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Response to Questions Hinesville/ Ft Stewart WWTP Modification PCS # 2009-63 November 10, 2014

- 1. The Pneumatic tank system specified in Section 15176 is not indicated on the plans other than schematically shown on the site plan indicated on sheet G-2 and C-2. Sheet C-2 indicates this tank as a 10,000 gallon vessel, however the specifications indicate that it is to be a 5,000 gallon vessel. Please clarify this tank size discrepancy. See addendum #1
- 2. Please provide the Pneumatic tank support system, foundation, saddles, etc. for the desired tank configuration. See addendum #1
- 3. Regarding the Pneumatic tank system, it appears that there is piping indicated between the tank area and the re-use pump station area on sheet G-2. No such piping is indicated on sheet M-16 where the reuse pump station details are indicated. Please provide details of piping and other items, piping connection points, isolation valves, etc. that are required between this tank and the reuse water system pumps discharge piping. See addendum #1
- 4. Please provide location where the pneumatic tank air compressor system is to be located. The specifications did not indicate any weather proof or exterior rated enclosure was required for this air compressor and pneumatic tank controls system. See addendum #1
- 5. Submersible pumps specified in Section 15200 identified in the pump products paragraph 2.01 as Effluent pumps and also as Sludge pumps Where are they to be installed in this project, are these the ones provided by Aqua Aerobics Yes
- 6. Sheet M-16 at both the Reuse Pump Station and the Reject/Reuse PS indicate in Note 1 that all three of these vertical turbine pumps are to be supplied by the Owner. These pumps do not appear to be listed in the ITB listing of equipment to be supplied by the Owner. Please clarify this discrepancy. Solicitation for the pumps is in progress
- 7. Specification Section 15201 for Vertical Turbine Pumps list pump characteristics but do not indicate the location(s) for the pump(s). Please confirm these are the pumps required at both the Reuse and the Reject/Reuse Pump Stations and that the total quantity of pumps that are to be provided by the City and Installed by the Contractor are a total of three (3) each. Correct
- 8. Sheet M-16 at both the Reuse Pump Station and the Reject/Reuse PS indicate vertical turbine pumps to be installed. Normally, where these type pumps are installed, a vacuum and/or air relief valve assembly is installed immediately beyond the pump discharge flange. We did not see any See addendum #1

- 9. Reference the ITB Gorman Rupp Pumps to be supplied by the Owner. The information included in the ITB scopes for this equipment does not provide any listing of scope items to be provided. It has only a pump data sheet and curve data. Please provide scope with complete listing of items to be provided by the owner associated with these pumps. See addendum #1
- 10. Reference the Section 15202 Gorman Rupp Pump Station. Specifications require a factory built automatic pump station complete with all equipment and fiberglass enclosure. The specification also requires all internal piping, valves, control panel, automatic liquid level control system with internal wiring. These requirements are in conflict with the proposed structure indicated on the bidding documents. Please address these conflicts and clarify by addendum. See addendum #1
- 11. Section 15280 Chemical Feed Equipment specifies One (1) 6,000 gallon capacity tank to be provided. Sheet M-15 indicates two (2) tanks with a capacity of 8,000 gallons. Please clarify these discrepancies. See addendum #1
- 12. Is it acceptable to use the Standard AIA Bid Bond Form, as one wasn't provided to us? If not please provide bid bond form. Bid Items reference EJCDC. That is the preferred document. If other is desired a copy for approval will be required.
- 13. Item 7 of the ITB directs us to Article 11 of the Supplemental General Conditions for Insurance? I found the FmHA Supplemental General Conditions but article 11 does not talk about Insurance could you please clarify. Addendum #1 replaces this Supplemental condition with the correct Supplemental Condition. Discard the FmHA document.
- 14. Article 5 of the general conditions tells us the types of insurance required to be furnished by owner or contractor but does not give any dollar limits can you provide the dollar limits required for each coverage the contractor is to provide? See Supplemental General Conditions included in addendum
- 15. Can the bid date be extended until at least the first week of December due to the Thanksgiving holiday? We are considering this, but when the date is extended no questions will be allowed after November 20, 2014. Addendum #2 will address the bid date extension.
- 16. Regarding the bid form, we are confused on the additional bid items without quantities. Are we to estimate the quantities from the drawings and put here and not in the base bid? See addendum #1
- 17. Based on the PolymerCrete Interpipe material list the Owner will be furnishing MH's 1 ~ MH 7, JB B1 & B2, JB A1 & JB A2 as well as 200 lf of 24" steel reinforced polymer concrete pipe. Will the Owner be furnishing the rings and covers for these structures? Will the Owner furnished MH's include the inverts from the manufacturer? Contractor will provide everything except the structure itself. The structure will include boots. We have requested information on inverts.

- 18. Reference sheet C-8, the plan view indicates that line A will connect at existing JB A-1. The profile view indicates that JB A-1 is a new junction box furnished by the Owner. JB A-1 has been included in the material list for the PolymerCrete Interpipe. We are assuming the note on the plan view is incorrect and JB A-1 is a new junction box. JB B-1 is noted as a new dog house MH. Is this correct? If so will there be any requirements for field coating where the penetrations are grouted? Profile view is correct. All structures will be SFPC. No coating si required.
- 19. Please advise on the average daily flow for the incoming 36" SS. Assuming JB A-1 is a new junction box a full bypass system will be required at this location. Where is the nearest manhole man hole on this line? Average flow is around 3 MGD on each influent sources. Varies by time of day and time of year. If you use 3 MGD and you are flexible when the installation is made 3.0 should be adequate.
- 20. With JB B-1 being installed over an existing 24" incoming force main how long can the upstream pump station be taken off line? Both will require a night change over and could be shut down approximately 4 hours on the Hinesville side. We are checking for the Ft Stewart side.
- 21. Are as-built drawings and any other pertinent information available for all structures to be modified and/or demolished. No as built drawings are available. We sent copies of structural drawings of structures to be demolished with prebid notes.
- 22. Section 15281 Hydrogen Sulfide Odor Control System is referenced for this clarification item request. Paragraph 2.02 A lists requirements of the components of the system. Sheet M-1, Headworks indicates only a pad location where the odor control unit is to be installed. The Enduro proposal lists components to be provided under their scope of equipment to be purchased by the owner. The location on the drawings that show the duct work is on sheet E1.0, with no size mentioned. See addendum #1 for all of these
  - a. Ductwork connection points to the Headworks cover system size?

b. A water panel and a water recirculation system if noted in the specs. No information on what this system consists of, where it is to be located or how it is supposed to work.

c. Locations and specification on any flexible ductwork connections to covers and/or scrubber system

d. Two butterfly valves are referenced in paragraph 2.02.B.9. These valves are not included in the Enduro scope of supply. Provide specification requirements for these valves.

23. Is the intent that specification Section 15060 Walkways and Work Platforms are to govern the requirements for the Headworks Odor Control System Covers? If yes, please clarify the following discrepancy regarding the cover. Specifications paragraph 2.01.A reference a 3/16" thick aluminum diamond plate. A callout on sheet M-1, Section B-B references a <sup>3</sup>/<sub>4</sub>" thick aluminum cover. Please clarify this discrepancy between material thickness and type covers allowable. See addendum #1

- 24. Headworks Odor Control System Covers. Please provide details of what is required for the odor control covers in the area of the manual bar screen channel, is it covered also? See addendum #1
- 25. Headworks Odor Control System Covers . Please provide attachment details for the proposed headworks area odor control covers? See addendum #1
- 26. Aluminum Slide gates at Headworks and UV Structures. Please provide operating height required for all aluminum slide gates. Widths are given but no information on operating/vertical gate heights? Gates will be required to open for 90% depth of the channel
- 27 Specification Section 15302 Flow Metering Equipment, Part 1, Paragraph 1.01 Scope states requirements for a propeller meter at a land application pumping station and parshall flume at the effluent of the constructed wetlands. We cannot find any references in our bidding documents that address either of these areas. Please provide clarification regarding these requirements. See addendum #1
- Specification Section 15302 Flow Metering Equipment, Part 1, Paragraph 2.02.A state's requirement for a 12" flume. Drawing M-1 at the Headworks indicates 18" Parshall flumes. Please clarify this discrepancy. See addendum #1
- 29. Specification Section 15302 Flow Metering Equipment, Part 1, Paragraph 2.04 states requirement for an Electro-Magnetic Flowmeter. Please provide size and location where this device(s) are required. See addendum #1
- 31. Fluidyne Grit System...Sheet M-1 indicates only the grit vortex equipment and the Grit Classifier locations. There are four blower units and associated piping, along with valves and accessories that will be required for the blower piping air system. These are noted in the Fluidyne proposal that these are to be provided by others. Please provide information to indicate blower locations, piping routing, connection points and other necessary details to allow us to determine a complete scope of work to be performed at the grit system equipment. See addendum #1
- 32. Headworks structure, Sheet M-1, Note 3 regarding Spectrashield Coatings. Please provide low water elevation to define the point where to begin the application of the Spectrashield coatings. This elevation is not noted on the drawings. Bottom of the vertical wall
- 33. Please confirm that the Reject/Reuse Water Tank Drain Wetwell Detail (Pump Station) shown on sheet M-16 is the same as the existing pump station shown on sheet G-2 just East of the existing Maintenance/Storage Building. Correct. Also shown on C-5
- 34. Please confirm that the Future Reject Pump Station wet well indicated on Sheet G-2 adjacent to the proposed disk filter structure is NOT included in this contract. That is a

future pumps station. It is shown only to indicate a place holder. No other piping or facilities my cross that area.

- 35. Disk Filter structure, 18" Influents to filter basins. The Aqua Aerobics scope of supply drawings 81070866001, Note 6 indicates influent valves are required for filter influent isolation. No such vales are indicated as being required on sheet M-5 at the 18" influent wall pipes for each of the three filter basins. Please clarify what is to be provided by the Contractor, if anything, to satisfy this operational requirement. New drawing will be issued as part of addendum #2
- 36. Disk Filter structure, Effluent Weirs. Note that the specifications require that an effluent weir assembly shall be provided by the installing contractor. Please clarify this item and provide details for any weirs required on the effluent side of the disk filters. New drawing will be issued as part of addendum #2
- 37. Sheet M-2 and M-3 both indicate a precast vault on the influent lines to the SBR Tanks with an unspecified in-line devices indicated. Is this intended to be a plug valve? Two plug valves
- Specification Section 05120, mentions Division 13 Section "Pre Engineered Metal Building", considering there seems to be 3 metal buildings, is this section missing? Section 13100 was inadvertently left out of the specifications and will be included in addendum #2.
- 39. Is it correct that there are 3 metal buildings or roof structures, In-plant pump station, UV structure, and the Filter basin? Seems correct
- 40. Considering the caisson's for the above structures, is there a depth the contractor should base his bid on? After consultation with the structural engineer, it was decided to assign a base bid depth of 10' for caissons. Additional depth that may be required as a result of geotechnical recommendations will be paid based on unit prices per foot beyond the 10', that will be incorporated into the proposal form.
- 41. Considering that one New Parkson Influent Screen is provided, does the second screen need to be removed from the existing headworks and installed? No two new screens will be purchased. Purchase of the second is in process.
- 42. After reviewing the time given for the early deadline for substantial construction, and complete construction of the proposed project, it is our opinion that more days/months are needed for the proposed construction of this project. The way that the project would have to be constructed would require various work trades overlapping each of their areas of construction, which may create safety issues. The proposed contract time should be based on realistic <u>construction duration</u> and not a permitting deadline that was mentioned at the pre-bid meeting. Is this a question?
- 43. Can a checklist be provided to the General Contractors that lists what items are required to be turned in with the bid (in each envelope) other than document pages P-1 thru P-4? A checklist can be provided, however it is still the responsibility of the contractor to meet the specific requirements of the bid documents. We will help in every way possible, but the burden and responsibility remains with the bidder.

- 44. Will the Owner cover the cost of bringing the new electrical feed to the project site? YES
- 45. Will there be temporary water and electrical available for construction of the project? The contractor will be responsible for his own utilities until plant start up. The power will be switched to the owner at completion of substantial equipment installation and start up. If the contractor wants to perform start up on a progressive basis, power will be his responsibility until SBR start up.
- 46. Will the Owner provide and cover the cost of test water for start-up testing required for the new plant? The owner will provide treated wastewater for testing at the current discharge. The contractor will be required to get it in the tanks.
- Please confirm as was stated at the pre-bid meeting that the cost of the Owner direct purchased equipment listed on specification pages I-3 & 4/10A will not be included in the Contractors bid. Correct
- 48. The bidding documents state that the building permit cost would be paid by the Contractor. This is commonly waived by the Owner, or put as an allowance on the bid form for this specialized type of project, can this be changed? And are both city and county building permits required for this project? See meeting notes. The contractor will be required to obtain a permit from Liberty County at no cost.
- 49. Will burning on-site be allowed for clearing debris with "permission from local authorities" as mentioned in specification 02100-1/2.09-B? See Ft Stewart Notes. All above ground clearing must be taken to chipper site. Stumps will be disposed of. Due to the problems with burning stumps this will not be allowed. Tops and other debri may be burned with all applicable permits
- 50. Is there an area available to the Contractor for dewatering discharge? Yes, in the canal Beyond the City's discharge monitoring location
- 51. After review of the Geotechnical Report, and the various Geotechnical notes on the structural drawings that refer back to the Geotechnical Report, we are confused as to what is actually required as site preparation for some of the proposed structures. Can this be clarified? Can we are assume that undercutting 1'-6" and replacing with #57 stone on all of the proposed structures with the exception of the SBR structure which will be supported with concrete piles is correct? The blower bldg., power house and chemical bldg, would fall into this category and you assumption would be correct. We will provide an area to price any overage depth beyond the 1'6". Also, can a Geotechnical allowance be included in the bid for unknown cost such as the Blower Building area where settling plates monitoring are suggested and unsuitable pipe bedding? Overage prices will be incorporated into the proposal form for overage on caissons, piles and undercutting for buildings. All will require approval by the project engineer in writing prior to installation. Base bid should be based on 1'6" for bldgs., 10' for caissons and 45' for piles (not including cap). Pipe bedding will be included in the pipe prices. An experienced utility contractor in Southeast Georgia will know how much stone bedding to add. This will not be broken out separate.
- 52. Can the Engineer provide a masonry specification? Yes. Addendum #2 will include

- 53. Can the Owner/Engineer provide minimum insurance coverage requirements for the project bid? See addendum #1
- 54. Can Liberty Co., City of Savannah, and neighboring counties be included in the allowable M/WBE Certification list? The provided list shows 3/8 of the listed allowable cities/counties are in the Atlanta area which is almost 4 hours away. During the pre-bid meeting, the engineer recommended we reach out to M/WBE contractors in the Hinesville area as they may be more likely to bid with us. Please consider increase the list to include nearby agencies (cities & counties). That question has been referred to the MWBE expert
- 55. Can the bid date be moved 2 weeks? See pervious notes
- 56. There are two sump pumps shown on Sheet M-5, can you please refer size, make and model of sump pumps with discharge size of pipe? We will include in addendum #2
- 57. Addendum #1, drawing M-23 refers to the odor control ductwork as FRP, this is in conflict with the ductwork specified in the odor control equipment section as polypropylene butt fusion welded, can a specification be provided for the FRP? Recent events are making us rethink the pipe material in the specification. The issue will be addressed in Addendum #2, but you should be prepared to supply FRP similar spec to the grit system.
- 58. Sheet R-4 indicate louvers in the building elevations and sheet R-8 indicates them in the Louvered Eave Detail, can specifications for louvers be provided? That question has been referred to the building designer. Response will be offered later.
- 59. Are the FRP doors for the project all Chem-Pruf? That question has been referred to the building designer. Response will be offered later.
- 60. Is there a specification for the overhead coiling door, Door 601? Yes, it will be provided in addendum #2.
- 61. Per the specifications, testing is provided by the General Contractor, does this include the Geotechnical Engineer for the piling on sheet 3S-1? We have reconsidered this position and decided that the geotechnical engineer and lab will be under contract to the City for all testing.
- 62. Will the owner provide a bid bond form or is the Surety's form acceptable? See above response
- 63. Regarding the second bullet point under Bid Documents of Addendum 1, please confirm the FmHA Supplemental General Conditions is to remain a part of the Contract. Discard FmHA document.
- 64. Section VII *Minority Participation Encouragement Policies* Paragraph A.3 states the city will provide trade specific lists. Please provide. That question has been referred to the MWBE expert. Response will be offered later.
- 65. Please provide a list of documents that need to be included with the bid. See previous repsonse

- 66. Reference Sheet C-9. A 12x8 Wye is shown on the sanitary sewer run from MH-6 to MH-5, however in the profile this pipe is shown as 10". Is this run 10" or 12"? Profile is correct. The line is 10"
- 67. The proposed Reject/Reuse Water Tank Drain Wet Well pump Station shown on C-7 shows 6" piping and M-16 shows 8". Please clarify. 6" on Sheet C-7 is potable water main. C-5 shows 6" which should be 8" The pump discharge is 8" on M-16 is correct.
- 68. There is one valve depicted in a vault adjacent the SBR tank on M-2. On M-3, there is a vault shown with two spaces between the two SBR Influent lines. Please clarify if these are to be valves or spools and if a valve what type of valve. Also please advise centerline. As drawn, it appears the valves would be above grade. Should the vault have handrail and access steps? The vault is near ground level so rails and steps are not required. This vault has two manually operated plug valves in it.
- 69. On Sheet M-2, the plug on the end of the discharge header is noted as 16". Please confirm this should be 24". Plug is 24"
- 70. An Odor Control system is specified and a pad is shown where the system is to be located; however, there is no foul air duct shown coming from the Headworks/Grit structure. Duct is excluded in the proposal provided by Enduro. Please provide duct sizing, lengths, arrangement, etc. or otherwise advise. See addendum #1.
- 71. The Paralleling Switchgear on E5.0 shown as being provided by Cummins does not appear to be in the scope of material provided in the documents. Please confirm Owner is supplying any necessary scope from Cummins in their pre-negotiated scope.
  - a) The generator is a pre-purchase by the owner, provided to the project, for installation by the contractor.
  - b) The paralleling switchgear shall be provided by the contractor, installed by the contractor and obtained from Cummins Power South.
  - c) Contact John Carper, Cummins Power South, for quotation on the paralleling switchgear, startup, testing, etc.
  - d) Refer to sheet E5.0, note 5.
  - e) Refer to Specification Section 16210.
- 72. At the Grit System, what materials should the air lines coming from the PD Blowers and the Regenerative Blowers be? Sch 40 Stainless steel
- 73. During UV System relocation (namely the SCC and HSC), which will likely have to happen several weeks or more prior to SBR plant being fully online, will the current plant use some other means of disinfection? The plant will use chemical treatment for disinfection during the relocation of the UV system. The period of chemical treatment will be limited to 10 days
- 74. Please confirm that on sheet C-7, the single line called out as "8" Air Piping" represents two individual 8" air lines going to each Digester. That is correct two air lines go to the digester

- 75. On Sheet C-7, the air piping going to Digester is shown leaving the Blower Building on the North side. On Sheet M-17 it is shown leaving the South side with a backup air line from SBR blowers connecting to it on the Southwest side of the building. Please clarify Air piping arrangement on the site plan. M-16 is correct. C-7 will be modified in future addendum
- 76. Who pays for the diesel fuel, soda ash and alum for start-up and testing? Are the tanks to be topped off after testing? The City will pay for initial fill of fuel and chemicals. The contractor will top the tanks after testing but prior to final acceptance if more than 10% of the material or fuel has been used.
- 77. Are there any as-built drawings for the existing digester lids? Structural dwgs (excluding Digesters) were provided in the Addendum 1. Please provide digester structural. Please also include mechanicals if possible. As stated in the prebid, as builts are NOT available! Available information will be provided.
- 78. On Sheet C-7 stairs for access to SBR are shown on the South and West sides of the tank. On sheet 3S-2 only the West stair is shown. Please advise if the South stair is required. Stairs on both ends are required.
- 79. Please confirm the Reject Pump Station forcemain shown in the middle of C-7 is PVC. PVC is correct
- 80. Please provide the approved Integrator(s) that submitted the requisite qualifications per Section 16002 paragraph 1.4.3.6. None have been received to date.
- 81. Does the Vac Truck Receiving pad have an outlet pipe? 6" pvc gravity shown on C-5 Shown but not labeled will be labeled on future addendum
- 82. Do any of the structures to be demolished require any special abatement (i.e. lead or asbestos)? None that we know of. The building were constructed in mid 80s so none are expected
- 83. Drawing 5S-1 UV Channel Plan and Drawing 4S-1 Filter Basin Plan have notes for the concrete caisson foundations for a Pre-engineered buildings, is the building a requirement of this contract and if so, will plans and details be provided (height, sidewalls requirements, trim, roof materials, insulation, finish on members)? Yes building is required, Section 13100 will provide guidance along with additional drawing information in addendum #2.
- 84. What are the requirements for the PEMB on the in Plant Pump Station; i.e. is it to be enclosed, roof material specs, painting or galvanizing requirements for members, insulation requirements? The section 13100 was inadvertently left out of the specifications. It will be forwarded as part of addendum # 2 later this week. The eave height and other details will also be included in the addendum.

- 85. Spec Section 02560 Paragraph 1.02 describes design of an NPRL. Please confirm all design and modeling responsibilities are not by Contractor. The engineer has designed those systems, no additional design will be required by the contractor.
- 86. Reference Sheet M-2. What is the inlet of the In Plant Pump Station Suction pipe? Is it an increaser? The inlet is an increaser to spread the flow rate over a larger area. The inlet is a 12" x 18" increaser constructed of stainless steel with a flanged connector. Pipe restraints should be used to support the suction pipe form the concrete top.
- 87. Reference Sheet M-4, Sections 1 and 3. There appears to be a spool adjacent to the connection to the decanter pipe(not shown) in the SBR (not in the EQ Basin) with a small pipe coming off of it with a valve near the top of the wall elevation. It appears to be a vent for the decant pipe. What size is this and what type of valve? The spool piece is installed between the wall and the flexible connector. The vertical riser is a fill line that will include a <sup>3</sup>/<sub>4</sub>" tap on the spool and a <sup>3</sup>/<sub>4</sub>" ss pipe from the spool piece top the top with valve and hose connection. The riser is used to fill the pipe in case the decanter gets clogged. All of this is supplied by the contractor.
- 88. Reference Specification 02221. Is the intent to <u>NOT</u> use in-situ material for the haunching and bedding material? Please clarify bedding requirements so that it is not up to interpretation. The specification is clear. Please state exactly your question. We are obtaining some additional soils information on excavated areas to provide to the contractor which may help. As noted above an experienced utility contractor will know how to prepare for the pipe for bedding.
- 89. Who is responsible for removing the existing supplies, appliances, cabinets, fume hood, etc. in the existing laboratory? The contractor
- 90. Damage to the existing concrete channel appears to be extensive and will require bypass pumping of the plant effluent. Confirm that the only area that requires repair to the channel is from the point where it passes under the northern fence line to 30 feet to the south. I believe the section to be replaced is inside the fence.
- 91. Please confirm that clearing of trees and removal of fence at the under-mined portion of the effluent concrete channel (repair location) is acceptable. Due to the extent of undermining in this area we believe several trees will need to be removed for equipment access to the damaged and undermined channel. Fence removal is permitted. Clearing of trees is limited to only one or two trees. Equipment should be used that will not require significant clearing.
- 92. Please confirm that the unit price item "Concrete Drainage Channel Removal & Replacement" includes earthwork required to grade the undermined subgrade to the extent currently evident from site visit. We are concerned if all bidders didn't physically view that

section that they may take this item as a simple cut out the channel and replace. The pay item includes all work necessary to accomplish the task.

- 93. Please provide details for the pipe supports in the Post Equalization Basin that support the SBR Influent piping and air piping. Detail added for addendum #2.
- 94. Regarding the roof rehabilitation of existing structures, should penetrations and equipment noted as "to remain" be extended through the new roof with curbs / boots as applicable or remain in the attic space? Note this could involve moving exhaust fans, additional duct work, addition of curb, electrical work, etc. There is not currently enough information to price this item. We recommend an allowance for plumbing, electrical, and/or mechanical alterations required as a result of the new framing and roof installation. We will inspect, however an allowance is not the desirable alternative. Do not expect an allowance.
- 95. For purposes of determining coating requirements, are all structures in the process defined as "wastewater" and as such would receive coatings. For example, is the Filter to get coated per 2.01 E. Is the UV to get coated? Are the new portions of the Concrete Drainage Channel to get coated? The effluent channel is not process! The specification is clear on those requirements.
- 96. Paint Schedule under 09900 Part 3 Execution, paragraph 3.05 would indicate no concrete gets painted. This is in conflict with paragraphs under Part 2 Materials of the same specification. I disagree with your interpretation. You must read the spec as a whole not pick one paragraph as if it stood alone.
- 97. Do existing structures get coated per 09900, including Clarifiers, Digesters (inside and out), etc. Yes
- 98. To clarify the painting requirements please consider providing a paint schedule or specify painting requirements by structure interior and exterior. We do not believe this is necessary. If you have specific questions ask them in detail.
- 99. Should surfaces qualifying as submerged receive the submerged coating for the entire surface For example should Post Equalization basin get submerged coating for full wall height (HWL is EL 78 and top of wall is EL 90.50). The entire surface should be coated.
- 100. Please define the limits of coatings. Often, floors are not coated as well as walls that are continuously submerged (i.e. 2 feet below low water level). No floors unless they are frequently drained. Wall from the bottom up.
- 101. Note on R-3 requires matching of all new roofs. Depending on the answers to above questions regarding PEMB, the PEMB canopies may not have standing seam roof and therefore may not match the new standing seem metal roofs. All are standing seam roof.

- 102. Please confirm the vertical turbine pumps are supplied by Owner as noted on M-16 (4 places). That is stated on the plans.
- 103. Are all DI pipe and fittings domestic? Spec for Reuse water (02560) requires fittings to be made in US, however neither 02555 nor 02650 require domestic. The specification is correct
- 104. Please clarify use of Protecto 401 (P401) on Ductile Iron pipe and fittings. Specifications in Sanitary Sewer specification (2650) require P401. Would this include SBR Influent, SBR effluent, and Filter Effluent, Drains? All DIP on the project must have Protecto 401 coating.
- 105. Please advise what material the pipe supports should be for the various applications? 316 Stainless steel, except for the pipe hangers. They are fiberglass with SS rods. Also areas not in the area of the headworks may be galvanized. This will be addressed in addendum #2
- 106. I understand you are sole sourcing Spectrashield for coating treatment plant in Hinesville? Where is the funding for this project coming from? Funding is GEFA loan. Spectrashield is not a sole source. We are entertaining alternatives as long as the system is a three part system with an expandable element and does not include any cementious material in any layer. We have had good experience with Spectrashield in the past, so it has become system of comparison.
- 107. What type of expansion joint is required for the 8" air pipe indicated per note # 7 on page M-10, M-17, and M-19? Expansion loops or Resistoflex series R6900 convolute expansion joint. Specifics will be in addendum #2.

108. Can you clarify who is responsible for payment of Concrete material testing. Specifications section 03300 E. 1 seems to indicate that the Contractor is responsible only for taking the slump test and making the cylinders and the "laboratory will be selected by the owner". Does this mean the owner will pay for the laboratory services. This is our preferred method, however they generally provide field service to perform slump and air test onsite and transport cylinders back to the lab which is part of the items that this specification seems to require of the contractor Owner will pay for all testing

109. Sheet 3S-6 provides details for both construction joints and expansion joints in the SBR structure but I cannot find where these are specifically located. On a smaller structure it would not be a concern but on something this large could we be provided some sketch or language on where these will be required. There will be an expansion joint in the approximate center of each wall of each SBR reactor. Control / construction joints will be at 30 ft max. There will also be a control/const joint in the middle of the two ends of the Post EQ basin. Plan will be revised to show expansion joint locations and also the expansion joint detail will be revised to show smooth bar dowels for shear transfer across expansion joint

110. Lastly and this is by far the largest dollar question, sheet 3S-2 Foundation Notes #2 calls for the following. " Dewater, undercut, and replace material below footings per Geotech report. Granular Base below footings shall be #57 stone". I have two questions regarding the subgrade foundation on this structure.

A. I cannot find where the Geotech report clearly defines what elevation to undercut this area to? If I am overlooking this please excuse my oversight but this is such a large area I would like to be sure of the requirement. Even if this is a general requirement to remove topsoil etc can a definite elevation be provide for bidding purposes. See comments above regarding this item above. Base bid for stone undercutting and undercutting will be 18" plus the slab thickness below the ff. Overage will/be addressed with unit prices.

B. Prior to any undercutting above, the existing grade at the SBR structure is approx. elevation 60.0 and the footing will be placed on elevation 62.0 Are we to assume that the grade will have to be brought up this 2 vertical feet by placement of #57 stone? SBR will be supported by piles so grade can be brought up with well drained fill and 1'6" stone under the structure.