



**Green Mountain Pump Station Facility**  
**Solicitation Number: CO-00194**  
**Job No.: 17-1121**

**ADDENDUM 5**  
**October 19, 2018**

To Bidder of Record:

This addendum, applicable to work referenced above, is an amendment to the bid proposal, plans and specifications and as such will be a part of and included in the Contract Documents. Acknowledge receipt of this addendum by entering the Addendum number and issue date on the space provided in submitted copies of the bid proposal.

<b>RESPONSES TO QUESTIONS</b>
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- 1. Question: What building or construction permits will the General Contractor need to obtain for this project?**  
*Response: City of San Antonio. Reference website for Development Services:*  
<https://www.sanantonio.gov/DSD/Online>
- 2. Question: Whom do we contact to determine their cost?**  
*Response: City of San Antonio. Reference website for Development Services:*  
<https://www.sanantonio.gov/DSD/Online>
- 3. Question: Any other licenses or fees that the Contractor must pay for?**  
*Response: City of San Antonio. Reference website for Development Services:*  
<https://www.sanantonio.gov/DSD/Online>
- 4. Question: Is the tank located inside or outside the City limit?**  
*Response: Project is located inside the city limits of San Antonio. Project is not located over the Edwards Aquifer Recharge or Contributing Zone.*
- 5. Question: What is the budget for this project? What is the budget for the tank?**  
*Response: Ref Pre-Bid meeting presentation. Estimated cost is \$8,013,031.*
- 6. Question: We understand this project exempt from state and local taxes. We still must pay taxes on consumables used on the project.**  
*Response: Confirmed.*
- 7. Question: On Sheet T2.1, Elevation View, there is a note that states "bottom cone shall be directly proportional to the shell in order to conform to the tank bowl shape as shown on this sheet." The meaning of this note is unclear, please clarify intent. May we use our standard geometries for this size and capacity tank?**  
*Response: The intent of the note is to ensure that the steel cone and the shell are proportional to each other such that they look equal to the detail provided on sheet T2.1. Some standard geometries for the tank bowl may not be applicable.*
- 8. Question: The load combinations presented in Section 132100, Page 3, Para 1.03.F differ from the load combinations of AWWA D107- 16 Section 4.3. Can the industry standard AWWA D107-16 load combinations be used instead?**  
*Response: Yes, Reference revised spec section 13 2100 attached herein.*

9. **Question:** Section 132100, Page 5, Para 1.05.A.5 requires that a supervisor employed by the Contractor shall be on site during foundation construction. We plan design and build the Composite elevated tank but will to be a subcontractor to the General Contractor. The General Contractor will build the foundation and have a supervisor on site during foundation construction. Is this acceptable?  
*Response: Yes, see revised Specifications Section 13 2100 attached herein.*
10. **Question:** Section 132100, Page 9, Section 2.05.A.C.2 requires a transition knuckle at the top of the tank shell and Sheet T2.1 shows a transition knuckle between the shell and roof. A transition knuckle is not necessary for a dome roof, this is a detail is only used for cone roof. Please confirm that a transition knuckle is not required for a dome roof.  
*Response: A transition knuckle is required. The transition from the shell to the roof shall be as shown on sheet T2.1.*
11. **Question:** Spec references tank disinfection per AWWA C652. Are method #2 or #3 both acceptable methods?  
*Response: Yes, methods #2 and #3 are acceptable as presented in AWWA C652.*
12. **Question:** I respectfully request to have J&S Metal Seated Segmented Ball Valve added as an approved manufacturer to spec section 15 0900 for the above referenced project.  
*Response: Reference to SAWS website for approved products at [http://www.saws.org/business\\_center/specs/product\\_submittal/docs/2018\\_SAWS\\_Approved\\_Standard\\_Products\\_20180326.pdf](http://www.saws.org/business_center/specs/product_submittal/docs/2018_SAWS_Approved_Standard_Products_20180326.pdf)  
Reference to SAWS webpage [http://www.saws.org/business\\_center/specs/product\\_submittal/](http://www.saws.org/business_center/specs/product_submittal/) for inclusion in our approved SAWS products for consideration in future projects.*
13. **Question:** I would like to request that others be accepted as an “or equal” for the package pump station manufacturer on this project.  
*Response: Technical specifications Section 43 21 25 Subsection 2.11.B reflects procedures to submit for “or equal” products, materials and equipment.*
14. **Question:** Specification Section 16410 Safety Switches; Section 2.01.A only list Siemens as approved manufacturer. We would like to request adding Eaton as an approved manufacturer.  
*Response: Eaton and Square D have been pre-approved.*
15. **Question:** Can you point me in the right direction on who to talk to about my providing the inspections and tests for construction and painting the tank?  
*Response: Refer to the SAWS General Conditions.*
16. **Question:** Please confirm that individual manufacturer’s standard details will be acceptable.  
*Response: Tank manufacturers shall follow the standard details provide in the specifications as part of the bid documents.*
17. **Question:** Please confirm the number of cross over ladders. 1 or 2?  
*Response: One (1) crossover ladder is required per detail DD-903-07 provided on Sheet T2.2 of the plans.*
18. **Question:** Sheet T1.1 shows 1 over the inlet/outlet, but not over the bypass.  
*Response: Provide one (1) crossover ladder per detail DD-903-07 provided on Sheet T2.2 of the plans.*
19. **Question:** Please confirm we follow Section 13 2100, AWWA D107 and industry standards for the composite tank support wall relating to mixes, curing, form removal times, etc. in lieu of Division 3 as Division 3 relates more to concrete operations such as concrete paving and sidewalks, etc.  
*Response. Confirmed that Division 3 is generally for concrete paving, sidewalks, etc. Elevated Tank Construction for this project shall conform to AWWA D107.*

20. **Question: Section 13 2100 Item 3.01.A.1 says the Contractor is to retain the geotechnical engineer for foundation subgrade verification, however, the Special Inspection specification says the Owner will engage the inspector and testing agency. Please clarify.**  
*Response: Reference to response to item #63. Contractor shall retain the geotechnical engineer for subgrade verification. Reference to specification page 03 3000 - 17 Under FIELD QUALITY CONTROL A. Special Inspections: Owner will engage a special inspector and qualified testing and inspecting agency to perform field tests and inspections and prepare test reports. The Registered Design Professional in Responsible Charge (RDPiRC) will oversee a City of San Antonio approved agency independent from the contractor responsible for the work being inspected. Reference to specification page 13 2100 – 22 under 3.07 FIELD QUALITY CONTROL B. Steel Tank Testing & Inspection Radiographic inspection of full penetration butt-welded joints shall be made by an independent inspection company retained by the Contractor. Reference to specification page 13 2100 – 22 C. Tank Painting Inspection and Testing # 2 and #3. Inspection and testing shall generally be in accordance with AWWA D102 and in accordance with Section 09 9000 of these Specifications. The Contractor shall furnish to the Owner inspection devices in good working condition for measurement of dry film thickness of coatings. Contractor shall also furnish U.S. Department of Commerce, National Bureau of Standards certified thickness calibration plates to test the accuracy of dry film thickness measurement device. 3. The Contractor shall deliver to the Owner a nondestructive holiday detector to be used for inspecting the interior and exterior coatings. All holidays shall be marked, repaired in accordance with the manufacturer's printed recommendations and retested. No holidays or other irregularities shall be permitted in the final coating. Owner's third party inspection/material testing is still to be determined.*
21. **Question: GC Item 5.18 says there will be no work on Saturday without permission and no work at all on Sundays.**  
*Response: Reference General Conditions 8.3 and construction plans sheet C1.2 General Notes #11.*
22. **Question: Will Saturday work be allowed?**  
*Response: Reference General Conditions 8.3. Saturday work allowed with advance notice approval from SAWS.*
23. **Question: Will Sunday work be allowed?**  
*Response: Reference General Conditions 8.3. No work on Sundays.*
24. **Question: Is there a logo required? If so can a detail of the logo be provided along with the number of logos required?**  
*Response: There will be no logo placed on this elevated storage tank.*
25. **Question: Section 13 2100 Item 1.07.A.1. Is a building permit required for the elevated tank? If required will the fees be waived or can a fee schedule be provided?**  
*Response: A building permit will be required from the City of San Antonio. Reference to website for the City of San Antonio Development Services: <https://www.sanantonio.gov/DSD/Online>*
26. **Question: Section 01 0250 Measurement and Payment is missing from our specification – can this be provided?**  
*Response: Reference Addendum #2.*
27. **Question: Section 01 2000 Price and Payment Procedures is missing from our specification – can this be provided?**  
*Response: Reference Addendum #2.*
28. **Question: Section 01 2100 Allowances is missing from our specification – can this be provided?**  
*Response: Reference Addendum #2.*
29. **Question: Section 01 5100 Temporary Utilities is missing from our specification – can this be provided?**  
*Response: Reference Addendum #2.*
30. **Question: Section 01 5500 Vehicle Access and Parking is missing from our specification – can this be provided?**  
*Response: Reference Addendum #2.*
31. **Question: Section 15 1200 Control Valves is missing from our specification – can this be provided?**  
*Response: Reference Addendum #2.*

32. **Question:** There are multiple missing sections from the contract documents for the above project. As such, we are unable to prepare appropriate questions by the tomorrow's deadline for questions.  
*Response:* Reference Addenda #1, #2, and #3 for missing sections as well as the revised deadline dates.
33. **Question:** Respectfully request a one-week extension of the deadline for questions, and a one-week extension of the bid date.  
*Response:* Reference Addenda #1 and #3 for the revised deadline dates.
34. **Question:** Is it okay for pump supplier to only supply motors, pumps, and barrels? Our Standard design does not normally include piping and valves. That is usually provided by contractor.  
*Response:* Reference to plans. Interested bidders shall contact entities and manufacturers at their discretion. It is the responsibility of the Prime Contractor submitting the bid to ensure the bid being submitted conforms to SAWS' requirements.
35. **Question:** Is suction piping included in the packaged pump station?  
*Response:* Reference to plans. Interested bidders shall contact entities and manufacturers at their discretion.
36. **Question:** Per Section 11 2120.2.04.M.2. Pump Suction Barrel – Installation. "The entire suction barrel is to be encased in concrete from the cap plate to the bottom of the top flange. The plan sheet C6.1 drawing of the can does not match up with the requirement called out. The concrete stops at the bottom of the skid and doesn't reach the bottom of the top flange. Installation procedures do not mention anything about pump skid. Please advise on installation requirements. Would it be okay to provide without pump package skid?  
*Response:* Concrete installation shall extend as shown on Sheet C6.1. Deliver pump cans are required in construction documents.
37. **Question:** Is there a specific reason valves are being placed on a base skid instead of just on the concrete slab?  
*Response:* Design reflects valves on base skid. Provide as shown in drawings C6.1, C6.2 and C6.3.
38. Couple of sections in the specifications are missing. They are as follows:  
**Question:** In the Division 00 – Procurement and Contracting Requirements  
*Response:* Reference Addendum #2.
39. **Question:** Missing - 00 4100 – Bid Form  
*Response:* Reference Addendum #2.
40. **Question:** Missing - 00 4373 – Proposed Schedule of Values Form  
*Response:* Reference Addendum #2.
41. **Question:** The only form included in Division 00 is 00 0110 – Table of Contents. We would sincerely appreciate your assistance in retrieving these missing documents.  
*Response:* Reference Addendum #2.
42. **Question:** Viper II as an acceptable vapor barrier for this project and for all future projects requiring a vapor barrier. ISI Building Products has manufactured Viper II Vapor Barriers with great success for approximately 10 years. We are dedicated to making a high-quality, cost-competitive, below-slab vapor barrier that meets and exceeds all of the Class A performance requirements set forth by ASTM E 1745 (Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs). We request "ISI Building Products: Viper II" be added to your firm's master specification. Our Viper II under slab vapor barriers are installed in millions of square feet of projects every month. By adding Viper II vapor barriers to your master specification, we are confident that we can provide a high-quality product at a very economical price.  
*Response:* This is a product that will be reviewed as a shop drawing submittal from the Contractor in accordance with the Contract Documents. Reference the plans and technical specifications for procedures.
43. **Question:** Under SECTION 16443 Article 2.1 MANUFACTURERS only Siemens Tiastar motor control centers are approved for this project. Will San Antonio Water Systems be sole sourcing this equipment and there will be no need for other vendors to provide comparable designs and pricing based on their designs.  
*Response:* Square D, GE and Eaton have been pre-approved.

44. **Question:** In the larger Contract Documents, I am not seeing several items on the Table of Contents. Please advise how to obtain the missing documents below:

- Bid Form
- Proposed Schedule of Values Form
- 2.01 Measurement and Payment
- Price and Payment Procedures
- Allowances
- Project Meetings
- Construction Progress Schedule
- Daily Construction Project Report
- Construction Photographs
- Security Procedures
- Quality Requirements
- Definitions
- Temporary Utilities
- Vehicular Access and Parking
- 2.9 F. 15 1200 Control Valves
- Division 03 – Structural
- San Antonio Water System – Specification Sections
- City of San Antonio – Specification Sections
- Also, in the Smaller set on Contract Documents, Technical Specifications
- City of San Antonio (COSA) Standard Specifications
- SAWS Specifications for Water and Sanitary Sewer

*Response: Reference Addendum #2.*

45. **Question:** How can I be approved as a manufacturer for this project?

*Response: Reference to SAWS webpage [http://www.saws.org/business\\_center/specs/product\\_submittal/](http://www.saws.org/business_center/specs/product_submittal/) for inclusion in our approved SAWS products for consideration in future projects.*

46. **Question:** Do you have a contact for the responsible party of the Gas Line?

*Response: CPS Energy, Contractor to call 1-800 Dig Tess for utility locates.*

47. **Question:** Is there a contact for a site visit? Can we visit without an 'escort'? Is the site marked?

*Response: Limits of project site have been marked in the field however, the site will not be made accessible until after award of the contract. Bidder may, at their own time and at their own risk, visit the outside parameters of the site.*

48. **Question:** On sheet S002, Concrete Reinforcing: ...#10 states, "...and install one (2) tons of..." , please clarify 1 or 2 tons.

*Response: Revise sentence to reflect "...provide and install two (2) tons..."*

49. **Question:** Bid Item No. 6 speaks of tie-ins with Ductile Iron Pipe...the drawings indicate PVC. Please clarify.

*Response: Connections will be made to Ductile Iron Pipe.*

50. **Question:** Section 132100, Page 18, Section 3.04.A.3 states that the maximum form height is limited to 10 feet. We have a 12-foot forming system that will be more economical especially as tall as this tank is. Please confirm that a maximum form height of 12 feet is acceptable?

*Response: No, the 12-foot forming system is not acceptable.*

51. **Question:** Unclear as to what the paint system is required for the Composite Elevated Tank. Does not appear to be any definition in specification.

*Response: The tank shall include a Fluoropolymer exterior finish coat. All interior coatings shall be NSF approved. Reference to attached revised Technical Specification Section 09 9000, and new Technical Specification Sections 09 9100 and 09 9850 attached herein.*

52. **Question: Does not give tank painting information in Para 3.06 5. Mentions to see specification Section 09 9000 which is also unclear. Looking for preferred coating suppliers and paint systems. Are there any tank logos required?**  
*Response: No logos are required for the tank. Reference the new Technical Specification Section 09 9100 attached herein. Reference to attached revised Technical Specification Section 09 9000, and new Technical Specification Sections 09 9100 and 09 9850 attached herein.*
53. **Question: Para 3.07. C.3 Is holiday testing required on exterior and interior surfaces? Para 3.07 C.4 Confirm paint warranty on tank is one year. Section 13 2100-7, Para 1.09 A calls for a two-year warranty period. Please clarify which is correct.**  
*Response: Holiday testing is required on both interior and exterior surfaces. Section 13 2100, 1.09A will be revised to reflect a 2-year warranty is required on tank painting and surface coatings, etc.*
54. **Question: Spec 13 21000 - 4, Para 1.04 A. 2 requires a preliminary section view of the proposed tank. We suggest the owner also require a preliminary view of the tank foundation to be submitted with the bid.**  
*Response. No additional information required for bid submittal. Foundation design will be a submittal from the Contractor.*
55. **Question: Spec 13 2100-10, para 2.06 D allows aluminum swing out rest seats. This is no longer a safe practice, we suggest climb thru rest platforms.**  
*Response: Yes, rest platforms are required.*
56. **Question: Has a FAA determination been filed for the elevated tank on this project? If so, can the determination be included by addendum?**  
*Response: Red Aircraft lights reflected on Sheet T2.1 are required.*
57. **Question: The bid documents include a Disclaimer for Use of the Geotechnical Report prepared for the 2500 MG Composite Tank by InTech dated November 08, 2017. We have no choice but to use this report and rely on its information to design the tank and the tank foundation. Please confirm that this is acceptable.**  
*Response: Yes.*
58. **Question: Please confirm tank fabricator can use their standard geometries and dimensions for the 2.50 MG Composite tank.**  
*Response: Tank manufacturers may utilize standard geometries but must provide minimum storage capacity as noted in technical specifications, and must insure that the steel cone is proportional to the shell as indicated in the response to Question #7 and Sheet T2.1.*
59. **Question: Sheet T2.1, right side elevation view, indicates that the tower wall diameter "varies", but Sheet C3.1, plan view, indicates a tower wall radius of 29 feet. Please confirm that the tower diameter can be established by the tank contractor based on the contractor's standard dimensions, and that a minimum tower diameter of 59 feet (per Sheet C3.1) is not required. Our standard concrete shaft diameter is 52'.**  
*Response: Tank manufacturers may utilize standard geometries but must provide minimum storage capacity as noted in technical specifications, and must insure that the steel cone is proportional to the shell as indicated in the response to Question #7 and Sheet T2.1.*
60. **Question: Please advise what material the horizontal piping in the base of the tank is. It appears to be steel pipe but just want confirmation that it is not ductile iron pipe or stainless steel. We do understand the vertical pipe is stainless steel.**  
*Response: Horizontal piping in the base of the elevated storage tank is to be steel pipe.*
61. **Question: Concerning the Paint specification, we also need a paint spec for the Type 3 Non-Sacrificial Anti-Graffiti 16-foot high coating shown on Sheet T2.1, elevation view, left side.**  
*Response: Reference to new Specification Section 09 9850 Special Coatings attached.*

62. **Question: Concerning scaled plate layout and total number of visible weld seams, we are sending by separate pdf a confidential drawing for SAWS and the engineer to review.**  
*Response: Tank manufacturers may utilize standard geometries but must provide minimum storage capacity as noted in technical specifications, and must insure that the steel cone is proportional to the shell as indicated in the response to Question #7 and Sheet T2.1.*
63. **Question: May we contact the soils consultant directly to get their time and material rates for performing excavation /soils testing, concrete testing of footings and concrete shaft? Or would you ask them to send the unit price rates to all bidders.**  
*Response: No, bidders may not contact the geotechnical consultant working on this project during the solicitation process as it is a violation of the restriction to communication.*
64. **Question: On Drawing E2 duct bank section 4-4 shows conduits for cable tags P102, but these circuits are going to the booster pumps. Please verify that these cables should be P100 for the middle row (3x) and P101 in the third row (2x).**  
*Response. Reference to revised drawings E2, E4, E6, E9, E12, E13, I5, I6 and I8 attached herein.*
65. **Question: Similar issue with control conduits tagged with C-137 and C-135 in the duct bank section 4-4. Please verify that the conduits marked with C-137 and C-135 should be either spares or other cables for section 4-4.**  
*Response. Reference to revised drawings E2, E4, E6, E9, E12, E13, I5, I6 and I8 attached herein.*
66. **Question: On Drawing E2 duct bank transitions from sections 2-2 to 1-1 with conduits being routed to light pole & camera 5 needs to be corrected. We believe the sections details are switched.**  
*Response. Reference to revised drawings E2, E4, E6, E9, E12, E13, I5, I6 and I8 attached herein.*
67. **Question: On Drawing E2 duct bank sections 5-5 and 6-6 are identical and circuits to camera 2 and 3 is not shown. Please confirm that additional conduits are to be added for routing the duct bank section 5-5 to the light pole for cameras 2 and 3 along with light pole circuit.**  
*Response. Reference to revised drawings E2, E4, E6, E9, E12, E13, I5, I6 and I8 attached herein.*
68. **Question: Please confirm that the 1200 Amp Non-Fused switch shown on Drawing E4 is required for this project. According to Figure no. 1800.17 of the CPS code book, from 400 Amp to 800 Amp services, a disconnect ahead of the meter is not required. The CPS trans-socket acts as the primary disconnect. It is unclear if CPS requires the contractor to supply a non-fused disconnect ahead of the meter for 1200 Amp applications.**  
*Response. Reference to revised drawings E2, E4, E6, E9, E12, E13, I5, I6 and I8 attached herein.*
69. **Question: Specifications call for Pipe, Fittings, and Welds to be passivated; this can be extremely expensive. If passivation is required, the engineer needs to clarify and specify the method required per ASTM A380. Many Composite elevated tanks with potable water have vertical stainless-steel pipe that do not require passivation. Please advise if it is required, and if so, what method?**  
*Response: Passivation is required and should be done by Electrochemical Cleaning.*
70. **Question: Sheet C5.2 – In order for Line ‘B’ to pass under our ring footing which is bearing at a depth of 6 ft we will need to place the incoming water line a bit deeper. Please confirm the % slope of the pipe can be reduced as required to allow the pipe to pass under the foundation.**  
*Response: Minimum slope of outgoing water line on sheet C5.2 shall be 2%. Adjustments to depth will be reviewed and confirmed during submittal process. Contractor will be responsible for any additional fittings and related items at no additional cost to Owner.*
71. **Question: Sheet C5.3 – In order for Line ‘C’ to pass under our ring footing which is bearing at a depth of 6 ft we will need to place the incoming water line a bit deeper. Please confirm the % slope of the pipe from STA 1+00.00 to STA 1 +41.68 can be reduced as required to allow the pipe to pass under the foundation.**  
*Response: Minimum slope of incoming water line on sheet C5.3 shall be 1%. Adjustments to depth will be reviewed and confirmed during submittal process. Contractor will be responsible for any additional fittings and related items at no additional cost to Owner.*

72. **Question: Sheet C3.1 shows a pedestal radius of 29 ft. Sheet T2.1 shows the pedestal diameter as varies. For this volume tank and specified head range we would utilize our nominal 54 ft diameter form system. Please confirm this is acceptable.**  
*Response: Tank manufacturers may utilize standard geometries but must provide minimum storage capacity as noted in technical specifications, and must insure that the steel cone is proportional to the shell as indicated in the response to Question #7 and Sheet T2.1.*
73. **Question: Section 13 2100 Item 2.05.C.2 provides the option for either a conical or a domed roof. Please confirm the transition knuckle is required, regardless of roof style.**  
*Response: The transition from the shell to the roof shall be as shown on sheet T2.1.*
74. **Question: Sheet T2.1 shows the access tube extending down to the upper landing with a door in it. This is another manufacturers standard and is used to support the upper platform. Our standard construction detail does not permit the access tube to be taken past the tank floor and we do not require the access tube to support our upper platform. Either tank manufacturer's standard will provide continuous ladder access from the upper platform to the tank roof.**  
*Response: Access tube shall extend to upper landing platform as shown on sheet T2.1. Termination of access tube 1.5 FT passed the concrete dome from ground level side is allowed so long as access tube is supported and designed by a licensed Texas Structural Engineer, condensation access drip interior/exterior ring is used with 1.5" drain line with check valve tie-in to overflow pipe and does not cost the owner additional expense.*
75. **Question: Sheet T2.2 shows the transition from steel pipe to stainless steel pipe at the base 90 deg bend at the connection to the vertical riser. Can the transition to stainless steel at the first flange 2'-10" above the floor slab be considered an acceptable alternative?**  
*Response: No. Provide piping as shown on sheet T2.2.*
76. **Question: Sheet T2.2 shows 1 over the bypass, but not over the inlet/outlet.**  
*Response: Provide one (1) crossover ladder per detail DD-903-07 provided on Sheet T2.2.*
77. **Question: Sheet T2.3 – The overflow details shows a stainless-steel expansion joint on the overflow pipe. Section 13 2100, Item 2.06.L.c only requires the expansion joint if differential movement is not accommodated by a suitable upper horizontal offset.**  
*Response: Provide Stainless Steel expansion joint on the overflow pipe. Delete the following sentence from Section 13 2100 2.06.L.c "A layout with sufficient upper offset to accommodate differential movement is acceptable.*
78. **Question: Please confirm the expansion joint is only required by the tank manufacturers design.**  
*Response: Expansion joints are required for the concrete pavement. Stainless Steel expansion joints are required for all internal piping within the elevated storage tank as shown in the drawings.*
79. **Question: Sheet T2.1 shows the head range as, +40 ft (min), Section 13 2100 Item 1.03.C describes the head range as 45 ft maximum, 30 ft minimum.**  
*Response: Tank operating range shall be 45 feet.*
80. **Question: Please confirm the maximum head range is 45 ft.**  
*Response: Refer to response to Question 79 above.*
81. **Question: Sheet S001 Foundation Note 4 describes an allowable bearing capacity of 1800 psf. Please confirm this is not applicable to the Composite Tank foundation.**  
*Response: Interpretation of Note 4 is correct.*
82. **Question: Sheet T2.3 Mechanical Note 1 specifies the pedestal interior piping as Type 316 stainless steel. However, Section 13 2100 Item 2.06.L specifies Type 304 stainless steel. Please clarify.**  
*Response: All inlet/outlet piping and overflow piping shall be Type 316 Stainless Steel. Technical Specification 13 2100 2.06.L.1 and 2.06.L.2 shall be revised to replace the phrase "Type 304L Stainless Steel" with Type 316 Stainless Steel".*



83. **Question: Sheet T2.3 shows the roof hatches as 36" x 42", However, Section 13 2100 Item 2.06.G.2 specifies 30" x 30". Please clarify.**

*Response: Roof hatches shall be 36" x 42" as shown on Sheet T2.3. Technical Specification 13 2100 2.06.G.2 shall be revised to reflect providing two (2) 36" x 42" roof hatches.*

84. **Question: Sheet T2.1 shows an offset platform at 40ft, However Section 13 2100 Item 2.06.D.1 specifies swing out rest seats at max. 30 ft spacing on a straight run ladder configuration.**

*Response: Provide an offset landing platform at every 40 feet. Offset platform shall be as shown on sheet T2.4.*

85. **Question: Please clarify if there are rest seats at max 30 ft spacing or a single offset rest platform at 40 ft above grade.**

*Response: Provide an offset landing platform at every 40 feet. Offset platform shall be as shown on sheet T2.4.*

86. **Question: Sheet T2.1 describes a cable type safety climb for the pedestal ladder, However Section 13 2100 Item 2.06.C specifies a rigid aluminum rail safety climb. Please confirm either is acceptable.**

*Response: Provide DBI SALA safety cable climb system as shown on sheet T2.4.*

87. **Question: Section 13 2100 Item 2.08.A.1 refers the Contractor to Division 9 for a specification for steel tank painting. However Section 09 9000 does not include a specification. Can a specification for interior and exterior paint systems be provided?**

*Response: Reference to new Technical Specifications Section 09 9100 Special Coatings as attached.*

88. **Question: Section 16010 Item 1.03.B.1 says we are to coordinate with CPS for the installation of the electric service and pay for the installation with Contract Allowance. Can this allowance amount be provided?**

*Response: Change specification 16010 para 1.03.B.1 to read "The contractor to be responsible for obtaining the electrical service to the site and coordinate with CPS for the installation of the electric service." An allowance will also be added to the Bid form for CPS Energy. Reference revised Bid form attached herein.*

89. **Question: Please confirm that 4 ft. minimum concrete pour height will be acceptable.**

*Response: A minimum concrete pour height of 4-feet will be acceptable. Specification section 13 2100, 3.04 A. 3. The second sentence is to be deleted and replaced with the following sentence: "Concrete pour height shall be a minimum of 4 feet and a maximum of 10- ft."*

90. **Question: Specification section 13 2100-page 09 para 2.05 requires submittal of a scaled plate layout sketch with the bid. Para 2.05.A.1 it says**

sides. To ensure an aesthetically pleasing tank and minimize mold growth the design of the cone and shell plate(s) shall minimize the number and total length of visible weld seams (shop and field). **A scaled plate layout sketch must be provided with the bid, or be cause for rejection, noting that the use of any cone or shell plate (excluding roof plates) with widths and/or lengths equal to or less than 72" x 20' for the cone and 72" x 30' for the shell is unacceptable.**

*Response: Tank manufacturers may utilize standard geometries, construction details and schematics, but must provide minimum requirements and construction items per plans and specifications and minimum storage capacity as noted in technical specifications. They must also insure that the steel cone is proportional to the shell as indicated in the response to Question #7 and Sheet T2.1.*

91. **Question: Our sketch of the shell plate dimensions will satisfy the dimensional requirements, but the dimensions of several of the cone courses will not meet the 20-foot minimum length requirement. We have never seen this called for in a tank specification and not sure where it originated. Is this standard required to limit completion?**

*Response: Tank manufacturers may utilize standard geometries but must provide minimum storage capacity as noted in technical specifications, and must insure that the steel cone is proportional to the shell as indicated in the response to Question #7 and Sheet T2.1.*

92. **Question: Our sketch shows the actual plate lengths of our three lower courses of much thicker cone plates are less than the 20-foot minimum lengths called for. Do we need your approval to use our standard and proven plate layout to design and build our tank? If this acceptable, can you please revise the wording for the cone?**

*Response: Tank manufacturers may utilize standard geometries but must provide minimum storage capacity as noted in technical specifications, and must insure that the steel cone is proportional to the shell as indicated in the response to Question #7 and Sheet T2.1.*

93. **Question: Regarding Section 11 2120. 2.04.D.1: “The pump bowl assembly shall be designed for use with a water lubricated column. Pump data sheet to be filled out (11 2120-17) has lubrication type marked as oil. Which one is it?**

*Response: Pump bowl lubrication shall be water.*

94. **Question: Ref Plan Page T1.2 & T2.2**

- **Please verify the pipe size for the Altitude Control Valve Piping. Spec 15 1520 Calls for the Valve to be 16”. The Drawings show this piping as 24”.**

*Response: Valve size shall be 16”.*

- **Please provide a specification for the Duo-Check Valve**

*Response: Acceptable duo style check valves include the following:*

- *Crande Duo Check ii Style G*
- *Gulf Wafer Check*
- *APCO Style 9000*
- *Crade Duo-Check Model G30SMF-14 Wager Style Double Door Check Valve*
- *Valves shall have Cast steel body, 3126 stainless steel plates and pins, S 316 Stainless Steel Springs, Buna-N Seat, Tnemec 141 2-Part Epoxy Coated Exterior only. Valve body shall be equipped with a lift hole and eye bolt for lifting and moving of valve for installation and maintenance.*

95. **Question: Do you have a manufacturer that will be providing the package pump station?**

*Response: Reference technical specifications, section 43 2125, 2.11 A. and B.*

96. **Question: Reference Plan Page C5.1. The 24” EBAA Flex-Tend Flexible Expansion Joint...which length of expansion are you looking for? The EBAA brochure for this product shows that it is available in 8”, 16” or 24” Expansion Length. Please advise.**

*Response: Requested Expansion length is 16”. Reference revised Sheet C5.1 attached herein.*

97. **Question: Do you have a ductile iron pipe specification?**

*Response: Reference Addendum #2. Link to SAWS Standard Specifications provided.*

98. **Question: Can you show the limits of what will be provided in the package pump station?**

*Response: Reference to plans. Interested bidders shall contact entities and manufacturers at their discretion.*

99. **Question: Please provide Security System Specification Section 16722 and Antenna Tower Specification Section 17600.**

*Response: Reference to attached Specification Section 16722 and 17600. Antenna to be located on the top of the elevated storage tank as shown on drawing E11.*

100. **Question: Specification Section 16110 Part 3.1F states Below-grade to above-grade upturns in non-metallic runs shall be made with schedule 40 PVC Conduit. However, typical underground conduit run detail on Drawing Sheet E2 shows this transition to be PVC to PVC-Coated Aluminum. Please confirm the use of schedule 40 PVC is acceptable.**

*Response: Replace text in Section 16110 3.1 F. to read as follows: “Below grade to above grade upturns in non-metallic runs shall be made with schedule 40 PVC coated aluminum conduit.”*

101. **Question: Specification Section 16443-1 Low Voltage Motor Control Centers Section 2.1.A only list Siemens as approved manufacturer. We would like to request adding Eaton as an approved manufacturer.**

*Response: Eaton, Square D and GE have been pre-approved.*

102. **Question: Panel A shown on drawing E4 shows be internal to the MCC, however the Panel Detail shows Enclosure to be NEMA 4X 316 SS. Please confirm that Panel A does not need to be NEMA 4X.**

*Response: Reference to revised drawings E2, E4, E5, E6, E7, E9, E12, E13, I5, I6 and I8 attached herein.*

103. **Question:** On drawing E7 Storage Tank Panel A1 installation calls for 4 – 1” spares stub up 12” AFF inside tank floor and stubbed out 5’ past tank exterior wall, however on E8 these conduits are shown to be four (4) 1-1/2” conduits. Please verify what size is required.  
*Response.* Drawing E8 Elevated Storage Tank Ground Level power and Receptacle Plan change 4-1 ½” spare conduits stubbed out and capped 5’ from edge of concrete walkway to read 4-1” spare conduits stubbed out and capped 5’ from edge of concrete walkway.
104. **Question:** DB section 3-3 2” spare conduit from SCP to the Elevated Storage Tank. Drawings do not show where these conduits are to be stubbed up in the base of EST area. Please indicate the desired location in the EST area.  
*Response.* Stub up and cap 12” above finished floor under wireway shown on drawing E7 storage tank Panel A1 installation. Label conduits C-191, C-192.
105. **Question:** DB section 3-3 detail on is missing C-138 and C-136 on drawing E2 as well as conduits necessary for Circuits A1-9, A1-11, A1-12 and A1-14. Please revise the duct bank section detail.  
*Response.* Reference to revised drawings E2, E4, E5, E6, E7, E9, E12, E13, I5, I6 and I8 attached herein.
106. **Question:** On Drawing E8, conduit/cable C-190 (Level Electrode Panel to SCP on drawing E13) is shown on the EST Roof Electrical Plan being routed to the access hatch. The level electrode cables are C-201 routed to the level electrode holder outside the handrail. Please clarify what the cable going to the access hatch is.  
*Response.* Reference to revised drawings E2, E4, E5, E6, E7, E9, E12, E13, I5, I6 and I8 attached herein.
107. **Question:** Please provide a drawing detail reference for the desired typical buried steel pipe joint...including desired interior coating and (its repair if necessary).  
*Response:* Reference to SAWS Standards for Construction, Item 816 Steel Pipe Installation and related details. Reference to SAWS Website [http://www.saws.org/business\\_center/specs/constspecs/docs/](http://www.saws.org/business_center/specs/constspecs/docs/).
108. **Question:** The rock in this area is known to have karst features (voids). In order to test the subgrade thoroughly below the tank foundation, test probes will be required. Please add a line item in the bid form to cover the cost of probes.  
*Response:* The soil borings reflect existing conditions at the specific boring locations. No additional bid items or allowances will be made for contractor requested additional bores. If a void or karst feature is exposed during construction, the Owner and Engineer will respond and provide a solution in accordance with current regulations and treated as an unknown site condition subject to a change order to address additional work if required.
109. **Question:** The piping grade varies at the site. In addition, the depth to rock varies as well. Comparing borings B-1 and B-2, a 10-foot clay layer was encountered in B-1 before hitting soft shale whereas 36 feet of clay was encountered in Boring 2. This can cause some differential movement under the tank foundation. Is the intent of the drawing on sheet T2.1 to take the piping underneath the foundation? We suggest that it is better to have the piping pass through the ringwall so it is easy for maintenance and there is no undermining of the foundation. Please confirm the piping should pass thru the ring wall and not under the tank foundation.  
*Response.* Piping to be located below the ring wall of the tank.
110. **Question:** On Drawing E2 duct bank section 6-6 layout shows number of bends and distance exceeding the Specification Section 16050 3.02.C requiring a pull point at every 150 feet or the equivalent of 3 right angle bends. However, no underground pull box or manhole is shown. This would apply to the runs to the elevated storage tank base on duct bank 3-3 with distance exceeding 150 LF run. Please confirm if a manhole or pull box is required for these duct banks. Currently no manholes or underground pull boxes are shown in the drawings.  
*Response:* Manholes are to be provided as shown on revised sheet E2 along with typical manhole detail shown on drawing E11.
111. **Question:** Drawing # E2 duct bank section 6-6, drawing # E13 cable and conduit schedule, and drawing # I8 Network System Diagram does not align on cabling required. Please review and confirm the correct cabling required.  
*Response:* Will include in revised drawing. See attached revised drawing E2.
112. **Question:** Drawing E7 typical booster pump control valve and pump control panel installation note 13; heat trace control cabinet cable shows they are fed from panel A1 located in the Elevated Storage Tank base. The conduits

shown on E7 shows they are routed to the electrical shelter. It would be much more cost effective to feed them from panel A1. Panel A1 would still have 6 spares. Will this be acceptable?

*Response: Reference to revised drawings E2, E4, E5, E6, E7, E9, E12, E13, I5, I6 and I8 as attached*

**113.Question: Specification section 16120 section 2.01.C specifies Type XHHW-2 for power insulation, however, drawing E13 lists THWN for cables designated as power. C-147, C-170 – C-173. Please confirm which cables types are to be utilized.**

*Response: Reference to revised drawings E2, E4, E5, E6, E7, E9, E12, E13, I5, I6 and I8 attached herein.*

**114.Question: Specification section 16120 section 2.01E states no conductor smaller than #12 shall be used, however E-12 and E-13 lists #14 cables for control wiring. Please confirm the use of #14 as listed in the cable and conduit schedule is acceptable.**

*Response: Revise paragraph Section 16210 2.01C to read “: unless otherwise noted, no conductor smaller than #12 AWG shall be used.”*

**115.Question: Drawing E7 Note 4 at the Booster Pump Skid Area Electrical Plan show to route 2-1” spare conduits from Discharge Valve Control Panel to BP control panel, however on E13 these conduits are sized as 2” (C-182 - C-189). Please verify what size they need to be.**

*Response. Reference to revised drawings E2, E4, E5, E6, E7 E9, E12, E13, I5, I6 and I8 attached herein.*

**116.Question: Ref Sht C6.1&C6.3- ITEM #14&15 - Please clarify if the Cla-Val & Gate Valve (Items #14&15) are 6” or 8”?**

*Response: Both items are 6”.*

**117.Question: Do you have a contact for the responsible party of the Gas Line?**

*Response: CPS Energy, Contractor to call 1-800 Dig Tess for utility locates.*

**118.Question: On sheet S002, Concrete Reinforcing: ...#10 states, “...and install one (2) tons of...”, please clarify 1 or 2 tons.**

*Response: Revise sentence to reflect “...provide and install two (2) tons...”*

**119.Question: Bid Item No. 6 speaks of tie-ins with Ductile Iron Pipe...the drawings indicate PVC...please clarify.**

*Response: Connections will be made to existing DI pipe.*

**120.Question: Please provide a drawing detail reference for the desired typical buried steel pipe joint...including desired interior coating and (its repair if necessary).**

*Response: Reference to SAWS Standards for Construction, Item 816 Steel Pipe Installation and related details. Reference to SAWS Website [http://www.saws.org/business\\_center/specs/constspecs/docs/](http://www.saws.org/business_center/specs/constspecs/docs/).*

**121.Question: Specification 43 21 25 PARA. C requires Flex connectors Proco Style on each discharge side, but a dismantling joint is shown to be provided on the plans.**

*Response: Provide Flex Connectors as noted in Specifications 43 2125 2.08 C. Reference Revised drawings C6.1 and C6.3 attached herein.*

**122.Question: PARA. G requires EBAA style on suction AND discharge piping. Is the requirement at the headers (24” & 30”) or will they be required at each pump headers?**

*Response: Provide EBAA style joints on header piping only, not at each pump header discharge piping.*

**123.Question: Plans call for 10” Wafer style check valves- Valmatic 1410. Specification 15 1140 calls for Valmatic Surgbuster 7200, Henry Pratt, GA Response:**

*Response: Provide Valmatic Surgbuster 7200.*

**124.Question: Plans call for the Pressure reducing valve to be CLA-VAL 50-01B. Specification 43 21 25 calls for Valmatic 52-03, or equal.**

*Response: Pressure reducing valve to be CLA-VAL 50-01B as noted in technical specifications section 43 2125 2.0H.5. Reference revised spec section 43 2125.*

125. **Question:** Specification 43 21 25 requires dismantling joint on suction side of pump. Plans show to provide dismantling joint on discharge as well.  
*Response:* Discharge piping from pump station reflect 24" Flex-Tend Expansion Joint, not dismantle joint.
126. **Question:** Sheet E9 - According to the drawing E9 of Green Mountain project, we need to show the status (Hand-Off –Auto) of selector switch which is shown on Booster Pump Control valve on top end graphic. Therefore, we need to have 2 extra inputs (Hand and Auto)  
*Response:* Reference to revised sheet E9 as attached.
127. **Question:** SCADA Drawing – Antenna Location – Where is the location of the Antenna?  
*Response:* Antenna is located on Tank.
128. **Heat Trace Specifications – Heat trace is not shown on drawings but described in specifications.**  
*Response:* Information on drawings is adequate for construction.
129. **Question:** Heat Trace Specifications- Provide an additional routing for a heat trace circuit from the booster pump panel via conduit, slab mounted, to the vicinity of the PRV.  
*Response:* Reference revised drawing E12 and E13.
130. **Question:** Progress meeting Specifications Missing.  
*Response:* Reference to attached specifications Section 01 3120 Progress Meetings.
131. **Question:** Where will the radio antenna be located  
*Response:* The radio antenna will be located on the top of the tank on the southeast side of the tank, with final location to be confirmed in the field prior to tank construction.
132. **Question:** Regarding the pump station and requirements for US certification, may suppliers bid the project with Flowserve?  
*Response:* Suppliers may pursue the project with other vendors and contractors. Requirements for meeting listed certifications under Section 43 2125 will not be waived.
133. **Question:** This a big project and big undertaking. We need more time to put a competitive proposal together. Can you extend the bid date at least one week, maybe two? If a bid extension is granted, we also request an extension on the time for cut off of questions.  
*Response:* An extension has been provided. Reference Addendum No. 3 for final dates.
134. **Question:** In looking at the Pre-Bid Presentation, specifically the IFB Schedule, the 'Board Award' is shown in December. In light of the award date, we respectfully request that the bid date be moved to the latest day possible.  
*Response:* Reference Addendum No. 3 for final dates.
135. **Question:** Drawing E4 Main Service Entrance Breaker being feed from the Utility Meter is shown as a 1200A, and the Automatic Transfer switch is shown as 1200A, but Motor Control Center Bussing is shown as 1600A. Should the LV MCC be 1200A bussing to match the upstream devices?  
*Response:* The bus rating stays the same as shown on plans.

<b>CHANGES TO THE SPECIFICATIONS</b>
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1. Table of Contents
2. New Specification Section 01-3120 – Progress Meeting
3. Revised Specification Section 09 9000 – Painting and Coating
4. New Specification Section 09 9100 – Steel Water Storage Tank Painting
5. New Specification Section 09 9850 – Special Coating
6. Revised Specification Section 13 2100 – Composite Elevated Storage Tank
7. New Specification Section 16722 – Security System
8. Revised Specification Section 43 2125 – Packaged Pump Station
9. New Addendum to Specification Section 17405 – Impact, Output List Addendum A
10. Section 46 0909 should be deleted. Use Section 17500 for PLC
11. Revised List of Bid Items Form

<b>CHANGES TO THE PLANS</b>
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1. Sheet C5.1 24" Water Line "A" Plan and Profile
2. Sheet C6.1 Pump Station Details Sheet 1

3. Sheet C6.3 Pump Station Details Sheet 3
4. Sheet E2 Electrical Site Plan
5. Sheet E4 Electrical One Line Diagram
6. Sheet E5 Electrical Schematics Sheet No. 1
7. Sheet E6 Electrical Schematics Sheet No. 2
8. Sheet E7 Area Electrical Plans Sheet No. 2
9. Sheet E9 Area Electrical Plans Sheet 3
10. Sheet E12 Cable and Conduit Schedule Sheet 1
11. Sheet E13 Cable and Conduit Schedule Sheet 2
12. Sheet I5 Supervisory Control Panel Schematic Diagrams Sheet 1
13. Sheet I6 Supervisory Control Panel Schematic Diagrams Sheet 2
14. Sheet I8 Network System Diagram

**CLARIFICATIONS**

*It is anticipated that the contract for this project will be presented at the November 2018 SAWS Board of Directors meeting.*

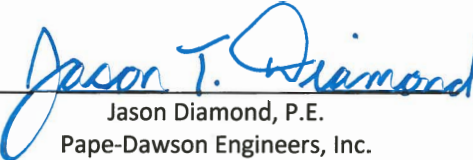
**END OF ADDENDUM**

This Addendum is fourteen (14) pages in its entirety.

This Addendum, including these fourteen (14) pages, is one-hundred-six (106) pages with attachments in its entirety.

**Attachments:**

1. Table of Contents
2. 01-3120 – Progress Meeting
3. 09 9000 – Painting and Coating
4. 09 9100 – Steel Water Storage Tank Painting
5. 09 9850 – Special Coating
6. 13 2100 – Composite Elevated Storage Tank
7. 16722 – Security System
8. 43 2125 – Packaged Pump Station
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24. Sheet I8 Network System Diagram

  
 Jason Diamond, P.E.  
 Pape-Dawson Engineers, Inc.  
 October 19, 2018

