



**WATER RESOURCES INTEGRATION PROGRAM
TWIN OAKS WEST PUMP STATION PHASE I
SAWS JOB NO. 13-8611-220
SOLICITATION NO. B-14-013-DD**

**ADDENDUM NO. 3
September 4, 2014**

To Respondent of Record:

This addendum, applicable to work references above, is an amendment to the bidding documents and as such will be part of and included in the Contract Documents. Acknowledge receipt of this addendum by entering the addendum number and issue date in the space provided in submitted copies of the proposal.

A. QUESTIONS SUBMITTED TO SAWS

1. Specification 09811: Paragraph 2.01.A.3. Please add LifeLast DuraShield 210 to the specification as this product meets the requirements of the specification and is specifically an approved polyurethane coating system for SAWS pipelines. **RESPONSE:** This coating is added to Section 09811 Article 2.01.A.3 as an approved coating in this addendum.
2. In review of the project plans, specifications and bid form, we ask for the following modifications and clarifications:

Specification 02571 Steel Pipe

- a. Section 1.01.D (pg 2): Please clarify whether this project must meet Buy American requirements for domestic manufacture. **RESPONSE:** Construction of this project is not funded by the Texas Water Development Board and thus is not subject to "Buy American Requirements". However, individual equipment/material specifications may have specific requirements for origin of manufacture, including Article 1.01.D of Section 02571.
- b. Section 1.04.A (pg 11): Please clarify owners in-plant inspections will

be at the owners expense and not the contractors or manufacturers.
RESPONSE: The manufacturer or Contractor shall pay costs for three representatives of the Owner to attend the pre-manufacturing inspection as revised in Section 02571 article 1.04.A in this addendum.

- c. Section 1.01.A (pg 1): Request adding ASTM 1011/1018 to the list of reference standards. **RESPONSE:** No change will be made.
- d. Section 1.03.C.3 (pg 5/6): Request striking last 2 sentences in paragraph. Manufacturers produce pipe joints in accordance with AWWA standards. Preparing “results of a test program” is unnecessary. **RESPONSE:** No change will be made.
- e. Section 1.03.C.6 (pg 6): Request revising this section to eliminate (2) table requirement for calculations with and without live loads. Calculations are prepared in accordance with AWWA M11 and will include loading as required for the depth of cover. **RESPONSE:** Article 1.03.C.6 is deleted in its entirety in this addendum.
- f. Section 1.03.C.8.a (pg 7): 2nd line, revise sentence to state, “AWWA Manual M11 and AWWA C604.” **RESPONSE:** No change will be made.
- g. Section 1.03.C.9.b (pg 8): Request removal of, “WPS qualified per the ASME BPVC shall include Supplementary Essential Variables for notch-tough welding. All provisions ANSI/AWS D1.1 pertaining to notch-tough welding shall apply. **RESPONSE:** Article 1.03.C.9.b is revised in this addendum.
- h. Section 1.03.C.11 (pg 10/11): Request striking the requirement for a stamped design by a professional engineer for handling and transportation. This requirement is onerous. Engineer already specifies the means and methods of stulling and transport. **RESPONSE:** No change will be made.
- i. Section 1.04.B.1 (pg 12): 2nd paragraph, the (80) hour requirement for onsite manufacturer observation is excessive. A manufacturer field representative typically observes the first (2) days of delivery and installation, will follow up visits as needed. Requiring (80) hours will result in increased cost, without benefit, to the project. **RESPONSE:** Article 1.04B.1 is revised in this addendum.
- j. Section 1.04.B.1.a (pg 12): Strike the word “welding” from this sentence. It is not the manufacturers responsibility to observe field welding activities. **RESPONSE:** Article 1.04B.1.a is revised in this addendum.
- k. Section 1.04.B.2 (pg 13): The (80) hour requirement for onsite manufacturer observation is excessive. A manufacturer field representative typically observes the first (2) days of delivery and installation, will follow up visits as needed. Requiring (80) hours will result in increased cost, without benefit, to the project. **RESPONSE:** Article 1.04B.2 is revised in this addendum.
- l. Section 1.04.D.1.e (pg 14): Please strike the magnetic particle weld

- test for cylinders. This non-standard test is mitigated by hydrostatically testing 100-percent of all cylinders. **RESPONSE:** Article 1.04.D.1.e is deleted in its entirety in this addendum.
- m. Section 1.04.D.1.f (pg 14): Please strike the requirement for liquid penetrant testing for 12-inches on the bell and spigot ends. Bell ends are required to have magnetic particle testing by AWWA C200. Spigot ends are not “formed” and do not require testing. **RESPONSE:** Article 1.04.D.1.f is deleted in its entirety in this addendum.
- n. Section 1.04.D.3.b (pg 15): Please strike the requirement for charpy testing on ¼-inch steel and thicker. Per AWWA C200-12, charpy testing is only required for steel in excess of ½-inch thickness. Not modifying this requirement will add unnecessary costs to the project, without benefit to the owner. **RESPONSE:** Article 1.04.D.3.b is deleted in its entirety in this addendum.
- o. Section 2.02.A.3 (pg 18): Please revise the elongation percentage from 22-percent to 19-percent, which is consistent with the grade of structural steel specified. **RESPONSE:** Article 2.02.A.3 is revised in this addendum.
- p. Section 2.02.F (pg 20): Please strike the requirement for manufacturers to provide flange gaskets. This is commonly done by the contractor, who is also purchasing gasket kits for use at valves and appurtenant piping. **RESPONSE:** No change will be made.
- q. Section 2.02.O (pg 22): Please strike the words, “and installation.” Stulling is provided for handling and transport to the job site only. It cannot be designed to withstand backfill loads. This requirement can be construed as the pipe manufacturer being responsible for deflection control once the pipe has reached the job-site, which is under the control of the Contractor. That is not the purpose of stulls. **RESPONSE:** No change will be made.
- r. Section 2.02.O.2.b/c (pg 22): Please revise stulling chart to allow (4) assemblies on 48-inch through 54-inch pipe. Requiring (6) sets is excessive and will add costs to the project without owner benefit. **RESPONSE:** No change will be made.
- s. Section 2.02.O.3 (pg 22): Stulling is provided for handling and transport to the job site only. It cannot be designed to withstand backfill and compaction loads. That is not the purpose of stulls. They are provided for handling and transport to the job site only. **RESPONSE:** No change will be made.
- t. Section 2.03.B (pg 24): Request revising the D/t ratio from 200 to 240, which is standard for AWWA M11. Request striking the words, “zero minus tolerance.” The minimum wall thickness defeats the purpose of “designing” a steel pipe system. Steel wall thicknesses are manufactured to an accuracy of 1/1000-inch; a substantial advantage over other materials from a manufacturing technology stand-point. Bonded linings and coatings, combined with cathodic

protection when needed, drastically reduces any chances of corrosion damage in the long term, which is a big difference compared to other metallic pipes. Revise last sentence to allow the use of mortar lining in the pipe wall stiffness calculation, as per AWWA M11. **RESPONSE:** No change will be made.

- u. Section 2.03.C (pg 24): Request revising the transient pressure, per AWWA M11, from 1.5 times to 1.25 times working pressure. **RESPONSE:** No change will be made.
- v. Section 2.03.F (pg 24): Request revising the allowable deflection from 2-percent to 3-percent, per AWWA M11, and industry practice for rigid lined and flexible coated steel pipe. **RESPONSE:** No change will be made.
- w. Section 2.04.C (pg 25): Section is asking for deep butt strap joints in lieu of deep weld bells. Request section be revised with deep bells at spacing intervals of 500 feet for temperature control. **RESPONSE:** No change will be made.
- x. Section 3.01.G (pg 29): Delete paragraph and replace with. "Pipe shall be coated with "off white" or light colored polyurethane to lower pipe surface temperature. Pipe shall not be exposed for longer periods than what is recommended by the polyurethane coating manufacturer. For exposure longer than recommended, pipe shall be covered as per coating manufacturer recommendations." Reason for change: UV inhibitors are not part of polyurethane formulation and would require new formulation (change in chemistry) of approved polyurethane materials. Polyurethane manufactures have much experience and science into exposure limits of current polyurethane formulations and will make recommendations on long term exposure limits specific to their formulations. **RESPONSE:** Article 3.01.G is replaced in its entirety in this addendum.
- y. Section 3.06.A (pg 39): Request revising the allowable deflection from 2-percent to 3-percent, per AWWA M11, and industry practice for rigid lined and flexible coated steel pipe. **RESPONSE:** No change will be made.

Specification 02572 Steel Fabricated Specials

- a. Section 2.03.B (pg 5/6): Request revising the steel thickness to be in accordance with AWWA M11 and the same as adjacent pipe sections. It is not necessary to arbitrarily thicken the pipe cylinder, to 0.375-inch, for fittings greater than 24-inch. This will substantially add cost to the project without owner benefit. **RESPONSE:** Article 2.03.B is revised in this addendum.
3. Is there a specific Scope of Work for Land Surveying in the Specifications or do we need to get with the contractor for this project? **RESPONSE:** See Section 01720.

4. BL Technology, Inc. requests to be added as an approved vendor for the following: PCSI-Process Control System Integrator. **RESPONSE:** No. The list of recommended PCSI providers for this project shall be as shown in Specification Section 13500 and this addendum.
5. Spec 02571 says to use 316SS flange bolts for underground pipe but I can't find anything in spec 02572 saying what to use for above ground steel pipe flanges. Can you provide this information? **RESPONSE:** Flange bolting material for above grade pipe shall be steel as revised in Section 02571 Article 2.02.E included in this addendum.
6. We request clarifications and/or change requests to the Vertical Diffusion Van Pumps specifications.
 - a. 1-4.04 Lateral and Torsional Analysis: We request changing "API-610" in the 3rd sentence to "Hydraulic Institute Standards". **RESPONSE:** No change will be made.
 - b. 4.04 Lateral and Torsional Analysis: The last sentence references "...an independent specialist..." Please clarify if this specialist can be an independent P.E. or is there a specific or preferred specialist indicated here. The analyses are generally done by a manufacturer's specialist. **RESPONSE:** The specialist should be independent from the manufacturer. The manufacturer can submit qualifications of the proposed specialist for review.
 - c. 2-2. Performance and Design Requirements: Please clarify the "type of efficiency indicated ... Pump". Confirm if this is bowl efficiency, complete pump efficiency or wire to water efficiency. **RESPONSE:** Efficiency is complete pump efficiency. Pump includes bowl, column, and discharge head. Losses should include thrust losses.
 - d. 2-3 Materials: The pedestal and sub base are specified at cast iron or fabricated steel. We recommend deleting cast iron. Cast iron is not modifiable if vibrations due to resonance are found. **RESPONSE:** No change will be made.
 - e. 2-3 Materials: Lineshaft sleeves are called for stainless steel. 2-4.04 states lineshaft sleeves are "not used". We recommend no sleeves on a stainless steel lineshaft. Please clarify. **RESPONSE:** The lineshaft sleeve reference in Section 11140 Article 2-3 is deleted in this addendum.
 - f. 2-4.14 Pump Barrel: This specification does not detail wall thicknesses, bottom plate and top flange thicknesses or installation/level requirements. I have attached a copy of our standard barrel specification for review and addition by addenda. **RESPONSE:** Material requirements for the pump barrel are specified in Article 2-3. Leveling requirements for the mounting flange are specified in Article 2-4.13. Installation of the barrel and leveling are in accordance with the Hydraulic Institute Standards and as required by the manufacturer/contractor. No change will be made.

- g. 2-4.14 Pump Barrel: Please clarify the cover plate thickness. Specification requires 3/16" and plans call out 1/2" on Sheet PTO-01 (24 of 113). We recommend a 1" plate due to pressures. **RESPONSE:** Article 2-4.14 is revised in this addendum to provide 1/2" cover plate with o-ring seal.
- h. 2-7 Shop Tests: Please clarify if the complete pump including job columns and heads are required for factory/shop tests. **RESPONSE:** If the job columns and discharge heads are not used for the shop tests, the appropriate headloss in the column and discharge head shall be used to determine the total head of the pump.
- i. 3-1 Installation: We recommend field welding and leveling the to barrel flanges to achieve .002"/foot level on the final barrel installation. This procedure is detailed in the barrel specifications attached. **RESPONSE:** See previous response to Question 6f regarding leveling.

7. The following questions are related to Specification Sections 02571 and 02572.

- a. Specs 02571 & 02572 for Steel Pipe & Steel Pipe Specials do not indicate the material type for Flange x Flange connections bolting material. What hex bolt & nut materials type for below ground? ...for above ground? **RESPONSE:** Flange bolting material shall be as revised in Section 02571 Article 2.02.E included in this addendum.
- b. Specs 02571 & 02572 for Steel Pipe & Steel Pipe Specials do not indicate the type of flexible couplings or bolting material. There doesn't appear to be a miscellaneous materials specification section including/detailing mechanical couplings/flexible couplings. There are many locations Above Ground and Below Ground where mechanical couplings – compression style/Dresser style couplings are required...the detail sheet 29 doesn't indicate bolting material type/s. What type of flexible coupling with coating (Epoxy Steel Compression – Dresser Style)? What bolting material type for compression flexible couplings below ground? ...for above ground? **RESPONSE:** See Section 02571, Article 2.02.K for mechanical/flexible couplings. Bolting material shall be as be as required in Section 02571 Article 2.02.
- c. Sheet 29 details the restraint system alluding to the M-11 design requirement. It does not however detail the materials type/s for gusset plates, all thread rod, nuts and washers What material type for the M-11 restraint systems plates, rods, nuts & washers for below ground? ...for above ground? **RESPONSE:** See revisions to Section 02571 Article 2.02.Y included in this addendum.
- d. Can the question deadline be extended till 8/28? And, can there be a 2 day grace period to seek further clarification/ask more questions

with regard to Addendum #1 responses if required? **RESPONSE:**
No change will be made.

8. Is there going to be an excell list of SMWB contractors available for these two projects? **RESPONSE:** Yes. The list has been posted on SAWS website and is available at the following link:

http://www.saws.org/business_center/ContractSol/Drill.cfm?id=1197&View

9. In the specs there are two separate lists of Specifications. The first is noted as DPR (Design Professional Responsibility). The DPR specification list appears as a list which the Engineer designed an stamped specific design discipline areas. The second list is noted as "TC" appears to be a list of all Divisions and Specifications sections in numeric order. The issue here is: Are the sections listed in the "TC" portion of the index complete and all-encompassing of all scopes of work to bin the contract. By having both of these lists of specifications include in the bid documents, it is confusing as to which of the list is the one we need to address.

Perhaps SAWS should issue an addendum stating that the "TC" list is only set of specification the bidding contractors need to bid. And the "TC" list is a complete scope of work to contracted. Should there be any variable in the sections two lists (the "DPR" and the "TC") then the "TC" list should take precedence.

Or SAWS may even elect to have the DPR list removed from the contract document altogether.

Without SAWS addressing this issue, the only other answer to the coordination would require a bidding contractor to read, compare and verify all 1,400 pages on the Twin Oaks project with the over 1,500 pages on the Old Pearsall Rd project. Such time to do this research or verification would be too much time for a bid of this magnitude. **RESPONSE:** The DPR list is included simply to comply with Texas Board of Professional Engineering rules regarding signing/sealing of plans and specifications. The DPR list is not relevant to Bidders. The Table of Contents includes all documents and specifications that are applicable to the project.

On plans sheet No. CTO-01 (9 of 113) we have to cross under 1 or 2 existing retaining wall(s) [maybe I am not sure since the drawing is not clear here. I have attached a copy of the sheet for your reference] with the proposed underground lines. What types of walls are these? Stacked stone? CMU? Concrete? Should we remove and replace a section of them? Can a section of them be removed and patched to the owner's satisfaction? Or do we need to plan on removing and replacing them completely? See attached plans. **RESPONSE:** There is one retaining wall, which is constructed of modular masonry units. (Sheet CTO-08 is revised in this addendum to clarify there is one retaining wall.) It is not the intent to

require replacement of the entire wall. The wall shall be removed as required to complete the Work and shall be restored to its original or better condition and to its original location. The existing masonry units may be reused, if not damaged during removal.

1. In section 2317 – Trench Excavation, Backfill & Compaction

3.02 PRE-INSTALLATION MEETING

A. Requires CONTRACTOR to lay 500' of pipe for inspection purposes at a location to be determined by the OWNER.

3.02.A.6 says "The CONTRACTOR may reuse the pipe sections in the pre-installation inspection provided there is not damage to the pipe."

Evidently, SAWS wants this pipe laid not as a part of the proposed line work per design and plans. Can we lay the first 500' of proposed pipe as Pre-Installation Meeting and save cost for the owner?

It will be cheaper to abandon the 500' of test pipe than to dig it up. If we abandon it, do we have to fill it with the grout or can we just end cap it? Also, what type of pipe do they want to use for this test? Section 3.02.A.5 of the specs refer to the deflection test which would indicate plastic pipe instead of steel pipe. **RESPONSE**: Section 02317 Article 3.02.A is revised as part of this Addendum.

10. Several of the recent SAWS projects have had the requirement for all iron and steel products used in the project be produced in the US. Do these projects have that requirement? **RESPONSE**: See response to Question 2a.
11. Why is the spec for air valves "Not for Construction?" Also, there is a spec for 3" and larger CAV's but nothing for the 4" and 8" ARV's shown in the schedule. **RESPONSE**: The "Not for Construction" notation is deleted in this addendum. This addendum also includes revisions to Section 15108 Article 2-1 and Schedule 15108-S01.
12. Steel pipe specs require pipe manufacturer to furnish gaskets for their steel pipe but what about gaskets for other pipe specifically ductile iron? **RESPONSE**: Gaskets for ductile iron pipe are covered in the SAWS Standard Specification 814 and gaskets for other types of pipe are covered in the applicable technical specifications. If the specification does not specifically address who is to furnish the gasket, the decision is up to the Contractor.

Reference Details D, E and F on CDTO-03: What if any of this pipe is ductile iron? Detail D shows ductile iron and steel. Is only the tee and 45 on top steel? **RESPONSE**: This piping is ductile iron. See revisions to Section 01630-S01 and Detail D included in this addendum.

13. Contract Specifications, Section 04200, Page 3, Paragraph 1-5 tells me that the Concrete Masonry Units will be Colored at the Factory per Owner's color selection however the Contract Drawings, Sheet 34 of 113 (Room Finish Schedule) says that the Masonry Walls will be Painted (PT). Do you really want to paint this CMU that is already going to be colored at the Factory per the Owner's selection? **RESPONSE:** Yes. The interior wall surfaces shall be painted as shown on the drawings and as specified.
14. Specification Section 02200 page 15 list elevations for over excavation on specific structures/foundations, there is an elevation given for the transformer pad of 571.4, the drawings shows two transformer pads. I believe that this is for the transformer pad outside the electrical building shown on Sheet 11(CTO-03) based on top of concrete elevations. Is this correct? The second transformer pad is shown on sheet 12(CTO-04), does this transformer pad require any over excavation? If so, to what elevation does it need to be over excavated? **RESPONSE:** The transformer pad referenced on page 15 is for the large pad shown at the end of the concrete driveway on Sheet CTO-04. Please note that this elevation is changed to 591.3 in this addendum. The small transformer pad is located on the east side of the electrical building and is shown on Sheet CTO-03. Over-excavation is not required for this small transformer pad.
15. The following questions pertain to the Price Proposal and to Section 01500 Construction Facilities and Temporary Controls:
- a. Permitting Allowance, Bid Item #2. Does this allowance cover both City and County permits? **RESPONSE:** Yes.
 - b. CPS Energy Allowance, Bid Item #3. Does the allowance cover all fees including any fee for temporary power connection at the contractor's staging area? **RESPONSE:** No. Contractor is responsible for all costs associated with utility services for temporary office facilities and for general construction operations (see Section 01500, Article 1.04.A.1).
 - c. Will the Owner/Engineer office trailer be located within the contractor's staging area? **RESPONSE:** Yes. The Owner/Engineer trailer should be located in close proximity to the Contractor's trailer in the staging area as shown on sheet TCTO-01.
 - d. Within the staging area is there telephone connections available? **RESPONSE:** No. Contractor is responsible to coordinate with the telephone company to obtain and pay for telephone service for temporary office facilities (see Article 1.04.A.1)
16. Does this project require implementation of the American Iron and Steel provisions of P.L. 113-76. Consolidated Appropriations Act of 2014? I see it is being required for the pipeline portions of the WRIP projects. **RESPONSE:** See response to Question 2a.

17. On the above mentioned projects there are mandatory pre-proposal meetings.... We are bidding these projects as a sub-contractor for the cathodic protection. Is it mandatory that we attend these meetings? **RESPONSE:** Only firms that intend to submit as a prime contractor must attend the mandatory pre-proposal meeting.
18. The following series of questions are related to Specification Section 13500.
- a. General: In the Division 13 there are several references to HMI, SCADA, and PCS (part of), please confirm that this is actually the existing SAWS DYNAC® ES SCADA system. If this is not the case, please identify the system(s) in more detail and whether they are existing or new. Likewise, there are references that state that the ASP is responsible to among other things configure the system(s), yet as can be seen in the questions below there are references that imply that the Owner and/or Engineer may be responsible to configure the system(s). Please clarify. **RESPONSE:** Yes, these references are for the existing SAWS DYNAC ES SCADA system.
 - b. Please note that Transdyn has changed its name. The new company name is Kapsch. The address and contact information remain as before. **RESPONSE:** Name change is included in this addendum.
 - c. Section 13500, 1-2.05.h – Please confirm that the requirement is for the ASP to extend its standard 24x7 remote telephone support service agreement to cover changes to the existing system, to be implemented under this project. **RESPONSE:** Article 1-2.05.h requires ASP to provide 24-hour Service Control for the length of the warranty period for all system components.
 - d. Section 13500, 3-2.d – Please provide the total number of 8 hour day visits to be included in the proposal. **RESPONSE:** ASP is responsible to determine the number of 8-hour day visits required to complete the configuration.
 - e. Section 13500, 3-2.e – Please confirm that requirement for support is for 24x7 days per week from the ASP's facility, not the PCSI facility. **RESPONSE:** 24-hour support shall be from the ASP's facility. Article 3-2.e is revised in this addendum.
 - f. Section 13500, 3-2.f – Please clarify the requirement to provide a printer and field control device. Please provide a specification for the equipment required including required OS support. **RESPONSE:** Article 3-2.f is deleted in this addendum.
 - g. Section 13500, 3-2.i – Please specify all features and functions to be implemented that are not a part of the system software. Please identify which system software is being referenced. **RESPONSE:** This article 3-2.i is deleted in this addendum.

- h. Section 13500, 3-5.01.01 Training Costs – Please specify the requirements for offsite training. Since SAWS is not procuring a new DYNAC® ES system, will offsite training require staging a DYNAC® ES system with workstations to support up to 10 students? Will facilities (tables, chairs, power, projector, etc.) be provided? **RESPONSE:** Within the specific training sections offsite training was not mentioned. Offsite training is not anticipated. The intent is if offsite training was suggested by the PCSI, the PCSI is responsible for all cost incurred.
 - i. 13500, 3-5.03 Control System Maintenance Training – Please confirm that no maintenance training will be required for the existing DYNAC® ES system, including hardware and software. **RESPONSE:** Control System Maintenance Training is for PLC and instrumentation hardware only. The existing DYNAC ES system is excluded from this training. DYNAC ES system software training is covered in article 3-5.05 Programmer Training (HMI Software).
 - j. Section 13500, 3-5.05 Programmer Training (HMI Software) – Please clarify the requirement that training be “provided to enable Owner’s and Engineer’s personnel to initially configure and later reconfigure the system.” Is system configuration of the changes required to support the Old Pearsall Road PSP to be excluded from the proposal? **RESPONSE:** Article 3-5.05 is revised in this addendum.
 - k. Section 13500, 3-5.05.01 Classes – Please confirm the requirement for 80 hours of programmer training on the existing DYNAC® ES system. Please clarify the requirement to deliver the 1st round of training “within 30 days of delivery of the configuration hardware and software.” Please note that there is no requirement to deliver configuration hardware and software. Configuration files, if configuration is included as part of this proposal, will be loaded directly into the existing online system or configuration will be done directly on the existing system. **RESPONSE:** Article 3-5.05.01 is revised in this addendum.
19. (This question pertains to Section 13500 Instrumentation and Control System). Prime Controls would like to be listed as an “Approved Application Service Providers...”/“Recommended Application Service Providers...” for the referenced project. Prime Controls has been listed on pervious SAWS projects including but not limited to; Twin Oaks Brackish Groundwater Desalination Program, NACO Pump Station, and University Pump Station. **RESPONSE:** Prime Controls is added to the list of recommended ASP in Section 13500 Article 1-2.05 in this addendum.
20. Would it be possible for me to come out there sometime soon and do a job walk? About a year ago we did a job with you all and I was able to go to the job site and walk it to verify the exact lengths of tubing/piping that needed to

be traced. The reason why I ask if this is possible is because the PS plans are not clear on the exact total length of tubing that will be needed to have heater cable on it. **RESPONSE:** No. This is a new pump station and inspection is not possible. Site visits were provided on August 21, 2014 following the pre-proposal meeting as indicated in the RFCSP and on SAWS' website.

If a job walk in the near future isn't possible, is there a way, or can you point me to the correct sheet numbers, to clearly get a scope of tubing that will need to be traced. I'm only asking because I know your hydraulic valves have tubing on them also and it will be a large assumption on our part if we don't have a clear number. **RESPONSE:** Heat trace locations are specified in Section 16859, Article 1.01.D. Some heat trace locations are shown on Sheets ESTO-06, ETO-18, ETO-19, and ETO-20. However all locations are not shown on the drawings and contractor/supplier is responsible to provide heat tape in accordance with the specified requirement.

21. Trench Safety specification section 02318, paragraph 1.03 reads in part "Contractor shall be responsible for obtaining the necessary geotechnical information to design the trench safety plan". Will the contractor be required to pay for his own geotechnical report to be able to submit a trench safety plan? **RESPONSE:** All geotechnical information available for this project has been made available to Contractors upon their request per the Special Conditions. Any additional geotechnical information required to complete the scope of work will be the responsibility of the Contractor.

Special Conditions , Critical Operation and Tie - Ins .Critical tie-In number 1 is the new 48" tie-in at the existing 96" Finished Water and is limited to a February date . As of now that would be February, 2016. If the notice to proceed is November of 2014 and there are 470 calendar days to reach substantial completion, the February date will be at the very end of the contract time. Please consider adding 30 more days to the contract so we can complete this last activity and all the testing and disinfection that will be required. **RESPONSE:** The time period is revised to between January 1 and March 31 in Article 1 of the Special Conditions in this addendum.

Critical Tie-In number 2 is limited to the month of July. If we base the schedule on a November 2014 award, the only July in the construction schedule will be July of 2015. This means that the 48" Recharge line will have to be installed to the first valve, which is at the Recharge Control Structure above ground and left there until later in the project to complete (7 months later). Is there anyway that the 48"x 60" tie-in can be moved to a later month near the end of the project? **RESPONSE:** The time period for critical tie-in No. 2 will not be changed.

New Altitude Valve sheet CTO-07 note 3 requires the contractor to have DN Tanks to certify the work has been done without damage to the tank. We are not sure what work has to be done to the tank. The Cla-Val model 210 has no float requirements, therefore we see no need to have a pipe penetration. If there is a pipe penetration to the existing tank please provide additional detail. **RESPONSE:** If Cla-Val model specified in note 2 on sheet CTO-07 does not require pipe penetrations to the existing clearwell, then no penetrations to the clearwell are required. No change will be made.

Section 02519 Disinfection of Water System, after the disinfection of the pipe system and the chlorinated water has been de-chlorinated is the means that the water can be pumped back to the raw water side of the plant for disposal. If this is not possible please advise to where and how to dispose of the water as the specification do not allow water to enter the sewer system. **RESPONSE:** See revisions to Section 02519 Article 3.04.B included in this addendum.

Section SIR, Supplementary Instructions, Background, Experience and Qualifications. Paragraph H reads provide experience of the Construction Team that will be directly involved in the Project as it relates to the programming of the Process Control System Integrator and Application System Provider. We are not sure if you are asking for our experience working with PCSI subcontractors or if you are asking for the experience and qualifications of the PCSI. If you are asking for the PCSI qualifications we will not be able to provide until after the bid, as we will not know who will provide the lowest bid until almost bid time. It appears that the information being requested pertains to the PCSI and ASP. We request that the contractor be allowed to furnish this information within 24 hours after the bid as we will not know before the bid which of the four pre-approved subcontractors will submit the best offering. **RESPONSE:** All information for the PCSI and ASP listed under the referenced section of the Supplementary Instructions to Respondents (SIR) must be submitted with the Contractors proposal.

22. SCI requests to be added to the approved PCSI list for the Twin Oaks Pump Station, SCI is certified as a WBE with the South Central Texas Regional Certification Agency. Our Qualifications are attached. **RESPONSE:** No. The list of recommended PCSI providers for this project shall be as shown in the Specification Section 13500 and this addendum.
23. The following questions are in reference to Section 15101 Butterfly Valves and Section 15101-S01 Butterfly Valve Schedule:
 - a. Butterfly Valve Schedule 15101-S01, Column 1.0606 (AWWA Class). The column identifies a number of valves as 250B-F. Valves in this class can be supplied with ANSI B16.1 Class 125 flanges on

all valves or with ANSI B16.1 Class 250 flanges on valves up to and including 48". Please clarify the flange class required. **RESPONSE:** Flange class required shall be coordinated with Section 02571 Steel Pipe and Section 15108 Air Valves.

- b. Butterfly Valve Tag Numbers BFV-101 through BFV-105. This group of valves is shown on Schedule 15101-S01, Drawing PT0-01 (Sheet 24) with a reference to detail sheet CDT0-02 (Sheet 18, reference found in connection with BFV-103 shown in Section 2 of PT0-01). The schedule indicates these valves to be equipped with a wrench nut, end of travel limit switches, extension stems and extension bonnets. Detail CDT0-02 does not appear to be descriptive of the arrangement. Please clarify as to the arrangement that is required. Use of an Extension Bonnet extending above the surface with the gear (inclusive of EOT limit switches) mounted on top of the bonnet may be a potential solution. **RESPONSE:** The detail callout is revised in this addendum.
- c. Butterfly Valve Tag Numbers BFV-106 through BFV-110. This group of valves is shown on Schedule 15101-S01, Drawing PT0-01 (Sheet 24) with a reference to detail sheet CDT0-03 (Sheet 19, reference found in connection with BFV-108 shown in Section 2 of PT0-01). The schedule indicates an "IP" installation. Drawing PT0-01 with detail CDT0-03 suggests that the valves are buried with the gear mounted to the valve and the use of an extension stem / valve box arrangement. Please clarify as to the arrangement that is required. Use of an Extension Bonnet extending above the surface with the gear (inclusive of EOT limit switches) mounted on top of the bonnet with a HW operator may be a potential solution. **RESPONSE:** The schedule is revised in this addendum.

24. Sheet CTO-07 note 3 and 4 makes reference to pipe penetrations at the existing East Clearwell and that the contractor should coordinate with DN Tanks. We have been advised by DN Tanks that they have submitted the pipe penetration price directly to SAWS and should be awarded the contract within the next month. Therefore it appears that notes 3 and 4 do not apply to this contract and should be deleted. **RESPONSE:** Notes 3 and 4 still apply since the pipe penetrations are related to the new 12" altitude valve as indicated in note 3. No change will be made.

Sheet CDT0-03, Typical Pipe Trench: There is a note that reads "gravel subgrade filler and filter fabric to be determined in field by inspector in conditions where subgrade is unstable". There is no unit price bid item for this work. Please verify that if gravel subgrade filler is required, that additional payment will be allowed to contractor. **RESPONSE:** The Typical Trench detail note on Sheet CDT0-03 is revised in this addendum to allow additional payment for this item (if required).

25. Sheet GTO-05 General note 2 reads that SAWS will fund all soil testing. Specification section 01451, 1.08 reads that the contractor will provide all testing including concrete and field density test. Please verify who pays for what testing. **RESPONSE:** Testing shall be provided by Contractor as specified in Section 01451. The note on Sheet GTO-05 is revised in this addendum.
26. The following questions are related to electrical work:
- a. Sections 16000-1.06.B.3 & 5 state for Power Company to furnish and install the primary cables and terminate the underground primary cables at the riser pole, while Sections 16000-1.06 C.2 & 5 state for the Contractor to furnish and install the primary cables. Are these to be provided by the Power Company or the Contractor? If required to be provided by the Contractor, what size conductors are to be provided? **RESPONSE:** Cables will be furnished by the power company. See revision to Section 16000 Article 1.06.C.2 included in this addendum.
 - b. The Fixture Schedule on drawing EGTO-02 lists a fixture Type P2 that does not appear on any of the drawings. Are there any Type P2 fixtures required to be provided and if so, where are they to be located at? **RESPONSE:** Type P2 fixtures are not required on this project. This sheet is revised to delete P2 fixtures in this addendum.
 - c. Raceway Boxes Section 16110-2.03.C states for "All other locations not described above..." to be NEMA 12 316SS. NEMA-12 boxes are painted steel. Are NEMA-12 painted boxes acceptable or are 316SS NEMA-4X boxes required? **RESPONSE:** NEMA 12 painted boxes are acceptable for indoor locations only, as specified.
 - d. The Raceway Application Chart in Section 16110-3.02.B Raceway Type 1 states, unless other noted otherwise, to utilize rigid galvanized conduit for conduits in concrete and masonry walls. Is PVC40 conduit acceptable in lieu of rigid galvanized conduit? **RESPONSE:** See revision to Section 16110 Article 3.02.B included in this addendum.
 - e. Drawing ETO-05 Note 1 states "Provide direct buried conduit for pole lights". There is no specification for direct burial conduit. What type of conduit should be provided for direct burial? Is anything more than PVC40 required? **RESPONSE:** Schedule 80 PVC conduit. See revision to this note on sheet ETO-05 included in this addendum.
27. Reference IR-2.5.b. Would SAWS consider adding an "Allowance" or "Force Account" Item No. (Bid Item) with a dollar amount on the Price Proposal that would be used for payment if any "existing" coating systems; e.g., exterior, interior and piping coating systems, etc. that are determined to be hazardous if discovered during the construction of this project instead of as this paragraph states that the Respondent is expected to make all site

investigations prior to Respondents submitting their offer for consideration. **RESPONSE:** No changes will be made to this requirement.

Reference 13800 (Surge Control System). What suppliers are qualified to furnish the Surge Control System? The customary practice is for the Engineer or Owner to identify which companies manufacture the product which meets the specification. This specification does not mention any manufacturers. **RESPONSE:** No change will be made.

Reference Spec 11140 and 16483. Variable Frequency Drives – these are to be provided by Spec. 16483 but there is confusion because Spec. 11140 says that they are to be provided by the Pump Supplier. We suggest you clean up Spec. 11140 so that the supply of these drives is clearly and only in Spec. 16483. Pump supplier can still be required to furnish inverter duty motors and to coordinate with the VFD manufacturer. **RESPONSE:** See revision to Section 11140 Article 2-6.03 included in this addendum.

Drawing PDTO-04. Is the pump can air release assembly (PDTO-04) required for future pumps 4 and 5? **RESPONSE:** No air release valve is required. However, a 1" ball valve is required as indicated in note 1 on sheet PTO-01.

Specification 02519 – Disinfection of Water Systems. Section 3.04.B. makes reference to Section 02643 Water Pipeline Testing. Please provide Section 02643 or correct reference. **RESPONSE:** See revisions to Section 02519 Article 3.04.B included in this addendum.

Reference IR-2b & IR-16. Paragraph IR-2.b states "No later than the 45th day after the date of opening of the proposals...." Paragraph 16 states "It is anticipated that the contract will be awarded within 90 days after the solicitation deadline...." Please confirm that it is SAWS intent to award the contract within 90 days from opening of the proposals, i.e. that the 45 day period runs concurrent with the 90 day period. **RESPONSE:** Per #16, page IR-5, SAWS anticipates awarding the contract within 90 days after the proposals are opened. The 45 day period refers to the evaluation period, which runs concurrent with the 90 day period.

Reference PP, SS-9.2.3 and 02332. The project duration is 500 days from NTP with substantial completion in 470 days. The seeding window is from 3/15 to 9/15 each year. Assuming NTP is issued on or around 12/15/14 final completion would be 4/28/16. Supplemental Condition 9.2.3 specifically allows final site grading and vegetation to take place after substantial completion, but prior to final completion. Section 02232 requires the contractor to water seeded areas for 120 days. The same section says that SAWS will inspect the seeded areas 8 weeks after work is completed.

Would both the 8 week inspection and the 120 day watering periods have to be completed prior to Final Completion? If yes, would SAWS consider waiving the seeding window limitations to allow seeding to take place in December? If no, would SAWS be willing to shorten the two durations to no more than 30 days each? **RESPONSE:** No change will be made.

Reference PP, 01015, 01270. Bid Item No 2 – Permitting Allowance is \$10,000 and states that actual amounts will be reimbursed by SAWS to Contractor. Section 01015, Paragraph 23 – Permits lists a sample of Contractor Permits. 6 from Bexar County and 1 from the City of San Antonio. Section 01270, Paragraph 1-8.02 states that this item shall be an allowance for fees associated with acquiring building and tree permits from the City of San Antonio. No mention is made of fees for permits from Bexar County. Please confirm that Bid Item No 2 will cover Bexar County permit fees as well as the City of San Antonio permit fees. **RESPONSE:** The permitting allowance is for both City and County permits. See revision to Section 01270 Article 1-8.02 in this addendum.

28. Specification 02571 1.01 C1, states that Pump Suction piping and above ground piping are to be epoxy lined and that below ground (excluding pump suction) can be either epoxy lined or cement mortar lined. What exactly is the limit of pump suction piping, we see on drawing CTO-06, that the pump station 36" pump suction piping & 30" surge piping along with the 78" Pump Suction Header are called out as "Pump Suction Piping" and therefore should have Epoxy lining, however, the 78" suction line is not distinctly called out as "Pump Suction Piping" should it be epoxy also or is CML an option? **RESPONSE:** Pump suction is indicated on sheet CTO-06 as 36" Pump Suction and 78" Pump Suction Header, which shall be epoxy lined. Therefore, the Pump Suction limits are from the pump can to the 78" Pump Suction Header. See revisions to Section 02571 Article 1.01.C.1.a included in this addendum.

Specification 02571 1.01 C1, states that Pump Suction piping and above ground piping are to be epoxy lined and that below ground (excluding pump suction) can be either epoxy lined or cement mortar lined. In past SAWS projects, when we see epoxy, we have learned that it means Fusion Bonded Epoxy per AWWA C213, however, we do not see provisions for Fusion Bonded Epoxy in this project. Are we to use Fusion Bonded Epoxy Per C213 or Liquid Epoxy per C210? Please Clarify. **RESPONSE:** Use liquid epoxy per AWWA C210 as specified in Section 02571.

Is this project "Buy American Project"? **RESPONSE:** See response to Question 2a.

Drawing CTO-06 shows New Pipe Connections / Tie-Ins (Cutting in 48" Tee's) on the existing 96" piping and existing 60" piping, can you tell us

what type of piping this is? **RESPONSE:** Existing piping is steel pipe. Contractor shall field verify existing conditions as indicated in General Notes for Civil Drawings on sheet GTO-05. See revision to Sheet CTO-06 in this addendum.

Drawing CTO-06, Note 3, refers to the above-mentioned tie-ins, and states we are to see specifications for special conditions for additional requirements for the tie-ins, we cannot find any special conditions or additional requirements in the specifications...can you please direct us to the appropriate section(s). **RESPONSE:** See Special Conditions, Article 1.

Specification 02571 2.03 C, Design (Working) Pressure, states that the working pressure and field hyd. test pressures shall be indicated in section 02704 Testing Pipeline and Leakage Testing. However, when looking in 02704 - S02, we only see the Test Pressures listed. Question - Is the Test Pressures listed also the Working Pressures? If so want that make the Transient pressures higher and therefore make the Pipe Flange classifications higher? Please Clarify. **RESPONSE:** The Design (Working) Pressure has been added to Schedule 02704-S02 in this addendum.

29. Reference Section SIR. "F. Format of Proposals" on SIR-6. F.6. states not to use Metal-Ring Hard Cover Binders. Since this proposal requires that we have to submit information on subcontractors such as electricians and instrumentation and the final subcontractor will most likely not be known until close to closing time. Since we cannot use the three-ring binders can we use such items as "Aluminum screw posts" so that the correct information can be inserted at the last moment? **RESPONSE:** Yes. Proposal bound by aluminum screw post are allowable.

30. SHEET 55 OF 113, ETO-01: EMH-64 is illustrated to be existing. During the site visit on 8-21-14, no evidence of a Manhole was observed. Please confirm its existence and location. **RESPONSE:** The manhole is existing. The exact location of existing electrical duct bank and manhole shall be verified in the field. Sheet ETO-01 note 4 is revised in this addendum.

SHEET 53 OF 113, EFTO-02, LIGHTING FIXTURE SCHEDULE: "P2" was not found to be use on this project. **RESPONSE:** This is correct. P2 fixtures are not applicable. Sheet EGTO-02 is revised in this addendum.

SHEET 69 OF 113, ETO-15: Which of the cable trays is to be mounted closest to the ceiling? Medium or Low voltage tray on top? **RESPONSE:** The medium voltage (MV) cable tray shall be mounted closest to the ceiling. The low voltage tray is to be mounted below the MV tray and may be offset as required to accommodate wiring.

SHEET 69 OF 113, ETO-15: Mounting height to top of the upper tray is 8" from the ceiling, with a separation of 8" between the bottoms of the upper tray to the top of the lower. These clearances will not allow for the bend radius of the medium voltage cables, assuming the top tray is purposed for medium voltage. If bottom tray is to be used for medium voltage the low voltage tray is directly in its path. Please clarify. **RESPONSE:** See response above.

31. Please verify the Minimum Required Excavation Elevation for the transformer pad as shown on page 15 of Section 02200 as 571.4. The top of this transformer pad is to be 595.25 per the elevations shown on sheet CTO-04. Please confirm/verify the Minimum Required Excavation Elevation for this structure. **RESPONSE:** The minimum required excavation elevation in Section 02200 is changed to 591.3 in this addendum.

We have a detail on the harnessed mechanical couplings. Could we also be provided with details for the restrained dismantling joints and tied mechanical couplings? **RESPONSE:** The plans use the term "harnessed mechanical coupling" and "tied mechanical coupling" interchangeably. The details for harnessed mechanical couplings are C and D on Sheet PDTO-01. Restrained dismantling joints shall be Romac "DJ400", Dresser "Style 131 Dismantling Joint" or Viking Johnson, with coating in accordance with NSF 61. Notes for the restrained dismantling joints have been added to sheets CDTO-03 and PT-01 in this addendum.

32. We welcomed the opportunity to review these studies [geotechnical report]. However, we understand that we are not allowed to have a copy of these studies for quoting purposes. We are requesting SAWS's reconsideration to furnish a copy of the existing Geotechnical Engineering Study to all bidding contractors. We respectfully request the San Antonio Water System to reconsider its position in sharing these studies with all bidding contractors. **RESPONSE:** Instructions on obtaining the geotechnical report were modified as part of this Addendum in Article 4 of the Special Conditions.

B. **DRAWINGS.**

1. **Sheet GTO-05 (5 of 113).** In General Note 2, change the words "funded by the San Antonio Water System" to "at the expense of the Contractor".
2. **Sheet CTO-06 (14 of 113).** Revise the callout that reads "Connection of new to existing, see note 3" to read "Connection of new pipe to existing 60" steel pipe, see note 3" located at N 13603948.02, E 2161659.31.
3. **Sheet CTO-08 (16 of 113).** In the Line B profile, delete the arrow pointing at a structure near Sta. 5+90. (There is only one retaining wall).

4. Sheet CDTO-03 (19 of 113). On detail D, add the following note:

“1. Restrained dismantling joints shall be Romac “DJ400, Dresser “Style 131 Dismantling Joint” or Viking Johnson, with coating in accordance with NSF-61.”

On detail D, deleted the words “Steel pipe” on the riser pipe (this piping is ductile iron).

On detail D, move the Insulating Flange Kit from the above-grade tee to the below grade flange outlet on the 48” pipe.
5. Sheet CDTO-03 (19 of 113). On the Typical Pipe Trench detail note that reads “Gravel subgrade filler and filter fabric to be determined in the field by inspector in conditions where subgrade is unstable”, add the following note “Additional payment for this item (if required) will be negotiated between the CONTRACTOR and OWNER on an as needed basis”.
6. Sheet PTO-01 (24 of 113). In Note 1, change the word “gasket” to “o-ring seal”.
- Add the following note:

“5. Restrained dismantling joints shall be Romac “DJ400, Dresser “Style 131 Dismantling Joint” or Viking Johnson, with coating in accordance with NSF-61.”

On Section 2, revise the callout for the buried butterfly valve that reads “C/CDTO-02” to read “C/CDTO-03”.
7. Sheet EGTO-02 (53 of 113). Delete the line for P2 fixtures from the Lighting Fixture Schedule.
8. Sheet ETO-01 (55 of 113). Add the following note:

“4. The exact location of existing electrical duct bank and manhole shall be verified in the field. The contractor shall be responsible to furnish all material including additional conduit and wire as necessary to meet the existing field conditions.”
9. Sheet ETO-05 (59 of 113). In Note 1, add the words “Schedule 80 PVC conduit” before the words “for direct buried conduit”.
- C. BIDDING AND CONTRACT REQUIREMENTS.
 1. INVITATION FOR COMPETITIVE SEALED PROPOSALS.

- a. Page 1. Add the following at the end of the Invitation:

“Mandatory Pre-Proposal – Firms in Attendance

Proposals will not be accepted from any firm not represented at the mandatory pre-proposal meeting held on August 21, 2014 at 10:00 a.m. The following list is a record of represented firms:

- Scruggs Co.
- CYMI Industrial
- Webber, LLC
- Garney Construction
- Pepper Lawson
- Civil Engineering (CEC Texas)
- Odessa Pumps
- ASI Constructors, Inc.
- Balfour Beatty/Frucon Construction
- National Trench Safety (NTS)
- DSI
- Eagle Contracting, LP
- Robles 1 Demolition
- Sundt Construction
- Zachry Parsons
- Archer Western
- MGC Contractors
- Alterman Electric
- Smith Pump
- Hanson Pressure Pipe
- HD Supply
- Cardinal Contractors
- Prime Controls
- Northwest Pipe
- Holloman Corp.”

2. INSTRUCTIONS TO RESPONDENTS.

Change to page IR-6, Instructions to Respondents #17, remove and replace the first paragraph with the following:

San Antonio Water System Contracting Office may reject the Proposal when: (a) the Respondent misstates or conceals any material fact in the proposal, or if (b) the proposal does not strictly conform with the law or the requirements of this RFCSP, or if (c) the proposal is conditional, or if (d) the price proposal is unbalanced, or if (e) the Respondent fails to acknowledge

in the final price of the price proposal any and all addendums on the Price Proposal issued prior to the solicitation deadline.

Clarification

Price Proposal

It is not a requirement to submit a signed page of each Addendum with the Respondent's Proposal Packet. However, all Respondents should acknowledge all Addenda by noting the numbers of each Addendum issued on page PP-3 of the Price Proposal.

3. SUPPLEMENTARY INSTRUCTIONS TO RESPONDENTS.

- a. Page 4, Article E. At the end of the first paragraph, add the following:

“A list of SMWB contractors available identified by skill for this project has been posted on SAWS’ website.”

4. PROPOSAL CERTIFICATION.

- a. Page 1. Remove the Proposal Certification page in its entirety and replace with the attached version, which is the version that should be submitted with the Price Proposal.

5. SPECIAL CONDITIONS.

- a. Page 1, Article 1. On the Critical Tie-in No. 1 paragraph, revise the last sentence to read “This tie-in must be performed between January 1 and March 31.”

- b. Page 2, Article 4. Delete Article 4 (from Addendum No. 1) and replace with the following:

“4. A Geotechnical Report has been developed per SAWS on this project and upon request will be made available for Contractors for information purposes only. Please contact Diana Dwyer by email at Diana.dwyer@saws.org. SAWS will require the execution of a SAWS disclaimer form by the Contractor as condition of and prior to the release of the report.”

D. TECHNICAL SPECIFICATIONS.

1. SECTION 01270 – MEASUREMENT AND PAYMENT.

- a. Page 3, Article 1-8.02. In the first paragraph, add the words and “Bexar County” after the words “City of San Antonio”. In the second paragraph, add the words “Bexar County” after the words “City of San Antonio” (two places).
2. SECTION 01630-S01 – PIPELINE SCHEDULE.
 - a. Change the pipe material for the Drain Structure from Steel to Ductile Iron Pipe.
3. SECTION 02200 – EXCAVATION AND FILL FOR STRUCTURES.
 - a. Page 15, Article 3-5.01. In the minimum excavation depth table, change the elevation for transformer pad from 571.4 to 591.3.
4. SECTION 02317 – TRENCH EXCAVATION, BACKFILL & COMPACTION.
 - a. Page 9, Article 3.02.A. Replace the first sentence with the following: “At the start of pipe laying activities, the OWNER will designate a section of pipe (up to 5 pipe joints) for inspection purposes.”
 - b. Page 10, Article 3.02.A.6. Replace the first and second sentences with the following: “After acceptance, the CONTRACTOR may proceed with the work. Any damage to the pipe during the pre-installation inspection will be the responsibility of the CONTRACTOR and shall be repaired or replaced to the satisfaction of the OWNER.”
5. SECTION 02519 – DISINFECTION OF WATER SYSTEMS.
 - a. Page 4, Article 3.04.B. Revise the second sentence to read: “This section shall conform to Section 02704 Pipeline Pressure and Leakage Testing”.
 - b. Page 4, Article 3.04.B. Add the following at the end of the paragraph: “The Contractor will be allowed to use the existing sludge lagoons located approximately 500 ft south of the pump station for disposal.”
6. Section 02571 – STEEL PIPE.
 - a. Page 2, Article 1.01.C.1.a. Add the following at the end of the article: “36-in Pump Suction and 78” Pump Suction Header shall be epoxy lined. Pump Suction limits are from the pump can to the 78” Pump Suction Header.”
 - b. Page 6, Article 1.03.C.6. Delete this article in its entirety.

- c. Page 8, Article 03.C.9.b. Replace the last two sentences of the article with the following “All filler metals shall be classified by AWS with charpy’s at 0 degrees Fahrenheit or lower temperature.”
- d. Page 11, Article 1.04.A. Revise the fourth sentence that reads “The CONTRACTOR shall provide manufacturers’ site visits in accordance with Section 01451 – Quality Control” to read “The manufacturer or Contractor shall pay costs for air transportation, vehicle rental and other ground transportation, lodging, and meals for three representatives of the Owner to attend the pre-manufacturing inspection and all such costs shall be included in the contract price. All flights shall originate and return to San Antonio Airport and shall be Coach Class or better. Hotel accommodations shall be business class. All travel arrangements shall be subject to approval by the Owner.”
- e. Page 12, Article 1.04.B.1. On the second paragraph, replace the first two sentences to read as follows: “For bidding purposes, assume up to 40 hours will be required for the initial installation of pipe and fittings. Three additional 8-hour site visits will be at the request and discretion of the OWNER.”
- f. Page 12, Article 1.04.B.1.a. Delete the words “and welding”.
- g. Page 13, Article 1.04.B.2. Replace the last three sentences of this article to read as follows: “For bidding purposes, assume up to 40 hours will be required for the initial installation. Three additional 8-hour site visits will be at the request and discretion of the OWNER.”
- h. Page 14, Article 1.04.D.1.e. Delete this article in its entirety.
- i. Page 14, Article 1.04.D.1.f. Delete this article in its entirety.
- j. Page 15, Article 1.04.D.3.b. Delete this article in its entirety.
- k. Page 18, Article 2.02.A.3. Revise the article to read “Minimum elongation in 2-inch gauge length of 21 percent per ASTM A516 for Grade 70 Steel”.
- l. Page 21, Article 2.02.E. Revise the first sentence of this article to read: “Flange bolting material shall be in accordance with ANSI/AWWA C207, of the bolt and nut type or bolt-stud and two nuts permitted for 1 inch and larger.”
- m. Page 23, Article 2.02.Y. Add the following after Article X:

“Y. Harnessed Restrained Joints. Harnesses shall be welded per ANSI/AWWA C200 and C206. Lugs or collars shall be ASTM A283, Grade B or C; or ASTM A36. Tie bolts shall be ASTM A193, Grade B7. Threading shall be ANSI/ASME B1.1, Class 2A fit coarse thread series for 7/8” and smaller and 8-thread series for 1” and larger. Ends shall be chamfered or rounded. Nuts shall be hexagonal, ASTM A194, Grade 2H or better. Threading shall be as specified for tie bolts, except Class 2B fit, with ANSI/ASME B.18.2.2 dimensions. Flat washers shall be hardened steel, ASTM A325.”

n. Page 29, Article 3.01.G. Replace the article in its entirety as follows:

“Long term Exposure: Pipe shall not be exposed for longer periods than what is recommended by the polyurethane coating manufacturer. For exposure longer than the recommended period, pipe shall be covered with plastic sheeting, canvas, UV blocking material, or other method recommended by the polyurethane manufacturer and approved by the OWNER. Clear plastic sheets are not acceptable. Areas of coating that display UV degradation shall be repaired or replaced to the satisfaction of the OWNER at the sole cost of the CONTRACTOR.”

7. Section 02572 – STEEL PIPE FABRICATED SPECIALS.

- a. Page 5, Article 2.03.B. Delete the sentence that reads “the thickness shown on the Drawings, or the following, whichever is thicker”.
- b. Page 6, Article 2.03.B. Delete the table in its entirety.

8. Section 02704 – PIPELINE PRESSURE AND LEAKAGE TESTING.

- a. Page 1, Schedule 02704-S02. Replace the Plant Piping Test Pressure Schedule in its entirety with the following:

Piping Designation	Test Pressure	Design (Working) Pressure
	psig	psig
Twin Oaks West PS Piping Upstream of Pumps	187.5	150
Twin Oaks West PS Piping Downstream of Pumps and up to Ball Valve (including Ball Valve)	300	300
Twin Oaks West PS Piping Downstream of Ball Valve & Recharge Piping	312.5	250
Twin Oaks West PS Surge Tank 24” Piping & 60” Piping	312.5	250
Twin Oaks West PS Recharge Piping (Lines “A” and “B”)	312.5	250

9. Section 09811 – POLYURETHANE COATING FOR STEEL PIPE.
- a. Page 2, Article 1.03.C.3. Add the following sentence to the end of this article:
- “A color pallette shall also be submitted for Owner’s use in making a color selection for the coating material.”
- b. Page 4, Article 2.01.A.2. Change the minimum dry film thickness from 30 mils to 35 mils.
- c. Page 4, Article 2.01.A.3. Add Lifefast “Durashield 210” to the list of accepted coating materials.
10. Section 11140 – VERTICAL DIFFUSION VANE PUMPS.
- a. Page 6, Article 2-2. On the last paragraph of the article replace the pump manufacturer that reads “Floway” with “Goulds”.
- b. Page 7, Article 2-3. Delete the line for “Lineshaft Sleeves”.
- c. Page 10, Article 2-4.14. In the last sentence, change the cover plate thickness from 3/16” to 1/2”.
- d. Page 11, Article 2-6.03. In the second sentence, change the words “furnishing the adjustable frequency drive” to “coordinating with the adjustable frequency drive manufacturer”.
11. Section 13500 – Instrumentation and Control System.
- a. Page 2, Article 1-2.04. In the last sentence of the first paragraph delete the sentence that reads “Only approved suppliers, as listed herein, will be accepted”.
- b. Page 3, Article 1-2.04. Prior to the list of PCSI, revise the sentence that reads “The PCSI shall be one of the following:” to read “The recommended PCSI shall be one of the following:”
- c. Page 4, Article 1-2.04. Remove and replace the first paragraph after 4 to read: The listing of specific PCSI organizations above is not all encompassing and does not imply acceptance of their products and capabilities that do not meet the specified ratings, features and functions required herein.

- d. Page 5, Article 1-2.05. Prior to the list of ASP, revise the sentence that reads “Only approved suppliers will be accepted. The following firms have been prequalified by the Owner for this project:” to read “The recommended ASP shall be one of the following:”
- e. Page 5, Article 1-2.05. In the list of recommended ASP, change “Transdyne” to “Kapsch”.
- f. Page 5, Article 1-2.05. Add the following to the list of recommended ASP:

“Prime Controls
815 Office Park Circle
Lewisville, Texas 75057
Attn: Gary McNeil
Phone: 972-221-4849
Email: Sales@prime-controls.com”

- c. Page 16, Article 3-2.e. Change to read “Provide the services of the applications engineer for 24 hours x 7 days telephone consultation and troubleshooting from ASP’s facility through final completion of the project.”
- d. Page 16, Article 3-2.f. Delete paragraph in its entirety.
- e. Page 17, Article 3-2.i. Delete paragraph in its entirety.
- f. Page 21, Article 3-5.03. Change the first sentence to read as follows: “System maintenance training shall be provided to enable Owner’s personnel to perform routine and preventive maintenance, troubleshoot, and repair all hardware furnished with the system; existing HMI computer hardware shall not require system maintenance training.”
- g. Page 23, Article 3-5.05. Change the second paragraph to read as follows, “System programming training shall be provided to Owner’s and Engineer’s personnel. Program training shall cover the topics outlined in the content of classes section below.”
- h. Page 23, Article 3-5.05.01. Change the article to read as follows: “Programmer training shall be conducted in two sessions. The first session shall consist of 40 hours of instruction for 10 students and shall be conducted at Owner’s or Engineer’s facilities within 60 days prior to the commencement of startup and commissioning activities. The second session shall consist of 40 hours of instruction for 10 students and shall

be conducted at Owner's facility within 30 days prior to the commencement of startup and commissioning activities.”

- i. Page 23-24, Article 3-5.05.02. Replace the entire article with the following.

“Programmer training shall include, but not be limited to the following topics:

Section 1: Point Control/Log/Database Building

- Registry Browser application
- Object/Point monitoring, identification and sorting
- Database Editor (DBE)
- Creating Points, digital devices and RTU configuration.
- Generic Device Templates and Generic Devices
- Aspect Training Modules
- Aspect Manager application Training Module,
- Aspect Control Browser application Training Module
- Notification Training Module

Section 2: Alarming & Event Tracking

- Alarm Banner Training Module
- Active Alarm display and acknowledgement
- Event Viewer Training Module
- System event reporting, file archiving and retrieval.

Section 3: Data History

- History Monitor Training Module:
- Modifying historical data, history systems and files.

Section 4: Data Reporting

- Trend Training Module:
- Modifying real-time and historical data on trends.
- Creating real-time and historical trends for use in graphics.
- Creating Launch Trends.
- Reporting Training Module:
- Modifying real-time and historical data on spreadsheets.
Saving and Exporting real-time and historical spreadsheets for use in other systems.

Section 5: DynDraw

- DynDraw Training Module:
- Creating static and dynamic displays for the DynDisplay application

Section 6: System Manager/Security

- System Manager Training Module
- Modifying system role security permissions and individual security permissions.

Section 7: Communication & System Monitor

- Communications Monitor Training Module
- Monitoring data communication, interpreting data errors and understanding PLC data structure.
- Sysmon Monitor Training Module:
- Viewing Server status. Monitoring process status. Starting and stopping processes.

Section 8: Server Administration

- System Administration Training Module
- Server File management, File editing, Server status and Failover Theory.
- Database Configuration Files Training Module
- (csv, txt & xml)
- Dynac® Backup Training Module
- Scheduler Device/Reminder Training Module:
- Scheduling Device commands and reminders.
- Scheduler Training Module:
- Creating and Scheduling Cron Jobs for automatic event and report generation.

Section 9: Miscellaneous

- These items are listed for discussion only and are considered useful tools for System Administrators.
 - Exceed for x-windows applications
 - Putty for remote access to the server
 - WinSCP for moving files
 - Java (installation)
 - VNC for remote access
 - VPN for remote access"

12. Section 15101 – AWWA BUTTERFLY VALVES.

- a. On the Schedule 15101- S01, Page 1. Revise the schedule for BFV-106 through BFV-110, to read "B20" under column 1.040, to read "WN" under column 2.010, to read "Yes" under column 8.010, and to read "Yes" under column 8.020.

13. Section 15108 – AIR VALVES.

- a. Pages 1 through 3. Delete the notation “DRAFT – NOT FOR CONSTRUCTION” in the footer.
 - b. Page 1, Article 2-1. Add the following at the end of Article 2-1: “Air and vacuum valves (ARVR) shall be Vent-O-Mat Series RBX per SAWS Material Standard Specification 29-01.”
 - c. Schedule 15108-S01, Page 1. Revise the schedule for ARV-111, ARV-112, and ARV-113 as follows: to read “ARVR-111, ARVR-112, ARVR-113” under column 1.010, and for each valve to read “ARVR” under column 1.020.
14. Section 16000 – ELECTRICAL – GENERAL PROVISIONS.
- a. Page 5, Article 1.06.C.2. Delete the words “and cables” at the end of this article.
15. Section 16110 – RACEWAYS, BOXES, AND FITTINGS.
- a. Page 7, Article 3.02.B. In the raceway chart, change the location for Type 1 Rigid Galvanized Conduit to “Installed for all exposed locations.” Change the location for Type 2 PVC Coated Rigid Steel Conduit to “Installed in all embedded conduit bends, underground duct bank bends more than 20 degrees, and all conduit stub-ups to a minimum of 6” above finished floor.”
16. Section 16196 – LOW VOLTAGE AC SURGE PROTECTIVE DEVICES (SPDs)
- a. Page 3, Article 2.01.A. Add “Siemens” to the list of Manufacturers.
17. Section 16461 – DISTRIBUTION DRY-TYPE TRANSFORMERS
- a. Page 4, Article 2.01.A. Add “Siemens” to the list of Manufacturers.
18. Section 16470 – PANELBOARDS
- a. Page 3, Article 2.01.A. Add “Siemens” to the list of Manufacturers.
19. Section 16475 – LOW VOLTAGE ENCLOSED CIRCUIT BREAKERS AND DISCONNECT SWITCHES
- a. Page 4, Article 2.01.A. Add “Siemens” to the list of Manufacturers.
20. Section 16481 – LOW VOLTAGE MOTOR CONTROLLERS

Each Respondent is requested to acknowledge receipt of this Addendum No. 3 by his/her signature affixed hereto and to file same as an attachment to his/her proposal.

The undersigned acknowledges receipt of this Addendum No. 3 and the proposal submitted herewith in accordance with the information and stipulation set forth.

Date

Signature of Respondent

END OF ADDENDUM



PROPOSAL CERTIFICATION

Accompanying this proposal is a Bid Bond or Certified or Cashier's Check payable to the Order of the San Antonio Water System for _____ dollars (\$_____), which amount represents five percent (5%) of the total bid price. Said bond or check is to be returned to the bidder unless the proposal is accepted and the bidder fails to execute and file a contract within **10** calendar days after the award of the Contract, in which case the check shall become the property of said San Antonio Water System, and shall be considered as payment for damages due to delay and other inconveniences suffered by said San Antonio Water System due to the failure of the bidder to execute the contract. The San Antonio Water System reserves the right to reject any and all bids.

It is anticipated that the Owner will act on this proposal within **90** calendar days after the bid opening. Upon acceptance and award of the contract to the undersigned by the Owner, the undersigned shall execute standard San Antonio Water System Contract Documents and make Performance and Payment Bonds for the full amount of the contract within **10** calendar days after the award of the Contract to secure proper compliance with the terms and provisions of the contract, to insure and guarantee the work until final completion and acceptance, and the guarantee period stipulated, and to guarantee payment of all lawful claims for labor performed and materials furnished in the fulfillment of the contract.

It is anticipated that the Owner will provide written Authorization to Proceed within **30** days after the award of the Contract.

The work called for in this Contract shall commence on the date indicated in the SAWS written Authorization to Proceed. Under no circumstances shall the work commence prior to the date provided for in the SAWS issued, written Authorization to Proceed. Work shall be completed in full within _____ consecutive calendar days.

The undersigned certifies that the bid prices contained in the proposal have been carefully checked and are submitted as correct and final.

The undersigned further acknowledges compliance with "Wage and Labor Standard Provisions" of this contract and the use of the Blue Book rental rates for establishment of equipment rental rates whether owned or leased during the course of this Contract.

In completing the work contained in this proposal the undersigned certifies that bidder's practices and policies do not discriminate on the grounds of race, color, religion, sex or national origin and that the bidder will affirmatively cooperate in the implementation of these policies and practices.

Signed: _____
Company Representative

Company Name

Address

Please return bidder's check to: _____
Company Name

Address