer to page 11 comment.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

87. Section 11363, Page 21: Service factor: The service factor for both motors will be 1.0 since the motors are inverter duty with VFD operation.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

88. Section 11363, Page 22: Lubrication system: Please refer to page 1 comment.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

89. Section 11363, Page 23: Vibration isolators: The present Alfa Laval centrifuges do not use built-in leveling bolts. The centrifuges are shimmed to level. We ask this requirement be removed from the specification.

No. Substitute material and equipment may be considered after execution of the contract in accordance with Part C-Instructions to Bidders, Paragraph 7.

90. Section 11363, Page 23: Flexible connectors: The installing contractor shall furnish all electrical flexible connectors including: drive motor, backdrive and centrifuge junction boxes to the electrical panels. The installing contractor shall insure that all electrical codes are met.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

91. Section 11363, Page 24: Vibration monitoring: We are taking exception to this request and we will provide SKF vibration sensors with direct input into the PLC for monitoring and alarms. We request this is acceptable.

No. Substitute material and equipment may be considered after execution of the contract in accordance with Part C-Instructions to Bidders, Paragraph 7.

92. Section 11363, Page 24: The vibrations in vertical and horizontal direction always follow the same magnitude because the vibration is a result of a given unbalance of the rotor. The horizontal measurements are always a little bit higher than the vertical measurements (even though the unbalance force is exact the same). The reason is that it is "easier" to create vibrations in horizontal direction because it is only the mass of the rotating assembly that should be moved. The frame can so to speak tilt forth and back. Therefore the measured value is higher in horizontal direction. It takes more energy to create vibrations in vertical direction because both the bowl and the frame should be moved. Therefore the measured value is smaller in vertical direction.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

93. Section 11363, Page 24: There is no added value to measure in both horizontal and vertical direction. Both measures are a result of the actual rotor unbalance. We measure the higher of the two values as described. The centrifuge does not vibrate axially.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

94. Section 11363, Page 29: Control of lubrication system: We will provide control of the automatic grease lubrication.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

#### 95. Section 11363, Page 33: Service factor: Please refer to page 20 comment.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

#### 96. Section 11363, Page 34: Service factor: Please refer to page 20 comment.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

97. Section 11363, Page 36: VFD: We will propose Allen Bradley but we would like to recommend engineer to consider AB VFDs as acceptable manufacturer to be added to the specification, this way we can recommend ABB ACS800 or 880 ULH VFDs which guarantees IEEE-519 compliance.

No. Substitute material and equipment may be considered after execution of the contract in accordance with Part C-Instructions to Bidders, Paragraph 7.

# 98. Section 11363, Page 43: Temporary gauges and meters: To be provided by the contractor.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

99. Section 13530, 2-8: This paragraph specifies "System Supplier" to provide
(2) Programming Device Hardware (Computers) for the project. I am not sure if this applies to centrifuge specification. We would request clarification if this applies to the centrifuge supplier.

This requirement does not apply to vendor PLCs. The System Supplier shall provide the two laptops and Programming Software.

100. Section 13530, 2-9: This paragraph specifies Programming Software (2) licensed copies. Please clarify if this applies to the centrifuge supplier.

This requirement does not apply to vendor PLCs. The System Supplier shall provide the two laptops and Programming Software.

101. Specification section 11165 paragraph 1-5. SPARE PARTS AND ACCESSORIES: Change O-ring kits, seals, and gaskets to specifically those used when replacing rams and poppets valves. As the spare parts identified are for two different pump valve systems, modify the spare parts requirements as follows:

Spare Parts:

**Quantity Spare Parts for all piston pumps:** 

1 Hydraulic filters.

2 Material piston heads.

1 Sets of lamps.

1 Sets of fuses.

2 Sets of O-ring kits, seals, gaskets for ram and valve change.

**Quantity Spare Parts for Poppet valves only:** 

2 Sets of suction cone or poppet valves disc, seals, and seats.

2 Sets of discharge cone or poppet valves disc, seals, and seats.

Quantity Spare Parts for swing tube valves only:

- 2 Sets of wear rings and plates.
- 2 Swing tubes.

2 Discharge bearing assemblies, including wear sleeve, scraper ring, O-ring, Guide band, lip seal ring, and compression ring.

2 Shaft bearing assemblies, including wear sleeve, O-rings, collar disc, bushing, and securing ring.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

102. Specification section 11165 paragraph 1-6 Warranty: states "Provide a five (5) year warranty, inclusive of all service and replacement parts, including wear parts, at no cost to the Owner". To reduce cost to owner, replace with attached warranty specification.

No.

103. Specification section 11165 paragraph 2-4.04 Hydraulic Control Block: States "The design of the hydraulic controls shall be limited to two connection lines between power unit and pump control block." Note that in addition to Two (2) connections lines to pump control block, a third connection for drain line is required.

No comment.

104. Specification section 11165 paragraph 2-4.04 Hydraulic Control Block: States "A three position, lever operated control valve requiring two handed operation shall be provided for manual forward-neutral-reverse control for maintenance." The three position valve is solenoid operated. Separate switches requiring two handed operation shall be provided for manual forward-neutral-reverse control for maintenance.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

105. Specification section 14552 paragraph 2-2. Performance and Design Requirements: 10 HP motor is specified, is 5 HP motor allowed since 5 HP is sufficient to meet design requirement?

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

106. Specification section 14552 paragraph 2-5.03. Troughs: Please specify thickness of wear liner. Is 1/4" thickness specified for chutes in paragraph 2-7.01 also for troughs?

The thickness of the wear liner shall be ¼" minimum.

107. Specification section 14552 paragraph 2-9.05. Transition Pressure Transmitter: Please clarify what is function of pressure transmitter?
"Pressure signal shall be used to control the speed of the twin-screw auger to maximize filling the pump while minimizing wear to the twin-screw auger."

It appears this reference is to specification section 11165, not 14552. It also appears the question was asked and answered. Otherwise, we are uncertain the issue and further clarification from the bidder is required.

108. Electrical Drawing E-23 and E-24. Single Line Diagram: E-23 & E-24 show 50HP piston pump motor and 5HP Auger feeder motor. A single 50 HP motor is recommended in lieu of the two (2) separate motors to reduce field wiring.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

109. Instrumentation Drawing I-23. Instrumentation P&ID Centrifuges 1 and 2: I-23 shows Centrifuge Cake Pump discharge pipeline lubrication system to be controlled via PPL-LCP per spec 11721. As spec 11721 is for belt press lubrication system only and conflicts with specification 11165 paragraph 2-11.03 Pipeline Lubrication System Control and 2-7 PIPELINE LUBRICATION UNIT, remove the note from drawing I-23 stating control panel per specification 11721 as this unit is controlled from the Piston Pump control panel.

Please refer to item C.5 for a revision related to this question.

110. Would you please provide list of G.C. Companies bidding Subject Project?

The following were prequalified to submit bids for this projectAddendum No. 3Y15-771 PHOctober 15, 201528

Adams Robinson Enterprises, Inc. Brasfield & Gorie, LLC Cardinal Contractor's Inc Garney Companies, Inc. MWH Constructors PC Construction Company dba PCEO, Inc. in Florida PCL Construction, Inc. Poole & Kent Company of Florida Ulliman Schutte Construction Wharton-Smith, Inc.

111. 11613-1, 1-1, Reference is made to a future remote I/O rack to be provided for Southwest and Southeast basin valves, flow meters and DO probes. Please confirm if this is to be provided by the Single Stage Blower manufacturer? If required, please provide details on requirements for remote I/O panel.

Please refer to item B.17 for a revision related to this question

112. 11613 1-3.01 Submittals, Drawings and Data – Note, the Blower Control System PLC program documentation cannot be suppled at the time of submittal. It can be supplied after submittals are approved and the software is developed. The Blower Control System list of all addresses for all information communicated between the blower main control panel PLC and the plant control system cannot be suppled at the time of submittal. It can be supplied after submittals are approved and the software is developed.

### This is acceptable.

113. 1613-6, 1-3.01 – Estimated average noise level of blower, measured 3 feet from blowers is 92-95 dBA. Sound pressure level of 85 dBA is not achievable based on the current configuration. If 85 dBA is required, additional sound attenuation provisions would be required. Please clarify sound pressure level requirements.

Please refer to item B.19 for a revision related to this question.

114. 11613-10, 2-2 – Siemens standard and recommended operation (control) for multiple blowers online is cascade control. Siemens request parallel or cascade operation be allowed.

"Parallel" in this paragraph does not imply parallel control but that blowers must discharge into a common header in parallel. Cascade control is acceptable as long as it does not result in excessive motor starts. 115. **11613-12**, **2-4** – Standard vibration isolators construction used is metal spring type isolators. Please confirm metal spring isolators are acceptable.

They are acceptable if properly sized by the manufacturer and if they meet specified anchor bolt minimum diameter requirements.

116. **11613-14, 2-6** – Please clarify if oil referenced, is to be supplied by the blower manufacturer?

Yes, it is to be supplied by the blower manufacturer.

117. 11613-15, 2-6.01.03 – Note that a vent pipe is not applicable to the blower models specified. A replaceable/disposable oil reservoir breather of the spin-on filter type is provided.

Please refer to item B.18 for a revision related to this question.

118. 11613-15, 2-6.01.03 – Due to the high probability of sight glasses leaking and/or breaking, a dipstick is recommended to be provided for monitoring the oil level.

Revise the last sentence of the referenced paragraph by addendum to state: "A sight glass or a dip stick shall be provided to monitor oil level in the reservoir."

119. **11613-17**, **2-7.04** – A rubber expansion joint on the blower inlet is not applicable. The proposed Siemens blower utilizes a flexible band clamp arrangement for connecting to the blower inlet. Please confirm this is acceptable.

A flanged connection as specified is preferred if inlet is available flanged.

120. **11613 -24, 2-10.01.05** - The statement after the listing of displayed process variables should read "Other signals such as blower inlet air temperature, outlet temperature, outlet pressure, bearing temperature, bearing vibration values, and motor temperature shall be selectively viewable from the operator interface touch screen on the front of the local control panel.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

- 121. **11613-18**, **2-7.09** Note that based on the application and the materials specified for other components we question the requirement for stainless steel construction, carbon steel construction is standard. Please confirm the following requirements for the inlet filter:
  - requirement for all stainless steel construction.
  - If stainless steel is required, please specify 304L or 316L.
  - If stainless steel is required, please confirm that specified powder coat system (Epoxy-Plus) is required in addition to stainless steel.
  - If stainless steel is required, please confirm that support legs shall also be stainless steel.
  - Model number specified is TKZ side-outlet; drawing indicates TKM top outlet. Please verify that a top-outlet model is correct.
  - Please confirm requirement for qty (4) 1/4" NPT pressure taps.

Please refer to item B.2 and B.3 for a revision related to this question.

122. 11613-18, 2-7.09 - Note that based on the application and the materials specified for other components we question the requirement for stainless steel construction, carbon steel construction is standard. Please confirm if carbon steel construction is acceptable.

Please refer to item B.1 for a revision related to this question.

123. **11613-19**, **2-7.12** – Siemens request for check valves with ductile iron nickel plated plates and stainless steel springs be acceptable, as manufactured by Titan. These are of equivalent quality to those specified.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

124. 11613 -25, 2-10.03.01 & 13530, 2-11- Siemens request for the blower manufactures standard OIT screens for the operation of the blowers be allowed. All of the blower manufacturer technicians and engineers are familiar with these screens and their operations. If custom screens are to be developed, this would extremely limit future support.

This is acceptable.

125. 11613 -25, 2-10.03.01 - Please clarify OIT size? Siemens recommends that the LCP and MCP panels be supplied with matching 12" Siemens Comfort Panel OITs.

This is acceptable.

126. 11613-26, 2-10.03.02.a, & 13570-2-1.04, Panel Fabrication – Clarification required on wiring gauges as this specification section calls for 14 AWG min. on power distribution & control and 16 AWG on twisted shielded pairs. Specification section 13570-2-1.04 calls for AC & DC control to be 16 AWG and Analog twisted pairs to be 18 AWG. Siemens standard follows section 13570-2-1.04.

This is acceptable.

127. 11613-27, 2-10.03.02.e, 13570 -2.2.02 & .03 – Standard material construction for control panels is USS 12 gauge not USS 10 gauge as specified. Please confirm acceptance of USS 12 gauge construction.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

128. 11613-28, 2-10.05 Uninterruptible Power Supply – Clarification required as this section calls for the UPS to provide back-up power for a minimum of 30 minutes, specification section 13570-2-1.06.01 requires a minimum of 10 minute back-up time at half load. Please clarify blower control panel UPS size requirement.

A minimum of 10 minute back-up time at half load is acceptable.

129. **13530-2**, **2-1.05-** Siemens recommends that all LCP and MCP panels be equipped with matching Siemens S7/1500 model processor, model S7-1516-3. Model specified is not a product that is available.

PLC Processors shall be Model S7-1516-3, without exception.

130. 13570-2-1.06.01 UPS for Free-Standing Vertical and Wall Cabinets – Note, the specified UPS from APC "Smart UPS", Emerson/Liebert "GTX1000MT" and Toshiba "1000 Series" do not meet UL508A standards for UPS in Industrial Control Panels. Siemens request a "Panel-mounted" UPS as manufactured from Allen-Bradley "1609 Series" or Phoenix Contact "Quint Series" UPS be added as acceptable products. No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

131. 16151 – 3, 2.2, Request Siemens, Baldor/ABB, and Teco Westinghouse be added to the list of acceptable motor manufactures.

No comment. If specification changes regarding substitute material or equipment are being requested, refer to Part C-Instructions to Bidders, Paragraph 7.

### E. ADDITIONAL INFORMATION:

- 1. All work in the influent screenings building shall be complete within 18 months of the Notice to Proceed.
- 2. All work in the West Electrical Building shall be complete within 18 months of the Notice to Proceed.
- G The Bidder shall acknowledge receipt of this addendum by completing the applicable section in the solicitation or by completion of the acknowledgement information on the addendum. Either form of acknowledgement must be completed and returned not later than the date and time for receipt of the bid.
  - All other terms and conditions remain the same.

Receipt acknowledged by:

Authorized Signature

Date Signed

Title

Name of Firm