



SAN ANTONIO WATER SYSTEM
Evans PZ 11A Booster Station Improvements Project
SAWS Job No. 13-6003
Solicitation No. B-14-052-MF

ADDENDUM NO. 6
August 8, 2014

TO BIDDER OF RECORD:

The following changes, additions, and/or deletions are hereby made a part of the Contract Documents for the Evans PZ 11A Booster Station Improvements Project, for the San Antonio Water System, San Antonio, Texas, Dated July 2, 2014, as fully and completely as if the same were set forth therein.

PART 1 – TECHNICAL SPECIFICATIONS

- 1. Section 01568 Erosion & Sediment Controls
REPLACE Section 01568 in its entirety with the attached Section. The new Section 01568 includes the Acknowledgement of Pollution Abatement Compliance to be submitted with the Price Proposal.

PART 2 – BIDDING AND CONTRACT DOCUMENTS

- 1. RESPONDENT’S PROPOSAL CHECKLIST
REPLACE this section in its entirety with the revised version attached to this Addendum that corrects the title of the “Pollution Abatement Compliance Form” to read “Acknowledgement of Pollution Abatement Compliance”.

ALL BIDDERS SHALL ACKNOWLEDGE RECEIPT OF ADDENDUM NO. 6 ON THE BID FORM AND BY HIS/HER SIGNATURE AFFIXED HERETO AND TO FILE SAME AS AN ATTCHMENT TO HIS/HER BID. BID FORMS SUBMITTED WITHOUT THIS ACKNOWLEDGEMENT WILL BE CONSIDERED NON-RESPONSIVE.

Mark B Hill

Mark B. Hill, P.E.
Ford Engineering, Inc.
TBPE No. F-1162



ACKNOWLEDGEMENT BY BIDDER

THE UNDERSIGNED ACKNOWLEDGES RECEIPT OF THIS ADDENDUM NO. 6 AND THE BID SUBMITTED HERewith IS IN ACCORDANCE WITH THE INFORMATION AND STIPULATION SET FORTH.

Date

Signature of bidder

Appended hereto and part of Addendum No. 6 is:

- Respondent's Proposal Checklist
- Section 01568 Erosion & Sediment Controls

END OF ADDENDUM NO. 6

RESPONDENT'S PROPOSAL CHECKLIST

Project Name: Evans PZ 11A Booster Station Improvements

SAWS Job No.: 13-6003

SAWS Solicitation Number: B-14-052-MF

ENVELOPE 1 (sealed envelope or box)

- Signed Price Proposal/Acknowledgement of Addendums** (Do not include this Price Proposal within the 7 required copies)
- Signed Proposal Certification Page (PC-1)**
- Bid Bond/Cashier's Check**

ENVELOPE (OR BOX) 2

ORIGINAL PROPOSAL

- Proposal Checklist
- One (1) CD of Original Proposal Packet (*excluding the Price Proposal and Financial Statement*)
- Statement on President's Executive Orders – Page IB 6 or 7
- Good Faith Effort Plan
- Conflict of Interest Questionnaire – Form CIQ
- Financial Statement
- W-9
- Proof of Insurability (Letter from Insurer or Sample Certificate of Insurance)
- Respondent Questionnaire
- Background, Experience, and Qualifications narrative
 - Past Experience
 - References (with contact information provided)
- Proposed Plan, Safety and Quality Program narrative (*including, but not limited to*):
 - OSHA 300
 - OSHA Form 300A
 - TRIR
 - Any OSHA Citations
- Acknowledgement of Pollution Abatement Compliance

Project Name: Evans PZ 11A Booster Station Improvements

SAWS Job No.: 13-6003

SAWS Solicitation Number: B-14-052-MF

PROPOSAL PACKET COPIES -7 (separate sealed envelope or box for all 7 copies)

- Proposal Checklist
- Respondent Questionnaire
- Background, Experience, and Qualifications narrative
 - Past Experience
 - References (with contact information provided)
- Proposed Plan, Safety and Quality Program narrative (*including, but not limited to*):
 - OSHA 300
 - OSHA Form 300A
 - TRIR
 - Any OSHA Citations

I certify that the proposal packet submitted includes the items as indicated above.

Signature

Date

Printed Name

Title

SECTION 01568

EROSION & SEDIMENT CONTROLS

1.00 GENERAL

1.01 SECTION INCLUDES:

- A. Prevention of erosion due to construction activities.
- B. Prevention of sedimentation of waterways, open drainage ways, and storm and sanitary sewers due to construction activities.
- C. Description of erosion and sediment control and other best management practices which shall be utilized during construction activities.
- D. Restoration of areas eroded due to insufficient preventive measures.
- E. Compensation of Owner for fines levied by authorities having jurisdiction due to non-compliance by CONTRACTOR.

1.02 REFERENCES

- A. EPA 832-R-92-005 - Storm Water Management for Construction Activities; U.S. Environmental Protection Agency; current edition.
- B. FHWA (BMP) - Best Management Practices for Erosion and Sediment Control; Federal Highway Administration; current edition.
- C. USDA TR-55 - Urban Hydrology for Small Watersheds; USDA Natural Resources Conservation Service; current edition.
- D. TCEQ Permit 150000

1.03 PERFORMANCE REQUIREMENTS

- A. Comply with all requirements of TCEQ Permit 150000 for work over the Edwards Aquifer Recharge Zone and the U.S. Environmental Protection Agency for erosion and sedimentation control.
- B. Best Management Practices Standard: TCEQ 150000.
- C. Review proposed Erosion and Sedimentation Prevention Plan and modify as necessary and submit periodic inspection reports.
- D. Do not begin clearing, grading, or other work involving disturbance of ground surface cover until applicable permits have been obtained; furnish all documentation required to obtain applicable permits
 - 1. CONTRACTOR will obtain permits required by authority having jurisdiction. Obtain TCEQ Construction Site Notice and Post per TCEQ requirements for Small Construction Site.
 - 2. Owner will withhold payment to CONTRACTOR equivalent to all fines resulting from non-compliance with applicable regulations.
- E. Timing: Put preventive measures in place as soon as possible after disturbance of surface cover and before precipitation occurs.
- F. Storm Water Runoff: Control increased storm water runoff due to disturbance of surface cover due to construction activities for this project.
 - 1. Prevent runoff into storm and sanitary sewer systems, including open drainage channels, in excess of actual capacity or amount allowed by authorities having jurisdiction, whichever is less.

2. Anticipate runoff volume due to the most extreme short term and 24-hour rainfall events that might occur in 2 years.
- G. Erosion On Site: Minimize wind, water, and vehicular erosion of soil on project site due to construction activities for this project.
1. Control movement of sediment and soil from temporary stockpiles of soil.
 2. Prevent development of ruts due to equipment and vehicular traffic.
 3. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no additional cost to Owner.
- H. Erosion Off Site: Prevent erosion of soil and deposition of sediment on other properties caused by water leaving the project site due to construction activities for this project.
1. Prevent windblown soil from leaving the project site.
 2. Prevent tracking of mud onto public roads outside site.
 3. Prevent mud and sediment from flowing onto sidewalks and pavements.
 4. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no additional cost to Owner.
- I. Sedimentation of Waterways On Site: Prevent sedimentation of waterways on the project site, including rivers, streams, lakes, ponds, open drainage ways, storm sewers, and sanitary sewers.
1. If sedimentation occurs, install or correct preventive measures immediately at no additional cost to Owner; remove deposited sediments; comply with requirements of authorities having jurisdiction.
 2. If sediment basins are used as temporary preventive measures, pump dry and remove deposited sediment after each storm.
- J. Sedimentation of Waterways Off Site: Prevent sedimentation of waterways off the project site, including rivers, streams, lakes, ponds, open drainage ways, storm sewers, and sanitary sewers.
1. If sedimentation occurs, install or correct preventive measures immediately at no additional cost to Owner; remove deposited sediments; comply with requirements of authorities having jurisdiction.
- K. Open Water: Prevent standing water that could become stagnant.
- L. Maintenance: Maintain temporary preventive measures until permanent measures have been established.

1.04 SUBMITTALS

A. Erosion and Sedimentation Control Plan:

If CONTRACTOR elects to change plan, submit within 2 weeks after Notice to

1. Proceed.
2. Include:
 - a. Site plan identifying soils and vegetation, existing erosion problems, and areas vulnerable to erosion due to topography, soils, vegetation, or drainage.
 - b. Schedule of temporary preventive measures, in relation to ground disturbing activities.
 - c. Other information required by law.

- d. Format required by law is acceptable, provided any additional information specified is also included.
- B. Certificate: Mill certificate for silt fence fabric attesting that fabric and factory seams comply with specified requirements signed by legally authorized official of manufacturer; indicate actual minimum average roll values; identify fabric by roll identification numbers.
- C. Inspection Reports: Submit report of each inspection; identify each preventive measure and indicate condition, and specify maintenance or repair required and accomplished.
- D. Maintenance Instructions: Provide instructions covering inspection and maintenance for temporary measures that must remain after Substantial Completion.

2.00 PRODUCTS

2.01 MATERIALS

- A. Mulch: Single shredded native wood.
- B. Grass Seed for Temporary Cover: See Landscape Specifications for seed type.
- C. Silt Fence Fabric: Polypropylene geotextile resistant to common soil chemicals, mildew, and insects; non-biodegradable; in longest lengths possible; fabric including seams with the following minimum average roll lengths:
 - 1. Average Opening Size: 30 U.S. Std. Sieve, maximum, when tested in accordance with ASTM D 4751.
 - 2. Permittivity: 0.05 sec^{-1} , minimum, when tested in accordance with ASTM D 4491.
 - 3. Ultraviolet Resistance: Retaining at least 70 percent of tensile strength, when tested in accordance with ASTM D 4355 after 500 hours exposure.
 - 4. Tensile Strength: 100 lb-f, minimum, in cross-machine direction; 124 lb-f, minimum, in machine direction; when tested in accordance with ASTM D 4632.
 - 5. Elongation: 15 to 30 percent, when tested in accordance with ASTM D 4632.
 - 6. Tear Strength: 55 lb-f, minimum, when tested in accordance with ASTM D 4533.
 - 7. Color: Manufacturer's standard, with embedment and fastener lines preprinted.
- D. Silt Fence Posts: One of the following, minimum 5 feet long:
 - 1. Steel U- or T-section, with minimum mass of 1.33 lb. per linear foot.

3.00 EXECUTION

3.01 EXAMINATION

- A. Examine site and identify existing features that contribute to erosion resistance; maintain such existing features to greatest extent possible.

3.02 PREPARATION

- A. No clearing and grubbing or rough cutting shall be permitted until erosion and sediment control systems are in place with the exception of site work, as submitted to and accepted by the Engineer, to allow soil testing and surveying.
- B. Schedule work so that soil surfaces are left exposed for the minimum amount of time.
- C. Equipment and vehicles shall be prohibited by the CONTRACTOR from maneuvering on areas outside of project limits, or dedicated rights-of-way and easements for construction. Damage caused by construction traffic to erosion and sediment control systems shall be repaired immediately by the CONTRACTOR.

3.03 SCOPE OF PREVENTIVE MEASURES

- A. In all cases, if permanent erosion resistant measures have been installed temporary preventive measures are not required.
- B. Construction Entrances: Traffic-bearing aggregate surface.
 - 1. Width: As required or indicated on the Drawings; 20 feet, minimum.
 - 2. Length: As required or indicated on the Drawings; 50 feet, minimum.
 - 3. Provide at each construction entrance from public right-of-way.
 - 4. Where necessary to prevent tracking of mud onto right-of-way, provide wheel washing area out of direct traffic lane, with drain into sediment trap or basin.
- C. Linear Sediment Barriers: Made of silt fences.
 - 1. Provide linear sediment barriers:
 - a. Along downhill perimeter edge of disturbed areas, including soil stockpiles.
- D. Soil Stockpiles: Protect using one of the following measures:
 - 1. Cover with polyethylene film, secured by placing soil on outer edges.
 - 2. Cover with mulch at least 4 inches thickness of pine needles, sawdust, bark, wood chips, or shredded leaves, or 6 inches of straw or hay.
 - 3. The CONTRACTOR shall be responsible for collecting, storing, hauling, and disposing of spoil, silt, and waste materials as specified in this or other Specifications and in compliance with applicable federal, state, and local rules and regulations.
- E. Temporary Seeding: Use where temporary vegetated cover is required.
- F. Other Best Management Practices (BMPs):
 - 1. As required or indicated on the Drawings.
 - 2. CONTRACTOR shall implement other BMPs, at no additional cost to the Owner, as required for erosion and sediment controls whether indicated in the Drawings or listed in the Specifications or not.

3.04 INSTALLATION

- A. Silt Fences:
 - 1. Store and handle fabric in accordance with ASTM D 4873.
 - 2. Where slope gradient is less than 3:1 or barriers will be in place less than 6 months, use nominal 16 inch high barriers with minimum 36 inch long posts spaced at 6 feet maximum, with fabric embedded at least 4 inches in ground.
 - 3. Where slope gradient is steeper than 3:1 or barriers will be in place over 6 months, use nominal 28 inch high barriers, minimum 48 inch long posts spaced at 6 feet maximum, with fabric embedded at least 6 inches in ground.
 - 4. Where slope gradient is steeper than 3:1 and vertical height of slope between barriers is more than 20 feet, use nominal 32 inch high barriers with woven wire reinforcement and steel posts spaced at 4 feet maximum, with fabric embedded at least 6 inches in ground.
 - 5. Install with top of fabric at nominal height and embedment indicated on Drawings.
 - 6. Embed bottom of fabric in a trench on the upslope side of fence, with 2 inches of fabric laid flat on bottom of trench facing upslope; backfill trench and compact.

7. Do not splice fabric width; minimize splices in fabric length; splice at post only, overlapping at least 18 inches, with extra post.
8. Fasten fabric to steel posts using wire, nylon cord, or integral pockets.
9. Wherever runoff will flow around end of barrier or over the top, provide temporary splash pad or other outlet protection; at such outlets in the run of the barrier, make barrier not more than 12 inches high with post spacing not more than 4 feet.

B. Temporary Seeding:

1. Seeding shall be by hydromulch method per the Landscape Specifications. Do not install seed where future sod is to be installed.
2. When surface soil has been sealed by rainfall or consists of smooth undisturbed cut slopes, and conventional or manual seeding is to be used, prepare seedbed by scarifying sufficiently to allow seed to lodge and germinate.
3. If temporary mulching was used on planting area but not removed, apply nitrogen fertilizer at 1 pound per 1,000 sq. ft.
4. Irrigate as required to thoroughly wet soil to depth that will ensure germination, without causing runoff or erosion.
5. Repeat irrigation as required until grass is established.

3.05 MAINTENANCE

- A. Inspect preventive measures weekly, within 24 hours after the end of any storm that produces 0.5 inches or more rainfall at the project site, and daily during prolonged rainfall.
- B. Repair deficiencies immediately.
- C. Silt Fences:
 1. Promptly replace fabric that deteriorates unless need for fence has passed.
 2. Remove silt deposits that exceed one-third of the height of the fence.
 3. Repair fences that are undercut by runoff or otherwise damaged, whether by runoff or other causes.
- D. Clean out temporary sediment control structures weekly and relocate soil on site.
- E. Place sediment in appropriate locations on site; do not remove from site.

3.06 DUST CONTROL

- A. Implement dust control methods to control dust creation and movement on construction sites and roads and to prevent airborne sediment from reaching receiving streams or storm water conveyance systems, to reduce on-site and off-site damage, to prevent health hazards, and to improve traffic safety.
- B. Control blowing dust by using one or more of the following methods:
 1. Mulches bound with chemical binders.
 2. Temporary vegetative cover.
 3. Spray-on adhesives on mineral soils when not used by traffic.
 4. Tillage to roughen surface and bring clods to the surface.
 5. Irrigation by water sprinkling.
 6. Barriers using solid board fences, snow fences, burlap fences, crate walls, bales of hay, or similar materials.

- C. Implement dust control methods immediately whenever dust can be observed blowing on the project site.

3.07 KEEPING STREETS CLEAN

- A. Keep streets clean of construction debris and mud carried by construction vehicles and equipment. Where necessary to keep the streets clean, install stabilized construction exits at construction, staging, storage, and disposal areas. A vehicle/equipment wash area (stabilized with coarse aggregate) may be installed adjacent to the stabilized construction exit, as needed. Release wash water into a drainage swale or inlet protected by erosion and sediment control measures.
- B. In addition to stabilized construction exits, shovel or sweep the pavement to the extent necessary to keep the street clean. Water hosing or sweeping of debris and mud off of the street into adjacent areas is not allowed.

3.08 EQUIPMENT MAINTENANCE AND REPAIR

- A. Confine maintenance and repair of construction machinery and equipment to areas specifically designated for that purpose. Locate such areas so that oils, gasoline, grease, solvents, and other potential pollutants cannot be washed directly into receiving streams or storm water conveyance systems. Provide these areas with adequate waste disposal receptacles for liquid as well as solid waste. Clean and inspect maintenance areas daily.
- B. On a construction site where designated equipment maintenance areas are not feasible, take precautions during each individual repair or maintenance operation to prevent potential pollutants from washing into streams or conveyance systems. Provide temporary waste disposal receptacles.

3.09 WASHING AREAS

- A. Vehicles such as concrete delivery trucks or dump trucks and other construction equipment shall not be washed at locations where the runoff will flow directly into a watercourse or storm water conveyance system. Designate special areas for washing vehicles. Locate these areas where the wash water will spread out and evaporate or infiltrate directly into the ground, or where the runoff can be collected in a temporary holding or seepage basin. Beneath wash areas construct a gravel or rock base to minimize mud production.

3.10 SANITARY FACILITIES

- A. Provide the construction sites with adequate portable toilets for workers in accordance with Division 1 "General Requirements," and applicable health regulations.

3.11 STORAGE OF CONSTRUCTION MATERIALS AND CHEMICALS

- A. Isolate sites where chemicals, cements, solvents, paints, or other potential water pollutants are stored in areas where they will not cause runoff pollution.
- B. Store toxic chemicals and materials, such as pesticides, paints, and acids in accordance with manufacturers' guidelines. Protect groundwater resources from leaching by placing a plastic mat, packed clay, tar paper, or other impervious materials on any areas where toxic liquid are to be opened and stored.
- C. Use and store pesticides during construction in accordance with manufacturers' guidelines and with federal, state, and local regulations. Avoid overuse of pesticides and do not store containers in or near flowing streams or storm water conveyance systems.

3.12 WASTE COLLECTION AND DISPOSAL

- A. Do not allow trash or debris to accumulate on site. Pick up trash and debris on a daily basis.

- B. CONTRACTOR shall formulate and implement a plan for the collection and disposal of waste materials on the construction site. In plan, designate locations for trash and waste receptacles and establish a collection schedule. Methods for ultimate disposal of waste shall be specified and carried out in accordance with applicable federal, state, and local health and safety regulations. Make special provisions for the collection and disposal of liquid wastes and toxic or hazardous materials.
- C. Keep receptacles and waste collection areas neat and orderly to the extent possible. Waste shall not be allowed to overflow its container or accumulate from day-to-day. Locate trash collection points where they will least likely be affected by concentrated storm water runoff.

3.13 SITE RESTORATION

- A. All vegetated areas disturbed by the CONTRACTOR shall be restored. At a minimum, disturbed areas shall be seeded per the Landscape Specifications.
- B. Restoration of the site shall occur prior to final completion. The restoration of vegetated areas disturbed by the CONTRACTOR shall be acceptable only after the applied seed has germinated and grown to a minimum height of three inches and uniformly covers the disturbed areas. All areas not meeting this requirement one month prior to the end of the warranty period shall be restored again.

3.14 CLEAN UP

- A. Remove temporary measures after permanent measures have been installed, unless permitted to remain by SAWS COI.
- B. Clean out temporary sediment control structures that are to remain as permanent measures..
- C. Where removal of temporary measures would leave exposed soil, shape surface to an acceptable grade and finish to match adjacent ground surfaces.

