



**Turtle Creek No. 3 Well Drilling
Solicitation Number: CO-00169
Job No.: 17-6008**

**ADDENDUM 1
4/12/18**

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.

RESPONSES TO QUESTIONS

1. **Question:** Has TCEQ approval been obtained for construction of the new wells? If not, when is it anticipated to be received?

Response: TCEQ Plan Review is in progress. The authorization to construct is expected to be received not later than the 1st week of June 2018.

2. **Question:** Have the ground water district well permits been obtained? If not, when are they anticipated to be received?

Response: Permit requirements are addressed in several sections of the specifications including but not limited to the General Conditions and 331113 1.4 P. In general permits are the Contractor's responsibility. Specific to the permits in question, the Edwards Aquifer Authority Construction Permit and SAWS Well Construction Permit are the responsibility of the Contractor. Contractor is responsible for obtaining the permits and paying associated fees.

Specification 331113 1.4 has been modified in the changes section below to clarify status of permits and responsibilities.

3. **Question:** Construction of these wells will require 24 hour/7 day week operations. Therefore an acoustic sound wall will be required. There are not any bid items for a sound wall and one needs to be added since there are restrictions on the amounts for Bid Items 1 and 2 (10% max of total bid allowed in these items). We would suggest specifying the attached acoustical sound wall 32 ft. tall with unit pricing by the linear foot (base quantity of approx. 800 LF). These are used often on many projects and are very successful for noise abatement for 24 hour operations. The acoustical sound wall contractors can provide a site study and recommendations for where to install the wall for the specific locations.

Response: The Contractor must be in compliance with City of San Antonio noise ordinance. There are noise-sensitive neighbors to the project.

- a) Bid Item has been added
- b) Specification 331113 1.1 B Sound Proofing has been modified below.

4. **Question:** Are there after hours/holiday/weekend inspection costs that the Contractor will have to pay?

Response: There are no additional costs for after hours and weekend inspection by SAWS. See General Condition 8.3 for requirements. .

5. **Question:** Will water be provided for construction supply and if so where will can we get water? A min 3” tap is needed.

Response: A fire hydrant is clearly shown on Drawing C-02 in the lower right-hand corner of the view and requirements are provided in General Conditions 5.24 and 015000 1.4 E.

6. **Question:** The discharge point shown on the drawings (C-02) does not appear suitable for the volume of water that will be discharge on this project (7000 GPM plus). If water is discharged at this location it will likely flood the parking lot and adjacent property. It appears the nearest discharge point would be approximately 1000 ft. NW of this discharge point shown on the drawings at the creek/drainage canal at Datapoint Dr. To access this it will require laying discharge line down the power line easement and crossing the apartment complex driveway OR crossing Datapoint Dr. Please clarify the discharge location for the test pumping water.

Response: Refer to Specification 015000 1.7 and 331113 1.4 X and 331114 3.14.B.2. Contractor is responsible for run off and SWPPP. No sheet flow is allowed. An Erosion/Sedimentation Control and Testing-Water Discharge Plan is a required submittal. There will be the need for a discharge line to transfer water from the wells through storage as required, across the site and across the CPS transmission line ROW without erosion to deliver the water to a concrete drainage channel that runs adjacent to the CPS ROW. Contractor is responsible for BMPs along and at the end of the concrete channel as it transitions to the culverts which lead to Rock Creek. Contractor shall adequately account for all variables in costing Bid Item No. 1 Mobilization/Demobilization, as part of the establishment of other facilities necessary to the start of the work, to ensure runoff is controlled.

7. **Question:** Please clarify that the trees that are to be removed as indicated on the drawings (C-03) can be removed and disposed of offsite. Want to make sure they are not to be relocated to another location.

Response: Yes, per 015000 1.4 G debris and flammable material is to be removed from site at the Contractor’s expense weekly. See C-03 and C-04 for trees to be removed. No trees are to be relocated on or off site.

8. **Question:** The trees that are to be removed as indicated on the drawings (C-03) appear to be the larger oak trees. There are also mesquite trees inside the drilling work areas that are not marked on the plans. These will need to be removed. Please clarify if they can be removed and disposed of off-site.

Response: Per C-03 and lists on C-04, larger oak trees are to remain. Pruning may be required where canopy covers access/egress drive to be coordinated with COSA arborist – tree inspector. Tree permit application has been made and Contractor shall maintain permit onsite per COSA requirements.

9. **Question:** The existing entrance and gate will need to be removed during construction for access of drilling equipment. Please confirm if this is acceptable and temporary fence/gate installed during construction.

Response: Contractor will be allowed to use the existing site entrance and gate. Any and all modifications (and or damage) to existing site infrastructure regarding roads, fences and gates will be required to be returned to original condition at the point of Final Completion of project. Contractor is also responsible for site security per 015000 1.8. If the Contractor prefers to provide a separate construction entrance, then Contractor is responsible for associated permits and fees.

10. **Question:** Can the contract time of 180 days be extended to 240 days?

Response: The contract period of 180 days from Notice to Proceed to a declaration of Final Completion is considered sufficient for a project of this magnitude.

11. **Question:** A portion of the existing fence in the middle of the location will need to be removed. Will this need to be reinstalled once construction is completed?

Response: Any and all modifications to existing site infrastructure regarding roads, fences and gates will be required to be returned to original condition at the point of Final Completion of project except as noted on drawings. See C-03 Drawing change below. The internal fence may be removed within the boundaries of the staging area and will not be required to be replaced.

12. **Question:** Can all weather/crushed limestone access roads be installed between the well locations during construction and if so will they need to be removed once construction is completed?

Response: The Contractor may install compacted, flexible-base material to facilitate access and construction within the site. Removal of material within the boundaries of the site is not required.

13. **Question:** Can the centralizers be carbon steel or do they need to be of the same material as the casing?

Response: Refer to Specifications 331114 Sections 2.1 C and 3.7 G for detail. Conductor casing centralizers must be same material as casing. Production casing centralizers should be of Halliburton-type in compliance with API Specification 10D and may be of material as manufactured (submittal approval required). If shop-manufactured centralizers are welded onto production casing, they must be of same material as casing. All welding on casing must be of same material as casing.

14. **Question:** Can the 36" casing be ASTM A252 Grade B 0.500" wall thickness with a minimum 50,000 yield in lieu of HSLA ASTM A606?

Response: No. HSLA- ASTM A606-Type 4 Steel only.

15. **Question:** Can the 30" screen be mill slot or perforated rather than shutter screen?

Response: No

16. **Question:** Can the casing be straight seam weld in lieu of spiral weld?

Response: No

17. **Question:** Please clarify that the borehole into the Edwards will be drilled as a 12.25" pilot hole first, run geophysical logs, then reamed out to 24" (and 34" for the first 100 ft.)? If so, can this pilot hole be drilled at 14.75" diameter?

Response: Yes, 14.75" pilot hole is acceptable.

18. **Question:** Please clarify if the owner and/or engineer will stake the well locations.

Response: The well locations have already been surveyed and coordinates are as follows:

Well 2: N 29°31'19.2170", W 098°33'42.1069"

Well 3: N 29° 31' 14.0351", W 098° 33' 47.4254"

Contractor shall survey in well coordinates and not rely on staking from OWNER. Contractor shall review and approve well locations in the field prior to drilling. See C-02 drawing notes additions below.

19. **Question:** Please clarify how often/phases of work that construction photos are required and if it must be a professional photographer.

Response: See Specification Section 013233 for details.

20. **Question:** Please clarify that the test pump must be line shaft turbine and that a submersible pump is not acceptable.

Response: See Specification Section 331114- 3.15 C. Pumping Equipment. The pumping equipment may be either line-shaft turbine or submersible electric (with variable-frequency drive) as long as it can exercise the requirement of a “variable-speed type” pump as per the specifications. A gate, globe, butterfly, or other type valve may not be used as the primary discharge rate control device.

21. Question: Is the Contractor required to file and maintain all SWPPP for this project?

Response: The SWPPP is the responsibility of the Contractor.

22. Question: The SWBE goal is very high for this project since there will not be much (if any) subcontracting. Can the percentage be lowered?

Response: The 20% SMWB goal will remain, because the goal is aspirational, and SMWB points are not earned on low bids. The following subcontracting opportunities have been utilized on prior well contracts:

- Roadwork
- Pipe Supplier
- Erosion Control
- Fencing
- Video/Photos
- Fuel
- Water Quality testing & analysis
- Cementing
- Screen
- Gravel Pack/Aggregate
- Logging

23. Question: Are temporary field offices required and if so what are the specific requirements?

Response: As per the Specifications 015000 1.9A Temporary field offices may be installed at the Contractor’s expense at the discretion of the Contractor but are not required. All temporary utilities are the responsibility of the Contractor.

CHANGES TO THE SPECIFICATIONS

1. Delete Bid Proposal.
Add Bid Proposal attached.
2. Add the following Supplemental Condition:
Article V – Contract Responsibilities

Section 5.18 WORKING HOURS – Delete the paragraph in its entirety and replace it with the following:

5.18 WORKING HOURS - No Work, with the exception of such items as **well drilling activities**, curing of concrete, maintenance of barricades, etc., will be allowed by the Owner between the hours of 5:00 p.m. and 8:00 a.m. of the following day, unless directed by Owner or requested in writing by Contractor and approved by Owner and the ROW Owner. **During drilling activities, hours of operation may be 24/7 upon request in writing by Contractor and approved by Owner.** In addition to no work being permitted on holidays, no work shall occur on Saturdays or **Sundays** without specific, written permission of the Owner’s representative forty-eight (48) hours in advance of intent to perform Work.

The remaining sections of Article VIII shall remain the same.

3. Revise 012000 Measurement and Basis of Payment as follows:
Move "Part 2: Production Well Construction" to below Item No. 2

4. Revise 012000 Measurement and Basis of Payment as follows:
Add Bid Item 24 as follows and shift (as required) Items 24 – 26 to Items 25 - 27:
Item No. 24 – Sound Proofing
 1. Description - This item shall include all work associated with furnishing, installing, testing and removal of sound proofing material.
 2. Measurement - Measurement of the item "Sound Proofing" will be based upon the number of linear feet of sound proofing installed, tested, and accepted all in accordance with the Contract Documents. (See Section 331113 for details)
 3. Payment – Payment for installing sound proofing shall be at the unit price per linear foot installed as indicated in the Bid Proposal, which price shall constitute full compensation for the completed WORK all in accordance with the Contract Documents. This includes, but is not limited to, all materials tools, labor, equipment, supplies, permits, removal and disposal of waste or excess materials, etc. necessary to have the sound proofing installed, tested, accepted, and ready for use as its intended purpose.

5. 015000 1.4 E Water Service delete the paragraphs and replace with the following:
 1. The Contractor shall provide water service for all temporary office facilities and for general construction operations. SAWS water supply will be utilized from a temporary, metered, fire-hydrant connection. The fire hydrant is located near the easternmost corner of the property (N29.521779° / W098.560743°). No water supply wells may be constructed for temporary water supply service and no newly constructed well shall be used for water supply service.
 2. The Contractor will be responsible for all production and transport costs associated with utilities, including water for drilling operations.
 3. On an emergency basis and with prior written approval, the Contractor will be allowed to haul potable water from a hydrant. The Contractor shall provide the necessary backflow prevention and other fittings, as required by SAWS.

6. *Revise Specification 015000 1.7. A. 1*
Delete the followings paragraph
Erosion and Sedimentation Controls and Discharge of Well Testing Water
Contractor shall furnish all labor, materials, equipment and incidentals as shown, specified, and necessary to complete the work required for compliance with the TPDES Gen. Permit No. TXR150000 – Gen. Permit to Discharge Waste, issued by the Texas Commission on Environmental Quality, March 5, 2013 (to be renewed 3/5/18) and any other related State, County, or local requirements. Any issues regarding the Erosion/ Sedimentation Control and Testing Water Discharge Plan shall be referred to the ENGINEER.

Add the following paragraph
Erosion and Sedimentation Controls and Discharge of Well Testing Water
Contractor shall furnish all labor, materials, equipment and incidentals as shown, specified, and necessary to complete the work required for compliance with the TPDES Gen. Permit No. TXR150000 – Gen. Permit to Discharge Waste, issued by the Texas Commission on Environmental Quality, March 5, 2013 (to be renewed 3/5/18) and any other related State, County, or local requirements. **Contractor is responsible for the SWPPP, associated permit fees, and the Erosion/ Sedimentation Control and Testing Water Discharge Plan. Refer and coordinate this with requirements of 331113 and 331114.**

7. Revise 331113 1.1.B as follows:
Delete the following paragraph
See Section 015000, Paragraph 1.7 (C). Summary: The Contractor shall provide mufflers on equipment and take whatever other steps necessary during drilling, pumping, testing, and all other work incidental thereto to ensure that noise levels conform to any applicable noise ordinances. The Contractor will take necessary measures to limit access to drilling sites to minimize public hazards.

Add the following paragraphs:

The Contractor shall provide mufflers on equipment and take whatever other steps necessary during drilling wells 2 and 3, pumping, testing, and all other work incidental thereto to ensure that noise levels conform to any applicable noise ordinances. The Contractor will take necessary measures to limit access to drilling sites to minimize public hazards.

The Contractor shall install a minimum 24-foot high sound wall constructed with framing and the high level of sound attenuation materials. Contractor shall furnish, install and remove a temporary, acoustical sound wall or acoustical barrier blanket to reduce or absorb the noise during the well construction phase of the project. The acoustical sound wall installed shall meet the following specifications or requirements:

Manufacturer or Supplier: Environmental Noise Control (Texas) or Acoustical Control (Texas). The Contractor shall submit the proposed construction of the sound wall with the highest level of sound reducing blankets or panels for approval by SAWS. If any other manufacturer or supplier is proposed, then the Contractor shall provide the company and acoustical sound wall or blanket panel information, technical specifications for the installation and material(s), company contact information, prior representative well projects and references in writing to the Engineer with the bid submittal.

Acoustical Sound Wall or Blanket Installation:

Height: 24 feet (minimum).

Length: Base bid linear length is specified in the Bid Form.

Strength: Sufficient strength for the project requirements and wind loads.

Duration: As long as required during well drilling, construction and testing with the Contractor test pump equipment, or as specified by the Owner or Engineer.

8. *Revise 331113 1.4 P Permits as follows:*

Delete paragraph:

Permits: The Contractor is responsible for all permits with local, state, and federal regulatory agencies, including any applicable U.S. Army Corps of Engineer permits. However, and in particular, the COSA Tree Permit, the SAWS Well Construction Permits (submitted to SAWS Aquifer Protection and Evaluation Section) and the Edwards Aquifer Authority (EAA) Well Construction Permits will be conducted in cooperation and under supervision of the ENGINEER. Permit applications will be made with the SAN ANTONIO WATER SYSTEM as the applicant. SAWS will waive the fee for the SAWS Well Construction Permit.

Add paragraph:

Permits: **As required**, the Contractor is responsible for all permits with local, state, and federal regulatory agencies, including any applicable U.S. Army Corps of Engineer permits. **Permits include but are not limited to** the SAWS Well Construction Permits (submitted to SAWS Aquifer Protection and Evaluation Section) and the Edwards Aquifer Authority (EAA) Well Construction Permits. **These permit applications shall be submitted for engineers review prior to submittal to the permitting agencies.** Permit applications will be made with the SAN ANTONIO WATER SYSTEM as the applicant. SAWS will waive the fee for the SAWS Well Construction Permit. **The COSA tree permit A/P#2351161 has been obtained and fees paid by SAWS. Any fees required to maintain the Tree Permit beyond the initial permit time will be the responsibility of the Contractor. Contractor is responsible for obtaining and paying associated fees all other permits.**

9. *Revise Specification 331113 1.4 X*

Delete the followings paragraph

Erosion/Sedimentation Control and Testing-Water Discharge Plan: The CONTRACTOR shall submit to the ENGINEER a plan regarding the control of erosion and sedimentation on the entire work site in areas where the contractor has work responsibility. This plan shall conform to the requirements of any storm water Pollution Prevention Planning (SWPPP) as required by TCEQ. In conjunction with this plan the CONTRACTOR shall submit a plan regarding the discharge of well drilling and testing water from the site. The intent of the OWNER is that water produced from the wells during testing operations may be discharged to the existing storm water infrastructure (as storm water) in and adjacent to the project site. The water must be sediment free and be of freshwater quality. The discharged testing water must be conveyed to the entry points of existing storm water infrastructure via-water transfer equipment. No "sheet flow" of testing water is allowed and must not exit SAWS property at any location other than approved by

the ENGINEER. No use of sanitary sewer is allowed. Coordination with adjacent property and Rights of- Way owners is the responsibility of the CONTRACTOR. Testing discharge water-transfer equipment and storm water infrastructure must have the handling capacity of at least 7,000 gallons per minute without flooding of adjacent properties. CONTRACTOR is responsible for installing and maintaining any Best Management Practices (BMPs) and environmental controls necessary to control discharged water until it reaches FEMA-designated flood plain in nearby Rock Creek (to the north of the site). This planning submittal is further described in Section 015000 indicating the locations, dimensions, construction methods, and site restoration methods to be used. The plans will be reviewed and approved by the ENGINEER prior to implementation. This plan shall conform to SAWS requirements, as applicable.

Add the following paragraph

Erosion/Sedimentation Control and Testing-Water Discharge Plan:

The Contractor shall submit to the ENGINEER an Erosion/Sedimentation Control and Testing-Water Discharge Plan.

- 1) The plan shall include and the Contractor is responsible for the control of flooding, erosion and sedimentation.
- 2) The Plan shall include and the Contractor is responsible for installing and maintaining any Best Management Practices (BMPs) and environmental controls necessary to control discharged water until it reaches FEMA-designated flood plain in nearby Rock Creek (to the north of the site). Rock Creek feeds Olmos Creek which is within the San Antonio River drainage basin.
- 3) Appropriate BMPs will be constructed to prevent sediment from leaving the property.
- 4) This plan shall conform to the requirements of the storm water Pollution Prevention Planning (SWPPP) as required by TCEQ.
- 5) This plan shall conform to SAWS requirements, as applicable.
- 6) The water must be sediment free and be of freshwater quality.
- 7) No "sheet flow" of testing water is allowed along the discharge route to Rock Creek and must not exit SAWS property at any location other than approved by the ENGINEER.
- 8) No use of sanitary sewer is allowed.
- 9) The intent of the OWNER is that water produced from the wells during testing operations may be discharged to the existing concrete storm water infrastructure (as storm water) that is located adjacent to the CPS ROW which runs along the project site.
- 10) Testing discharge water-transfer equipment and storm water infrastructure must have the handling capacity of at least 7,000 gallons per minute without flooding of adjacent properties otherwise Contractor shall install BMPs to control water.
- 11) The discharged testing water must be conveyed to the entry points of existing storm water infrastructure via-water transfer equipment.
- 12) Coordination with adjacent property and Rights of- Way owners is the responsibility of the Contractor. Adjacent property owners may include but are not limited to: CPS, Signature Ridge Apartments and Sierra Ranch Apartments.
- 13) Refer and coordinate with requirements of 015000 and 331114.
- 14) The plan will be reviewed and approved by the ENGINEER prior to implementation.

10. Revise 331114 2.1B as follows:

Delete paragraph:

Well Casing and Pump Chamber Liner: The production well casing shall be 36- inch OD with a minimum wall thickness of 0.437 inch. The intermediate-interval production liner shall be 30" OD with a minimum wall thickness of 0.375 inch. All production casing and liner material shall be high-strength, low-alloy (HSLA) steel meeting the requirements of ASTM A606, Type 4. The liner shall be of a shutter screen configuration (Roscoe-Moss Full- Flo or approved equal) with slot opening of 0.25 inch. The well liner shall be assembled in sections of not less than 20 feet in length. Smaller lengths of 5 and 10 feet may be used upon approval of the ENGINEER to accommodate the final well design.

Add paragraph:

Well Casing and Pump Chamber Liner: The production well casing shall be 36- inch OD with a minimum wall thickness of 0.437 inch. The intermediate-interval production liner shall be 30" OD with a minimum wall thickness of 0.375 inch. All production casing and liner material shall be high-strength, low-alloy (HSLA) steel meeting the requirements of ASTM A606, Type 4. The liner shall be of a shutter screen configuration (Roscoe-Moss Full- Flo or approved equal)

with slot opening of **0.125 inch**. The well liner shall be assembled in sections of not less than 20 feet in length. Smaller lengths of 5 and 10 feet may be used upon approval of the ENGINEER to accommodate the final well design.

11. Revise Specification 331114 3.14.B.2.

Delete the following paragraph

The CONTRACTOR shall be responsible for providing an on-site tank or tanks of sufficient size and construction to accommodate development discharge from the well. The purpose of the tank is to minimize area flooding during direct airlifting activities. The tank shall be constructed with baffles to encourage sediment settlement prior to pumping from the tank to the designated discharge point. The CONTRACTOR shall furnish, install, operate, and remove a pump of sufficient size and horsepower to continuously pump stored discharge water as required from the tank(s) to the discharge point. This discharge point shall be designated by the ENGINEER in coordination with CONTRACTOR and OWNER. The discharge point is generally the lowest elevation along the boundaries of the Turtle Creek 3 Pump Station property that discharges to stormwater drainage. Discharge will be at or near the northern corner of the property into the Rock Creek Run/Olmos Creek/San Antonio River drainage basin. Appropriate BMPs will be constructed to prevent sediment from leaving the property. The CONTRACTOR shall furnish and install discharge piping for the pumping unit of sufficient size and length to conduct water to the nearest stormwater drainage or drain as approved by the ENGINEER. The CONTRACTOR shall prevent any site flooding, erosion, or sedimentation off the site which might be caused by the discharge. The CONTRACTOR shall install the discharge pipe to the point of discharge selected by the ENGINEER. Any necessary crossings over the discharge piping shall be constructed and maintained by the CONTRACTOR.

Add the following paragraph

The Contractor shall be responsible for providing an on-site tank or tanks of sufficient size and construction to accommodate development discharge from the well. The purpose of the tank is to minimize area flooding during direct airlifting activities. The tank shall be constructed with baffles to encourage sediment settlement prior to pumping from the tank to the designated discharge point. The Contractor shall furnish, install, operate, and remove a pump of sufficient size and horsepower to continuously pump stored discharge water as required from the tank(s) to the discharge point. This discharge point shall be designated by the ENGINEER in coordination with Contractor and OWNER. The Contractor shall furnish and install discharge piping for the pumping unit of sufficient size and length to conduct water to the nearest existing concrete storm water infrastructure drainage or drain as approved by the ENGINEER. The Contractor shall prevent any site flooding, erosion, or sedimentation off the site or along the discharge route which might be caused by the discharge. Any necessary crossings over the discharge piping shall be constructed and maintained by the Contractor. Refer to and coordinate this activity with requirements of 015000 and 331113.

CHANGES TO THE PLANS

1. G-02 Revise Sheet list as follows

SHEET LIST		
SHEET NO.	DRAWING NO.	DRAWING TITLE
1.	G-01	COVER SHEET
2.	G-02	SHEET LIST AND GENERAL NOTES
3.	C-01	EXISTING UTILITIES AND TEMPORARY FACILITIES SITE PLAN
4.	C-02	TREE PRESERVATION PLAN
5.	C-03	TREE INVENTORY AND NOTES
6.	M-01	WELL CASING DETAILS

2. All sheets: Revise Sheet No. of 6 per above sheet list.
3. C-01 delete sheet
4. C-02 Move "TESTING WATER DISCHARGE AREA (APPROXIMATE LOCATION)" cloud north to the eastern edge of the CPS ROW.
5. C-02 Add notes as follows:
 - a. Sewer control easement R=150' around wells 2 and 3.
 - b. Well 2 coordinates = *N 29°31'19.2170", W 098°33'42.1069"*
 - c. Well 3 coordinates = *N 29° 31' 14.0351", W 098° 33' 47.4254"*
 - d. *Contractor shall review and approve well locations in the field prior to drilling.*
6. C-03 Add note: Internal fence may be removed and not replaced within the boundaries of the staging area.
7. M-01 change "SHUTTER SCREEN 0.25" SLOT" to "SHUTTER SCREEN 0.125" SLOT"

CLARIFICATIONS

1. N/A

END OF ADDENDUM

This Addendum 1 is Thirteen (13) pages in its entirety.

Mary Portillo, P.E.

Stantec TBPE Firm Registration Number F-6324



BID PROPOSAL

PROPOSAL OF _____, corporation,
a partnership consisting of _____,
an individual doing business as _____,

THE SAN ANTONIO WATER SYSTEM:

Pursuant to Instructions and Invitations to Bidders, the undersigned proposes to furnish all labor and materials as specified and perform all work required for the construction of **two (2) Edwards Aquifer – public supply wells and appurtenances**, San Antonio Water System Project Number **PRO-10856** in accordance with the Plans and Specifications for the following prices to wit:

NOTE:

1. The sum of the extended amounts for Part 1, Item 1 (Mobilization/ Demobilization), and Item 2 (Drilling Rig Setup), shall not exceed ten percent (10%) of the bid price for Part 2, Items 3 through 26. **If the percentage exceeds the allowable maximum stated for mobilization/demobilization and drilling rig setup, SAWS reserves the right to cap the amount at the percentage shown and adjust the extension of the bid items accordingly.**
2. Total bid price includes costs for furnishing all tools, equipment, materials, supplies and manufactured articles and furnishing all labor, transportation, and services, including fuel power, water and essential communication and performing all the work, or other operations required for the contract in strict accordance with the contract documents for 2 (two) complete, Edwards Aquifer production, water-supply wells. Any item not specifically called out under each bid item shall be included under a bid item listed that is closely related to a missing item. CONTRACTOR is directed to the Measurement and Payment (Section 012000) of the specifications for a description of each bid item.
3. LS = Lump sum
LF = Linear feet
HSLA = High Strength, Low Alloy
GL = Gallons
Sack = Sacks
HR = Hour
CF = Cubic feet

BID SCHEDULE - UNIT PRICE

Schedule of prices for **TURTLE CREEK NO. 3 - WELL DRILLING** in accordance with the Contract Documents. Bidder must complete entire schedule.

Item	Estimated	Unit	Unit	Extended
No. Description	Quantity	Unit	Price	Amount
PART 1: Project Mobilization				
1. Mobilization/Demobilization (See NOTE above.)	1	LS	\$ _____	\$ _____
2. Drilling Rig Setup (See NOTE above.)	2	EA	\$ _____	\$ _____
PART 2: Production Well Construction				
3. Install 48" Dia. Conductor Casing	160	LF	\$ _____	\$ _____
4. Drill Pilot Borehole – Upper Interval	470	LF	\$ _____	\$ _____
5. Pilot Borehole Geophysical Logging Suite "Run 1"	2	EA	\$ _____	\$ _____
6. Ream Upper Borehole to a Minimum Nominal 42-inch Diameter	470	LF	\$ _____	\$ _____
7. Gyroscopic Alignment/Caliper Survey of Reamed Upper Borehole	2	EA	\$ _____	\$ _____
8. Furnish and Install 36-inch O.D. Casing, HSLA Steel (ASTM A 606, Type 4)	630	LF	\$ _____	\$ _____
9. Furnish and Emplace API Class H Cement with Approved Additives	630	LF	\$ _____	\$ _____
10. Gyroscopic Alignment Survey of Upper Production Casing	2	EA	\$ _____	\$ _____
11. Drill Pilot Borehole – Lwr. Interval	800	LF	\$ _____	\$ _____
12. Pilot Borehole Geophysical Logging Suite "Run 2"	2	EA	\$ _____	\$ _____

BID SCHEDULE - UNIT PRICE (CONTINUED)

Item	Estimated	Unit	Unit	Extended
No. Description	Quantity	Unit	Price	Amount
13. Ream Intermediate Borehole to a Minimum Nominal 34" Diameter	200	LF	\$ _____	\$ _____
14. Ream Lower production liner Interval Borehole to a Minimum, Nominal 24-inch Dia.	600	LF	\$ _____	\$ _____
15. Furnish and Install 30-inch O.D. Liner, HSLA Steel (ASTM A 606, Type 4)	200	LF	\$ _____	\$ _____
16. Furnish and Install 20,000 gallons of 28% Hydrochloric Acid in Production Borehole	2	EA	\$ _____	\$ _____
17. Acidizing in excess of 20,000 gallons 28% Hydrochloric Acid in Production Borehole	1,000	GL	\$ _____	\$ _____
18. Remove and Dispose of Acid Residue	2	EA	\$ _____	\$ _____
19. Constant-Discharge Pumping Test (24-hour)	2	EA	\$ _____	\$ _____
20. Water Quality Sampling and Analyses	2	EA	\$ _____	\$ _____
21. Well Disinfection	2	EA	\$ _____	\$ _____
22. Final Well Color Video Log	2	EA	\$ _____	\$ _____
23. Construct Well Sealing Block, As specified	2	EA	\$ _____	\$ _____
24. Sound Proofing	800	LF	\$ _____	\$ _____
25. Standby Time at the Direction of the ENGINEER (if requested)	100	HR	\$ _____	\$ _____

BID SCHEDULE - UNIT PRICE (CONTINUED)

Item	Estimated	Unit	Unit	Extended
No. Description	Quantity	Unit	Price	Amount
26. Post-Processing of Geophysical Logging Data, (if requested)	2	EA	\$ _____	\$ _____
27. Abandonment of Pilot Borehole (if requested)	1,000	LF	\$ _____	\$ _____
TOTAL BASE BID PRICE (Part 1 + Part 2)			\$ _____	
			(Price in Figures)	

 BIDDER'S OR RESPONDENT'S SIGNATURE

 FIRM'S NAME (TYPE OR PRINT)

 FIRM'S ADDRESS

 FIRM'S PHONE NO. /FAX NO.

 FIRM'S EMAIL ADDRESS

The Contractor herein acknowledges receipt of the following:

Addendum Nos. _____

OWNER RESERVES THE RIGHT TO ACCEPT THE OVERALL MOST RESPONSIVE BID OR PROPOSAL.

BID

The bidder offers to construct the Project in accordance with the Contract Documents for the contract price, and to complete the Project within **180** calendar days after the start date, or until funds are exhausted, whichever comes first, as set forth in the Authorization to Proceed. **The bidder understands and accepts the provisions of the contract Documents relating to liquidated damages of the project if not completed on time.**

Complete the additional requirements of the Bid Proposal which are included on the following pages.