



**SAN ANTONIO WATER SYSTEM
REGIONAL CARRIZO PROJECT
WATER SUPPLY PIPELINE
SAWS Job No. 10-8620-207
Solicitation No. B-12-022-DD**

ADDENDUM NO. 5

May 24, 2012

To Bidder of Record:

This addendum, applicable to work referenced above, is an amendment to the bidding documents 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 in the space provided in submitted copies of the proposal.

Technical Specifications:

1. Remove and replace in its entirety Section 01270 Measurement and Payment with the version attached to this Addendum. Changes are in bold text and have been underlined, see pages 13, 14, & 15.

Questions:

1. Given that the SAWS Regional Carrizo Project Water Supply Pipeline (SAWS Job No. 10-8620-207, Solicitation No. B-12-022-DD) bid opening was delayed from May 17, 2012 to June 1, 2012 (15 days), I am requesting that the cutoff date for bid questions be extended an equal amount of time from May 3, 2012 (Addendum No. 1) to May 18, 2012 (15 days). There is more than adequate time to accept and clarify additional questions that may arise, and more questions may be necessary following the May 16, 2012 Non-Mandatory Site Visit.

Response: See Addendum No. 4.

2. Specification 01330-9, Item 20, a). Regarding charging the Contractor \$2,000 per submittal for resubmittal of shop drawings, is the Engineer willing to work with the Contractor and provide "Approved as Noted" responses or are submittals going to be merely marked "Revise and Resubmit"? Small, minor technicalities can easily force resubmittals to the point where the Contractor is being charged \$2,000 for resubmittals.

Response: It is the Owner's intent to move the project forward as efficiently as practical while still maintaining quality of the components and documentation of what is installed. Submittals that are complete and clear with minor corrections by the Engineer will generally be given the status of "Accepted as Corrected".

3. Specification 01330-9, Item 20, b). Regarding charging the Contractor \$2,000 per submittal requested to be expedited with a 7 day turnaround, why is there additional charge for this? Is the Engineer planning on expending twice as much effort to review the submittal, or does the review merely occur faster?

Response: This specification is a program standard; this price is to cover the cost of additional resources that would be required to complete the review in a short timeframe.

4. Specification 01330-9, Item 20, c). Regarding charging the Contractor \$2,000 per submittal requested to be reviewed after the 50% point of time of the Contract, what is this for? Paving, for example, sometimes does not happen until later in the project, and should not be penalized for submission before it is going to actually occur.

Response: This specification is a program standard; the schedule of when submittals will be provided is established with the construction schedule and schedule of submittals, which will be reviewed and accepted by the Owner.

5. TOC-3 APPENDIX. Language refers to many different entities having Standard Specifications that may affect the project, and that if there is a conflict between these standards and the Project Documents, the most stringent shall apply. Shouldn't the Project Documents govern the Project, as the Engineer should be responsible to check conflicts with other standards during the design phase of the Project?

Response: The Engineer has reviewed the referenced documents and checked for conflicts.

6. Specification 02317-10 and 02317-20. Specification indicates Contractor shall establish existing (original) and final grades along the pipeline alignment, and to verify this. Is the Owner/Engineer going to have the Contractor survey the entire route pre-construction and post-construction to verify this?

Response: Yes, the Contractor is responsible for all surveying and construction staking for the project as specified.

7. Specifications require a test section of pipeline to be installed. It states to install 500 LF of pipe, wait 48 hours, check deflection, remove pipe, and check embedment. Does this really need to happen for a small diameter water line at minimal cover? How is deflection to be checked?

Response: This is required as specified. The method will be determined by the Contractor and pipe manufacturer.

8. Specification 02634-1. Specification requires the pipe supplier qualifications to be submitted with the bid. Can the pipe supplier qualifications be submitted by the Apparent Low Bidder post-bid? The Contractor may not know who the most competitive pipe supplier will be until minutes before the bid cut-off time.

Response: Yes.

9. Specification 02634-12. Specification indicates the position of the pipe shall be verified by instrument control at every joint. Does this mean that the Contractor has to survey each joint of pipe for horizontal and vertical location? If yes, why considering it is a water line?

Response: This is required as specified.

10. Specification 02634-14. Specification indicates the pipe shall be covered with backfill immediately after installation during cooler hours of the day. Does it need to be backfilled immediately, or during cooler hours of the day? If during cooler hours of the day, does that mean the Contractor will be forced to leave trench open and only backfill at night or in the morning?

Response: As a protective measure during cold weather, when there is a freeze warning, no pipe shall be laid unless it can be established that the trench will be backfilled before the end of the day.

11. Specification 02634-14. Specification indicates that deflection of pipe shall be measured at least 72 hours after backfill and shall be measured for deflection at 25-foot intervals. How is the deflection to be measured? Will the Contractor be required to run something through the installed pipe to check deflection somehow? Why?

Response: Deflection testing will only be required if the Owner has concerns with the installation. The method will be determined by the Contractor and pipe manufacturer.

12. Specification 02922-3, 1.06, 4. Specification indicates that the entire right-of-way needs to be mowed and maintained regularly. Will the Contractor be required to perform the mowing and maintenance listed? The project is located in a very remote location, why is mowing and maintaining the right-of-way necessary?

Response: Requirements of the specifications apply.

13. Does the stainless piping require wrapping and/or cathodic protection?

Response: No.

14. Bid Proposal Page BP-4. Bid Proposal states that Mobilization and Preparing Right of Way limited to 15% (10% and 5% respectively).01270-15 Measurement and Payment. Specifications state that Mobilization and Preparing Right of Way limited to 10% (6% and 4% respectively). Specification also states "A BID WITH SAID SUM THAT EXCEEDS SAID AMOUNT SHALL BE CONSIDERED UNBALANCED AND SHALL BE REJECTED." Does the SAWS PM, Consultant, and Contract Administration Manager believe such a discrepancy could invite a formal bid protest and potential re-bid situation should a conflict between the two stated limits arise?

Response: See attached revised Section 01270 Measurement and Payment.

15. Is a bid item going to be added for the Temp Plug/ Cap for testing?

Response: Temporary plugs/caps for testing are incidental to pipeline testing.

16A. Exhibit B, Good Faith Effort Plan, Item 1 states; “List ALL SUBCONTRACTORS/SUPPLIERS that will be utilized on this project/contract.” Is the Bidder required to identify both SMWB and non-SMWB companies on this form?

Response: Yes, all subcontractors and suppliers, whether SMWB or not, need to be listed. Prime contractors/consultants are asked to report payments made to all subcontractors and suppliers in the online Subcontractor Payment & Utilization Reporting (S.P.U.R.) System, beginning with the first payment the prime receives from SAWS, through the duration of the project.

16B. Would a bidder be considered non responsive if the below was not adhered to?

Response: A prime contractor should make every effort to submit a complete Good Faith Effort Plan by the time a bid is due. However, in the event that: A.) Your firm is the low bidder, and B.) additional Subcontractors/Suppliers need to be added to make the list complete, there is a standard form to fill out and submit to SAWS that documents the addition or deletion of subcontractors that deviates from the original Good Faith Effort Plan. This form is available on the SAWS website:

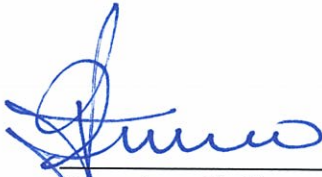
http://www.saws.org/business_center/contractsol/forms/SMWBChangeForm.pdf

17. What are or will be the working pressures and temperatures for each of SDR HDPE piping?

Response: The anticipated maximum working pressure for each DR section along the pipeline is: 136 psi for DR11, 98 psi for DR13.5, and 73 psi for DR17. The design working temperature is 100° F.

ACKNOWLEDGEMENT BY BIDDER

Each bidder is requested to acknowledge receipt of this Addendum No. 5 by his/her signature affixed hereto and to file same as an attachment to his/her bid.



Francisco C. Guerrero, P.E.
Project Engineer



5/24/2012

The undersigned acknowledges receipt of this Addendum No.5 and the bid submitted herewith is in accordance with the information and stipulation set forth.

Date

Signature of Bidder

END OF ADDENDUM

SECTION 01270

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

This Section defines the method that shall be used to determine the quantities of work performed, or materials supplied, and establish the basis upon which payment shall be made. Descriptions included in items are provided as a general indication of work required on Bid Items and shown on the Drawings. It shall be understood that the CONTRACTOR is required to complete the installation of this Project in accordance with Contract Documents, whether or not such work is listed herein.

1.02 MEASUREMENT AND PAYMENT

Item No. 1 - Erosion and Sedimentation Controls (Storm Water Pollution Prevention Plan – SW3P)

1. Description – This item shall govern preparation, maintenance and implementation of the SW3P, and complying with Texas Commission on Environmental Quality (TCEQ) regulations; Texas Pollution Discharge Elimination System (TPDES) General Permit requirements (Permit No. TXR150000), and the City of San Antonio Stormwater Compliance with Construction Activity Ordinance 94002 to include submittal and termination of permit notifications.

The CONTRACTOR shall be the operator as defined by TPDES General Permit. The CONTRACTOR shall comply with all TPDES General Permit requirements to include preparation, maintenance, and implementation of the SW3P. The CONTRACTOR shall submit all notifications and pay all associated fees required by the TPDES General Permit. The CONTRACTOR shall provide the OWNER copies of any submitted notifications and associated fee checks.

The CONTRACTOR's temporary control measures shall be installed and maintained throughout the construction contract and coordinated with proposed or existing permanent pollution control features to assure effective and continuous water pollution control throughout the construction and post construction period. The CONTRACTOR shall maintain and inspect the temporary control measures in accordance with the TPDES General Permit requirements. The control measures may include, but not limited to: sediment control fences, inlet protection, baled

hay, rock filter dams, dikes, swales, construction exits, soil retention blanket, sediment traps and basins, or non-structural water pollution controls. The CONTRACTOR is responsible for any type of disastrous event resulting from negligence in providing the appropriate devices to prevent the contamination of storm water sewers and flooding on the roadway and private properties, in an event of a rainstorm. The CONTRACTOR shall provide control measures to prevent or minimize the impact to streams and waterways. This SW3P is to be adjusted and updated as the project progresses to meet compliance with permit and ordinance.

CONTRACTOR shall be responsible for the removal and appropriate disposal of any project control measures not incorporated as a permanent control when final stabilization has been obtained on the project.

2. Measurement – SW3P Plan and Execution shall be measured by the lump sum.
3. Payment - The work performed and the materials furnished as prescribed by this item shall be paid for at the contract lump sum price for SW3P Plan and Execution. The amount paid shall not be greater than the contract lump sum price, and shall be paid as follows:
 - a. When the plan has been completed, accepted, and provided to the OWNER, 10% of the lump sum price shall be paid.
 - b. Upon initial installation of control devices required by the plan, up to 20% of the lump sum price shall be eligible for payment.
 - c. As approved for payment by the Inspector monthly and until removal, up to 50% of the lump sum price shall be eligible for payment. Payments shall be monthly in approximate equal amounts based on the number of months remaining in the contract after completed and accepted initial installation indicated above.
 - d. When control devices have been removed after the completion of all work and in accordance with specifications, and required documentation and records are filed up to 90% of the lump sum price shall be eligible for payment.
 - e. When the required notice of termination has been filed with the TCEQ, 100% of the lump sum price shall be paid.

Item No. 2 - Restrained Water Main

1. Description - The CONTRACTOR shall provide all labor, supervision, tools, equipment, and materials necessary to restrain the joints of water main and make the restrained water main (carrier pipe) complete and operable. This shall include, but not be limited to acquisition of pipe with inherent restraint systems that comply with appropriate sections of these Specifications, transportation of the pipe to the site, unloading, excavation of the trench, dewatering, placement of bedding material, lowering and fusing/joining of the pipe in the trench, backfilling, compaction, site restoration, and hauling and disposal of surplus excavated material.
2. Measurement - Restrained water main shall be measured by the horizontal linear foot, as shown on the plan stationing, for each size and type as follows:
 - a. From the centerline intersection of runs and branches of tees to the end of the valve of a dead end run.
 - b. Between the centerline intersection of runs and branches of tees. Where the branch is plugged for future connection, the measurement shall include the horizontal length, as shown on the plan stationing, of the branch or branches of the fitting.
 - c. The measurement of each line of pipe shall be continuous and shall include the horizontal lengths, as shown on the plan stationing, of all fittings and valves between the ends, except that the horizontal length of reducers shall be divided equally between the connected pipe sizes.
3. Payment - Payment for water main installed shall be made at the unit price bid per horizontal linear foot of pipe as specified, as shown on the plan stationing, for the various sizes installed by the open cut method. Payments shall be made based on 85% of the linear foot bid price after installation of the water main and submittal of associated mil certificates and shop testing information for the pipe installed. Of the remainder, 10% shall be payable upon successful completion of the hydrostatic test, and the remaining 5% shall be payable upon CONTRACTORS demonstration of compliance with requirements of these specifications and SAWS for Record Drawings as approved by the OWNER.

Item No. 3 - Restrained Water Main Installed in Casing Pipe

1. Description - This item consists of furnishing restrained water main of the size and type shown on the Drawings and as specified, and providing all

materials, tools, equipment, labor, dewatering, and supervision necessary to install restrained water main in casing pipe, including spacers, CLSM, and casing end seal, complete and operable.

2. Measurement - Restrained water main installed in casing pipe shall be measured by the horizontal linear foot, as shown on the plan stationing, for each size and type. It shall be measured along the centerline of the casing pipe from the beginning of the casing pipe to the end of the casing pipe.
3. Payment - Payment shall be made at the unit bid price per horizontal linear foot of pipe as specified, as shown on the plan stationing, for restrained water main installed in casing pipe for the various sizes and types shown. Payments shall be made based on 85% of the linear foot bid price after installation of the water main and submittal of associated mil certificates and shop testing information for the pipe installed. Of the remainder, 5% shall be payable upon CONTRACTORS demonstration of compliance with requirements of these specifications and SAWS for Record Drawings as approved by the OWNER, and the remaining 10% shall be payable upon successful completion of the hydrostatic test.

Item No. 4 - Jacking or Boring Casing for Carrier Pipe

1. Description - This item includes all work associated with furnishing and installing casing pipe by the methods of jacking or boring as specified and shown on the Drawings. The work includes providing all materials, labor, supervision, equipment, tools, dewatering, steel casing, and all other incidentals necessary to complete the work in place and restore the site to its original condition. This item does not include installation of the carrier pipe into the casing.
2. Measurement - Quantities for jacking or boring casing shall be determined by the horizontal linear foot, as shown on the plan stationing, for the size and type shown on the Drawings, as measured from the face of the jacking pit to the face of the receiving pit.
3. Payment - Payment shall be made at the unit bid price per horizontal linear foot of casing pipe as specified, as shown on the plan stationing, for restrained water main installed in casing pipe for the various sizes and types shown. Payments shall be made based on 85% of the linear foot bid price after installation of the casing and submittal of associated mil certificates and shop testing information for the casing installed. Of the remainder, 15% shall be payable upon CONTRACTORS demonstration of compliance with requirements of these specifications and SAWS for Record Drawings as approved by the OWNER.

Item No. 5 - Trench Excavation Safety Protection (All Depths)

1. Description - This item shall govern designing by professional engineer in the state of Texas, furnishing, and installation of all trench excavation safety protection systems to be utilized in the project for all depths. Such work shall include sloping, sheeting, trench boxes or trench shields, sheet piling, cribbing, bracing, shoring, and temporary pumping or diversion and recapture of storm water to provide adequate drainage. The work shall also include any over excavation and additional backfill necessary to accommodate the trench protection system, as well as any jacking or removal of jacks and trench supports after completion.
2. Measurement - Trench excavation safety protection shall be measured by the horizontal linear foot along the centerline of the pipeline.
3. Payment - Payment for trench excavation safety protection shall be made at the contract unit price per horizontal linear foot regardless of the depth of trench.

Item No. 6 – Isolation Butterfly Valves

1. Description - This item shall consist of installing butterfly valves inside valve vaults of the size and type shown on the Drawings or as specified and providing all materials, tools, equipment, labor, and supervision necessary to provide a complete installation capable of supporting the operation of the water system. Such work shall include, but not be limited to excavation, backfill and compaction, dewatering, hauling and disposal of surplus excavated materials, butterfly valve and handwheel operator, concrete valve vault, access manways, stainless steel piping including cement stabilized sand backfill, dismantling joint, stainless steel nipple and ball valve, 4-inch welded outlet and gate valve, HDPE flange adapters and back up rings, aluminum ladder and safety post, and lockable access hatch, as detailed on the construction plans (Isolation Valve Detail HDPE plan sheet).
2. Measurement - Butterfly valve and valve vault installation shall be measured by the unit of each assembly of the various size butterfly valves and valve vaults shown on the Plans.
3. Payment - Payment for this item shall be made at the contract unit price bid for each assembly of the various size butterfly valves and valve operators shown on the Plans and specified. This item shall be paid for at 95% of the unit price until CONTRACTOR's demonstration of compliance with requirements of these specifications and SAWS for Record Drawings as approved by the OWNER.

Item No. 7 - Air Valve Assembly Type 1

1. Description - This item shall consist of the work required to furnish and install air valve assemblies in accordance with the Drawings and Specifications. Such work shall include, but not be limited to excavation, dewatering, installation of the air valve and assembly, stainless steel pipe, HDPE flange adapters and back up rings, lockable access hatch, guard posts, stainless steel vent pipe, valves, concrete vault, concrete support, cement stabilized sand backfill, backfill and compaction, and hauling and disposal of surplus excavated materials, as detailed on the construction plans (Air Valve Assembly Type 1 HDPE plan sheet).
2. Measurement - Air valve assemblies shall be measured by the unit of each such assembly of the various sizes and types installed.
3. Payment - Payment for this item shall be made at the contract unit price bid for each assembly of the various size air valve assemblies shown on the Drawings and specified. This item shall be paid for at 95% of the unit price until CONTRACTORS demonstration of compliance with requirements of these specifications and SAWS for Record Drawings as approved by the OWNER.

Item No. 8 - Pipe Drain Structure

1. Description - This item shall govern the furnishing and installation of pipe drain structures and all associated appurtenances as depicted on the Drawings. Such work shall include, but not be limited to excavation, backfill, compaction, dewatering, reinforced concrete structures, stainless steel pipe and drain piping including cement stabilized sand, guard posts, lockable access hatch, valves, and hauling and disposal of surplus excavated materials, as detailed on the construction plans (Pipe Drain Structure Type 1 HDPE plan sheet).
2. Measurement - Pipe drain structures installation shall be measured by the unit of each assembly shown on the Drawings.
3. Payment – Payment for pipe drain structures shall be made at the unit price bid for each such assembly of the various sizes and types installed. This item shall be paid for at 95% of the unit price until CONTRACTORS demonstration of compliance with requirements of these specifications and SAWS for Record Drawings as approved by the OWNER.

Item No. 9 - Final Closure Assembly

1. Description - The CONTRACTOR shall provide all labor, supervision, tools, equipment, and materials necessary to furnish and install the pipeline closure assembly and all associated appurtenances as depicted on the Drawings. Such work shall include, but not be limited to excavation, cement stabilized sand backfill, compaction, dewatering, blowoff assembly, stainless steel closure assembly, bedding, and hauling and disposal of surplus excavated materials, as detailed on the construction plans.
2. Measurement – Pipeline closure assembly shall be measured by each size and type.
3. Payment - Payment for pipeline closure assembly shall be at the contract unit price for each closure shown on the Drawings.

Item No. 10 - Hydrostatic Testing

1. Description - This item shall govern the hydrostatic testing and flushing of all project water mains, valves, and appurtenances, as specified in Section 02643.
2. Measurement - Hydrostatic testing shall be measured by the lump sum.
3. Payment - Payment for hydrostatic testing shall be made at the contract lump sum price for "Hydrostatic Testing" and shall not be made until entire project water main has been successfully tested and accepted.

Item No. 11 - Restoration and Revegetation

1. Description - This item shall consist of all work required to prepare ground, provide for sowing of seeds, sprigging, mulching with cellulose fiber, or other management practices along and across such areas as are designated on the Drawings and as specified. All areas shall be covered with live grass/vegetation before acceptance.
2. Measurement - Measurement for acceptable land restoration and revegetation, complete in place, shall be made according to the linear foot of pipe that has passed hydrostatic testing and has the associated easement or construction zone area restored and revegetated.
3. Payment - Payment for this item shall be made at the contract unit price bid per linear foot. This item shall be paid for at **95%** of the unit price until CONTRACTORS demonstration of compliance with requirements of

these specifications and SAWS for Record Drawings as approved by the OWNER.

Item No. 12 - Remove and Replace Barbed Wire Fence

1. Description - This item shall consist of all work required to either install or remove and replace fences at locations designated on the Drawings and furnish and install any additional materials or temporary fencing while working in the area as required.
2. Measurement - Accepted work as performed and prescribed by this item shall be measured by the linear foot of fence either installed or removed and replaced. Gates shall not be measured as a separate payment item, but shall be included in the linear foot quantity.
3. Payment - The work performed and the materials furnished as prescribed by this item shall be paid for at the contract unit price per linear foot for "Install Fence" or "Remove and Replace Fence", which price shall be full compensation for removing and reinstalling the existing fence and gates, and for furnishing and installing all additional materials necessary to complete the work, including new gates.

Item No. 13 – Installation and Maintenance of Traffic Management and Controls

1. Description - This item shall consist of all work required to permit, provide, install, move, repair, maintain, clean, and remove upon completion of work, all barricades, signs, cones, lights, and other such type devices and to handle traffic, including deployment of a uniformed police officer if necessary as directed by TxDOT, the County, or the OWNER's Representative.
2. Measurement – Installation and Maintenance of Traffic Management and Controls shall be measured by the lump sum as the work progresses.
3. Payment - Installation and Maintenance of Traffic Management and Controls shall be paid for at the contract lump sum price for the work performed and materials furnished in accordance with this item. The lump sum price shall be full compensation for furnishing all labor, materials, supplies, equipment, and incidentals necessary to complete the work as specified. Payment shall be made on the following basis:
 - a. The total monthly payment for this item shall not exceed 10 percent of the total contract amount due for this item prior to "Final Acceptance."

- b. Payment for this item shall begin with the first payable monthly construction estimate after barricades, signs and traffic handling devices have been installed and construction has begun.
- c. Monthly payment shall be made each succeeding month for this item provided the barricades, signs and traffic handling devices have been installed and maintained until the contract amount for traffic management and controls has been paid unless adjusted by paragraph d.
- d. The quantity under this item shall not exceed the total plan quantity except when additional work is added by an approved field alteration or extra work order. Also when work is suspended for the convenience of TxDOT, the County or SAWS, through no fault of the CONTRACTOR, additional quantity may be paid when approved by field alteration. The quantity under this item shall be decreased when work is removed by an approved field alteration or work order.

Item No. 14 – Tree Protection

1. Description – This item shall govern the materials and work necessary to install, maintain, and remove all tree protection identified on the plans.
2. Measurement – Tree Protection shall be measured by the linear foot.
3. Payment – This item shall be paid for at the contract unit price per linear foot for Tree Protection”. This item shall be paid for at 95% of the unit price until CONTRACTOR has demonstrated establishment of vegetation along pipeline limits of construction and all tree protection has been removed from the project.

Item No. 15 - Concrete Driveway

1. Description - This item shall consist of all work required to install a new concrete driveway. The work includes providing all materials, labor, supervision, equipment, tools, and all other incidentals necessary to complete the work in place, grade and restore the driveway impact area, including culvert and end treatment where applicable.
2. Measurement - Concrete driveway shall be measured by the square foot installed. Limits of measurement for concrete driveways shall be as shown on the drawings.

3. Payment - Payment for concrete driveways shall be made at the contract unit price per square yard installed.

Item No. 16 – Flexible Base Driveway, Flexible Base Road and Flexible Base Road Repair

1. Description - This item shall consist of all work required to install a new flexible base driveway, new flexible base road, or to repair flexible base roads. The work includes providing all materials, labor, supervision, equipment, tools, and all other incidentals necessary to complete the work in place, grade and restore the impacted area, including culvert and end treatment where applicable and as required by Technical Specification 02730.
2. Measurement – Flexible Base Driveway, Flexible Base Road, and Flexible Base Road Repair shall be measured by the square foot installed. Limits of measurement for flexible base driveways, flexible base roads, and flexible base road repair shall be as shown on the drawings.
3. Payment - Payment for flexible base driveways, flexible base roads, and flexible base road repair shall be made at the contract unit price per square yard installed.

Item No. 17 – Pipeline Markers

1. Description - This item shall consist of all work required to install pipeline markers. The work includes providing all materials, labor, supervision, equipment, tools, and all other incidentals necessary to complete the work in place.
2. Measurement – Pipeline Markers shall be measured per each pipeline marker installed at the locations shown on the drawings.
3. Payment - Payment for pipeline markers shall be made at the contract unit price per each installed.

Item No. 18 – Temporary Protective Fencing

1. Description – This item shall govern the materials and work necessary to install, maintain, and remove all temporary protective fencing identified on the construction plans.
2. Measurement – Temporary Protective Fencing shall be measured by the linear foot.

3. Payment – This item shall be paid for at the contract unit price per linear foot for “Temporary Protective Fencing.” This item shall be paid for at 95% of the unit price until CONTRACTOR has removed all temporary protective fencing from the project.

Item No. 19 – Relocate/Reconnect Concrete Water Basin

1. Description - This item shall consist of all work required to remove and relocate an existing concrete water basin located along the pipeline alignment. The work includes providing all materials, labor, supervision, equipment, tools, and all other incidentals necessary to drain the existing basin, disconnect from the well, relocate to new location as directed by SSLGC representative, install a gravel base under the basin’s new location and reconnect the basin to the well.
2. Measurement – Relocate/Reconnect Concrete Water Basin shall be measured per lump sum.
3. Payment - Payment for relocate/reconnect concrete water basin shall be made lump sum.

Item No. 20 – Stainless Steel Bends

1. Description - The CONTRACTOR shall provide all labor, supervision, tools, equipment, and materials necessary to furnish and install the pipeline stainless steel bends and all associated appurtenances as depicted on the Drawings and Technical Specifications. Such work shall include, but not be limited to excavation, backfill (including cement stabilized sand), compaction, dewatering, stainless steel nuts and bolts, bedding, and hauling and disposal of surplus excavated materials, as detailed on the construction plans.
2. Measurement – Pipeline stainless steel bends shall be measured by each size and type.
3. Payment - Payment for pipeline stainless steel bends shall be at the contract unit price for each bend shown on the Drawings.

Item No. 21 – Concrete Retard

1. Description - This item shall consist of all work required to install pipeline concrete retards as shown on the plans along the pipeline. The work includes providing all materials, labor, supervision, equipment, tools, and all other incidentals necessary to complete the work in place.

2. Measurement – Concrete Retards shall be measured per each installed at the locations shown on the drawings.
3. Payment - Payment for pipeline concrete retards shall be made at the contract unit price per each installed.

Item No. 22 – 2-inch Waterline Replacement

1. Description - The CONTRACTOR shall provide all labor, supervision, tools, equipment, and materials necessary to remove and replace the existing 2-inch waterline located across the proposed pipeline alignment and leave it operable. This shall include, but not be limited to, cutting and removing existing pipe, temporarily plugging existing pipe to remain, purchase and installation of replacement pipe and fittings, transportation of the pipe to the site, unloading, excavation and backfilling of the trench.
2. Measurement - 2-inch Waterline Replacement shall be measured by the horizontal linear foot as shown on the plans.
3. Payment - Payment shall be made at the unit bid price per the horizontal linear foot of pipe installed.

Item No. 23 – Additional Pipe Bedding for KOCH Pipeline Crossing

1. Description - This item shall govern the furnishing and placement of additional pipe bedding in accordance with the specifications and as shown on the Drawings.
2. Measurement – Additional pipe bedding shall be measured per linear foot as indicated on the Drawings and Bid Proposal and to the limits shown on the Drawings.
3. Payment - Payment shall be made at the Unit Bid Price per the horizontal linear foot of pipe installed.

Item No. 24 – Filter Fabric

1. Description - This item shall govern the furnishing and placement of filter fabric at locations where subgrade filler is required as determined in the field by the OWNER's Representative in conditions where subgrade is unstable, in accordance with the specifications and details shown on the Drawings.
2. Measurement - Filter Fabric shall be measured per linear foot as detailed on the Drawings and indicated on the bid Proposal

3. Payment - Payment shall be made at the Unit Bid Price per the horizontal linear foot of Filter Fabric installed.

Item No. 25 – Gravel Subgrade

1. Description - The item shall govern the furnishing and placement of Gravel Subgrade at locations determined in the field by the OWNER's Representative in conditions where subgrade is unstable, in accordance with the specifications and details shown on the Drawings.
2. Measurement - Gravel Subgrade shall be measured per linear foot as detailed on the Drawings and indicated on the Bid Proposal.
3. Payment - Payment shall be made at the Unit Bid Price per the horizontal linear foot of Gravel Subgrade installed.

Item No. 26 – Bid Allowance for Road Repairs

1. Description - Bid allowance for work directed by OWNER for county road repairs as required by County Representative in the amount of One Hundred Thousand Dollars and no centers.
2. Measurement - Measurement to be determined at the time of authorization for Bid Allowance for road repairs.
3. Payment - Payment for Bid Allowance shall be made at the measurement determined at the time of authorization for road repair work as authorized by the OWNER.

Item No. 100 – Mobilization

4. Description - This item shall govern the mobilization of personnel, equipment, and supplies at the project site in preparation for the beginning work on contract items and the acquisition of insurance and bonds. Mobilization shall include, but not be limited to setting up the temporary staging and storage area, the movement of equipment, personnel, material, supplies, etc. to the project site, the establishment of temporary offices and other facilities necessary to the start of the work, and restoring/revegetating the temporary staging and storage area.
5. Measurement - Measurement of the item "Mobilization" shall be by the lump sum as the work progresses. "Mobilization" lump sum bid shall be limited to a maximum of **10%** of the adjusted contract amount bid. The adjusted contract amount is defined as the total contract amount less the lump sum bid total for Mobilization and Preparing of Right-of-Way.

6. Payment - Partial payments of the lump sum bid for Mobilization shall be as follows:
 - a. When 1% of the adjusted contract amount for construction items is earned, 25% of the Mobilization portion of this item or 5% of the total contract amount, whichever is less, shall be paid.
 - b. When 5% of the adjusted contract amount for construction items is earned, 50% of the Mobilization component of this item or 10% of total contract amount, whichever is less, shall be paid.
 - c. When 10% of the adjusted contract amount for construction items is earned, 75% of the Mobilization component of this item or 15% of total contract amount, whichever is less, shall be paid.
 - d. When 25% of the adjusted contract amount for construction items is earned, 90% of the Mobilization component of this item or 20% of total contract amount, whichever is less, shall be paid.
 - e. Mobilization payment shall be factored by 50% until all of these submittals have been made: Health and Safety Plan, Quality Control / Quality Assurance Plan, Pre-Construction Video/photography, and Construction Schedule. A factor of 75% shall be applied after submittal and until all of the above submittals are approved.

Item No. 101 - Preparing Right-of-Way

1. Description - This item shall govern preparing the right-of-way for construction operations by removing and disposing of all obstructions from the right-of-way and from designated easements where removal of such obstructions is not otherwise provided for in the Drawings and Specifications. It shall include the furnishing of all materials, equipment, tools, labor, supervision, and incidentals necessary to complete the work.
2. Measurement - Measurement of the item "Preparing Right-of-Way" shall be by the lump sum. "Preparing Right-of-Way" lump sum bid shall be limited to a maximum of 5% of the adjusted contract amount bid. The adjusted contract amount is defined as the total contract amount less the lump sum bid total for Mobilization and Preparing Right-of-Way.
3. Payment - This item shall be paid for at the lump sum price for preparing right-of-way. The lump sum price shall be pro-rated based on the percentage of the length of water main installed compared to the total length of water main in the project. Eligible for payment is determined when excavation is completed.

If the CONTRACTOR bids more than the percentages allotted for this item, payment may be made at the completion of all work. Preparing right-of-way payment shall be factored by 50% until all of these submittals have been made: Health and Safety Plan, Quality Control / Quality Assurance Plan, Pre-Construction Video/photography, and Construction Schedule. A factor of 75% shall be applied after submittal and until all of the above submittals are approved.

THE SUM TOTAL FOR MOBILIZATION (BID ITEM 100) AND PREPARING RIGHT-OF-WAY (BID ITEM 101) SHALL NOT EXCEED 15% OF THE ADJUSTED CONTRACT AMOUNT. A BID WITH SAID SUM THAT EXCEEDS SAID AMOUNT SHALL BE CONSIDERED UNBALANCED AND SHALL BE REJECTED.

PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

- END OF SECTION -