Item # 13

State Participation 2125 (SP2125) Program

Right of Way Division

Date: 3/20/20

SP2125 Program

The State Participation 2125 (SP2125) Program was created due to the new Texas Administrative Code Title 43, Part 1, Chapter 21, Subchapter B, Rule §21.25, "State Participation in the Relocation of Certain Publicly-Owned Utility Facilities" which prescribes the procedures to be taken by the utility to apply for state participation in the relocation of utility facilities and by the department and commission in determining whether all or part of the expense of the relocation of the facility will be reimbursed by the state. This program assists political subdivisons by alleviating financial hardships caused by required utility relocations on TxDOT's transportation projects.

FREQUENTLY ASKED QUESTIONS:

What are the qualifications to take advantage of the program?

- Payment for all or a part of the relocation of the utility facility would not cause the department to exceed $10 million for the relocation of utilities authorized under Section 203.092(a-4) in any fiscal year **AND**
- Utility is a Political Subdivision or owned by a Political Subdivision **AND**
- A financial condition would prevent the utility from being able to pay the cost in full or in part or, if paid at that time, the payment would adversely affect the utility's ability to operate or provide essential services to its customers **AND**
- The utility would not be able to receive a state infrastructure bank loan to finance the cost of the relocation and is otherwise unable to finance that cost. **OR**
- The utility is owned or operated by a political subdivision, that has a population of less than 5,000 and that is located in a county that has been included in at least five presidential disaster declarations in the six-year period preceding the proposed date of the relocation.

Can the Political Subdivision receive the money before installation or adjustment?

- No, this is a reimbursement program.

Are you required to apply for a SIB Loan to qualify for this program?

- No, the financial information required for the SP2125 program is the same financial information required for a SIB loan.

Can the adjustment be eligible to be included in the highway contract?

- Yes, we encourage that the adjustment be performed joint bid to minimize upfront costs by the political subdivision.

Are elective betterment costs eligible for reimbursement?

- No, elective betterments costs are not eligible for reimbursement.

APPLICATION FORM:

ROW-U-SP2125 can be found in the Utility Accommodations Toolkit under "Forms and Publications" → "Utility Forms"

RESOURCES:

TAC Rule §21.25

Senate Bill 1512

Texas Transportation Code Section 203.092

UTILITY ACCOMMODATIONS TOOLKIT:

https://www.txdot.gov/inside-txdot/division/right-of-way/utility-accommodations.html

Go to
www.txdot.gov
↓
Select Inside TxDOT
↓
Select Divisions
↓
Select Right of Way
↓
Utility Accommodations Toolkit

OR

Search Online:
"TxDOT Utility Accommodations Toolkit"

Additional Information:

The SP2125 Program application should be submitted to your local TxDOT district office. The contact information for your local TxDOT district office can be found online at:

www.txdot.gov → Inside TxDOT → Districts

Then use the map or the drop-down list to select your county for specific contact information.

Texas Department of Transportation
Form ROW-U-35
(Rev.10/20)

STANDARD UTILITY AGREEMENT

U Number: 15999 Utility ID: 00001377

District: Austin
Federal Project No.: N/A
ROW CSJ: 0323-01-029
Highway Project Letting Date: May 2021

County: Bastrop
Highway: SH 95
From: LP 230
To: FM 535

This Agreement by and between the State of Texas, acting by and through the Texas Transportation Commission, (**"State"**), and City of Smithville - Water & Wastewater , (**"Utility"**), acting by and through its duly authorized representative, shall be effective on the date of approval and execution by and on behalf of the **State**.

WHEREAS, the **State** has deemed it necessary to make certain highway improvements as designated by the **State** and approved by the Federal Highway Administration within the limits of the highway as indicated above (the **"Highway Project"**);

WHEREAS, the proposed Highway Project will necessitate the adjustment, removal, and/or relocation of certain facilities of the **Utility** as indicated in the following statement of work:

This project qualifies for SP 2125 special funding. Water and wastewater facilities relocation will be included in the TxDOT Roadway contract due to conflicts with proposed roadway improvements. Approx. 5,300 LF of wastewater facilities of various sizes will be relocated from station 402+22 to 435+66. Approx. 6,821 LF of water facilities will be relocated from station 402+22 to 437+74. Forced betterment documentation has been provided to justify the increase in pipe size at some locations. Some of the facilities will be abandoned in place.

; and more specifically as shown in the **Utility's** plans, specifications and estimated costs, which are attached hereto as Attachment "A".

WHEREAS, the **State** will participate in the costs of the adjustment, removal, and relocation of certain facilities to the extent as may be eligible for State and/or Federal participation.

WHEREAS, the **State,** upon receipt of evidence it deems sufficient, acknowledges the **Utility's** interest in certain lands and facilities that entitle it to reimbursement for the adjustment, removal, and relocation of certain of its facilities located upon the lands as indicated in the statement of work above.

NOW, THEREFORE, BE IT AGREED:

The **State** will pay to the **Utility** the costs incurred in adjustment, removal, and relocation of the **Utility's** facilities up to the amount said costs may be eligible for **State** participation.

All conduct under this agreement, including but not limited to the adjustment, removal, and relocation of the facility, the development and reimbursement of costs, any environmental requirements, and retention of records will be in accordance with all applicable federal and state laws, rules and regulations, including, without limitation, the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act, 42 U.S.C. §§ 4601, et seq., the National Environmental Policy Act, 42 U.S.C. §§ 4321, et seq., the Buy America provisions of 23 U.S.C. § 313 and 23 CFR 635.410, as amended, Texas Transportation Code § 223.045, the Utility Relocations, Adjustments, and Reimbursements provisions of 23 CFR 645, Subpart A, and the Utility Accommodation provisions of 23 CFR 645, Subpart B.

The **Utility** shall supply, upon request by the **State**, proof of compliance with the aforementioned laws, rules, regulations, and guidelines prior to the commencement of the adjustment, removal, and relocation of the facility.

The Utility shall not commence any physical work, including without limitation site preparation, on the State's right of way or future right of way, until TxDOT provides the Utility with written authorization to proceed with the physical work upon TxDOT's completion and clearance of its environmental review of the Highway Project. Any such work by the Utility prior to TxDOT's written authorization to proceed will not be eligible for reimbursement and the Utility is responsible for entering any property within the proposed limits of the Highway Project that has not yet been acquired by TxDOT. This written authorization to proceed with the physical work is in addition to the authorization to commence work outlined below. Notwithstanding the foregoing, the provisions of this paragraph are required only when TxDOT has not obtained completion and clearance of its environmental review of the Highway Project prior to the execution of this Agreement by the State and the Utility.

The **Utility** shall comply with the Buy America provisions of 23 U.S.C. § 313, 23 CFR 635.410, as amended, and the Steel and Iron Preference provisions of Texas Transportation Code § 223.045 and, when products that are composed predominately of steel and/or iron are incorporated into the permanent installation of the utility facility, use domestically manufactured products. TxDOT Form 1818 (Material Statement), along with all required attachments, must be submitted, prior to the commencement of the adjustment, removal, and relocation of the facility, as evidence of compliance with the aforementioned provisions. Failure to submit the required documentation or to comply with the Buy America, and Steel and Iron Preference requirements shall result in: (1) the **Utility** becoming ineligible to receive any contract or subcontract made with funds authorized under the Intermodal Surface Transportation Efficiency Act of 1991; (2) the **State** withholding reimbursement for the costs incurred by the **Utility** in the adjustment, removal, and relocation of the **Utility's** facilities; and (3) removal and replacement of the non-compliant products.

The **Utility** agrees to develop relocation or adjustment costs by accumulating actual direct and related indirect costs in accordance with a work order accounting procedure prescribed by the **State**, or may, with the **State's** approval, accumulate actual direct and related indirect costs in accordance with an established accounting procedure developed by the **Utility**. Bills for work hereunder are to be submitted to the **State** not later than one (1) year after completion of the work. Failure to submit the request for final payment, in addition to all supporting documentation, within one (1) year after completion of the work may result in forfeiture of payment for said work.

When requested, the **State** will make intermediate payments at not less than monthly intervals to the **Utility** when properly billed. Such payments will not exceed 90 percent (90%) of the eligible cost as shown in each such billing. Intermediate payments shall not be construed as final payment for any items included in the intermediate payment.

The **State** will, upon satisfactory completion of the adjustment, removal, and/or relocation and upon receipt of final billing prepared in an approved form and manner and accounting for any intermediate payments, make payment in the amount of 90 percent (90%) of the eligible costs as shown in the final billing prior to audit and after such audit shall make an additional final payment totaling the reimbursement amount found eligible for **State** reimbursement.

Alternatively, the **State** agrees to pay the **Utility** an agreed lump sum of $ N/A as supported by the attached estimated costs. The **State** will, upon satisfactory completion of the adjustments, removals, and relocations and upon receipt of a final billing, make payment to the **Utility** in the agreed amount.

Upon execution of this agreement by both parties hereto, the **State** will, by written notice, authorize the **Utility** to perform such work diligently and to conclude said adjustment, removal, and relocation by the stated completion date which is attached hereto in Attachment "C". The completion date shall be extended for delays caused by events outside the **Utility's** control, including an event of Force Majeure, which shall include a strike, war or act of war (whether an actual declaration of war is made or not), insurrection, riot, act of public enemy, accident, fire, flood or other act of God, sabotage, or other events, interference by the **State** or any other party with the **Utility's** ability to proceed with the work, or any other event in which the **Utility** has exercised all due care in the prevention thereof so that the causes of other events are beyond the control and without the fault or negligence of the **Utility**.

This agreement in its entirety consists of the following elements:

Standard Utility Agreement – ROW-U-35;
- Plans, Specifications, and Estimated Costs (Attachment "A");
- Accounting Method (Attachment "B");
- Schedule of Work (Attachment "C");
- Statement Covering Contract Work – ROW-U-48 (Attachment "D");
- Utility Joint Use Agreement – ROW-U-JUA and/or Utility Installation Request – Form 1082 (Attachment "E");
- Eligibility Ratio (Attachment "F");
- Betterment Calculation and Estimate (Attachment "G"); and
- Proof of Property Interest – ROW-U-Affidavit (Attachment "H").

All attachments are included herein as if fully set forth. In the event it is determined that a substantial change from the statement of work contained in this agreement is required, reimbursement therefore shall be limited to costs covered by a modification or amendment of this agreement or a written change or extra work order approved by the **State** and the **Utility**.

This agreement is subject to cancellation by the **State** at any time up to the date that work under this agreement has been authorized, and such cancellation will not create any liability on the part of the **State.** However, the **State** will review and reimburse the **Utility** for eligible costs incurred by the **Utility** in preparation of this Agreement.

The State Auditor may conduct an audit or investigation of any entity receiving funds from the **State** directly under this contract or indirectly through a subcontract under this contract. Acceptance of funds directly under this contract or indirectly through a subcontract under this contract acts as acceptance of the authority of the State Auditor, under the direction of the Legislative Audit Committee, to conduct an audit or investigation in connection with those funds. An entity that is the subject of an audit or investigation must provide the state auditor with access to any information the state auditor considers relevant to the investigation or audit.

The **Utility** by execution of this agreement does not waive any of the rights that the **Utility** may have within the limits of the law.

It is expressly understood that the **Utility** conducts the adjustment, removal, and relocation at its own risk, and that the **State** makes no warranties or representations regarding the existence or location of utilities currently within its right of way.

The signatories to this agreement warrant that each has the authority to enter into this agreement on behalf of the party represented.

UTILITY

Utility: City of Smithville - Water & Wastewater
Name of Utility

By: _____
Authorized Signature

Robert Tamble
Print or Type Name

Title: City Manager

Date: _____

EXECUTION RECOMMENDED:

_____
Director of TP&D (or designee), Austin *District*

THE STATE OF TEXAS

Executed and approved for the Texas Transportation Commission for the purpose and effect of activating and/or carrying out the orders, established policies or work programs heretofore approved and authorized by the Texas Transportation Commission.

By: _____
District Engineer (or designee)

Date: _____

Attachment "A"
Plans, Specifications, and Estimated Costs

All material items within cost estimate that must meet Buy America or Steel and Iron Preference Provision requirements must be indicated with an asterisk (*).

☐ Currently, **we do not have** Buy America required materials planned for this project. In the event that Buy America compliant materials are used during construction on this project, compliance documentation will be provided.

☐ There are non-domestic iron and steel materials in this project that fall under the De Minimus equation. Calculation showing the total cost does not exceed one-tenth of one percent (0.1 %) of the individual utility agreement amount or $2,500.00, whichever is greater is required.

☐ We understand the Buy America Compliance Requirements and will supply the required documentation to TxDOT indicating compliance with this provision. The following documents will be supplied prior to installation of the materials:

1) Form 1818 - Material Statement
2) Material Test Reports or Certifications

Utility Adjustment for TxDOT Project

TXDOT STANDARD SUA ESTIMATE 7/2020

City of Smithville
SH 95
RCSJ: 0323-01-029

Utility ID#: U-0000137
UNUMBER: U15999

The cost estimate items must be sufficiently detailed to provide TxDOT with a reasonable basis for analysis. Items should include appropriate units and unit price for each (See Utility Manual, Chapter 6 Section 2). Applies to All "EA" items

Materials& Labor TO BE REIMBURSED IN TXDOT CONTRACT - JOINT BID

	Line Item / Item Description	Unit	Quantity	$/Unit	Total
	WASTEWATER IMPROVEMENTS				
*	4" PVC DR-21 ASTM D2241 CL 200 PSI WITH 8" STEEL CASING BY OPEN CUT, ALL DEPTHS, UNDER PAVEMENT - FORCE MAIN	LF	55	$140.00	$ 7,700.00
*	4" PVC DR-21 ASTM D2241 CL 200 PSI ALL DEPTHS, ALL TRENCH TYPES-FORCE MAIN	LF	153	$48.00	$ 7,344.00
	6" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT NOT UNDER PAVEMENT	LF	15	$54.00	$ 810.00
	6" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT NOT UNDER PAVEMENT	LF	32	$66.00	$ 2,112.00
	6" PVC DR-26 ASTM D2241 CL 160 PSI 12'-14' CUT NOT UNDER PAVEMENT	LF	21	$78.00	$ 1,638.00
	6" PVC DR-26 ASTM D2241 CL 160 PSI 14'-16' CUT NOT UNDER PAVEMENT	LF	15	$84.00	$ 1,260.00
	6" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT UNDER PAVEMENT	LF	14	$78.00	$ 1,092.00
	6" PVC DR-26 ASTM D2241 CL 160 PSI 10'-12' CUT UNDER PAVEMENT	LF	40	$84.00	$ 3,360.00
	6" PVC DR-26 ASTM D2241 CL 160 PSI 12'-14' CUT UNDER PAVEMENT	LF	46	$90.00	$ 4,140.00
*	6" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT UNDER PAVEMENT WITH 12" STEEL CASING BY OPEN CUT	LF	18	$155.00	$ 2,790.00
*	6" PVC DR-26 ASTM D2241 CL 160 PSI 14'-16' CUT UNDER PAVEMENT WITH 12" STEEL CASING BY OPEN CUT	LF	18	$175.00	$ 3,150.00
*	6" PVC DR-26 ASTM D2241 CL 160 PSI WITH 12" STEEL CASING BY BORE	LF	78	$360.00	$ 28,080.00
	8" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT NOT UNDER PAVEMENT	LF	298	$60.00	$ 17,880.00
	8" PVC DR-26 ASTM D2241 CL 160 PSI 6'-8' CUT NOT UNDER PAVEMENT	LF	429	$66.00	$ 28,314.00
	8" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT NOT UNDER PAVEMENT	LF	237	$78.00	$ 18,486.00
	8" PVC DR-26 ASTM D2241 CL 160 PSI 12'-14' CUT NOT UNDER PAVEMENT	LF	26	$84.00	$ 2,184.00
	8" PVC DR-26 ASTM D2241 CL 160 PSI 6'-8' CUT NOT UNDER PAVEMENT WITH 12" PVC CASING BY OPEN CUT	LF	273	$138.00	$ 37,674.00
	8" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT NOT UNDER PAVEMENT WITH 12" PVC CASING BY OPEN CUT	LF	360	$132.00	$ 47,520.00
	8" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT UNDER PAVEMENT	LF	169	$72.00	$ 12,168.00
	8" PVC DR-26 ASTM D2241 CL 160 PSI 12'-14' CUT UNDER PAVEMENT	LF	199	$102.00	$ 20,298.00
	8" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT UNDER PAVEMENT WITH 12" PVC CASING BY OPEN CUT	LF	40	$144.00	$ 5,760.00
	8" PVC DR-26 ASTM D2241 CL 160 PSI 6'-8' CUT UNDER PAVEMENT WITH 12" PVC CASING BY OPEN CUT	LF	45	$150.00	$ 6,750.00
*	8" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT UNDER PAVEMENT WITH 14" STEEL CASING BY OPEN CUT	LF	18	$192.00	$ 3,456.00
*	8" PVC DR-26 ASTM D2241 CL 160 PSI 6'-8' CUT UNDER PAVEMENT WITH 14" STEEL CASING BY OPEN CUTE	LF	131	$198.00	$ 25,938.00

	Line Item / Item Description	Unit	Quantity	$/Unit	Total
*	8" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT UNDER PAVEMENT WITH 14" STEEL CASING BY OPEN CUT	LF	25	$210.00	$ 5,250.00
*	8" PVC DR-26 ASTM D2241 CL 160 PSI 12'-14' CUT UNDER PAVEMENT WITH 14" STEEL CASING BY OPEN CUT	LF	30	$222.00	$ 6,660.00
*	8" PVC DR-26 ASTM D2241 CL 160 PSI WITH 14" STEEL CASING BY BORE	LF	134	$420.00	$ 56,280.00
	12" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT NOT UNDER PAVEMENT	LF	122	$90.00	$ 10,980.00
	12" PVC DR-26 ASTM D2241 CL 160 PSI 10'-12' CUT NOT UNDER PAVEMENT	LF	564	$102.00	$ 57,528.00
	12" PVC DR-26 ASTM D2241 CL 160 PSI 12'-14' CUT NOT UNDER PAVEMENT	LF	101	$114.00	$ 11,514.00
	12" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT UNDER PAVEMENT	LF	144	$102.00	$ 14,688.00
*	12" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT UNDER PAVEMENT WITH 20" STEEL CASING BY OPEN CUT	LF	25	$246.00	$ 6,150.00
*	12" PVC DR-26 ASTM D2241 CL 160 PSI WITH 20" STEEL CASING BY BORE	LF	348	$540.00	$ 187,920.00
	15" PVC SDR-26 ASTM D3034 12'-14' CUT UNDER PAVEMENT	LF	52	$144.00	$ 7,488.00
	15" PVC SDR-26 ASTM D3034 14'-16' CUT UNDER PAVEMENT	LF	212	$156.00	$ 33,072.00
	20" PVC C900 DR 25 CL 165 PSI 8'-10' CUT NOT UNDER PAVEMENT	LF	28	$180.00	$ 5,040.00
	20" PVC C900 DR 25 CL 165 PSI 10'-12' CUT NOT UNDER PAVEMENT	LF	24	$192.00	$ 4,608.00
	20" PVC C900 DR 25 CL 165 PSI 12'-14' CUT NOT UNDER PAVEMENT	LF	50	$204.00	$ 10,200.00
	20" PVC C900 DR 25 CL 165 PSI 14'-16' CUT NOT UNDER PAVEMENT	LF	56	$216.00	$ 12,096.00
	20" PVC C900 DR 25 CL 165 PSI 16'-18' CUT NOT UNDER PAVEMENT	LF	174	$220.00	$ 38,280.00
*	20" PVC C900 DR 25 CL 165 PSI 14'-16' CUT UNDER PAVEMENT WITH 30" STEEL CASING BY OPEN CUT	LF	18	$475.00	$ 8,550.00
*	20" PVC C900 DR 25 CL 165 PSI 16'-18' CUT UNDER PAVEMENT WITH 30" STEEL CASING BY OPEN CUT	LF	13	$480.00	$ 6,240.00
*	20" PVC C900 DR 25 CL 165 PSI WITH 30" STEEL CASING BY BORE	LF	37	$660.00	$ 24,420.00
*	4" PVC D-26 ASTM D2241 CL 160 PSI ALL DEPTHS, ALL TRENCH TYPES - LONG SERVICE (including DI fittings)	EA	10	$3,600.00	$ 36,000.00
*	4" PVC D-26 ASTM D2241 CL 160 PSI ALL DEPTHS, ALL TRENCH TYPES - LONG SERVICE WITH DEEP SERVICE CONNECTION (including DI fittings)	EA	2	$4,800.00	$ 9,600.00
*	4" PVC D-26 ASTM D2241 CL 160 PSI ALL DEPTHS, ALL TRENCH TYPES - SHORT SERVICE WITH DEEP SERVICE CONNECTION (including DI fittings)	EA	9	$3,360.00	$ 30,240.00
*	4" PVC D-26 ASTM D2241 CL 160 PSI ALL DEPTHS, ALL TRENCH TYPES - SHORT SERVICE WITH DEEP SERVICE CONNECTION (including DI fittings)	EA	1	$4,560.00	$ 4,560.00
*	4" PVC DR-26 ASTM D2241 CL 160 PSI ALL DEPTHS, UNDER PAVEMENT WITH 8" STEEL CASING BY OPEN CUT	LF	216	$135.00	$ 29,160.00
*	4" PVC DR-26 ASTM D2241 CL 160 PSI WITH 8" STEEL CASING BY BORE	LF	352	$336.00	$ 118,272.00
*	4' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING 0-6' DEPTH NOT UNDER PAVEMENT	EA	14	$6,000.00	$ 84,000.00
*	4' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING 0-6' DEPTH NOT UNDER PAVEMENT WITH WATER TIGHT RIM	EA	3	$6,600.00	$ 19,800.00
*	ADDITIONAL DEPTH OF 4' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING NOT UNDER PAVEMENT (VERTICAL FEET)	LF	62	$600.00	$ 37,200.00

	Line Item / Item Description	Unit	Quantity	$/Unit	Total
*	4' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING 0-6' DEPTH UNDER PAVEMENT	EA	6	$6,600.00	$ 39,600.00
*	ADDITIONAL DEPTH OF 4' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING UNDER PAVEMENT (VERTICAL FEET)	LF	24.9	$720.00	$ 17,928.00
*	5' DIA PRE-CAST CONCRETE MANHOLE WITH INTERIOR COATING 0-6' DEPTH NOT UNDER PAVEMENT	EA	3	$9,000.00	$ 27,000.00
*	ADDITIONAL DEPTH OF 5' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING NOT UNDER PAVEMENT (VERTICAL FEET)	LF	20.5	$780.00	$ 15,990.00
*	5' DIA PRE-CAST CONCRETE MANHOLE WITH INTERIOR COATING 0-6' DEPTH UNDER PAVEMENT	EA	3	$9,600.00	$ 28,800.00
*	ADDITIONAL DEPTH OF 5' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING UNDER PAVEMENT (VERTICAL FEET)	EA	21.5	$900.00	$ 19,350.00
*	4' DIA. FINAL MANHOLE RIM ADJUSTMENTS	EA	8	$2,500.00	$ 20,000.00
*	5' DIA. FINAL MANHOLE RIM ADJUSTMENTS	EA	2	$3,000.00	$ 6,000.00
*	TIE IN TO EXISTING LIFT STATION	EA	1	$24,000.00	$ 24,000.00
*	TIE IN EXISTING 3" FORCE MAIN	EA	1	$2,400.00	$ 2,400.00
*	TIE IN EXISTING 4" FORCE MAIN	EA	2	$2,400.00	$ 4,800.00
*	TIE IN EXISTING 6" GRAVITY WASTEWATER	EA	1	$2,400.00	$ 2,400.00
*	TIE IN EXISTING 8" GRAVITY WASTEWATER	EA	2	$3,000.00	$ 6,000.00
*	TIE IN EXISTING 10" GRAVITY WASTEWATER	EA	1	$3,600.00	$ 3,600.00
	TRENCH PROTECTION	LF	4506	$6.00	$ 27,036.00
	ASPHALT PAVEMENT REPAIR	LF	1107	$36.00	$ 39,852.00
	ASPHALT PAVEMENT REPAIR (BORE PITS)	LF	231	$120.00	$ 27,720.00
	GRAVEL PAVEMENT REPAIR (LINES)	LF	230	$12.00	$ 2,760.00
	REMOVALS - EXISTING WASTEWATER LINE - CUT, PLUG, AND ABANDON IN PLACE WITH NO PRESSURE GROUTING	LF	928	$9.00	$ 8,352.00
	REMOVALS - EXISTING 6" AND UNDER WASTEWATER LINE - CUT, PRESSURE GROUT, PLUG AND ABANDON IN PLACE	LF	644	$14.00	$ 9,016.00
	REMOVALS - EXISTING 8" WASTEWATER LINE - CUT, PRESSURE GROUT, PLUG AND ABANDON IN PLACE	LF	2984	$16.00	$ 47,744.00
	REMOVALS - EXISTING 10" WASTEWATER LINE - CUT, PRESSURE GROUT, PLUG AND ABANDON IN PLACE	LF	1738	$18.00	$ 31,284.00
	REMOVALS - REMOVE EXISTING MANHOLES FULL DEPTH	EA	15	$2,400.00	$ 36,000.00
	REMOVALS - REMOVE EXISTING CLEANOUTS FULL DEPTH	EA	6	$1,200.00	$ 7,200.00
	POTHOLING AT WASTEWATER SERVICE TIE IN LOCATIONS	EA	22	$2,400.00	$ 52,800.00
	TEMPORARY 10" WASTEWATER TIE-IN TO PROPSOED 20" AT WWTP	EA	1	$6,000.00	$ 6,000.00
	TEMPORARY 4" WASTEWATER TIE-IN TO PROPOSED 8" WASTEWATER LINE	EA	1	$2,000.00	$ 2,000.00
				SUBTOTAL	**$ 1,681,332.00**
	WATER IMPROVEMENTS				
*	6" C900 DR-18 PVC WATER LINE NOT UNDER PAVEMENT	LF	690	$54.00	$ 37,260.00
*	6" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE NOT UNDER PAVEMENT	LF	100	$66.00	$ 6,600.00
*	6" C900 DR-18 PVC WATER LINE UNDER PAVEMENT	LF	185	$66.00	$ 12,210.00
*	6" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE UNDER PAVEMENT WITH 10" STEEL CASING BY OPEN CUT	LF	86	$160.00	$ 13,760.00
*	6" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE WITH 10" STEEL CASING BY BORE	LF	192	$360.00	$ 69,120.00
*	8" C900 DR-18 PVC WATER LINE NOT UNDER PVMT	LF	47	$66.00	$ 3,102.00
*	8" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE NOT UNDER PAVEMENT	LF	39	$84.00	$ 3,276.00
*	8" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE UNDER PAVEMENT WITH 14" STEEL CASING BY OPEN CUT	LF	16	$200.00	$ 3,200.00

	Line Item / Item Description	Unit	Quantity	$/Unit	Total
*	8" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE WITH 14" STEEL CASING BY BORE	LF	63	$420.00	$ 26,460.00
*	10" C900 DR-18 PVC WATER LINE UNDER PAVEMENT	LF	92	$96.00	$ 8,832.00
*	12" C900 DR-18 PVC WATER LINE NOT UNDER PAVEMENT	LF	3228	$90.00	$ 290,520.00
*	12" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE NOT UNDER PAVEMENT	LF	559	$162.00	$ 90,558.00
*	12" C900 DR-18 PVC WATER LINE NOT UNDER PAVEMENT	LF	391	$102.00	$ 39,882.00
*	12" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE WITH 18" STEEL CASING BY OPEN CUT, ALL TRENCH TYPES	LF	669	$312.00	$ 208,728.00
*	12" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE WITH 20" STEEL CASING BY BORE	LF	285	$540.00	$ 153,900.00
*	6" GATE VALVE	EA	11	$2,400.00	$ 26,400.00
*	8" GATE VALVE	EA	4	$3,000.00	$ 12,000.00
*	10" GATE VALVE	EA	1	$3,600.00	$ 3,600.00
*	12" GATE VALVE	EA	27	$4,200.00	$ 113,400.00
*	FINAL VALVE ADJUSTMENT - 2" GATE VALVES	EA	1	$250.00	$ 250.00
*	FINAL VALVE ADJUSTMENT - 6" GATE VALVES	EA	14	$500.00	$ 7,000.00
*	FINAL VALVE ADJUSTMENT - 10" GATE VALVES	EA	1	$1,000.00	$ 1,000.00
*	FINAL VALVE ADJUSTMENT - 12" GATE VALVES	EA	22	$1,500.00	$ 33,000.00
	20" C900 DR-18 (BLUE) PVC CASING AT MANHOLES BY OPEN CUT	LF	162	$180.00	$ 29,160.00
*	FIRE HYDRANT ASSEMBLY	EA	10	$7,200.00	$ 72,000.00
*	FIRE HYDRANT ASSEMBLY (LONG LEAD)	EA	4	$8,200.00	$ 32,800.00
	TRACER WIRE RISERS	EA	24	$300.00	$ 7,200.00
*	2" COMBINATION AIR RELEASE/VACUUM VALVE	EA	3	$6,000.00	$ 18,000.00
	3/4" LONG SERVICE WITH CONNECTION TO EX 3/4" METER, ALL TRENCH TYPES	EA	2	$3,000.00	$ 6,000.00
	3/4" SHORT SERVICE WITH CONNECTION TO EX 3/4" METER, ALL TRENCH TYPES	EA	3	$1,800.00	$ 5,400.00
	1" LONG SERVICE WITH CONNECTION TO EX 3/4" METER, ALL TRENCH TYPES	EA	9	$2,160.00	$ 19,440.00
	1" SHORT SERVICE WITH CONNECTION TO EX 3/4" METER, ALL TRENCH TYPES	EA	6	$2,160.00	$ 12,960.00
	1" LONG SERVICE WITH NEW 3/4" METER, ALL TRENCH TYPES	EA	2	$3,600.00	$ 7,200.00
	1" SHORT SERVICE WITH NEW 3/4" METER, ALL TRENCH TYPES	EA	4	$3,600.00	$ 14,400.00
	1" LONG SERVICE WITH CONNECTION TO EXISTING 3/4" SERVICE LINE, ALL TRENCH TYPES	EA	1	$2,160.00	$ 2,160.00
*	1" HDPE SDR-9 TUBING, UNDER PAVEMENT WITH 3" STEEL CASING BY OPEN CUT	LF	190	$100.00	$ 19,000.00
*	1" HDPE SDR-9 TUBING WITH 3" STEEL CASING BY BORE	LF	408	$150.00	$ 61,200.00
	2" LONG SERVICE WITH CONNECTION TO EX 1.5" METER, ALL TRENCH TYPES	EA	1	$3,960.00	$ 3,960.00
	2" LONG SERVICE WITH TWO NEW 3/4" METERS, ALL TRENCH TYPES	EA	1	$5,400.00	$ 5,400.00
	2" LONG SERVICE WITH CONNECTION TO EXISTING 2" SERVICE LINE, ALL TRENCH TYPES	EA	1	$4,800.00	$ 4,800.00
	2" SHORT SERVICE WITH CONNECTION TO EX 2" METER, ALL TRENCH TYPES	EA	1	$4,800.00	$ 4,800.00
*	2" HDPE SDR-9 TUBING, UNDER PAVEMENT WITH 4" STEEL CASING BY OPEN CUT	LF	46	$140.00	$ 6,440.00
*	2" HDPE SDR-9 TUBING WITH 4" STEEL CASING BY BORE	LF	112	$180.00	$ 20,160.00
*	2" GALVANIZED STEEL VENT PIPE FOR RAILROAD BORE	EA	4	$2,400.00	$ 9,600.00
*	TIE IN TO EXISTING 2" WATER LINE	EA	2	$2,400.00	$ 4,800.00
*	TIE IN TO EXISTING 6" WATER LINE	EA	8	$3,000.00	$ 24,000.00
*	TIE IN TO EXISTING 8" WATER LINE	EA	3	$3,600.00	$ 10,800.00
*	TIE IN TO EXISTING 12" WATER LINE	EA	2	$4,200.00	$ 8,400.00
	TRENCH PROTECTION	LF	6338	$3.00	$ 19,014.00
	GRAVEL PAVEMENT REPAIR (LINE)	LF	10	$12.00	$ 120.00

	Line Item / Item Description	Unit	Quantity	$/Unit	Total
	ASPHALT PAVEMENT REPAIR (LINES)	LF	1198	$36.00	$ 43,128.00
	ASPHALT PAVEMENT REPAIR (BORE PITS)	LF	243	$120.00	$ 29,160.00
*	CONCRETE PAVEMENT REPAIR (LINES)	LF	132	$120.00	$ 15,840.00
	REMOVALS - EXISTING WATER VALVES	EA	11	$600.00	$ 6,600.00
	REMOVALS - EXISTING METERS AND METER BOXES	EA	8	$900.00	$ 7,200.00
	REMOVALS - EXISTING FIRE HYDRANTS	EA	7	$1,800.00	$ 12,600.00
	REMOVALS - EXISTING WATER LINE - CUT, PLUG AND ABANDON IN PLACE WITH NO PRESSURE GROUTING	LF	1525	$8.00	$ 12,200.00
	REMOVALS - EXISTING 6" AND UNDER WATER LINE - CUT, PRESSURE GROUT, PLUG AND ABANDON IN PLACE	LF	7317	$14.00	$ 102,438.00
	REMOVALS - EXISTING 8" WATER LINE - CUT, PRESSURE GROUT, PLUG AND ABANDON IN PLACE	LF	30	$16.00	$ 480.00
	TEMPORARY - 6" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE	LF	545	$66.00	$ 35,970.00
*	TEMPORARY - UNCASED BORES INCLUDING 6" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE	LF	150	$138.00	$ 20,700.00
*	TEMPORARY - 6" GATE VALVE	EA	2	$2,400.00	$ 4,800.00
*	TEMPORARY - FIRE HYDRANT ASSEMBLY RELOCATIONS	EA	3	$7,200.00	$ 21,600.00
*	TEMPORARY - 6" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE WITH 10" STEEL CASING BY BORE	LF	45	$360.00	$ 16,200.00
*	TEMPORARY - TIE IN TO EXISTING 6" WATER LINE	EA	3	$3,000.00	$ 9,000.00
*	TEMPORARY - 3/4" SERVICE WITH CONNECTION TO EX 3/4" METER, ALL TRENCH TYPES	EA	7	$3,000.00	$ 21,000.00
	TEMPORARY - 1" SERVICE WITH CONNECTION TO EX 1" SERVICE LINE, ALL TRENCH TYPES	EA	1	$3,600.00	$ 3,600.00
				SUBTOTAL	**$ 1,955,788.00**
				SUBTOTAL WASTEWATER	$ 1,681,332.00
				SUBTOTAL WATER	$ 1,955,788.00
				SUBTOTAL W + WW	$ 3,637,120.00

Engineering/Inspection/Survey TO BE REIMBURSED IN TXDOT CONTRACT - JOINT BID (Railroad ROW Coordination)

Line Item / Item Description	Unit	Quantity	$/Unit	Total
Insurance	EA	2	$5,000.00	$ 10,000.00
Survey Work Plan for Survey Monitoring - RPLS	HR	18	$120.00	$ 2,160.00
Survey Work Plan for Survey Monitoring - Technician	HR	18	$90.00	$ 1,620.00
Survey Monitoring - 2 Man Crew Time	HR	400	$135.00	$ 54,000.00
Survey Monitoring - RPLS	HR	40	$120.00	$ 4,800.00
Survey Monitoring - Technician	HR	40	$90.00	$ 3,600.00
Flagging (per Day)	EA	40	$1,500.00	$ 60,000.00
UP Assigned 3rd Party Observer (per Day)	EA	40	$2,000.00	$ 80,000.00
			TOTAL	$216,180.00

Line Item / Item Description	Unit	Quantity	$/Unit	Total
Engineering/Inspection/Administration TO BE REIMBURSED TO:			City of Smithville	
Line Item / Item Description	**Unit**	**Quantity**	**$/Unit**	**Total**
INTERNAL ADMINISTRATION - Cost associated with securing funding for this project				
City Manager	HR	9.5	$98.37	$ 934.52
Public Works Director	HR	3	$84.06	$ 252.18
Grant Administration	HR	579.5	$48.15	$ 27,902.93
			SUBTOTAL	$ 29,089.62
INTERNAL ADMINISTRATION - Costs prior to execution of agreement				
City Manager	HR	73.5	$98.37	$ 7,230.20
Public Works Director	HR	55	$84.06	$ 4,623.30
Utility Personnel	HR	81	$46.69	$ 3,781.89
Clerical	HR	7	$39.64	$ 277.48
Clerical (City Secretary)	HR	24.5	$48.15	$ 1,179.68
Equipment Rate	HR	40	$50.00	$ 2,000.00
			SUBTOTAL	$ 19,092.54
INTERNAL ADMINISTRATION - Estimated Costs				
City Manager	HR	80	$98.37	$ 7,869.60
Clerical (City Secretary)	HR	20	$39.64	$ 792.80
Finance Director	HR	40	$54.50	$ 2,180.00
			SUBTOTAL	$ 10,842.40
INTERNAL INSPECTION - Estimated Costs				
Public Works Director	HR	400	$84.06	$ 33,624.00
Utility Personnel	HR	400	$46.69	$ 18,676.00
			SUBTOTAL	$ 52,300.00
			TOTAL	$ 111,324.56
BEFCO ENGINEERING - Cost documented with INVOICES and / or CHECKS				
Design Engineer / PE	HR	772.5	$120.00	$ 92,700.00
RPLS	HR	66.5	$120.00	$ 7,980.00
Designer/Technician	HR	674.5	$90.00	$ 60,705.00
Two-Man Survey Crew	HR	57	$135.00	$ 7,695.00
Clerical/Administrative	HR	10	$50.00	$ 500.00
Railroad Permit Submissions	EA	4	$15,000.00	$ 60,000.00
			SUBTOTAL	$ 229,580.00
BEFCO ENGINEERING Estimate - Cost documented with INVOICES and / or CHECKS (Estimated Costs)				
Design Engineer / PE (Construction Phase Services)	HR	1000	$120.00	$ 120,000.00
Designer/Technician (Construction)	HR	582	$90.00	$ 52,380.00
Clerical/Administrative (Partial Payments)	HR	20	$50.00	$ 1,000.00
			SUBTOTAL	$ 173,380.00
			TOTAL	$ 402,960.00
			Engineering / Administration / Inspection SUBTOTAL	$ 514,284.56

SUMMARY:

TOTAL PROJECT COST	$ 4,367,584.56
AMOUNT PAYABLE IN TXDOT CONTRACT	$ 3,853,300.00
GROSS REIMBURSABLE TO UTILITY	$ 514,284.56
Utility Internal Costs to be Reimbursed	$ 111,324.56
Utility External Costs to be Reimbursed	$ 402,960.00
AMOUNT DUE TO TXDOT VIA ADVANCE FUNDING AGREEMENT	$ 50,092.90
SALVAGE and or Depreciation CREDIT	$ -
ELIGIBILITY RATIO 100.00% — Ratio Deduction	$ -
BETTERMENT RATIO 1.30% — Ratio Deduction	$ 6,685.70
NET REIMBURSEMENT TO UTILITY	$ 507,598.86

Attachment "B"
Accounting Method

☑ **Actual Cost Method of Accounting**

The utility accumulates cost under a work order accounting procedure prescribed by the Federal or State regulatory body and proposes to request reimbursement for actual direct and related indirect costs.

☐ **Lump Sum Method of Accounting**

Utility proposed to request reimbursement based on an agreed lump sum amount supported by a detailed cost analysis.

Attachment "C"
Schedule of Work

Estimated Start Date: 01/10/2022

(subject to physical work restrictions prior to the issuance
of environmental clearance as required by the provisions of this agreement)

Estimated Duration (days): 360

Estimated Completion Date: 01/09/2023

Attachment "D"
Statement Covering Contract Work

(ROW–U–48)
(ROW–U–48–1, if applicable)

Construction Contract:

☐ Utility performing with their own forces (timesheets will be required at the time of billing).

☑ Utility will use outside forces to perform the adjustment, complete attached ROW-U-48 or ROW-U-48-1 (joint bid).

Engineering Contract:

☐ Utility performing with their own forces (timesheets will be required at the time of billing).

☑ Utility will use consultant contract (continuing contract rate sheets or fee schedule will be required).

☐ TxDOT will procure utility consultant.

STATEMENT COVERING UTILITY CONSTRUCTION CONTRACT WORK
(AS APPEARING IN ESTIMATE)

Texas Department of Transportation

Form ROW-U-48
(Rev. 10/20)
Page 1 of 1

U-Number: 15999 Utility ID: 00001377

ROW CSJ Number: 0323-01-029 District: Austin

County: Bastrop Highway No.: SH 95

Federal Project No.: N/A

I, Robert Tamble, a duly authorized and qualified representative of City of Smithville - Water & Wastewater, hereinafter referred to as **Owner**, am fully cognizant of the facts and make the following statements in respect to work which will or may be done on a contract basis as it appears in the estimate to which this statement is attached.

It is more economical and/or expedient for **Owner** to contract this adjustment, or **Owner** is not adequately staffed or equipped to perform the necessary work on this project with its own forces to the extent as indicated on the estimate.

Procedure to be Used in Contracting Work

☐ A. Solicitation for bids is to be accomplished through open advertising and contract is to be awarded to the lowest qualified bidder who submits a proposal in conformity with the requirements and specifications for the work to be performed. Associated bid tabulations will be provided to the **State**.

☐ B. Solicitation for bids is to be accomplished by circulating to a list of pre-qualified contractors or known qualified contractors and such contract is to be awarded to the lowest qualified bidder who submits a proposal in conformity with the requirements and specifications for the work to be performed. Associated bid tabulations will be provided to the **State**. Such presently known contractors are listed below:

1.
2.
3.
4.
5.

☐ C. The work is to be performed under an existing continuing contract under which certain work is regularly performed for **Owner** and under which the lowest available costs are developed. The existing continuing contract will be made available to the **State** for review at a location mutually acceptable to the **Owner** and the **State**. If only part of the contract work is to be done under an existing contract, give detailed information by attachment hereto.

☐ D. The utility proposes to contract outside the foregoing requirements and therefore evidence in support of its proposal is attached to the estimate in order to obtain the concurrence of the **State**, and the Federal Highway Administration Division Engineer where applicable, prior to taking action thereon (approval of the agreement shall be considered as approval of such proposal).

☑ E. The utility plans and specifications, with the consent of the **State**, will be included in the construction contract awarded by the **State**. In the best interest of both the **State** and the **Owner**, the **Owner** requests the **State** to include the plans and specifications for this work in the general contract for construction of Highway SH 95 in this area, so that the work can be coordinated with the other construction operations; and the construction contract is to be awarded by the **State** to the lowest qualified bidder who submits a proposal in conformity with the requirements and specifications for the work to be performed. If this option is chosen, attach form ROW-U-48-1, the terms of which are incorporated herein by reference.

Signature Date

City Manager
Title

Statement Covering Utility Construction Contract Work – In the State's Highway Construction Contract (As Referenced in Form ROW-U-48, Option E)

Work Responsibilities

A. The **Utility** shall provide the following services under this contract:

i. Responsible for engaging the services of a Texas Registered Professional Engineer to prepare drawings and technical specifications for relocations and adjustments along SH 95 .

ii. Provide the plans and specifications to the State to include in the current planning specifications and estimate package being prepared by representatives of the Texas Department of Transportation's Bastrop Area Office.

iii. Secure all necessary permitting as may be required for the installation of the water & wastewater line.

iv. Arrange and coordinate with the contractor, through the State, materials and equipment testing, rejection of all work not conforming to minimum requirements of the construction contract documents, maintenance of the proposed work area during construction, and the relocation of water & wastewater and connection of services to customers.

v. Advise the State of work that Utility determines should be corrected or rejected.

vi. Arrange, observe, and inspect all acceptance testing and notify the State of the results of these activities.

vii. Provide inspection services for the construction, notify the State of defects and deficiencies in the work, and observe actions of the contractor to correct such defects and deficiencies.

viii. Assume all responsibility for the maintenance of the existing water & wastewater lines during and upon completion of the construction contract.

ix. Ensure all Texas Commission on Environmental Quality and all other regulatory rules, regulations and laws are strictly adhered to.

x. Prepare and submit both a certificate of substantial completion and a list of observed items requiring completion or correction for the relocations and adjustments to the Project Engineer for concurrence.

xi. Coordinate all construction activities performed by Utility's staff for the relocations and adjustments through the Project Engineer.

B. The **State** shall provide the following services under this contract:

i. Combine the water & wastewater relocation and adjustment plans with the plans being prepared for the Project.

ii. Review and approve the final construction plans prior to any construction-related activities. In order to ensure federal and/or state funding eligibility, projects must be authorized by the State prior to advertising for construction.

iii. Advertise for construction bids, issue bid proposals, receive and tabulate the bids, and award and administer the contract for construction of the Project.

iv. Negotiate and administer all field changes and change orders required for the Project. All change orders increasing construction costs for Utility's Project shall be submitted to Utility for review and approval together with an evaluation. Utility agrees to review and either approve or disapprove all change orders within five (5) business days after receipt of such order unless Utility Board's approval is necessary in which case Utility shall bring the item to Utility Board as soon as reasonably possible.

v. Provide overall project management to supervise the day-to-day activities of the construction and monitor the activities of the contractor to promote the timely and efficient completion of the Project in accordance with the approved Plans and Specifications and construction schedule.

vi. Conduct field observations and coordinate with Utility's inspectors and the contractor to cure defects and deficiencies in the construction prior to final acceptance.

vii. Make timely payment to the contractor for work performed in connection with the Project.

viii. Ensure access and permit Utility's inspectors and other authorized representatives to inspect the waterline construction at all times.

ix. Conduct and coordinate final inspection of the Project in the presence of Utility's Engineer and Inspector, transmit final list of items to be completed or repaired and observe contractor correction of same.

x. Maintain job file.

Attachment "E"
Utility Joint Use Agreement – (ROW-U-JUA) and/or Utility Installation Request – (Form 1082)

☐ Utility Joint Use Agreement (ROW–U–JUA)

☑ Utility Installation Review/Permit Number:

Wastewater - AUS20210121161553
Water - AUS20210121165734

Attachment "F"
Eligibility Ratio

Eligibility Ratio established: 0.00 %

☐ Non-interstate Highway (Calculations attached)

☐ Interstate Highway

ROW Utility Manual Chapter 8, Section 2
In developing the ratio, line length or number of poles is restricted to facilities located within the existing and proposed highway right of way. Facilities located outside the existing and proposed right of way limits will not be used in developing the ratio.

Please see example of eligibility ratio calculations below.

Plan Sheet or Page#	In Easement (Eligible) Existing # of Poles or LF	In Public ROW (Ineligible) Existing # of Poles or LF
1	0	0
2	84	22
3	90	385
4	238	96
Totals	412	503

Total Existing # of Poles or LF (Eligible)	412
Total Existing # of Poles or LF (Ineligible)	503
Total Existing # of Poles or LF	915
Total Existing # of Poles or LF (Eligible) divided by the Total Existing # of Poles or LF	45.03%

100% cost participation by the state based on SP 2125.

value of the work product that can, as determined by the department, be used by the department in the performance of its functions, up to a maximum amount per proposer of $4,867,500.

IT IS FURTHER ORDERED that payment for work product may only be paid to the extent that the work product submitted meets the minimum criteria and the proposer satisfies the conditions for payment identified by the department in the I-35 Northeast Expansion Project procurement documents.

ITEM 8. Municipal Utility Relocation Reimbursement

Bastrop County - Consider the approval of a request from the City of Smithville (city) to make the relocation of the city's utility facilities required by the SH 95 highway improvement project an expense of the state under Transportation Code §203.092(a-4) (MO)

After Item 5, Chairman Bugg brought up this item. Item 8 was presented by Right of Way Division Director Kyle Madsen. Comments were received from Bastrop County Judge Paul Pape and Smithville City Manager Robert Tamble. Commissioner New made a motion, which was seconded by Commissioner Vaughn, and the commission approved the following minute order by a vote of 4 - 0.

115588
ROW

The Texas Department of Transportation (department) has a state highway project in Bastrop County, on State Highway 95, that requires the relocation of utility facilities. The City of Smithville owns certain of these utility facilities.

Transportation Code, §203.092(a-4) authorizes the Texas Transportation Commission (commission) to determine that certain publicly-owned utilities are eligible for utility facility relocation at the expense of the state. The City of Smithville has requested that the commission determine that the relocation of their utility facilities be at the expense of the state.

The commission finds and determines that the City of Smithville meets the eligibility standards contained in that statute and that the department's expenditures under Transportation Code, §203.092(a-4), including the request by the City of Smithville, will not exceed the fiscal year limitation contained in Transportation Code §203.092(e).

IT IS THEREFORE ORDERED by the commission that the relocation of the City of Smithville's utility facility required by the improvement of the state highway system is an expense of the state to be paid by the department.

ITEM 6. Design Bid Build Contract - Direct Connectors SH 99 and SH 249 Interchange

Harris County - Pursuant to an understanding between the department and Harris County (county) regarding the county's agreement to fund projects selected by the department and the county that enhance regional mobility, consider designating four proposed direct southern connectors at the interchange of State Highway 99 (Grand Parkway) and State Highway 249 (Tomball Tollway) in Harris County (referred to as the SH 249 DCs), connecting two existing toll projects, as toll projects funded and constructed solely by the county on the state highway system; consider designating the two direct connectors on the southeast side of the interchange (the Southeast DCs) as part of the Grand Parkway Project and authorizing the Grand Parkway Transportation Corporation (GPTC) to operate them as part of the Grand Parkway System; consider approving the exercise of primacy for the Southeast DCs by the department to develop, finance, construct and operate them; consider authorizing GPTC to perform any function authorized, including those authorized by Chapter 431 of the Transportation Code, in connection with the Southeast DCs; consider approving the assignment of revenues from the Southeast DCs to GPTC; consider approving financial assistance under the existing toll equity loan agreement between the department and GPTC for the SH 249 DCs,

Stefan Srnensky

From: Rich Truitt
Sent: Tuesday, September 1, 2020 12:57 PM
To: Sarah Halbardier
Cc: Wayne Robinson; Elizabeth Ortego; Stefan Srnensky; AUS_Utilities
Subject: RE: SB - 2125 Approval for Smithville

Ms. Halbardier,

I believe the Meeting Minutes will be more than sufficient.
Mr. Robinson is copied on this message, should he see otherwise.

THANK YOU

Rich E. Truitt
Right of Way Project Delivery Utility Specialist
Utility Portfolio Section
Right of Way Division

Texas Department of Transportation
118 E. Riverside Dr., Austin, TX 78704
Austin Office (512) 416-2906
richey.truitt@txdot.gov

ROW would love to hear from you!
Please click here to participate in this brief customer service survey.

Utility Accommodations Toolkit – Internal | TNtoday Website - ROW Division | txdot.gov Website - ROW Division

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ROW Division Mission Statement
Delivering Right of Way solutions for Texas

From: Sarah Halbardier
Sent: Tuesday, September 01, 2020 12:07 PM
To: Rich Truitt <Richey.Truitt@txdot.gov>
Cc: Wayne Robinson <Wayne.Robinson@txdot.gov>; Elizabeth Ortego <Elizabeth.Ortego@txdot.gov>; Stefan Srnensky <Stefan.Srnensky@txdot.gov>; AUS_Utilities <AUS_Utilities@txdot.gov>
Subject: RE: SB - 2125 Approval for Smithville

Rich,

Beth and I looked through our project files and found the commission meeting minutes that state the City of Smithville was approved for the funding.

We are beginning the SUA draft and would like to put an official approval from ROW in the agreement package. Is this something you could provide us? Should we just include the meeting minutes instead?

Thank you for your help,
Sarah

Texas Department of Transportation

Sarah Halbardier, P.E. | Utility Engineer
Austin District
7901 N IH 35, Austin, TX 78753
Phone: (512) 832-7202 | Email: sarah.halbardier@txdot.gov

From: Rich Truitt
Sent: Tuesday, September 01, 2020 9:58 AM
To: Sarah Halbardier <Sarah.Halbardier@txdot.gov>
Cc: Wayne Robinson <Wayne.Robinson@txdot.gov>; Elizabeth Ortego <Elizabeth.Ortego@txdot.gov>
Subject: SB - 2125 Approval for Smithville

Ms. Halbardier,
Mr. Robinson solicited an email from Mrs. Ortego which outlined the approval of the SB-2125 for Smithville.
He asked that I confirm the reception and understanding of the email.

THANK YOU

Rich E. Truitt
Right of Way Project Delivery Utility Specialist
Utility Portfolio Section
Right of Way Division

Texas Department of Transportation
118 E. Riverside Dr., Austin, TX 78704
Austin Office (512) 416-2906
richey.truitt@txdot.gov

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Utility Accommodations Toolkit – Internal | TNtoday Website - ROW Division | txdot.gov Website - ROW Division

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Attachment "G"
Betterment Calculation and Estimate

X Elective Betterment Ratio established: 1.32 %
(Calculation attached and justification below)

X Forced Betterment
(Provide supporting documentation)

☐ Not Applicable

Elective betterment justification statement:

Waste Water - Utility is requesting to increase the size of two wastewater crossings from 6" to 8" pipe.

Water - Utility is requesting to install a 6" water crossing for future needs.

U-15999_SH95_Cost Estimate_Attachment A02.01.21.xlsx

INKIND Cost Estimate for Attachment G

TXDOT STANDARD SUA ESTIMATE 7/2020

City of Smithville
SH 95
RCSJ: 0323-01-029

Utility ID#: U-0000137
UNUMBER: U15999

Key to help understand this cost estimate: Quantity in yellow is 100% Elective Betterment; Descriptions with color codes match the other descriptions to help track elective betterment due to increase in pipe size.

The cost estimate items must be sufficiently detailed to provide TxDOT with a reasonable basis for analysis. Items should include appropriate units

Materials& Labor TO BE REIMBURSED IN TXDOT CONTRACT - JOINT BID

Line Item / Item Description	Unit	Quantity	$/Unit	Total
WASTEWATER IMPROVEMENTS				
4" PVC DR-21 ASTM D2241 CL 200 PSI WITH 8" STEEL CASING BY OPEN CUT, ALL DEPTHS, UNDER PAVEMENT - FORCE MAIN	LF	55	$140.00	$ 7,700.00
4" PVC DR-21 ASTM D2241 CL 200 PSI ALL DEPTHS, ALL TRENCH TYPES-FORCE MAIN	LF	153	$48.00	$ 7,344.00
6" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT NOT UNDER PAVEMENT (less 15' elective betterment)	LF	0	$54.00	$ -
6" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT NOT UNDER PAVEMENT	LF	32	$66.00	$ 2,112.00
6" PVC DR-26 ASTM D2241 CL 160 PSI 12'-14' CUT NOT UNDER PAVEMENT [26' elective betterment (added)]	LF	47	$78.00	$ 3,666.00
6" PVC DR-26 ASTM D2241 CL 160 PSI 14'-16' CUT NOT UNDER PAVEMENT	LF	15	$84.00	$ 1,260.00
6" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT UNDER PAVEMENT	LF	14	$78.00	$ 1,092.00
6" PVC DR-26 ASTM D2241 CL 160 PSI 10'-12' CUT UNDER PAVEMENT	LF	40	$84.00	$ 3,360.00
6" PVC DR-26 ASTM D2241 CL 160 PSI 12'-14' CUT UNDER PAVEMENT [199' Elective Betterment (added) INKIND replacement with 6" pipe]	LF	245	$90.00	$ 22,050.00
6" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT UNDER PAVEMENT WITH 12" STEEL CASING BY OPEN CUT [18' Elective Betterment (subtracted)]	LF	0	$155.00	$ -
6" PVC DR-26 ASTM D2241 CL 160 PSI 14'-16' CUT UNDER PAVEMENT WITH 12" STEEL CASING BY OPEN CUT [30' (added INKIND replacement with 6" pipe]	LF	48	$175.00	$ 8,400.00
6" PVC DR-26 ASTM D2241 CL 160 PSI WITH 12" STEEL CASING BY BORE [78' INKIND replacement, 32' elective Betterment (subtracted); 63' elective betterment (added) INKIND replacement as 6" pipe]	LF	109	$360.00	$ 39,240.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT NOT UNDER PAVEMENT	LF	298	$60.00	$ 17,880.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 6'-8' CUT NOT UNDER PAVEMENT	LF	429	$66.00	$ 28,314.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT NOT UNDER PAVEMENT	LF	237	$78.00	$ 18,486.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 12'-14' CUT NOT UNDER PAVEMENT	LF	0	$84.00	$ -
8" PVC DR-26 ASTM D2241 CL 160 PSI 6'-8' CUT NOT UNDER PAVEMENT WITH 12" PVC CASING BY OPEN CUT	LF	273	$138.00	$ 37,674.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT NOT UNDER PAVEMENT WITH 12" PVC CASING BY OPEN CUT	LF	360	$132.00	$ 47,520.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT UNDER PAVEMENT	LF	169	$72.00	$ 12,168.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 12'-14' CUT UNDER PAVEMENT	LF	0	$102.00	$ -
8" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT UNDER PAVEMENT WITH 12" PVC CASING BY OPEN CUT	LF	40	$144.00	$ 5,760.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 6'-8' CUT UNDER PAVEMENT WITH 12" PVC CASING BY OPEN CUT	LF	45	$150.00	$ 6,750.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT UNDER PAVEMENT WITH 14" STEEL CASING BY OPEN CUT	LF	18	$192.00	$ 3,456.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 6'-8' CUT UNDER PAVEMENT WITH 14" STEEL CASING BY OPEN CUTE	LF	131	$198.00	$ 25,938.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT UNDER PAVEMENT WITH 14" STEEL CASING BY OPEN CUT	LF	25	$210.00	$ 5,250.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 12'-14' CUT UNDER PAVEMENT WITH 14" STEEL CASING BY OPEN CUT	LF	0	$222.00	$ -
8" PVC DR-26 ASTM D2241 CL 160 PSI WITH 14" STEEL CASING BY BORE	LF	71	$420.00	$ 29,820.00
12" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT NOT UNDER PAVEMENT	LF	122	$90.00	$ 10,980.00
12" PVC DR-26 ASTM D2241 CL 160 PSI 10'-12' CUT NOT UNDER PAVEMENT	LF	564	$102.00	$ 57,528.00
12" PVC DR-26 ASTM D2241 CL 160 PSI 12'-14' CUT NOT UNDER PAVEMENT	LF	101	$114.00	$ 11,514.00
12" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT UNDER PAVEMENT	LF	144	$102.00	$ 14,688.00
12" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT UNDER PAVEMENT WITH 20" STEEL CASING BY OPEN CUT	LF	25	$246.00	$ 6,150.00
12" PVC DR-26 ASTM D2241 CL 160 PSI WITH 20" STEEL CASING BY BORE	LF	348	$540.00	$ 187,920.00
15" PVC SDR-26 ASTM D3034 12'-14' CUT UNDER PAVEMENT	LF	52	$144.00	$ 7,488.00
15" PVC SDR-26 ASTM D3034 14'-16' CUT UNDER PAVEMENT	LF	212	$156.00	$ 33,072.00
20" PVC C900 DR 25 CL 165 PSI 8'-10' CUT NOT UNDER PAVEMENT	LF	28	$180.00	$ 5,040.00
20" PVC C900 DR 25 CL 165 PSI 10'-12' CUT NOT UNDER PAVEMENT	LF	24	$192.00	$ 4,608.00
20" PVC C900 DR 25 CL 165 PSI 12'-14' CUT NOT UNDER PAVEMENT	LF	50	$204.00	$ 10,200.00
20" PVC C900 DR 25 CL 165 PSI 14'-16' CUT NOT UNDER PAVEMENT	LF	56	$216.00	$ 12,096.00
20" PVC C900 DR 25 CL 165 PSI 16'-18' CUT NOT UNDER PAVEMENT	LF	174	$220.00	$ 38,280.00
20" PVC C900 DR 25 CL 165 PSI 14'-16' CUT UNDER PAVEMENT WITH 30" STEEL CASING BY OPEN CUT	LF	18	$475.00	$ 8,550.00
20" PVC C900 DR 25 CL 165 PSI 16'-18' CUT UNDER PAVEMENT WITH 30" STEEL CASING BY OPEN CUT	LF	13	$480.00	$ 6,240.00
20" PVC C900 DR 25 CL 165 PSI WITH 30" STEEL CASING BY BORE	LF	37	$660.00	$ 24,420.00
4" PVC D-26 ASTM D2241 CL 160 PSI ALL DEPTHS, ALL TRENCH TYPES - LONG SERVICE (including DI fittings)	EA	10	$3,600.00	$ 36,000.00

Betterment Cost Estimate for Attachment G (same as in Attachment A)

TXDOT STANDARD SUA ESTIMATE 7/2020

City of Smithville
SH 95
RCSJ: 0323-01-029

Utility ID#: U-0000137
UNUMBER: U15999

The cost estimate items must be sufficiently detailed to provide TxDOT with a reasonable basis for analysis. Items should include appropriate

Materials& Labor TO BE REIMBURSED IN TXDOT CONTRACT - JOINT BID

Line Item / Item Description	Unit	Quantity	$/Unit	Total
WASTEWATER IMPROVEMENTS				
4" PVC DR-21 ASTM D2241 CL 200 PSI WITH 8" STEEL CASING BY OPEN CUT, ALL DEPTHS, UNDER PAVEMENT - FORCE MAIN	LF	55	$140.00	$ 7,700.00
4" PVC DR-21 ASTM D2241 CL 200 PSI ALL DEPTHS, ALL TRENCH TYPES-FORCE MAIN	LF	153	$48.00	$ 7,344.00
6" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT NOT UNDER PAVEMENT	LF	15	$54.00	$ 810.00
6" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT NOT UNDER PAVEMENT	LF	32	$66.00	$ 2,112.00
6" PVC DR-26 ASTM D2241 CL 160 PSI 12'-14' CUT NOT UNDER PAVEMENT	LF	21	$78.00	$ 1,638.00
6" PVC DR-26 ASTM D2241 CL 160 PSI 14'-16' CUT NOT UNDER PAVEMENT	LF	15	$84.00	$ 1,260.00
6" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT UNDER PAVEMENT	LF	14	$78.00	$ 1,092.00
6" PVC DR-26 ASTM D2241 CL 160 PSI 10'-12' CUT UNDER PAVEMENT	LF	40	$84.00	$ 3,360.00
6" PVC DR-26 ASTM D2241 CL 160 PSI 12'-14' CUT UNDER PAVEMENT	LF	46	$90.00	$ 4,140.00
6" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT UNDER PAVEMENT WITH 12" STEEL CASING BY OPEN CUT	LF	18	$155.00	$ 2,790.00
6" PVC DR-26 ASTM D2241 CL 160 PSI 14'-16' CUT UNDER PAVEMENT WITH 12" STEEL CASING BY OPEN CUT	LF	18	$175.00	$ 3,150.00
6" PVC DR-26 ASTM D2241 CL 160 PSI WITH 12" STEEL CASING BY BORE	LF	78	$360.00	$ 28,080.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT NOT UNDER PAVEMENT	LF	298	$60.00	$ 17,880.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 6'-8' CUT NOT UNDER PAVEMENT	LF	429	$66.00	$ 28,314.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT NOT UNDER PAVEMENT	LF	237	$78.00	$ 18,486.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 12'-14' CUT NOT UNDER PAVEMENT [26' Elective Betterment due to increase to 8" pipe]	LF	26	$84.00	$ 2,184.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 6'-8' CUT NOT UNDER PAVEMENT WITH 12" PVC CASING BY OPEN CUT	LF	273	$138.00	$ 37,674.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT NOT UNDER PAVEMENT WITH 12" PVC CASING BY OPEN CUT	LF	360	$132.00	$ 47,520.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT UNDER PAVEMENT	LF	169	$72.00	$ 12,168.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 12'-14' CUT UNDER PAVEMENT WITH 14" STEEL CASING BY OPEN CUT [199' Elective Betterment due to increase in pipe size from 6" to 8"]	LF	199	$102.00	$ 20,298.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT UNDER PAVEMENT WITH 12" PVC CASING BY OPEN CUT	LF	40	$144.00	$ 5,760.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 6'-8' CUT UNDER PAVEMENT WITH 12" PVC CASING BY OPEN CUT	LF	45	$150.00	$ 6,750.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 0'-6' CUT UNDER PAVEMENT WITH 14" STEEL CASING BY OPEN CUT	LF	18	$192.00	$ 3,456.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 6'-8' CUT UNDER PAVEMENT WITH 14" STEEL CASING BY OPEN CUTE	LF	131	$198.00	$ 25,938.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT UNDER PAVEMENT WITH 14" STEEL CASING BY OPEN CUT	LF	25	$210.00	$ 5,250.00
8" PVC DR-26 ASTM D2241 CL 160 PSI 12'-14' CUT UNDER PAVEMENT WITH 14" STEEL CASING BY OPEN CUT [30' Elective Betterment due to increase in pipe size from 6" to 8"]	LF	30	$222.00	$ 6,660.00
8" PVC DR-26 ASTM D2241 CL 160 PSI WITH 14" STEEL CASING BY BORE [63' Elective Betterment due to increase in pipe size from 6" to 8"]	LF	134	$420.00	$ 56,280.00
12" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT NOT UNDER PAVEMENT	LF	122	$90.00	$ 10,980.00
12" PVC DR-26 ASTM D2241 CL 160 PSI 10'-12' CUT NOT UNDER PAVEMENT	LF	564	$102.00	$ 57,528.00
12" PVC DR-26 ASTM D2241 CL 160 PSI 12'-14' CUT NOT UNDER PAVEMENT	LF	101	$114.00	$ 11,514.00
12" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT UNDER PAVEMENT	LF	144	$102.00	$ 14,688.00
12" PVC DR-26 ASTM D2241 CL 160 PSI 8'-10' CUT UNDER PAVEMENT WITH 20" STEEL CASING BY OPEN CUT	LF	25	$246.00	$ 6,150.00
12" PVC DR-26 ASTM D2241 CL 160 PSI WITH 20" STEEL CASING BY BORE	LF	348	$540.00	$ 187,920.00
15" PVC SDR-26 ASTM D3034 12'-14' CUT UNDER PAVEMENT	LF	52	$144.00	$ 7,488.00
15" PVC SDR-26 ASTM D3034 14'-16' CUT UNDER PAVEMENT	LF	212	$156.00	$ 33,072.00
20" PVC C900 DR 25 CL 165 PSI 8'-10' CUT NOT UNDER PAVEMENT	LF	28	$180.00	$ 5,040.00
20" PVC C900 DR 25 CL 165 PSI 10'-12' CUT NOT UNDER PAVEMENT	LF	24	$192.00	$ 4,608.00
20" PVC C900 DR 25 CL 165 PSI 12'-14' CUT NOT UNDER PAVEMENT	LF	50	$204.00	$ 10,200.00
20" PVC C900 DR 25 CL 165 PSI 14'-16' CUT NOT UNDER PAVEMENT	LF	56	$216.00	$ 12,096.00
20" PVC C900 DR 25 CL 165 PSI 16'-18' CUT NOT UNDER PAVEMENT	LF	174	$220.00	$ 38,280.00
20" PVC C900 DR 25 CL 165 PSI 14'-16' CUT UNDER PAVEMENT WITH 30" STEEL CASING BY OPEN CUT	LF	18	$475.00	$ 8,550.00
20" PVC C900 DR 25 CL 165 PSI 16'-18' CUT UNDER PAVEMENT WITH 30" STEEL CASING BY OPEN CUT	LF	13	$480.00	$ 6,240.00
20" PVC C900 DR 25 CL 165 PSI WITH 30" STEEL CASING BY BORE	LF	37	$660.00	$ 24,420.00
4" PVC D-26 ASTM D2241 CL 160 PSI ALL DEPTHS, ALL TRENCH TYPES - LONG SERVICE (including DI fittings)	EA	10	$3,600.00	$ 36,000.00

Line Item / Item Description	Unit	Quantity	$/Unit	Total
4" PVC D-26 ASTM D2241 CL 160 PSI ALL DEPTHS, ALL TRENCH TYPES - LONG SERVICE WITH DEEP SERVICE CONNECTION (including DI fittings)	EA	2	$4,800.00	$ 9,600.00
4" PVC D-26 ASTM D2241 CL 160 PSI ALL DEPTHS, ALL TRENCH TYPES - SHORT SERVICE WITH DEEP SERVICE CONNECTION (including DI fittings)	EA	9	$3,360.00	$ 30,240.00
4" PVC D-26 ASTM D2241 CL 160 PSI ALL DEPTHS, ALL TRENCH TYPES - SHORT SERVICE WITH DEEP SERVICE CONNECTION (including DI fittings)	EA	1	$4,560.00	$ 4,560.00
4" PVC DR-26 ASTM D2241 CL 160 PSI ALL DEPTHS, UNDER PAVEMENT WITH 8" STEEL CASING BY OPEN CUT	LF	216	$135.00	$ 29,160.00
4" PVC DR-26 ASTM D2241 CL 160 PSI WITH 8" STEEL CASING BY BORE	LF	352	$336.00	$ 118,272.00
4' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING 0-6' DEPTH NOT UNDER PAVEMENT	EA	14	$6,000.00	$ 84,000.00
4' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING 0-6' DEPTH NOT UNDER PAVEMENT WITH WATER TIGHT RIM [less 1 elective betterment]	EA	2	$6,600.00	$ 13,200.00
ADDITIONAL DEPTH OF 4' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING NOT UNDER PAVEMENT (VERTICAL FEET)	LF	62	$600.00	$ 37,200.00
4' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING 0-6' DEPTH UNDER PAVEMENT	EA	6	$6,600.00	$ 39,600.00
ADDITIONAL DEPTH OF 4' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING UNDER PAVEMENT (VERTICAL FEET)	LF	24.9	$720.00	$ 17,928.00
5' DIA PRE-CAST CONCRETE MANHOLE WITH INTERIOR COATING 0-6' DEPTH NOT UNDER PAVEMENT	EA	3	$9,000.00	$ 27,000.00
ADDITIONAL DEPTH OF 5' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING NOT UNDER PAVEMENT (VERTICAL FEET)	LF	20.5	$780.00	$ 15,990.00
5' DIA PRE-CAST CONCRETE MANHOLE WITH INTERIOR COATING 0-6' DEPTH UNDER PAVEMENT	EA	3	$9,600.00	$ 28,800.00
ADDITIONAL DEPTH OF 5' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING UNDER PAVEMENT (VERTICAL FEET)	EA	21.5	$900.00	$ 19,350.00
4' DIA. FINAL MANHOLE RIM ADJUSTMENTS	EA	8	$2,500.00	$ 20,000.00
5' DIA. FINAL MANHOLE RIM ADJUSTMENTS	EA	2	$3,000.00	$ 6,000.00
TIE IN TO EXISTING LIFT STATION	EA	1	$24,000.00	$ 24,000.00
TIE IN EXISTING 3" FORCE MAIN	EA	1	$2,400.00	$ 2,400.00
TIE IN EXISTING 4" FORCE MAIN	EA	2	$2,400.00	$ 4,800.00
TIE IN EXISTING 6" GRAVITY WASTEWATER	EA	1	$2,400.00	$ 2,400.00
TIE IN EXISTING 8" GRAVITY WASTEWATER	EA	2	$3,000.00	$ 6,000.00
TIE IN EXISTING 10" GRAVITY WASTEWATER	EA	1	$3,600.00	$ 3,600.00
TRENCH PROTECTION (less 65' elective betterment)	LF	4441	$6.00	$ 26,646.00
ASPHALT PAVEMENT REPAIR	LF	1107	$36.00	$ 39,852.00
ASPHALT PAVEMENT REPAIR (BORE PITS) (less 13' elective betterment)	LF	218	$120.00	$ 26,160.00
GRAVEL PAVEMENT REPAIR (LINES)	LF	230	$12.00	$ 2,760.00
REMOVALS - EXISTING WASTEWATER LINE - CUT, PLUG, AND ABANDON IN PLACE WITH NO PRESSURE GROUTING	LF	928	$9.00	$ 8,352.00
REMOVALS - EXISTING 6" AND UNDER WASTEWATER LINE - CUT, PRESSURE GROUT, PLUG AND ABANDON IN PLACE	LF	644	$14.00	$ 9,016.00
REMOVALS - EXISTING 8" WASTEWATER LINE - CUT, PRESSURE GROUT, PLUG AND ABANDON IN PLACE	LF	2984	$16.00	$ 47,744.00
REMOVALS - EXISTING 10" WASTEWATER LINE - CUT, PRESSURE GROUT, PLUG AND ABANDON IN PLACE	LF	1738	$18.00	$ 31,284.00
REMOVALS - REMOVE EXISTING MANHOLES FULL DEPTH	EA	15	$2,400.00	$ 36,000.00
REMOVALS - REMOVE EXISTING CLEANOUTS FULL DEPTH	EA	6	$1,200.00	$ 7,200.00
POTHOLING AT WASTEWATER SERVICE TIE IN LOCATIONS	EA	22	$2,400.00	$ 52,800.00
TEMPORARY 10" WASTEWATER TIE-IN TO PROPSOED 20" AT WWTP	EA	1	$6,000.00	$ 6,000.00
TEMPORARY 4" WASTEWATER TIE-IN TO PROPOSED 8" WASTEWATER LINE	EA	1	$2,000.00	$ 2,000.00
			SUBTOTAL	$ 1,649,928.00
WATER IMPROVEMENTS				
6" C900 DR-18 PVC WATER LINE NOT UNDER PAVEMENT	LF	690	$54.00	$ 37,260.00
6" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE NOT UNDER PAVEMENT (less 14' elective betterment)	LF	86	$66.00	$ 5,676.00
6" C900 DR-18 PVC WATER LINE UNDER PAVEMENT	LF	185	$66.00	$ 12,210.00
6" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE UNDER PAVEMENT WITH 10" STEEL CASING BY OPEN CUT (less 18' elective betterment)	LF	68	$160.00	$ 10,880.00
6" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE WITH 10" STEEL CASING BY BORE (less 27' elective betterment)	LF	165	$360.00	$ 59,400.00
8" C900 DR-18 PVC WATER LINE NOT UNDER PVMT	LF	47	$66.00	$ 3,102.00
8" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE NOT UNDER PAVEMENT	LF	39	$84.00	$ 3,276.00
8" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE UNDER PAVEMENT WITH 14" STEEL CASING BY OPEN CUT	LF	16	$200.00	$ 3,200.00
8" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE WITH 14" STEEL CASING BY BORE	LF	63	$420.00	$ 26,460.00
10" C900 DR-18 PVC WATER LINE UNDER PAVEMENT	LF	92	$96.00	$ 8,832.00
12" C900 DR-18 PVC WATER LINE NOT UNDER PAVEMENT	LF	3228	$90.00	$ 290,520.00
12" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE NOT UNDER PAVEMENT	LF	559	$162.00	$ 90,558.00
12" C900 DR-18 PVC WATER LINE NOT UNDER PAVEMENT	LF	391	$102.00	$ 39,882.00
12" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE WITH 18" STEEL CASING BY OPEN CUT, ALL TRENCH TYPES	LF	669	$312.00	$ 208,728.00
12" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE WITH 20" STEEL CASING BY BORE	LF	285	$540.00	$ 153,900.00
6" GATE VALVE (less 1 elective betterment)	EA	10	$2,400.00	$ 24,000.00
8" GATE VALVE	EA	4	$3,000.00	$ 12,000.00
10" GATE VALVE	EA	1	$3,600.00	$ 3,600.00
12" GATE VALVE (less 2 elective betterment)	EA	25	$4,200.00	$ 105,000.00
FINAL VALVE ADJUSTMENT - 2" GATE VALVES	EA	1	$250.00	$ 250.00

Line Item / Item Description	Unit	Quantity	$/Unit	Total
4" PVC D-26 ASTM D2241 CL 160 PSI ALL DEPTHS, ALL TRENCH TYPES - LONG SERVICE WITH DEEP SERVICE CONNECTION (including DI fittings)	EA	2	$4,800.00	$ 9,600.00
4" PVC D-26 ASTM D2241 CL 160 PSI ALL DEPTHS, ALL TRENCH TYPES - SHORT SERVICE WITH DEEP SERVICE CONNECTION (including DI fittings)	EA	9	$3,360.00	$ 30,240.00
4" PVC D-26 ASTM D2241 CL 160 PSI ALL DEPTHS, ALL TRENCH TYPES - SHORT SERVICE WITH DEEP SERVICE CONNECTION (including DI fittings)	EA	1	$4,560.00	$ 4,560.00
4" PVC DR-26 ASTM D2241 CL 160 PSI ALL DEPTHS, UNDER PAVEMENT WITH 8" STEEL CASING BY OPEN CUT	LF	216	$135.00	$ 29,160.00
4" PVC DR-26 ASTM D2241 CL 160 PSI WITH 8" STEEL CASING BY BORE	LF	352	$336.00	$ 118,272.00
4' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING 0-6' DEPTH NOT UNDER PAVEMENT	EA	14	$6,000.00	$ 84,000.00
4' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING 0-6' DEPTH NOT UNDER PAVEMENT WITH WATER TIGHT RIM	EA	3	$6,600.00	$ 19,800.00
ADDITIONAL DEPTH OF 4' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING NOT UNDER PAVEMENT (VERTICAL FEET)	LF	62	$600.00	$ 37,200.00
4' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING 0-6' DEPTH UNDER PAVEMENT	EA	6	$6,600.00	$ 39,600.00
ADDITIONAL DEPTH OF 4' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING UNDER PAVEMENT (VERTICAL FEET)	LF	24.9	$720.00	$ 17,928.00
5' DIA PRE-CAST CONCRETE MANHOLE WITH INTERIOR COATING 0-6' DEPTH NOT UNDER PAVEMENT	EA	3	$9,000.00	$ 27,000.00
ADDITIONAL DEPTH OF 5' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING NOT UNDER PAVEMENT (VERTICAL FEET)	LF	20.5	$780.00	$ 15,990.00
5' DIA PRE-CAST CONCRETE MANHOLE WITH INTERIOR COATING 0-6' DEPTH UNDER PAVEMENT	EA	3	$9,600.00	$ 28,800.00
ADDITIONAL DEPTH OF 5' DIA PRE-CAST CONCRETE MANHOLES WITH INTERIOR COATING UNDER PAVEMENT (VERTICAL FEET)	EA	21.5	$900.00	$ 19,350.00
4' DIA. FINAL MANHOLE RIM ADJUSTMENTS	EA	8	$2,500.00	$ 20,000.00
5' DIA. FINAL MANHOLE RIM ADJUSTMENTS	EA	2	$3,000.00	$ 6,000.00
TIE IN TO EXISTING LIFT STATION	EA	1	$24,000.00	$ 24,000.00
TIE IN EXISTING 3" FORCE MAIN	EA	1	$2,400.00	$ 2,400.00
TIE IN EXISTING 4" FORCE MAIN	EA	2	$2,400.00	$ 4,800.00
TIE IN EXISTING 6" GRAVITY WASTEWATER	EA	1	$2,400.00	$ 2,400.00
TIE IN EXISTING 8" GRAVITY WASTEWATER	EA	2	$3,000.00	$ 6,000.00
TIE IN EXISTING 10" GRAVITY WASTEWATER	EA	1	$3,600.00	$ 3,600.00
TRENCH PROTECTION	LF	4506	$6.00	$ 27,036.00
ASPHALT PAVEMENT REPAIR	LF	1107	$36.00	$ 39,852.00
ASPHALT PAVEMENT REPAIR (BORE PITS)	LF	231	$120.00	$ 27,720.00
GRAVEL PAVEMENT REPAIR (LINES)	LF	230	$12.00	$ 2,760.00
REMOVALS - EXISTING WASTEWATER LINE - CUT, PLUG, AND ABANDON IN PLACE WITH NO PRESSURE GROUTING	LF	928	$9.00	$ 8,352.00
REMOVALS - EXISTING 6" AND UNDER WASTEWATER LINE - CUT, PRESSURE GROUT, PLUG AND ABANDON IN PLACE	LF	644	$14.00	$ 9,016.00
REMOVALS - EXISTING 8" WASTEWATER LINE - CUT, PRESSURE GROUT, PLUG AND ABANDON IN PLACE	LF	2984	$16.00	$ 47,744.00
REMOVALS - EXISTING 10" WASTEWATER LINE - CUT, PRESSURE GROUT, PLUG AND ABANDON IN PLACE	LF	1738	$18.00	$ 31,284.00
REMOVALS - REMOVE EXISTING MANHOLES FULL DEPTH	EA	15	$2,400.00	$ 36,000.00
REMOVALS - REMOVE EXISTING CLEANOUTS FULL DEPTH	EA	6	$1,200.00	$ 7,200.00
POTHOLING AT WASTEWATER SERVICE TIE IN LOCATIONS	EA	22	$2,400.00	$ 52,800.00
TEMPORARY 10" WASTEWATER TIE-IN TO PROPSOED 20" AT WWTP	EA	1	$6,000.00	$ 6,000.00
TEMPORARY 4" WASTEWATER TIE-IN TO PROPOSED 8" WASTEWATER LINE	EA	1	$2,000.00	$ 2,000.00
			SUBTOTAL	$ 1,681,332.00
WATER IMPROVEMENTS				
6" C900 DR-18 PVC WATER LINE NOT UNDER PAVEMENT	LF	690	$54.00	$ 37,260.00
6" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE NOT UNDER PAVEMENT	LF	100	$66.00	$ 6,600.00
6" C900 DR-18 PVC WATER LINE UNDER PAVEMENT	LF	185	$66.00	$ 12,210.00
6" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE UNDER PAVEMENT WITH 10" STEEL CASING BY OPEN CUT	LF	86	$160.00	$ 13,760.00
6" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE WITH 10" STEEL CASING BY BORE	LF	192	$360.00	$ 69,120.00
8" C900 DR-18 PVC WATER LINE NOT UNDER PVMT	LF	47	$66.00	$ 3,102.00
8" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE NOT UNDER PAVEMENT	LF	39	$84.00	$ 3,276.00
8" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE UNDER PAVEMENT WITH 14" STEEL CASING BY OPEN CUT	LF	16	$200.00	$ 3,200.00
8" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE WITH 14" STEEL CASING BY BORE	LF	63	$420.00	$ 26,460.00
10" C900 DR-18 PVC WATER LINE UNDER PAVEMENT	LF	92	$96.00	$ 8,832.00
12" C900 DR-18 PVC WATER LINE NOT UNDER PAVEMENT	LF	3228	$90.00	$ 290,520.00
12" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE NOT UNDER PAVEMENT	LF	559	$162.00	$ 90,558.00
12" C900 DR-18 PVC WATER LINE NOT UNDER PAVEMENT	LF	391	$102.00	$ 39,882.00
12" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE WITH 18" STEEL CASING BY OPEN CUT, ALL TRENCH TYPES	LF	669	$312.00	$ 208,728.00
12" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE WITH 20" STEEL CASING BY BORE	LF	285	$540.00	$ 153,900.00
6" GATE VALVE	EA	11	$2,400.00	$ 26,400.00
8" GATE VALVE	EA	4	$3,000.00	$ 12,000.00
10" GATE VALVE	EA	1	$3,600.00	$ 3,600.00
12" GATE VALVE	EA	27	$4,200.00	$ 113,400.00
FINAL VALVE ADJUSTMENT - 2" GATE VALVES	EA	1	$250.00	$ 250.00

U-15999_SH95_Cost Estimate_Attachment A02.01.21.xlsx

Line Item / Item Description	Unit	Quantity	$/Unit	Total
FINAL VALVE ADJUSTMENT - 6" GATE VALVES	EA	14	$500.00	$ 7,000.00
FINAL VALVE ADJUSTMENT - 10" GATE VALVES	EA	1	$1,000.00	$ 1,000.00
FINAL VALVE ADJUSTMENT - 12" GATE VALVES	EA	22	$1,500.00	$ 33,000.00
20" C900 DR-18 (BLUE) PVC CASING AT MANHOLES BY OPEN CUT	LF	162	$180.00	$ 29,160.00
FIRE HYDRANT ASSEMBLY	EA	10	$7,200.00	$ 72,000.00
FIRE HYDRANT ASSEMBLY (LONG LEAD)	EA	4	$8,200.00	$ 32,800.00
TRACER WIRE RISERS (less 1 elective betterment)	EA	23	$300.00	$ 6,900.00
2" COMBINATION AIR RELEASE/VACUUM VALVE	EA	3	$6,000.00	$ 18,000.00
3/4" LONG SERVICE WITH CONNECTION TO EX 3/4" METER, ALL TRENCH TYPES	EA	2	$3,000.00	$ 6,000.00
3/4" SHORT SERVICE WITH CONNECTION TO EX 3/4" METER, ALL TRENCH TYPES	EA	3	$1,800.00	$ 5,400.00
1" LONG SERVICE WITH CONNECTION TO EX 3/4" METER, ALL TRENCH TYPES	EA	9	$2,160.00	$ 19,440.00
1" SHORT SERVICE WITH CONNECTION TO EX 3/4" METER, ALL TRENCH TYPES	EA	6	$2,160.00	$ 12,960.00
1" LONG SERVICE WITH NEW 3/4" METER, ALL TRENCH TYPES	EA	2	$3,600.00	$ 7,200.00
1" SHORT SERVICE WITH NEW 3/4" METER, ALL TRENCH TYPES	EA	4	$3,600.00	$ 14,400.00
1" LONG SERVICE WITH CONNECTION TO EXISTING 3/4" SERVICE LINE, ALL TRENCH TYPES	EA	1	$2,160.00	$ 2,160.00
1" HDPE SDR-9 TUBING, UNDER PAVEMENT WITH 3" STEEL CASING BY OPEN CUT	LF	190	$100.00	$ 19,000.00
1" HDPE SDR-9 TUBING WITH 3" STEEL CASING BY BORE	LF	408	$150.00	$ 61,200.00
2" LONG SERVICE WITH CONNECTION TO EX 1.5" METER, ALL TRENCH TYPES	EA	1	$3,960.00	$ 3,960.00
2" LONG SERVICE WITH TWO NEW 3/4" METERS, ALL TRENCH TYPES	EA	1	$5,400.00	$ 5,400.00
2" LONG SERVICE WITH CONNECTION TO EXISTING 2" SERVICE LINE, ALL TRENCH TYPES	EA	1	$4,800.00	$ 4,800.00
2" SHORT SERVICE WITH CONNECTION TO EX 2" METER, ALL TRENCH TYPES	EA	1	$4,800.00	$ 4,800.00
2" HDPE SDR-9 TUBING, UNDER PAVEMENT WITH 4" STEEL CASING BY OPEN CUT	LF	46	$140.00	$ 6,440.00
2" HDPE SDR-9 TUBING WITH 4" STEEL CASING BY BORE	LF	112	$180.00	$ 20,160.00
2" GALVANIZED STEEL VENT PIPE FOR RAILROAD BORE	EA	4	$2,400.00	$ 9,600.00
TIE IN TO EXISTING 2" WATER LINE	EA	2	$2,400.00	$ 4,800.00
TIE IN TO EXISTING 6" WATER LINE	EA	8	$3,000.00	$ 24,000.00
TIE IN TO EXISTING 8" WATER LINE	EA	3	$3,600.00	$ 10,800.00
TIE IN TO EXISTING 12" WATER LINE	EA	2	$4,200.00	$ 8,400.00
TRENCH PROTECTION (less 59' elective betterment)	LF	6279	$3.00	$ 18,837.00
GRAVEL PAVEMENT REPAIR (LINE)	LF	10	$12.00	$ 120.00
ASPHALT PAVEMENT REPAIR (LINES) (less 13' elective betterment)	LF	1185	$36.00	$ 42,660.00
ASPHALT PAVEMENT REPAIR (BORE PITS)	LF	243	$120.00	$ 29,160.00
CONCRETE PAVEMENT REPAIR (LINES)	LF	132	$120.00	$ 15,840.00
REMOVALS - EXISTING WATER VALVES	EA	11	$600.00	$ 6,600.00
REMOVALS - EXISTING METERS AND METER BOXES	EA	8	$900.00	$ 7,200.00
REMOVALS - EXISTING FIRE HYDRANTS	EA	7	$1,800.00	$ 12,600.00
REMOVALS - EXISTING WATER LINE - CUT, PLUG AND ABANDON IN PLACE WITH NO PRESSURE GROUTING	LF	1525	$8.00	$ 12,200.00
REMOVALS - EXISTING 6" AND UNDER WATER LINE - CUT, PRESSURE GROUT, PLUG AND ABANDON IN PLACE	LF	7317	$14.00	$ 102,438.00
REMOVALS - EXISTING 8" WATER LINE - CUT, PRESSURE GROUT, PLUG AND ABANDON IN PLACE	LF	30	$16.00	$ 480.00
TEMPORARY - 6" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE	LF	545	$66.00	$ 35,970.00
TEMPORARY - UNCASED BORES INCLUDING 6" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE	LF	150	$138.00	$ 20,700.00
TEMPORARY - 6" GATE VALVE	EA	2	$2,400.00	$ 4,800.00
TEMPORARY - FIRE HYDRANT ASSEMBLY RELOCATIONS	EA	3	$7,200.00	$ 21,600.00
TEMPORARY - 6" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE WITH 10" STEEL CASING BY BORE	LF	45	$360.00	$ 16,200.00
TEMPORARY - TIE IN TO EXISTING 6" WATER LINE	EA	3	$3,000.00	$ 9,000.00
TEMPORARY - 3/4" SERVICE WITH CONNECTION TO EX 3/4" METER, ALL TRENCH TYPES	EA	7	$3,000.00	$ 21,000.00
TEMPORARY - 1" SERVICE WITH CONNECTION TO EX 1" SERVICE LINE, ALL TRENCH TYPES	EA	1	$3,600.00	$ 3,600.00
			SUBTOTAL	$ 1,930,519.00
			SUBTOTAL WASTEWATER	$ 1,649,928.00
			SUBTOTAL WATER	$ 1,930,519.00
			SUBTOTAL W + WW	$ 3,580,447.00

Materials TO BE REIMBURSED TO: City of Smithville

Line Item / Item Description	Unit	Quantity	$/Unit	Total
INTERNAL MATERIALS - documented with Certified Ledger at Payment			SUBTOTAL	$ -
EXTERNALLY ACQUIRED MATERIALS - documented with Invoices and/or Checks			SUBTOTAL	$ -
			MATERIALS SUBTOTAL	$ 3,580,447.00

* Indicated items are being tracked for BUY AMERICA COMPLIANCE and will be documented using Form 1818 and all

Labor TO BE REIMBURSED TO: City of Smithville

Line Item / Item Description	Unit	Quantity	$/Unit	Total
Internal Labor Costs - documented with Certified Ledger at payment.			SUBTOTAL	$ -
External Labor Costs - documented with Invoices and / or checks			SUBTOTAL	$ -
			LABOR SUBTOTAL	$ -

Engineering/Inspection/Survey TO BE REIMBURSED IN TXDOT CONTRACT - JOINT BID (Railroad ROW Coordination)

Line Item / Item Description	Unit	Quantity	$/Unit	Total
Insurance	EA	2	$5,000.00	$ 10,000.00
Survey Work Plan for Survey Monitoring - RPLS	HR	18	$120.00	$ 2,160.00
Survey Work Plan for Survey Monitoring - Technician	HR	18	$90.00	$ 1,620.00
Survey Monitoring - 2 Man Crew Time	HR	400	$135.00	$ 54,000.00
Survey Monitoring - RPLS	HR	40	$120.00	$ 4,800.00
Survey Monitoring - Technician	HR	40	$90.00	$ 3,600.00
Flagging (per Day)	EA	40	$1,500.00	$ 60,000.00
UP Assigned 3rd Party Observer (per Day)	EA	40	$2,000.00	$ 80,000.00
			TOTAL	$216,180.00

Line Item / Item Description	Unit	Quantity	$/Unit	Total
FINAL VALVE ADJUSTMENT - 6" GATE VALVES	EA	14	$500.00	$ 7,000.00
FINAL VALVE ADJUSTMENT - 10" GATE VALVES	EA	1	$1,000.00	$ 1,000.00
FINAL VALVE ADJUSTMENT - 12" GATE VALVES	EA	22	$1,500.00	$ 33,000.00
20" C900 DR-18 (BLUE) PVC CASING AT MANHOLES BY OPEN CUT	LF	162	$180.00	$ 29,160.00
FIRE HYDRANT ASSEMBLY	EA	10	$7,200.00	$ 72,000.00
FIRE HYDRANT ASSEMBLY (LONG LEAD)	EA	4	$8,200.00	$ 32,800.00
TRACER WIRE RISERS	EA	24	$300.00	$ 7,200.00
2" COMBINATION AIR RELEASE/VACUUM VALVE	EA	3	$6,000.00	$ 18,000.00
3/4" LONG SERVICE WITH CONNECTION TO EX 3/4" METER, ALL TRENCH TYPES	EA	2	$3,000.00	$ 6,000.00
3/4" SHORT SERVICE WITH CONNECTION TO EX 3/4" METER, ALL TRENCH TYPES	EA	3	$1,800.00	$ 5,400.00
1" LONG SERVICE WITH CONNECTION TO EX 3/4" METER, ALL TRENCH TYPES	EA	9	$2,160.00	$ 19,440.00
1" SHORT SERVICE WITH CONNECTION TO EX 3/4" METER, ALL TRENCH TYPES	EA	6	$2,160.00	$ 12,960.00
1" LONG SERVICE WITH NEW 3/4" METER, ALL TRENCH TYPES	EA	2	$3,600.00	$ 7,200.00
1" SHORT SERVICE WITH NEW 3/4" METER, ALL TRENCH TYPES	EA	4	$3,600.00	$ 14,400.00
1" LONG SERVICE WITH CONNECTION TO EXISTING 3/4" SERVICE LINE, ALL TRENCH TYPES	EA	1	$2,160.00	$ 2,160.00
1" HDPE SDR-9 TUBING, UNDER PAVEMENT WITH 3" STEEL CASING BY OPEN CUT	LF	190	$100.00	$ 19,000.00
1" HDPE SDR-9 TUBING WITH 3" STEEL CASING BY BORE	LF	408	$150.00	$ 61,200.00
2" LONG SERVICE WITH CONNECTION TO EX 1.5" METER, ALL TRENCH TYPES	EA	1	$3,960.00	$ 3,960.00
2" LONG SERVICE WITH TWO NEW 3/4" METERS, ALL TRENCH TYPES	EA	1	$5,400.00	$ 5,400.00
2" LONG SERVICE WITH CONNECTION TO EXISTING 2" SERVICE LINE, ALL TRENCH TYPES	EA	1	$4,800.00	$ 4,800.00
2" SHORT SERVICE WITH CONNECTION TO EX 2" METER, ALL TRENCH TYPES	EA	1	$4,800.00	$ 4,800.00
2" HDPE SDR-9 TUBING, UNDER PAVEMENT WITH 4" STEEL CASING BY OPEN CUT	LF	46	$140.00	$ 6,440.00
2" HDPE SDR-9 TUBING WITH 4" STEEL CASING BY BORE	LF	112	$180.00	$ 20,160.00
2" GALVANIZED STEEL VENT PIPE FOR RAILROAD BORE	EA	4	$2,400.00	$ 9,600.00
TIE IN TO EXISTING 2" WATER LINE	EA	2	$2,400.00	$ 4,800.00
TIE IN TO EXISTING 6" WATER LINE	EA	8	$3,000.00	$ 24,000.00
TIE IN TO EXISTING 8" WATER LINE	EA	3	$3,600.00	$ 10,800.00
TIE IN TO EXISTING 12" WATER LINE	EA	2	$4,200.00	$ 8,400.00
TRENCH PROTECTION	LF	6338	$3.00	$ 19,014.00
GRAVEL PAVEMENT REPAIR (LINE)	LF	10	$12.00	$ 120.00
ASPHALT PAVEMENT REPAIR (LINES)	LF	1198	$36.00	$ 43,128.00
ASPHALT PAVEMENT REPAIR (BORE PITS)	LF	243	$120.00	$ 29,160.00
CONCRETE PAVEMENT REPAIR (LINES)	LF	132	$120.00	$ 15,840.00
REMOVALS - EXISTING WATER VALVES	EA	11	$600.00	$ 6,600.00
REMOVALS - EXISTING METERS AND METER BOXES	EA	8	$900.00	$ 7,200.00
REMOVALS - EXISTING FIRE HYDRANTS	EA	7	$1,800.00	$ 12,600.00
REMOVALS - EXISTING WATER LINE - CUT, PLUG AND ABANDON IN PLACE WITH NO PRESSURE GROUTING	LF	1525	$8.00	$ 12,200.00
REMOVALS - EXISTING 6" AND UNDER WATER LINE - CUT, PRESSURE GROUT, PLUG AND ABANDON IN PLACE	LF	7317	$14.00	$ 102,438.00
REMOVALS - EXISTING 8" WATER LINE - CUT, PRESSURE GROUT, PLUG AND ABANDON IN PLACE	LF	30	$16.00	$ 480.00
TEMPORARY - 6" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE	LF	545	$66.00	$ 35,970.00
TEMPORARY - UNCASED BORES INCLUDING 6" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE	LF	150	$138.00	$ 20,700.00
TEMPORARY - 6" GATE VALVE	EA	2	$2,400.00	$ 4,800.00
TEMPORARY - FIRE HYDRANT ASSEMBLY RELOCATIONS	EA	3	$7,200.00	$ 21,600.00
TEMPORARY - 6" CERTA-LOK RJIB C900 DR-18 PVC WATER LINE WITH 10" STEEL CASING BY BORE	LF	45	$360.00	$ 16,200.00
TEMPORARY - TIE IN TO EXISTING 6" WATER LINE	EA	3	$3,000.00	$ 9,000.00
TEMPORARY - 3/4" SERVICE WITH CONNECTION TO EX 3/4" METER, ALL TRENCH TYPES	EA	7	$3,000.00	$ 21,000.00
TEMPORARY - 1" SERVICE WITH CONNECTION TO EX 1" SERVICE LINE, ALL TRENCH TYPES	EA	1	$3,600.00	$ 3,600.00
			SUBTOTAL	$ 1,955,788.00
			SUBTOTAL WASTEWATE	$ 1,681,332.00
			SUBTOTAL WATER	$ 1,955,788.00
			SUBTOTAL W + WW	$ 3,637,120.00

Materials TO BE REIMBURSED TO: City of Smithville

Line Item / Item Description	Unit	Quantity	$/Unit	Total
INTERNAL MATERIALS - documented with Certified Ledger at Payment			SUBTOTAL	$ -
EXTERNALLY ACQUIRED MATERIALS - documented with Invoices and/or Checks			SUBTOTAL	$ -
			MATERIALS SUBTOTAL	$ 3,637,120.00

* Indicated items are being tracked for BUY AMERICA COMPLIANCE and will be documented using Form 1818 and all

Labor TO BE REIMBURSED TO: City of Smithville

Line Item / Item Description	Unit	Quantity	$/Unit	Total
Internal Labor Costs - documented with Certified Ledger at payment.			SUBTOTAL	$ -
External Labor Costs - documented with Invoices and / or checks			SUBTOTAL	$ -
			LABOR SUBTOTAL	$ -

Engineering/Inspection/Survey TO BE REIMBURSED IN TXDOT CONTRACT - JOINT BID (Railroad ROW Coordination)

Line Item / Item Description	Unit	Quantity	$/Unit	Total
Insurance	EA	2	$5,000.00	$ 10,000.00
Survey Work Plan for Survey Monitoring - RPLS	HR	18	$120.00	$ 2,160.00
Survey Work Plan for Survey Monitoring - Technician	HR	18	$90.00	$ 1,620.00
Survey Monitoring - 2 Man Crew Time	HR	400	$135.00	$ 54,000.00
Survey Monitoring - RPLS	HR	40	$120.00	$ 4,800.00
Survey Monitoring - Technician	HR	40	$90.00	$ 3,600.00
Flagging (per Day)	EA	40	$1,500.00	$ 60,000.00
UP Assigned 3rd Party Observer (per Day)	EA	40	$2,000.00	$ 80,000.00
			TOTAL	$216,180.00

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Line Item / Item Description	Unit	Quantity	$/Unit	Total
Engineering/Inspection/Administration TO BE REIMBURSED TO:			City of Smithville	
Line Item / Item Description	**Unit**	**Quantity**	**$/Unit**	**Total**
INTERNAL ADMINISTRATION - Cost associated with securing funding for this project				
City Manager	HR	9.5	$98.37	$ 934.52
Public Works Director	HR	3	$84.06	$ 252.18
Grant Administration	HR	579.5	$48.15	$ 27,902.93
			SUBTOTAL	$ 29,089.62
INTERNAL ADMINISTRATION - Costs prior to execution of agreement				
City Manager	HR	73.5	$98.37	$ 7,230.20
Public Works Director	HR	55	$84.06	$ 4,623.30
Utility Personnel	HR	81	$46.69	$ 3,781.89
Clerical (City Secretary)	HR	7	$39.64	$ 277.48
Grant Administration	HR	24.5	$48.15	$ 1,179.68
Equipment Rate	HR	40	$50.00	$ 2,000.00
			SUBTOTAL	$ 19,092.54
INTERNAL ADMINISTRATION - Estimated Costs				
City Manager	HR	80	$98.37	$ 7,869.60
Clerical (City Secretary)	HR	20	$39.64	$ 792.80
Finance Director	HR	40	$54.50	$ 2,180.00
			SUBTOTAL	$ 10,842.40
INTERNAL SURVEY / LANDMAN				
	HR	0	$0.00	$ -
	HR	0	$0.00	$ -
INTERNAL INSPECTION - Estimated Costs				
Public Works Director	HR	400	$84.06	$ 33,624.00
Utility Personnel	HR	400	$46.69	$ 18,676.00
			SUBTOTAL	$ 52,300.00
			TOTAL	$ 111,324.56
INTERNAL ENGINEERING / SURVEY / INSPECTION / ADMINISTRATION OVERHEAD				
PERCENTAGE OF INTERNAL COSTS	%		0.00%	$ -
			INTERNAL COSTS SUBTOTAL	$ 111,324.56
BEFCO ENGINEERING - Cost documented with INVOICES and / or CHECKS				
Design Engineer / PE	HR	772.5	$120.00	$ 92,700.00
RPLS	HR	66.5	$120.00	$ 7,980.00
Designer/Technician	HR	674.5	$90.00	$ 60,705.00
Two-Man Survey Crew	HR	57	$135.00	$ 7,695.00
Clerical/Administrative	HR	10	$50.00	$ 500.00
Railroad Permit Submissions	EA	4	$15,000.00	$ 60,000.00
			SUBTOTAL	$ 229,580.00
BEFCO ENGINEERING Estimate - Cost documented with INVOICES and / or CHECKS (Estimated Costs)				
Design Engineer / PE (Construction Phase Services)	HR	1000	$120.00	$ 120,000.00
Designer/Technician (Construction)	HR	582	$90.00	$ 52,380.00
Clerical/Administrative (Partial Payments)	HR	20	$50.00	$ 1,000.00
			SUBTOTAL	$ 173,380.00
			TOTAL	$ 402,960.00
EXTERNAL SURVEY / LANDMAN				
Two-Man Survey Crew	HR	0	$0.00	$ -
			SUBTOTAL	$ -
EXTERNAL INSPECTION				
Inspector	HR	0	$120.00	$ -
Inspector Expenses per Day	EA		$175.00	$ -
			SUBTOTAL	$ -
PERMITS				
			SUBTOTAL	$ -
Engineering / Administration / Inspection SUBTOTAL				$ 514,284.56

SUMMARY:	
TOTAL PROJECT COST	$ 4,310,911.56
AMOUNT PAYABLE IN TXDOT CONTRACT	$ 3,796,627.00
GROSS REIMBURSABLE TO UTILITY	$ 514,284.56
Utility Internal Costs to be Reimbursed	$ 111,324.56
Utility External Costs to be Reimbursed	$ 402,960.00
AMOUNT DUE TO TXDOT VIA ADVANCE FUNDING AGREEMENT	$ -
SALVAGE and or Depreciation CREDIT	$ -
ELIGIBILITY RATIO 100.00% — Ratio Deduction	$ -
BETTERMENT RATIO 0.00% — Ratio Deduction	$ -
NET REIMBURSEMENT TO UTILITY	$ 514,284.56

Line Item / Item Description	Unit	Quantity	$/Unit	Total
Engineering/Inspection/Administration TO BE REIMBURSED TO:			City of Smithville	
Line Item / Item Description	**Unit**	**Quantity**	**$/Unit**	**Total**
INTERNAL ADMINISTRATION - Cost associated with securing funding for this project				
City Manager	HR	9.5	$98.37	$ 934.52
Public Works Director	HR	3	$84.06	$ 252.18
Grant Administration	HR	579.5	$48.15	$ 27,902.93
			SUBTOTAL	$ 29,089.62
INTERNAL ADMINISTRATION - Costs prior to execution of agreement				
City Manager	HR	73.5	$98.37	$ 7,230.20
Public Works Director	HR	55	$84.06	$ 4,623.30
Utility Personnel	HR	81	$46.69	$ 3,781.89
Clerical (City Secretary)	HR	7	$39.64	$ 277.48
Grant Administration	HR	24.5	$48.15	$ 1,179.68
Equipment Rate	HR	40	$50.00	$ 2,000.00
			SUBTOTAL	$ 19,092.54
INTERNAL ADMINISTRATION - Estimated Costs				
City Manager	HR	80	$98.37	$ 7,869.60
Clerical (City Secretary)	HR	20	$39.64	$ 792.80
Finance Director	HR	40	$54.50	$ 2,180.00
			SUBTOTAL	$ 10,842.40
INTERNAL SURVEY / LANDMAN				
	HR	0	$0.00	$ -
	HR	0	$0.00	$ -
INTERNAL INSPECTION - Estimated Costs				
Public Works Director	HR	400	$84.06	$ 33,624.00
Utility Personnel	HR	400	$46.69	$ 18,676.00
			SUBTOTAL	$ 52,300.00
			TOTAL	$ 111,324.56
INTERNAL ENGINEERING / SURVEY / INSPECTION / ADMINISTRATION OVERHEAD				
PERCENTAGE OF INTERNAL COSTS	%		0.00%	$ -
			INTERNAL COSTS SUBTOTAL	$ 111,324.56
BEFCO ENGINEERING - Cost documented with INVOICES and / or CHECKS				
Design Engineer / PE	HR	772.5	$120.00	$ 92,700.00
RPLS	HR	66.5	$120.00	$ 7,980.00
Designer/Technician	HR	674.5	$90.00	$ 60,705.00
Two-Man Survey Crew	HR	57	$135.00	$ 7,695.00
Clerical/Administrative	HR	10	$50.00	$ 500.00
Railroad Permit Submissions	EA	4	$15,000.00	$ 60,000.00
			SUBTOTAL	$ 229,580.00
BEFCO ENGINEERING Estimate - Cost documented with INVOICES and / or CHECKS (Estimated Costs)				
Design Engineer / PE (Construction Phase Services)	HR	1000	$120.00	$ 120,000.00
Designer/Technician (Construction)	HR	582	$90.00	$ 52,380.00
Clerical/Administrative (Partial Payments)	HR	20	$50.00	$ 1,000.00
			SUBTOTAL	$ 173,380.00
			TOTAL	$ 402,960.00
EXTERNAL SURVEY / LANDMAN				
Two-Man Survey Crew	HR	0	$0.00	$ -
			SUBTOTAL	$ -
EXTERNAL INSPECTION				
Inspector	HR	0	$120.00	$ -
Inspector Expenses per Day	EA		$175.00	$ -
			SUBTOTAL	$ -
PERMITS				
			SUBTOTAL	$ -
Engineering / Administration / Inspection SUBTOTAL				$ 514,284.56

SUMMARY:	
TOTAL PROJECT COST	$ 4,367,584.56
AMOUNT PAYABLE IN TXDOT CONTRACT	$ 3,853,300.00
GROSS REIMBURSABLE TO UTILITY	$ 514,284.56
Utility Internal Costs to be Reimbursed	$ 111,324.56
Utility External Costs to be Reimbursed	$ 402,960.00
AMOUNT DUE TO TXDOT VIA ADVANCE FUNDING AGREEMENT	$ 50,092.90
SALVAGE and or Depreciation CREDIT	$ -
ELIGIBILITY RATIO 100.00% — Ratio Deduction	$ -
BETTERMENT RATIO 1.30% — Ratio Deduction	$ 6,685.70
NET REIMBURSEMENT TO UTILITY	$ 507,598.86

U-15999_SH95_Cost Estimate_Attachment A02.01.21.xlsx

BETTERMENT RATIO CALCULATOR

Two estimates are required to calculate betterment. One with, and one without betterment. Please attach both estimates.

The total estimated cost of the project **INCLUDING BETTERMENT**	$4,367,584.56
The total estimated cost of the project **NOT** including **BETTERMENT**	$4,310,911.56
THE AMOUNT OF BETTERMENT	$56,673.00
The BETTERMENT RATIO IS:	1.30%

U-15999_SH95_Cost Estimate_12.18.20.xlsx

SH 95 WASTEWATER FORCED BETTERMENT TABULATION

SHEET NUMBER	STREET	TXDOT STATION RANGE	WASTEWATER STATION RANGE	EXISTING LINE SIZE	PROPOSED LINE SIZE	LINEAR FEET OF PROPOSED LINE	Austin District Review of Justification	JUSTIFICATION
34/49	SH 95	434+00 - 434+21	Negative 0+13 - 2+00 (SL B)	10" (material unknown)	Base Bid: 20" PVC; Alt. Bid Equivalent: 24" HDPE	213	Forced	In order to maximize pipe depth at the upstream end of the project, the proposed wastewater line is required to be run at TCEQ minimum pipe slope per TCEQ Chapter 217 Design Criteria for Domestic Wastewater Systems Table C.2.. The minimum slope for a 20" is 0.115%. At this slope, the 20" pipe capacity exceeds peak flows of 1946.3 GPM. See pipe segment sizing chart. The next smaller pipe size is 18" which has a capacity of 1601 GPM which will not accommodate peak flows. In the event this pipe material is not available, an equivalent HDPE material was sized which was 24" HDPE IPS DR 11 which provides a pipe capacity that exceeds peak flows.
34/60	SH 95\FM 2571	434+45 - 437+74	0+00 - 3+18.02 (SL B1)	6" (material unknown)	8" PVC	318.02	Elective	Per pipe segment sizing chart, 8" PVC at minimum slope exceeds peak flows of 160 GPM and 6" PVC would be adequate size and accommodate peak flows; however, due to this line serving commercial development an 8" is recommended due to the characteristics of commercial wastewater potentially containing larger solids.
35/50	SH 95	432+12 - 434+00	2+00 - 3+86.51 (SL B)	10" (material unknown)	Base Bid: 20" PVC; Alt. Bid Equivalent: 24" HDPE	186.51	Forced	In order to maximize pipe depth at the upstream end of the project, the proposed wastewater line is required to be run at TCEQ minimum pipe slope per TCEQ Chapter 217 Design Criteria for Domestic Wastewater Systems Table C.2.. The minimum slope for a 20" is 0.115%. At this slope, the 20" pipe capacity exceeds peak flows of 1786.3 GPM. See pipe segment sizing chart. The next smaller pipe size is 18" which has a capacity of 1601 GPM which will not accommodate peak flows. In the event this pipe material is not available, an equivalent HDPE material was sized which was 24" HDPE IPS DR 11 which provides a pipe capacity that exceeds peak flows.
35/50	SH 95	430+50 - 432+12	3+86.51 - 5+45 (SL B)	10" (material unknown)	12" PVC	158.49	Forced	In order to maximize pipe depth at the upstream end of the project, the proposed wastewater line is required to be run at TCEQ minimum pipe slope per TCEQ Chapter 217 Design Criteria for Domestic Wastewater Systems Table C.2.. The minimum slope for a 12" is 0.20%. At this slope, the 12" pipe capacity exceeds peak flows of 568.5 GPM. See pipe segment sizing chart. The next smaller pipe size is 10" which has a capacity of 485 GPM at minimum slope of 0.25% which will not accommodate peak flows.
36/51	SH 95	427+00 - 430+50	5+45 - 8+89 (SL B)	10" (material unknown)	12" PVC	344	Forced	In order to maximize pipe depth at the upstream end of the project, the proposed wastewater line is required to be run at TCEQ minimum pipe slope per TCEQ Chapter 217 Design Criteria for Domestic Wastewater Systems Table C.2.. The minimum slope for a 12" is 0.20%. At this slope, the 12" pipe capacity exceeds peak flows of 473.5 GPM. See pipe segment sizing chart. The next smaller pipe size is 10" which has a capacity of 485 GPM at minimum slope of 0.25% which will accommodate peak flows; however, running this segment of pipe at the 10" minimum slope reduces the depth of the upstream end of the system by just under one foot. The upstream end cannot lose this depth since it is already shallow and would potentially be to shallow to gravity serve upstream services; therefore, 12" PVC was selected to maximize depth upstream.
37/52	SH 95	423+50 - 427+00	8+89 - 12+39 (SL B)	10" (material unknown)	12" PVC	350	Forced	In order to maximize pipe depth at the upstream end of the project, the proposed wastewater line is required to be run at TCEQ minimum pipe slope per TCEQ Chapter 217 Design Criteria for Domestic Wastewater Systems Table C.2.. The minimum slope for a 12" is 0.20%. At this slope, the 12" pipe capacity exceeds peak flows 473.5 GPM. See pipe segment sizing chart. The next smaller pipe size is 10" which has a capacity of 485 GPM at minimum slope of 0.25% which will accommodate peak flows; however, running this segment of pipe at the 10" minimum slope reduces the depth of the upstream end of the system by just under one foot. The upstream end cannot lose this depth since it is already shallow and would potentially be to shallow to gravity serve upstream services; therefore, 12" PVC was selected to maximize depth upstream.
38/53	SH 95	420+43 - 423+50	12+39 - 15+45.73 (SL B)	10" (material unknown)	12" PVC	306.73	Forced	In order to maximize pipe depth at the upstream end of the project, the proposed wastewater line is required to be run at TCEQ minimum pipe slope per TCEQ Chapter 217 Design Criteria for Domestic Wastewater Systems Table C.2.. The minimum slope for a 12" is 0.20%. At this slope, the 12" pipe capacity exceeds peak flows of 473.5 GPM. See pipe segment sizing chart. The next smaller pipe size is 10" which has a capacity of 485 GPM at minimum slope of 0.25% which will accommodate peak flows; however, running this segment of pipe at the 10" minimum slope reduces the depth of the upstream end of the system by just under one foot. The upstream end cannot lose this depth since it is already shallow and would potentially be to shallow to gravity serve upstream services; therefore, 12" PVC was selected to maximize depth upstream.
38/53	SH 95	420+00 - 420+43	15+45.73 - 15+88 (SL B)	8" (material unknown)	8" PVC	42.27	INKIND	NA, line is being replaced with same size line. The proposed wastewater line is required to be run at TCEQ minimum pipe slope per TCEQ Chapter 217 Design Criteria for Domestic Wastewater Systems Table C.2.. The minimum slope for a 8" is 0.33%. At this slope, the 8" pipe capacity exceeds peak flows of 146.4 GPM. See pipe segment sizing chart. A 6" pipe size cannot be used due to its minimum slope of 0.50% which would lose depth upstream and would potentially be to shallow to gravity serve upstream services.
39/54	SH 95	417+00 - 420+00	15+88 - 18+79 (SL B)	8" (material unknown)	8" PVC	291	INKIND	NA, line is being replaced with same size line. The proposed wastewater line is required to be run at TCEQ minimum pipe slope per TCEQ Chapter 217 Design Criteria for Domestic Wastewater Systems Table C.2.. The minimum slope for a 8" is 0.33%. At this slope, the 8" pipe capacity exceeds peak flows of 146.4 GPM. See pipe segment sizing chart. A 6" pipe size cannot be used due to its minimum slope of 0.50% which would lose depth upstream and would potentially be to shallow to gravity serve upstream services.
40/55	SH 95	413+50 - 417+00	18+79 - 22+22 (SL B)	8" (material unknown)	8" PVC	343	INKIND	NA, line is being replaced with same size line. The proposed wastewater line is required to be run at TCEQ minimum pipe slope per TCEQ Chapter 217 Design Criteria for Domestic Wastewater Systems Table C.2.. The minimum slope for a 8" is 0.33%. At this slope, the 8" pipe capacity exceeds peak flows of 146.4 GPM. See pipe segment sizing chart. A 6" pipe size cannot be used due to its minimum slope of 0.50% which would lose depth upstream and would potentially be to shallow to gravity serve upstream services.
41/56	SH 95	410+00 - 413+50	22+22 - 25+72 (SL B)	8" (material unknown)	8" PVC	350	INKIND	NA, line is being replaced with same size line. The proposed wastewater line is required to be run at TCEQ minimum pipe slope per TCEQ Chapter 217 Design Criteria for Domestic Wastewater Systems Table C.2.. The minimum slope for a 8" is 0.33%. At this slope, the 8" pipe capacity exceeds peak flows of 146.4 GPM. See pipe segment sizing chart. A 6" pipe size cannot be used due to its minimum slope of 0.50% which would lose depth upstream and would potentially be to shallow to gravity serve upstream services.
41/67	SH 95/5th	410+60	0+00 - 0+65 (SL B17)	none	6" PVC	65	Elective	Per TCEQ Chapter 217 Design Criteria for Domestic Wastewater Systems Table C.2., the minimum pipe size for gravity sewer application is 6 inches. A 6" crossing is being provided to the west side of SH 95 in the event there is a need in the future to run a 6" parallel to SH 95 in an easement on the west side of SH 95. A parallel line in the future would minimize service bores across SH 95 to the proposed 8" wastewater line on the east side of SH 95.
42/57	SH 95	406+50 - 410+00	25+72 - 29+72 (SL B)	8" (material unknown)	8" PVC	400	INKIND	NA, line is being replaced with same size line. The proposed wastewater line is required to be run at TCEQ minimum pipe slope per TCEQ Chapter 217 Design Criteria for Domestic Wastewater Systems Table C.2.. The minimum slope for a 8" is 0.33%. At this slope, the 8" pipe capacity exceeds peak flows of 146.4 GPM. See pipe segment sizing chart. A 6" pipe size cannot be used due to its minimum slope of 0.50% which would lose depth upstream and would potentially be to shallow to gravity serve upstream services.

U-15999_SH95_Cost Estimate_12.18.20.xlsx

SHEET NUMBER	STREET	TXDOT STATION RANGE	WASTEWATER STATION RANGE	EXISTING LINE SIZE	PROPOSED LINE SIZE	LINEAR FEET OF PROPOSED LINE	Austin District Review of Justification	JUSTIFICATION
43/58	SH 95	403+00 - 406+50	29+72 - 33+36 (SL B)	8" (material unknown)	8" PVC	364	INKIND	NA, line is being replaced with same size line. The proposed wastewater line is required to be run at TCEQ minimum pipe slope per TCEQ Chapter 217 Design Criteria for Domestic Wastewater Systems Table C.2.. The minimum slope for a 8" is 0.33%. At this slope, the 8" pipe capacity exceeds peak flows of 120 GPM. See pipe segment sizing chart. A 6" pipe size cannot be used due to its minimum slope of 0.50% which would lose depth upstream and would potentially be to shallow to gravity serve upstream services.
43/65	SH 95	403+20 - 405+19	0+00 - 2+00 (SL B27)	4" PVC FORCE MAIN	4" PVC FORCE MAIN	200	INKIND	NA, line is being replaced with same size line. Per TCEQ Chapter 217 Design Criteria for Domestic Wastewater Systems 217.67 (A)(1), minimum force main size is 4 inches unless associated with a grinder station. Existing lift station is not a grinder station. New 4" force main will also be installed on east side of SH 95 and will eliminate the existing\new force main from crossing under SH 95.
44/59	SH 95	402+22 - 403+00	33+36 - 34+11.80 (SL B)	4" (material unknown)	8" PVC	71.7	Forced	The proposed wastewater line is required to be run at TCEQ minimum pipe slope per TCEQ Chapter 217 Design Criteria for Domestic Wastewater Systems Table C.2.. The minimum slope for a 8" is 0.33%. At this slope, the 8" pipe capacity exceeds peak flows of serving one house. See pipe segment sizing chart. A 6" pipe size cannot be used due to its minimum slope of 0.50% which would lose depth upstream and creates a utility conflict with a proposed storm sewer culvert. Utilizing an 8 inch line size allows the line to be run at a flatter slope and eliminating an upstream utility conflict with a proposed storm sewer culvert.
45/61	NW 1st ST	432+12	0+00 - 2+63.97 (SL B2)	10" (material unknown)	15" PVC	263.97	Forced	The proposed slope of 0.40% for the 15 inch pipe provides pipe capacity that exceeds peak flows of 1217.8 GPM. See pipe segment sizing chart. The next smaller pipe size is 12" which has a capacity of 949 GPM at 0.40% which will not accommodate peak flows. The alignment requires extension past TXDOT paving improvements due to separation to proposed water line, location of the existing wastewater line and discharging wastewater to MH #4 in the direction of flow occuring in the main.
46/62	4th AVE	430+51	0+00 - 2+31.68 (SL B3)	6" (material unknown)	6" PVC	231.68	INKIND	NA, line is being replaced with same size line. The proposed wastewater line is required to be run at TCEQ minimum pipe slope per TCEQ Chapter 217 Design Criteria for Domestic Wastewater Systems Table C.2.. The minimum slope for a 6" is 0.50%. At this slope, the 6" pipe capacity exceeds peak flows of 95 GPM. See pipe segment sizing chart.
47/63	MLK	420+43	0+00 - 1+43.85 (SL B8)	8" (material unknown)	12" PVC	143.85	Forced	The minimum slope for a 12" is 0.20%. At this slope, the 12" pipe capacity exceeds peak flows of 325 GPM. See pipe segment sizing chart. The next smaller pipe size is 10" which has a capacity of 485 GPM at minimum slope of 0.25% which will accommodate peak flows; however, this would be the only segment of 10" pipe for the entire project. For continuity of the project and due to limited quantity of 10" needed, 12" PVC was selected. The alignment requires extension past TXDOT paving improvements due to the location of the existing wastewater line and discharging wastewater to MH #9 in the direction of flow occuring in the main.
48/64	North ST	407+31	0+00 - 2+34.03 (SL B21)	8" (material unknown)	8" PVC	234.03	INKIND	NA, line is being replaced with same size line. The proposed wastewater line is required to be run at TCEQ minimum pipe slope per TCEQ Chapter 217 Design Criteria for Domestic Wastewater Systems Table C.2. The minimum slope for a 8" is 0.33%. At this slope, the 8" pipe capacity exceeds peak flows. See pipe segment sizing chart.
						4877.25		

Size of Pipe	Linear Feet TOTALS	IN KIND	Forced Betterment	Elective Betterment	
4"	200.00	200.00	0.00	0.00	200.00
6"	296.68	231.68	0.00	65.00	296.68
8"	2414.02	2024.30	71.70	318.02	2414.02
10"	0.00	0.00	0.00	0.00	0.00
12"	1303.07	0.00	1303.07	0.00	1303.07
15"	263.97	0.00	263.97	0.00	263.97
20"	399.51	0.00	399.51	0.00	399.51
	4877.25				4877.25

U-15999_SH95_Cost Estimate_12.18.20.xlsx

SH 95 WATER FORCED BETTERMENT TABULATION

SHEET NUMBER	STREET	TXDOT STATION RANGE	WATER STATION RANGE	EXISTING LINE SIZE	PROPOSED LINE SIZE	LINEAR FEET OF PROPOSED LINE	Austin District Review of Justification	JUSTIFICATION
71/93	SH 95\FM 535	389+50	Negative 0+8.39 - 0+97.47 (WL A)	6" PVC	6" PVC	105.86	INKIND	NA, line is being replaced with same size since this line serves residential areas and does not need increased line size for non residential fire flows.
71/93	SH 95	389+50 - 393+00	0+97.47 - 4+30 (WL A)	6" PVC	12" PVC	332.53	Forced	Adopted Fire Code in City of Smithville is the IFC 2006. Non residential fire flows control the water main sizing since there is a Smithville ISD Campus where the line ends on the south side of the project near FM 535. Non residential fire flows are governed by IFC 2006, Appendix B, B105.2 and Table B105.1. Per Table B105.1, the maximum non residential fire flow is 8,000 GPM; however a 75% reduction of fire flow requirement is allowed when fire sprinklers are provided; therefore the required design fire flow is 2,000 GPM. The required delivery pressure is 20 psi. A 2,000 GPM fire flow requires a 12 inch water line due to velocity and head loss conditions. Pipes smaller than 12 inches would not be capable of providing 2,000 GPM at 20 psi due to increased velocities and associated headloss in the water system.
72/94	SH 95	393+00 - 396+00	4+30 - 7+30 (WL A)	6" PVC	12" PVC	300	Forced	Adopted Fire Code in City of Smithville is the IFC 2006. Non residential fire flows control the water main sizing since there is a Smithville ISD Campus where the line ends on the south side of the project near FM 535. Non residential fire flows are governed by IFC 2006, Appendix B, B105.2 and Table B105.1. Per Table B105.1, the maximum non residential fire flow is 8,000 GPM; however a 75% reduction of fire flow requirement is allowed when fire sprinklers are provided; therefore the required design fire flow is 2,000 GPM. The required delivery pressure is 20 psi. A 2,000 GPM fire flow requires a 12 inch water line due to velocity and head loss conditions. Pipes smaller than 12 inches would not be capable of providing 2,000 GPM at 20 psi due to increased velocities and associated headloss in the water system.
72/94	SH 95	395+41.20	0+00 - 0+84 (WL A3)	2" (material unknown)	6" PVC	84	Forced	A fire hydrant is required to tee off a minimum 6 inch water line size. WL A3 provides fire hydrant service as well as service to an existing 2 inch water line that extends beyond TXDOT right-of-way. In existing conditions there is a fire hydrant located at Bruner Blvd., by placing the new fire hydrant on WL A3 in lieu of at Bruner, it eliminates the need for a water line bore at Bruner.
73/95	SH 95	396+00 - 399+50	7+30 - 10+80 (WL A)	6" PVC and 8" PVC	12" PVC	350	Forced	Adopted Fire Code in City of Smithville is the IFC 2006. Non residential fire flows control the water main sizing since there is a Smithville ISD Campus where the line ends on the south side of the project near FM 535. Non residential fire flows are governed by IFC 2006, Appendix B, B105.2 and Table B105.1. Per Table B105.1, the maximum non residential fire flow is 8,000 GPM; however a 75% reduction of fire flow requirement is allowed when fire sprinklers are provided; therefore the required design fire flow is 2,000 GPM. The required delivery pressure is 20 psi. A 2,000 GPM fire flow requires a 12 inch water line due to velocity and head loss conditions. Pipes smaller than 12 inches would not be capable of providing 2,000 GPM at 20 psi due to increased velocities and associated headloss in the water system.
74/96	SH 95	399+50 - 403+00	10+80 - 14+35 (WL A)	6" PVC and 8" PVC	12" PVC	355	Forced	Adopted Fire Code in City of Smithville is the IFC 2006. Non residential fire flows control the water main sizing since there is a Smithville ISD Campus where the line ends on the south side of the project near FM 535. Non residential fire flows are governed by IFC 2006, Appendix B, B105.2 and Table B105.1. Per Table B105.1, the maximum non residential fire flow is 8,000 GPM; however a 75% reduction of fire flow requirement is allowed when fire sprinklers are provided; therefore the required design fire flow is 2,000 GPM. The required delivery pressure is 20 psi. A 2,000 GPM fire flow requires a 12 inch water line due to velocity and head loss conditions. Pipes smaller than 12 inches would not be capable of providing 2,000 GPM at 20 psi due to increased velocities and associated headloss in the water system.
75/97	SH 95	403+00 - 406+50	14+35 - 17+86 (WL A)	6" PVC and 8" PVC	12" PVC	351	Forced	Adopted Fire Code in City of Smithville is the IFC 2006. Non residential fire flows control the water main sizing since there is a Smithville ISD Campus where the line ends on the south side of the project near FM 535. Non residential fire flows are governed by IFC 2006, Appendix B, B105.2 and Table B105.1. Per Table B105.1, the maximum non residential fire flow is 8,000 GPM; however a 75% reduction of fire flow requirement is allowed when fire sprinklers are provided; therefore the required design fire flow is 2,000 GPM. The required delivery pressure is 20 psi. A 2,000 GPM fire flow requires a 12 inch water line due to velocity and head loss conditions. Pipes smaller than 12 inches would not be capable of providing 2,000 GPM at 20 psi due to increased velocities and associated headloss in the water system.
76/98	SH 95	406+50 - 410+00	17+86 - 21+36 (WL A)	2" and 6" (material unknown)	12" PVC	350	Forced	Adopted Fire Code in City of Smithville is the IFC 2006. Non residential fire flows control the water main sizing since there is a Smithville ISD Campus where the line ends on the south side of the project near FM 535. Non residential fire flows are governed by IFC 2006, Appendix B, B105.2 and Table B105.1. Per Table B105.1, the maximum non residential fire flow is 8,000 GPM; however a 75% reduction of fire flow requirement is allowed when fire sprinklers are provided; therefore the required design fire flow is 2,000 GPM. The required delivery pressure is 20 psi. A 2,000 GPM fire flow requires a 12 inch water line due to velocity and head loss conditions. Pipes smaller than 12 inches would not be capable of providing 2,000 GPM at 20 psi due to increased velocities and associated headloss in the water system.
77/99	SH 95	410+00 - 413+50	21+36 - 24+86 (WL A)	2" and 6" (material unknown)	12" PVC	350	Forced	Adopted Fire Code in City of Smithville is the IFC 2006. Non residential fire flows control the water main sizing since there is a Smithville ISD Campus where the line ends on the south side of the project near FM 535. Non residential fire flows are governed by IFC 2006, Appendix B, B105.2 and Table B105.1. Per Table B105.1, the maximum non residential fire flow is 8,000 GPM; however a 75% reduction of fire flow requirement is allowed when fire sprinklers are provided; therefore the required design fire flow is 2,000 GPM. The required delivery pressure is 20 psi. A 2,000 GPM fire flow requires a 12 inch water line due to velocity and head loss conditions. Pipes smaller than 12 inches would not be capable of providing 2,000 GPM at 20 psi due to increased velocities and associated headloss in the water system.
77/99	SH 95	410+24.65	0+00 - 0+59 (WL A15)	2" (material unknown)	6" PVC	59	Elective	A 6" crossing is being provided to the west side of SH 95 in the event there is a need in the future to run a 6" parallel to SH 95 in an easement. A parallel line in the future would minimize service bores across SH 95 to the proposed 12" water line. Fire hydrants may also be added to this future 6" line for fire protection along the west side of the heavily traveled SH 95 corridor. There is currently a 2" water line on the west side of SH 95 that allows for domestic service for properties on the west side of SH 95 without boring across to the east side. The 6 inch line size for the crossing is required because that is the minimum line size a fire hydrant is required to tee off of.

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SHEET NUMBER	STREET	TXDOT STATION RANGE	WATER STATION RANGE	EXISTING LINE SIZE	PROPOSED LINE SIZE	LINEAR FEET OF PROPOSED LINE	Austin District Review of Justification	JUSTIFICATION
78/100	SH 95	413+50 - 417+00	24+86 - 28+30 (WL A)	2" and 6" (material unknown)	12" PVC	344	Forced	Adopted Fire Code in City of Smithville is the IFC 2006. Non residential fire flows control the water main sizing since there is a Smithville ISD Campus where the line ends on the south side of the project near FM 535. Non residential fire flows are governed by IFC 2006, Appendix B, B105.2 and Table B105.1. Per Table B105.1, the maximum non residential fire flow is 8,000 GPM; however a 75% reduction of fire flow requirement is allowed when fire sprinklers are provided; therefore the required design fire flow is 2,000 GPM. The required delivery pressure is 20 psi. A 2,000 GPM fire flow requires a 12 inch water line due to velocity and head loss conditions. Pipes smaller than 12 inches would not be capable of providing 2,000 GPM at 20 psi due to increased velocities and associated headloss in the water system.
79/101	SH 95	417+00 - 420+00	28+30 - 31+25 (WL A)	2" and 6" (material unknown)	12" PVC	295	Forced	Adopted Fire Code in City of Smithville is the IFC 2006. Non residential fire flows control the water main sizing since there is a Smithville ISD Campus where the line ends on the south side of the project near FM 535. Non residential fire flows are governed by IFC 2006, Appendix B, B105.2 and Table B105.1. Per Table B105.1, the maximum non residential fire flow is 8,000 GPM; however a 75% reduction of fire flow requirement is allowed when fire sprinklers are provided; therefore the required design fire flow is 2,000 GPM. The required delivery pressure is 20 psi. A 2,000 GPM fire flow requires a 12 inch water line due to velocity and head loss conditions. Pipes smaller than 12 inches would not be capable of providing 2,000 GPM at 20 psi due to increased velocities and associated headloss in the water system.
80/102	SH 95	420+00 - 423+50	31+25 - 34+72 (WL A)	6" (material unknown)	12" PVC	347	Forced	Adopted Fire Code in City of Smithville is the IFC 2006. Non residential fire flows control the water main sizing since there is a Smithville ISD Campus where the line ends on the south side of the project near FM 535. Non residential fire flows are governed by IFC 2006, Appendix B, B105.2 and Table B105.1. Per Table B105.1, the maximum non residential fire flow is 8,000 GPM; however a 75% reduction of fire flow requirement is allowed when fire sprinklers are provided; therefore the required design fire flow is 2,000 GPM. The required delivery pressure is 20 psi. A 2,000 GPM fire flow requires a 12 inch water line due to velocity and head loss conditions. Pipes smaller than 12 inches would not be capable of providing 2,000 GPM at 20 psi due to increased velocities and associated headloss in the water system.
81/103	SH 95	423+50 - 427+00	34+72 - 38+22 (WL A)	6" (material unknown)	12" PVC	350	Forced	Adopted Fire Code in City of Smithville is the IFC 2006. Non residential fire flows control the water main sizing since there is a Smithville ISD Campus where the line ends on the south side of the project near FM 535. Non residential fire flows are governed by IFC 2006, Appendix B, B105.2 and Table B105.1. Per Table B105.1, the maximum non residential fire flow is 8,000 GPM; however a 75% reduction of fire flow requirement is allowed when fire sprinklers are provided; therefore the required design fire flow is 2,000 GPM. The required delivery pressure is 20 psi. A 2,000 GPM fire flow requires a 12 inch water line due to velocity and head loss conditions. Pipes smaller than 12 inches would not be capable of providing 2,000 GPM at 20 psi due to increased velocities and associated headloss in the water system.
82/104	SH 95	427+00 - 430+50	38+22 - 41+65 (WL A)	6" (material unknown)	12" PVC	343	Forced	Adopted Fire Code in City of Smithville is the IFC 2006. Non residential fire flows control the water main sizing since there is a Smithville ISD Campus where the line ends on the south side of the project near FM 535. Non residential fire flows are governed by IFC 2006, Appendix B, B105.2 and Table B105.1. Per Table B105.1, the maximum non residential fire flow is 8,000 GPM; however a 75% reduction of fire flow requirement is allowed when fire sprinklers are provided; therefore the required design fire flow is 2,000 GPM. The required delivery pressure is 20 psi. A 2,000 GPM fire flow requires a 12 inch water line due to velocity and head loss conditions. Pipes smaller than 12 inches would not be capable of providing 2,000 GPM at 20 psi due to increased velocities and associated headloss in the water system.
83/105	SH 95	430+50 - 434+00	41+65 - 45+14 (WL A)	6" (material unknown)	12" PVC	349	Forced	Adopted Fire Code in City of Smithville is the IFC 2006. Non residential fire flows control the water main sizing since there is a Smithville ISD Campus where the line ends on the south side of the project near FM 535. Additionally, the area north of NW 1st Street is in a non residential area requiring non residential fire flows. Non residential fire flows are governed by IFC 2006, Appendix B, B105.2 and Table B105.1. Per Table B105.1, the maximum non residential fire flow is 8,000 GPM; however a 75% reduction of fire flow requirement is allowed when fire sprinklers are provided; therefore the required design fire flow is 2,000 GPM. The required delivery pressure is 20 psi. A 2,000 GPM fire flow requires a 12 inch water line due to velocity and head loss conditions. Pipes smaller than 12 inches would not be capable of providing 2,000 GPM at 20 psi due to increased velocities and associated headloss in the water system.
84/106	SH 95	434+00 - 436+00	45+14 - 47+20 (WL A)	6" (material unknown)	12" PVC	206	Forced	Adopted Fire Code in City of Smithville is the IFC 2006. Non residential fire flows control the water main sizing since there is a Smithville ISD Campus where the line ends on the south side of the project near FM 535. Additionally, the area north of NW 1st Street is in a non residential area requiring non residential fire flows. Non residential fire flows are governed by IFC 2006, Appendix B, B105.2 and Table B105.1. Per Table B105.1, the maximum non residential fire flow is 8,000 GPM; however a 75% reduction of fire flow requirement is allowed when fire sprinklers are provided; therefore the required design fire flow is 2,000 GPM. The required delivery pressure is 20 psi. A 2,000 GPM fire flow requires a 12 inch water line due to velocity and head loss conditions. Pipes smaller than 12 inches would not be capable of providing 2,000 GPM at 20 psi due to increased velocities and associated headloss in the water system.
84/106	SH 95	436+00	47+20 - 47+98 (WL A)	6" and 8" (material unknown)	8" PVC	78	Forced	Adopted Fire Code in City of Smithville is the IFC 2006. Non residential fire flows control the water main sizing. There are existing 6" and 8" water lines located on the west side of SH 95 north of FM 2571 providing fire flows to existing non residential development. An 8 inch crossing is provided for fire flow purposes. Non residential fire flows are governed by IFC 2006, Appendix B, B105.2 and Table B105.1. Per Table B105.1, the maximum non residential fire flow is 8,000 GPM; however a 75% reduction of fire flow requirement is allowed when fire sprinklers are provided; therefore the required design fire flow is 2,000 GPM. The required delivery pressure is 20 psi. The areas served by this proposed 8 inch crossing is in close proximity to the elevated water storage tank and the downtown water plant; therefore, headlosses will not be as significant when comparing to the distance to the Smithville ISD campus on the south side of the project. Based on this, an 8 inch line is adequate for the anticipated fire flow.
85/107	SW 7TH ST	404+54.85	0+00 - 1+55 (WL A6)	6" (material unknown)	6" PVC	155	INKIND	NA, line is being replaced with same size line (serves residential areas)
86/108	NORTH/WEBSTER ST	407+13.02	0+00 - 2+43 (WL A11)	6" (material unknown)	6" PVC	243	INKIND	NA, line is being replaced with same size line (serves residential areas)

U-15999_SH95_Cost Estimate_12.18.20.xlsx

SHEET NUMBER	STREET	TXDOT STATION RANGE	WATER STATION RANGE	EXISTING LINE SIZE	PROPOSED LINE SIZE	LINEAR FEET OF PROPOSED LINE	Austin District Review of Justification	JUSTIFICATION
87/109	SW 4TH ST	416+35.06	0+00 - 1+00 (WL A20)	6" (material unknown)	10" PVC	100	Forced	Adopted Fire Code in City of Smithville is the IFC 2006. Non residential fire flows control the water main sizing. There is an existing elementary school located approximately 250 feet east of SH 95 on SW 4th Street that requires service from a 10 inch water line. Additionally, City of Smithville has a 10" water line located at SW 4th and Lynch (about 12 blocks to the east). A 12" water line in 4th Avenue is not required since a 10" can provide the minimum fire flow delivery pressure. The estimated pressure delivery of the 10" to the school is 47 psi. The future water plan recommends a 10 inch water line along SW 4th from Lynch to SH 95 to provide a large line loop on the south side of the railroad tracks in Smithville. Based on the location of the elementary school and the City's future water plan, a 10 inch line is required.
88/110	MLK DR	420+75.93	0+00 - 3+45 (WL A26)	2" (material unknown)	6" PVC	345	Forced	A fire hydrant is provided off the proposed 6 inch water line. A fire hydrant is required to tee off a minimum 6 inch water line size. The proposed 6" water line ties into an existing 6" water line located at the intersection of MLK and Prima.
89/111	4TH AVE	430+31.97	0+00 - 1+66 (WL A33)	6" (material unknown)	6" PVC	166	INKIND	NA, line is being replaced with same size line (serves residential areas)
90 - 91/112 - 113	NW 1ST ST\FAWCETT	432+37.49	0+00 - 4+94 (WL A34)	No Line	12" PVC	494	Forced	Adopted Fire Code in City of Smithville is the IFC 2006. Non residential fire flows control the water main sizing since there is a Smithville ISD Campus where the line ends on the south side of the project near FM 535. Non residential fire flows are governed by IFC 2006, Appendix B, B105.2 and Table B105.1. Per Table B105.1, the maximum non residential fire flow is 8,000 GPM; however a 75% reduction of fire flow requirement is allowed when fire sprinklers are provided; therefore the required design fire flow is 2,000 GPM. The required delivery pressure is 20 psi. A 2,000 GPM fire flow requires a 12 inch water line due to velocity and head loss conditions. Pipes smaller than 12 inches would not be capable of providing 2,000 GPM at 20 psi due to increased velocities and associated headloss in the water system. The proposed 12" water line on NW 1st and Fawcett will be tied directly to the 12 inch water line feeding the existing elevated storage tank at the Rec Center. This tie-in is critical to providing the water supply for required fire flow for the school at the south end of the project.
92/114	N 2ND ST	435+22.12	0+00 - 0+87 (WL A35)	6" (material unknown)	6" PVC	87	INKIND	NA, line is being replaced with same size line
						6539.39		

Size of Pipe	Linear Feet TOTALS	IN KIND	Forced Betterment	Elective Betterment	
4"	0.00	0.00	0.00	0.00	0.00
6"	1244.86	756.86	429.00	59.00	1244.86
8"	78.00	0.00	78.00	0.00	78.00
10"	100.00	0.00	100.00	0.00	100.00
12"	5116.53	0.00	5116.53	0.00	5116.53
15"	0.00	0.00	0.00	0.00	0.00
20"	0.00	0.00	0.00	0.00	0.00
	6539.39				6539.39

Attachment "H"
Proof of Property Interest

☒ Supporting documentation of compensable property interest that establishes reimbursement eligibility as referenced in Texas Transportation Code §203.092.

☐ Property interest documented through applicable affidavits and required attachments.

☐ ROW-U-Affidavit

☐ The roadway improvement project is designated as an Interstate Highway project; therefore, no supporting documentation of compensable interest is required.

value of the work product that can, as determined by the department, be used by the department in the performance of its functions, up to a maximum amount per proposer of $4,867,500.

IT IS FURTHER ORDERED that payment for work product may only be paid to the extent that the work product submitted meets the minimum criteria and the proposer satisfies the conditions for payment identified by the department in the I-35 Northeast Expansion Project procurement documents.

ITEM 8. Municipal Utility Relocation Reimbursement

Bastrop County - Consider the approval of a request from the City of Smithville (city) to make the relocation of the city's utility facilities required by the SH 95 highway improvement project an expense of the state under Transportation Code §203.092(a-4) (MO)

After Item 5, Chairman Bugg brought up this item. Item 8 was presented by Right of Way Division Director Kyle Madsen. Comments were received from Bastrop County Judge Paul Pape and Smithville City Manager Robert Tamble. Commissioner New made a motion, which was seconded by Commissioner Vaughn, and the commission approved the following minute order by a vote of 4 - 0.

115588
ROW

The Texas Department of Transportation (department) has a state highway project in Bastrop County, on State Highway 95, that requires the relocation of utility facilities. The City of Smithville owns certain of these utility facilities.

Transportation Code, §203.092(a-4) authorizes the Texas Transportation Commission (commission) to determine that certain publicly-owned utilities are eligible for utility facility relocation at the expense of the state. The City of Smithville has requested that the commission determine that the relocation of their utility facilities be at the expense of the state.

The commission finds and determines that the City of Smithville meets the eligibility standards contained in that statute and that the department's expenditures under Transportation Code, §203.092(a-4), including the request by the City of Smithville, will not exceed the fiscal year limitation contained in Transportation Code §203.092(e).

IT IS THEREFORE ORDERED by the commission that the relocation of the City of Smithville's utility facility required by the improvement of the state highway system is an expense of the state to be paid by the department.

ITEM 6. Design Bid Build Contract - Direct Connectors SH 99 and SH 249 Interchange

Harris County - Pursuant to an understanding between the department and Harris County (county) regarding the county's agreement to fund projects selected by the department and the county that enhance regional mobility, consider designating four proposed direct southern connectors at the interchange of State Highway 99 (Grand Parkway) and State Highway 249 (Tomball Tollway) in Harris County (referred to as the SH 249 DCs), connecting two existing toll projects, as toll projects funded and constructed solely by the county on the state highway system; consider designating the two direct connectors on the southeast side of the interchange (the Southeast DCs) as part of the Grand Parkway Project and authorizing the Grand Parkway Transportation Corporation (GPTC) to operate them as part of the Grand Parkway System; consider approving the exercise of primacy for the Southeast DCs by the department to develop, finance, construct and operate them; consider authorizing GPTC to perform any function authorized, including those authorized by Chapter 431 of the Transportation Code, in connection with the Southeast DCs; consider approving the assignment of revenues from the Southeast DCs to GPTC; consider approving financial assistance under the existing toll equity loan agreement between the department and GPTC for the SH 249 DCs,

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Project: SH 95

STATE OF TEXAS §

COUNTY OF TRAVIS §

ADVANCE FUNDING AGREEMENT FOR VOLUNTARY UTILITY RELOCATION CONTRIBUTIONS ON STATE HIGHWAY IMPROVEMENT PROJECTS

THIS AGREEMENT is made by and between the State of Texas, acting through the Texas Department of Transportation ("State") and City of Smithville ("Utility"),

WITNESSETH

WHEREAS, Transportation Code, Chapters 201, 221, and 361, authorize the State to lay out, construct, maintain, and operate a system of streets, roads and highways that comprise the State Highway System; and,

WHEREAS, Transportation Code, Chapter 203, Subchapter E, Transportation Code §203.092 authorizes the State to regulate the placement of public utility facilities along a state highway; and,

WHEREAS, Texas Transportation Commission Minute Order Number 115291 and 115814 authorizes the State to undertake and complete a highway improvement generally described as: SH 95 from SL 230 to SOUTH OF FM 535 ("Project"); and,

WHEREAS, Utility possesses facilities that are affected by the above mentioned highway improvement and Utility, and the State agrees that it is more economical or efficient for such relocation to be effected by including said contract in the State's highway construction contract;

NOW THEREFORE, in consideration of the premises and of the mutual covenants and agreements of the parties hereto, to be by them kept and performed as hereafter set forth, the State and Utility do agree as follows:

AGREEMENT

1. **Time Period Covered**
   This agreement becomes effective when signed by the last party whose signing makes the agreement fully executed, and the State and Utility will consider it to be in full force and effect until the Project described in this agreement has been completed and accepted by all parties or unless terminated, as provided.

2. **Project Funding and Work Responsibilities**
   A. The State will authorize the performance of only those Project items of work which are eligible for relocation reimbursements or for which Utility has requested and has agreed to pay for as described in Attachment A - Payment Provision and Work Responsibilities, which is attached to and made a part of this contract. In addition to identifying those items of work to be paid for by payments to the State, Attachment A - Payment Provision and Work Responsibilities, also specifies those Project items of work that are the

responsibility of Utility and will be carried out and completed by Utility, at no cost to the State. The Utility shall be responsible for costs that are shown on Attachment B, Estimated Utility Costs, which is attached to and made a part of this agreement.

B. If the Utility will perform any work under this contract for which reimbursement will be provided by or through the State, the Utility must complete training before a letter of authority is issued. Training is complete when at least one individual who is working actively and directly on the Project successfully completes and receives a certificate for the course entitled *Local Government Project Procedures and Qualification for the Texas Department of Transportation*. The Utility shall provide the certificate of qualification to the State. The individual who receives the training certificate may be an employee of the Utility or an employee of a firm that has been contracted by the Utility to perform oversight of the Project. The State in its discretion may deny reimbursement if the Utility has not designated a qualified individual to oversee the Project.

C. Payment under this contract beyond the end of the current fiscal biennium is subject to availability of appropriated funds. If funds are not appropriated, this contract shall be terminated immediately with no liability to either party.

D. Utility is not eligible for reimbursement based on State policy on utility relocation rules; however, Utility is 100% reimbursable due to the new SP 2125 program.

3. Termination

A. This agreement may be terminated in the following manner:

1. By mutual written agreement and consent of both parties;
2. By either party upon the failure of the other party to fulfill the obligations set forth in this agreement; or
3. By the State if it determines that the performance of the Project or utility work is not in the best interest of the State.

B. If the agreement is terminated in accordance with the above provisions, Utility will be responsible for the payment of Project costs incurred by the State on behalf of Utility up to the time of termination.

4. Right of Access

If Utility is the owner of any part of the Project site, Utility shall permit the State or its authorized representative access to the site to perform any activities required to execute the work.

5. Adjustments Outside the Project Site

Utility will provide for all necessary right of way and utility adjustments needed for performance of the work on sites not owned or to be acquired by the State.

6. Responsibilities of the Parties and Indemnity

Utility acknowledges that it is not an agent, servant, employee of the State, nor is it engaged in a joint enterprise, and it is responsible for its own acts and deeds and for those of its agents or employees during the performance of the work on the Project. To the extent permitted by law, Utility agrees to indemnify and hold harmless the State, its agents and employees, from all suits, actions, or claims and from all liability and damages for any and

all injuries or damages sustained by any person or property in consequence with the performance of design, construction, maintenance, or operation of the Utility facility. Such indemnity includes but is not limited to any claims or amounts arising or recovered under the "Worker's Compensation Law", the Texas Tort Claims Act, Chapter 101, Texas Civil Practice and Remedies Code; or any other applicable laws or regulations, all as time to time may be amended.

7. Sole Agreement

In the event the terms of the agreement are in conflict with the provisions of any other existing agreements between Utility and the State, the latest agreement shall take precedence over the other agreements in matters related to the Project.

8. Successors and Assigns

The State and Utility each binds itself, its successors, executors, assigns, and administrators to the other party to this agreement and to the successors, executors, assigns, and administrators of such other party in respect to all covenants of this agreement.

9. Amendments

By mutual written consent of the parties, the scope of work and payment provisions of this agreement may be amended prior to its expiration.

10. Inspection and Conduct of Work

Unless otherwise specifically stated in Attachment A - Payment Provision and Work Responsibilities, to this contract, the State will supervise and inspect all work performed hereunder and provide such engineering inspection and testing services as may be required to ensure that the Project is accomplished in accordance with the approved plans and specifications. All correspondence and instructions to the contractor performing the work will be the sole responsibility of the State. Unless otherwise specifically stated in Attachment A to this contract, all work will be performed in accordance with the Utility Accommodation Rules as set forth in 43 Texas Administrative Code §21.31 et. seq. adopted by the State and incorporated in this agreement by reference, or special specifications approved by the State.

11. Maintenance

Upon completion of the Project, Utility will assume responsibility for the maintenance of the completed Utility facility unless otherwise specified in Attachment A to this agreement.

12. Notices

All notices to either party by the other required under this agreement shall be delivered personally or sent by certified or U.S. mail, postage prepaid, addressed to such party at the following addresses:

Utility:	State:
City Manager	Director of Contract Services
City of Smithville	Texas Department of Transportation
317 Main Street	125 E. 11th Street
Smithville, TX 78957	Austin, Texas 78701

All notices shall be deemed given on the date so delivered or so deposited in the mail, unless otherwise provided in this agreement. Either party may change the above address by sending written notice of the change to the other party. Either party may request in writing that such notices shall be delivered personally or by certified U.S. mail and such request shall be honored and carried out by the other party.

13. State Auditor

The state auditor may conduct an audit or investigation of any entity receiving funds from the State directly under this contract or indirectly through a subcontract under this contract. Acceptance of funds directly under this contract or indirectly through a subcontract under this contract acts as acceptance of the authority of the state auditor, under the direction of the legislative audit committee, to conduct an audit or investigation in connection with those funds. An entity that is the subject of an audit or investigation must provide the state auditor with access to any information the state auditor considers relevant to the investigation or audit.

14. Signatory Warranty

Each signatory warrants that the signatory has necessary authority to execute this agreement on behalf of the entity represented.

15. Access to Information

The Utility is required to make any information created or exchanged with the state pursuant to this contract, and not otherwise excepted from disclosure under the Texas Public Information Act, available in a format that is accessible by the public at no additional charge to the state.

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Each party is signing this agreement on the date stated under that party's signature.

THE UTILITY

_____
Signature

_____
Typed or Printed Name

_____
Title

_____
Date

THE STATE OF TEXAS

_____
District Engineer

_____
Date

CSJ # 0323-01-028
District # 14-AUS
Code Chart 64 # 39650
Project: SH 95

ATTACHMENT A
PAYMENT PROVISION AND WORK RESPONSIBILITIES

1. **Description of the Work Items**
   The parties agree that the existing water and wastewater shall be relocated and adjustments shall be made along SH 95. The water and wastewater facilities shall be owned, operated, and maintained by Utility from and after completion and final acceptance by the State and Utility. The estimated total construction cost for the relocated and adjusted facilities is $3,853,300. The parties agree that it is their intent to complete the relocation improvements within this estimate of cost.
2. **Actual Cost Agreement**
   Utility will be responsible for paying all costs associated with the planning, specification, and estimate (PS&E) development, and construction of the proposed utility work to the extent such is not reimbursed pursuant to state law. All the costs associated with construction of the water & wastewater items for the Project shall be provided as defined under the Standard Utility Agreement, Utility Joint Use Agreement, and/or the Agreement to Contribute Funds executed between the State and Utility.
3. **Schedule of Payments**
   - **A.** At least forty-five (45) days prior to the date set for receipt of the construction bids, the Utility shall remit its remaining financial share for the State's estimated construction oversight and construction costs. Utility must advance to the State one hundred percent (100%) of its share of the estimated Project utility construction costs. The amount to be advanced for the utility improvements is estimated to be $ 50,092.90. (See Attachment B – Estimated Utility Costs)
   - **B.** In the event the State determines that additional funding is required by the Utility at any time during the Project, the State will notify the Utility in writing. The Utility is responsible for one hundred percent (100%) of the authorized elective betterment project cost and any overruns. The Utility will make payment to the State within thirty (30) days from receipt of the State's written notification.
   - **C.** Whenever funds are paid by the Utility to the State under this agreement, the Utility will remit a warrant made payable to the "Texas Department of Transportation." The warrant will be deposited by the State and managed by the State. Until the final Project accounting, funds may only be applied by the State to the Project.
   - **D.** Upon completion of the Project, the State will perform an audit of the Project costs. Any funds due by the Utility, the State, or the Federal Government will be promptly paid by the owing party.
4. **Work Responsibilities**
   - **A.** The **Utility** shall provide the following services under this contract:
     - i. Responsible for engaging the services of a Texas Registered Professional Engineer to prepare drawings and technical specifications for waterline relocations and adjustments along _____.
     - ii. Provide the plans and specifications to the State to include in the current planning specifications and estimate package being prepared by representatives of the Texas Department of Transportation's Bastrop Area Office.

iii. Secure all necessary permitting as may be required for the installation of the water & wastewater line.
iv. Arrange and coordinate with the contractor, through the State, materials and equipment testing, rejection of all work not conforming to minimum requirements of the construction contract documents, maintenance of the proposed water & wastewater during construction, and the relocation of water & wastewater facilities and connection of services to customers.
v. Advise the State of work that Utility determines should be corrected or rejected.
vi. Arrange, observe, and inspect all acceptance testing and notify the State of the results of these activities.
vii. Provide inspection services for the construction, notify the State of defects and deficiencies in the work, and observe actions of the contractor to correct such defects and deficiencies.
viii. Assume all responsibility for the maintenance of the existing water & wastewater facilities during and upon completion of the construction contract.
ix. Ensure all Texas Commission on Environmental Quality and all other regulatory rules, regulations and laws are strictly adhered to.
x. Prepare and submit both a certificate of substantial completion and a list of observed items requiring completion or correction for the relocations and adjustments to the Project Engineer for concurrence.
xi. Coordinate all construction activities performed by Utility's staff for the relocations and adjustments through the Project Engineer.

B. The **State** shall provide the following services under this contract:
i. Combine the water & wastewater relocation and adjustment plans with the plans being prepared for the Project.
ii. Review and approve the final construction plans prior to any construction-related activities. In order to ensure federal and/or state funding eligibility, projects must be authorized by the State prior to advertising for construction.
iii. Advertise for construction bids, issue bid proposals, receive and tabulate the bids, and award and administer the contract for construction of the Project.
iv. Negotiate and administer all field changes and change orders required for the Project. All change orders increasing construction costs for Utility's Project shall be submitted to Utility for review and approval together with an evaluation. Utility agrees to review and either approve or disapprove all change orders within five (5) business days after receipt of such order unless Utility Board's approval is necessary in which case Utility shall bring the item to Utility Board as soon as reasonably possible.
v. Provide overall project management to supervise the day-to-day activities of the construction and monitor the activities of the contractor to promote the timely and efficient completion of the Project in accordance with the approved Plans and Specifications and construction schedule.
vi. Conduct field observations and coordinate with Utility's inspectors and the contractor to cure defects and deficiencies in the construction prior to final acceptance.
vii. Make timely payment to the contractor for work performed in connection with the Project.

viii. Ensure access and permit Utility's inspectors and other authorized representatives to inspect the waterline construction at all times.
ix. Conduct and coordinate final inspection of the Project in the presence of Utility's Engineer and Inspector, transmit final list of items to be completed or repaired and observe contractor correction of same.
x. Maintain job file.

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ATTACHMENT B
ESTIMATED UTILITY COSTS

Based on various calculations, following are those amounts due and payable for Utility's costs associated with this project.

Total Estimated Costs
$3,853,300

Less Betterment Amount Due from Utility
$50,092.90

Amount of total utility relocation Costs
$3,853,300

Estimated Amount Eligible for Reimbursement
(Calculated eligibility Ratio – 100%)
$3,803,207.10

Amount of Utility Adjustment Due from Utility
$ 0

Estimated amount to be included in Construction Agreement

A. Betterment	$ 50,092.90
B. Utility Adjustment	$3,803,207.10
GRAND TOTAL	**$ 3,853,300.00**

Betterment Ratio Calculation

Estimated Betterment Costs

1. …Increase in wastewater pipe size from 6" to 8"
2. …Additional 6" water line crossing for future development

Betterment Calculation:

Total Costs of Betterment	**(Estimated)**	-	**$50,092.90**
Total Costs of Project (Estimated)		-	**$ 3,853,300.00**

Betterment Percentage for final cost determination: 1.30% of final cost of relocation
Determination of Betterment – Comparison of estimated cost to replace "as is" versus estimated costs associated with the betterment.
Item A:
Item B: