



UNINTECH CONSULTING ENGINEERS, INC.

STRUCTURAL • CIVIL • SURVEYING

March 15, 2022
City of Schertz
Engineering
10 Commercial Place, Bld 2
Schertz, TX 78154

Attn: Jennifer R. Shortess, PE

Re: City of Schertz – On-Call Civil Engineering Services Agreement
Proposal – Ware Seguin to Lower Seguin Watermain Loop
Proposal – IH 10 Watermain Pfeil RD to N Graytown Rd

Unintech Consulting Engineers, Inc. is pleased to provide this proposal for professional engineering services to the City of Schertz for the design of the watermain loop connection between Ware Seguin Road and Lower Seguin Road, per the attached exhibit; and the design of the watermain along IH-10 between Pfeil Road and Graytown Road, per the attached exhibit.

Our understanding of the scope of work is generally as follows: The City Schertz desires to construct a 12-inch water main through private property connecting existing 8-inch water mains on Ware Seguin Road and on Lower Seguin Road.

The City of Schertz desires to construct a 12-inch water main through private property, following the IH-10 right of way, connecting the existing 8-inch water mains on Pfeil Road and Graytown Road.

Scope **Survey**

For the limits described above, per phase, Unintech Consulting Engineers, Inc will provide the topographical survey of the proposed project limits to determine locations of existing utilities and pertinent topographic features; at 25-foot sections, approximately 40- feet wide.

The City will secure rights of entry for survey from property owners.

UNINTECH will provide boundary survey and exhibits/metes and bounds descriptions for permanent utility easements and temporary construction easement descriptions.

It is assumed that there will be three (3) permanent easements and three (3) temporary construction easements for the Ware Seguin to Lower Seguin Road segment.

It is assumed that there will be nine (9) permanent easements and three (3) temporary construction easements for the IH-10 – Pfeil Road to Graytown Road segment.

Geotechnical

Arias and Associates will obtain geotechnical samples and report for project with one sample at each end of each project in public right of way.

Water Main Design

For the limits described above, per phase, Ford Engineering will prepare ONE set of construction plans, specifications, and quantity estimate, for review, approval, and construction with associated details per the standards indicated in Statement of Work. Plans and specifications will



be in conformance with City of Schertz standards of construction and materials. Plans will include the pipeline layout and details for construction for both areas of proposed watermain; Ware Seguin to Lower Seguin Watermain Loop, and IH 10 Watermain Pfeil Road to N Graytown Rd.

It is assumed that the Ware Seguin to Lower Seguin Watermain Loop will be traversing private property.

It is assumed that the IH 10 Watermain Pfeil Road to N Graytown Road Segment will be running parallel to the IH-10 right of way but inside private property.

Permitting

Because utility easements are being obtained and capital improvements funds are used, we recommend an Environmental Constraints Analysis and a Texas Antiquities Code review. Our subconsultant, Adams Environmental will provide the reports and associated submittals.

There is a potential for a **Nationwide Permit** under CWA 404 being required because the preliminary alignment for the and IH 10 Watermain Pfeil Road to N Graytown Rd segment crosses two drainage lows, and one of those crossings is in the FEMA special flood hazard area for the 100-year event. Should the constraints analysis determine that a Nationwide Permit be required it will be considered additional services, and the additional fee for the effort to obtain the permit will be negotiated at that time.

UNINTECH will prepare a **flood development permit** for one (1) anticipated crossing of the floodplain for the IH 10 Watermain Pfeil Road to N Graytown Rd segment.

There is at least one oil pipeline the proposed Ware Seguin to Lower Seguin Watermain Loop main will cross. UNINTECH will coordinate with the pipeline operator to obtain a letter of no objection.

Access off of IH-10 will be required for the IH 10 watermain from Pfeil Road to N Graytown. UNINTECH will prepare exhibit for the acquisition of easement.

Design Phases

Preliminary Design

Both segments are anticipated to be included in one set of plans.

Preliminary Construction Plans as PDFs of all deliverables to include the following:

Cover page, overall project layout, estimated quantities, water plan, standard City details, and a preliminary estimate of probable cost.

Geotechnical report and Environmental constraints report.

Final Design

100% Plans, Bid Documents, Estimates.

(CAD files and hard copy bound sets, upon request)

Bid Phase

For the limits described above, per phase, UNINTECH will provide Bid Documents, Bid Tabulations and recommendation for awards, attend a Pre-Bid meeting and respond to contractor questions.

Construction Phase



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For the limits described above, per phase, UNINTECH will attend a pre-construction meeting with the City and selected contractor. UNINTECH survey will verify benchmarks. UNINTECH will provide review of contractor pay applications, submittals, and RFI. A UNINTECH representative will make two (2) site visits per month for up to six (6) months during the construction to observe overall conformance to the plans.

Engineering Fee

Compensation for these services will be in the amount of **\$186,973.00**, which will cover all costs associated with the scope described above, as further detailed in the attached Project Work Plan and Fee Proposal Breakdowns.

Additional services and significant changes will be compensated for as provided by Schedule of Fees in the agreement for Engineering Services between the City of Schertz and Ford Engineering, Inc. dated October 9, 2019, modified in January 2021 for the acquisition of Ford Engineering, Inc. by Unintech Consulting Engineers, Inc.

Fees payable to permitting agencies will be the responsibility of the City.

Should there be any questions or if further information is needed, please do not hesitate to call us at 210-641-6003.

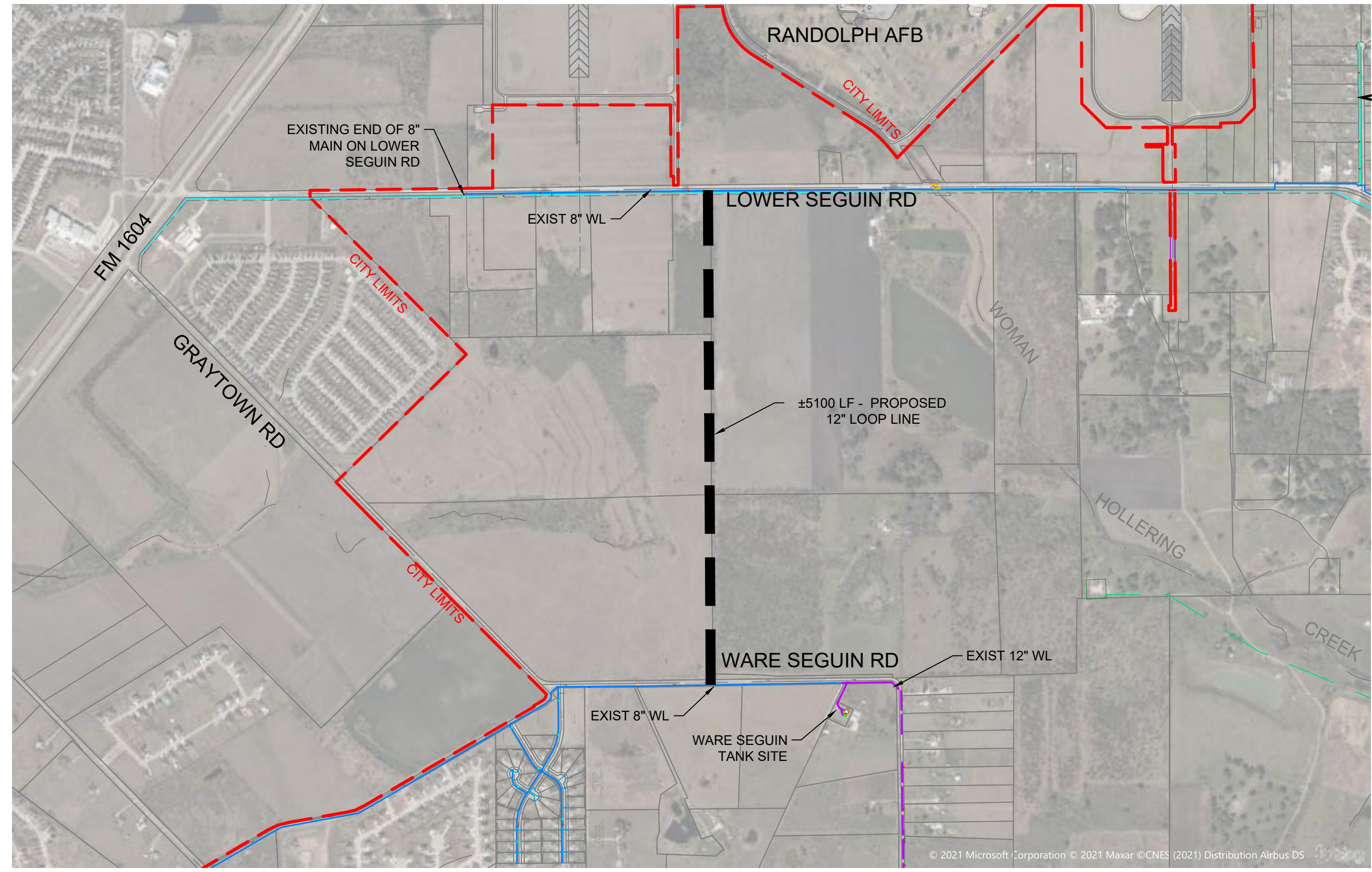
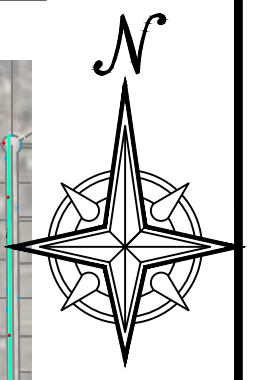
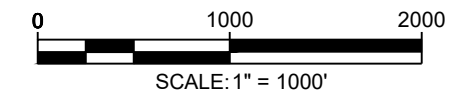
Sincerely,

A handwritten signature in black ink that reads "Mark B Hill".

Mark B Hill, P.E.

UNINTECH CONSULTING ENGINEERS, INC.

Encl: Project Work Plan and Fee Proposal Breakdown



H:\ACTV_DP\011_SCHERTZ\112404.00_On-Call Engineering_2020\Drawings\Ware Seguin Loop.dwg - Lower Seguin-Ware Seguin Loop.dwg - 4/6/2021 5:32:22 PM 1:1

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WARE SEGUIN TO LOWER SEGUIN LOOP

PROJECT WORK PLAN AND FEE PROPOSAL BREAKDOWN

Project: **Ware Seguin to Lower Seguin Watermain Loop**
 Prime Consultant: **Unintech Consulting Engineers, Inc**
 Proposal Date: **3/15/2022**
 Prepared By: **Mark B Hill**

TASK CODE AND DESCRIPTION	Principal	Sr. Project Manager	EIT	Admin/Clerical	RPLS	Survey Tech	Survey Crew - 2 man	TASK HOURS	TASK / PHASE FEE
	\$200.00	\$165.00	\$100.00	\$65.00	\$165.00	\$85.00	\$145.00		
Preliminary Design	10	44	160	2	23	80	68	350	\$45,845.00
01. Project Management and General Items									
01.010. Project Mgmt	2			2				4	\$530.00
02. Right-of-Way Surveying and Mapping									
02.010. Acquire Ownership Information						4		4	\$340.00
02.060. Easements and Field Notes (3 permanent and 3 temporary)					16	48		64	\$6,720.00
02.070. Flag or Set New Corners							16	16	\$2,320.00
03. Topographic Surveying / Base Mapping									
03.010. Establish Primary Project Control					1	2	8	11	\$1,495.00
03.040. Survey Topographic Features					4	16	40	60	\$7,820.00
03.060. Secure Utility Maps						2		2	\$170.00
03.070. Survey Quality Level C Locates					1	2	4	7	\$915.00
03.120. Develop Existing Conditions Model		8	24		1	6		39	\$4,395.00
07. Utility Plans									
07.010. Water Relocation Plans	8	24	80					112	\$13,560.00
07.020. Utility Coordination (Gas, Outside Water)		4						4	\$660.00
08. Traffic Control Plan									
08.030. Conceptual Construction Phasing Layouts		1	8					9	\$965.00
09. Other Plans									
09.010. General Sheets and Details		2	16					18	\$1,930.00
10. Environmental and Regulatory Coordination								-	-
10.020. SWPPP		1	8					9	\$965.00

TASK CODE AND DESCRIPTION	Principal	Sr. Project Manager	EIT	Admin/Clerical	RPLS	Survey Tech	Survey Crew - 2 man	TASK HOURS	TASK / PHASE FEE
	\$200.00	\$165.00	\$100.00	\$65.00	\$165.00	\$85.00	\$145.00		
11. Cost Estimating		4	24					28	\$3,060.00
11.010. Prepare Cost Estimate								-	-
Final Design	14	45	116	2	0	0	0	131	\$21,955.00
01. Project Management and General Items									
01.010. Project Mgmt	2			2				4	\$530.00
01.030. General Sheets - Index, Summaries / Quantities, Notes		4	16					20	\$2,260.00
01.040. Design Review Meeting		4						4	\$660.00
01.060. Project Schedule (Includes Construction)		1	4					5	\$565.00
01.070. QA/QC Review of Plan Set	8							8	\$1,600.00
07. Utility Plans									
07.010. Water Relocation Plans		12	40					52	\$5,980.00
08. Traffic Control Plan		1	4						\$565.00
09. Other Plans									
09.010. General Sheets and Details		4	16					20	\$2,260.00
10. Environmental and Regulatory Coordination									
10.010. General Environmental Coordination		1	4					5	\$565.00
11. Cost Estimating		2	8					10	\$1,130.00
11.010. Prepare Cost Estimate								-	-
15. Specifications									
15.030. Preliminary Specification and bid docs	4	16	24					44	\$5,840.00
Bid Phase	0	13	10	1	0	0	0	24	\$3,210.00
12. Bid Phase									
12.010. Submit 100% Plans		1	4					5	\$565.00
12.020. Final Project Bid Documents		4	4					8	\$1,060.00
12.030. Finalize Constructability Review		1	2					3	\$365.00
12.040. Review Utility Conflict Report and Address Pending Items		1						1	\$165.00
12.050. Attend 100% Review Meeting/Precon walkthrough		2						2	\$330.00
12.080. Attend Pre-Bid Meeting		1						1	\$165.00
12.090. Respond to Contractor Questions		1						1	\$165.00

	Principal	Sr. Project Manager	EIT	Admin/Clerical	RPLS	Survey Tech	Survey Crew - 2 man		
	\$200.00	\$165.00	\$100.00	\$65.00	\$165.00	\$85.00	\$145.00		
TASK CODE AND DESCRIPTION	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	TASK HOURS	TASK / PHASE FEE
12.100. Prepare and Distribute Necessary Addenda		1						1	\$165.00
12.110. Prepare Bid Tabulation and Letter of Recommendation		1		1				2	\$230.00
Construction Phase	0	16	38	0	1	1	8	64	\$7,850.00
13. Construction Management									
13.010. Reestablish Project Control					1	1	8	10	\$1,410.00
13.020. Review Contractor Pay Estimates		4	16					20	\$2,260.00
13.040. Review Shop Drawings		1	2					3	\$365.00
13.050. Respond to RFI's		1						1	\$165.00
13.060. Project Site Visits & Reports (1 visits per month - 6 months)		4	20					24	\$2,660.00
13.080. Final Walkthrough and Punchlist Review		4						4	\$660.00
13.100. Pre Construction Meeting		2						2	\$330.00
Project Closeout	0	1	4	0	0	0	0	5	\$565.00
14. Project Closeout									
14.010. Prepare Record Drawings		1	4					5	\$565.00
14.020. Final Warranty Inspection								-	-
Additional Services									
Environmental constraints analysis - Adams Environmental									\$4,124.00
Geotechnical - Arias & Associates									\$2,670.00
TOTAL BASE FEE WITH HOUR BREAKDOWN	10	74	212	3	24	81	76	443	\$86,219.00

PROJECT WORK PLAN AND FEE PROPOSAL BREAKDOWN

Project: **IH 10 Waterline: Pfeil Road to Graytown Road**
 Prime Consultant: **Unintech Consulting Engineers, Inc**
 Proposal Date: **3/15/2022**
 Prepared By: **Mark B Hill**

TASK CODE AND DESCRIPTION	Principal	Sr. Project Manager	EIT	Admin/Clerical	RPLS	Survey Tech	Survey Crew - 2 man	TASK HOURS	TASK / PHASE FEE
	\$200.00	\$165.00	\$100.00	\$65.00	\$165.00	\$85.00	\$145.00		
	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS		
Preliminary Design	10	43	136	2	31	140	112	458	\$59,140.00
01. Project Management and General Items									
01.010. Project Mgmt	2			2				4	\$530.00
02. Right-of-Way Surveying and Mapping									
02.010. Acquire Ownership Information						8		8	\$680.00
02.060. Easements and Field Notes (9 permanent and 3 temporary)					24	96		120	\$12,120.00
02.070. Flag or Set New Corners						8	48	56	\$7,640.00
03. Topographic Surveying / Base Mapping									
03.010. Establish Primary Project Control					1	2	8	11	\$1,495.00
03.040. Survey Topographic Features					4	16	48	68	\$8,980.00
03.060. Secure Utility Maps						2		2	\$170.00
03.070. Survey Quality Level C Locates					1	2	8	11	\$1,495.00
03.120. Develop Existing Conditions Model		8	24		1	6		39	\$4,395.00
07. Utility Plans									
07.010. Water Relocation Plans	8	24	80					112	\$13,560.00
08. Traffic Control Plan		1	8					9	\$965.00
09. Other Plans									
09.010. General Sheets and Details		2	16					18	\$1,930.00
10. Environmental and Regulatory Coordination									
10.010. General Environmental Coordination		4						4	\$660.00
10.020. SWPPP		2	4					6	\$730.00
10.030. TXDOT Permits		2	4					6	\$730.00

TASK CODE AND DESCRIPTION	Principal	Sr. Project Manager	EIT	Admin/Clerical	RPLS	Survey Tech	Survey Crew - 2 man	TASK HOURS	TASK / PHASE FEE
	\$200.00	\$165.00	\$100.00	\$65.00	\$165.00	\$85.00	\$145.00		
11. Cost Estimating								-	-
11.010. Prepare Cost Estimate		4	24					28	\$3,060.00
Final Design	12	41	124	2	0	0	0	138	\$21,695.00
01. Project Management and General Items									
01.010. Project Mgmt	2			2				4	\$530.00
01.020. Complete Streets Assessment								-	-
01.030. General Sheets - Index, Summaries / Quantities, Notes		4	16					20	\$2,260.00
01.040. Design Review Meeting		4						4	\$660.00
01.060. Project Schedule (Includes Construction)		1	4					5	\$565.00
01.070. QA/QC Review of Plan Set	8							8	\$1,600.00
07. Utility Plans									
07.010. Water Relocation Plans		12	40					52	\$5,980.00
09. Other Plans									
09.010. General Sheets and Details		4	16					20	\$2,260.00
10. Environmental and Regulatory Coordination									
10.010. General Environmental Coordination		2	4					6	\$730.00
10.030. TXDOT Permits		2	4					6	\$730.00
10.040. Floodplain Permit		2	8					10	\$1,130.00
11. Cost Estimating		2	8					10	\$1,130.00
11.010. Prepare Cost Estimate								-	-
15. Specifications									
15.030. Preliminary Specifications and bid docs	2	8	24					34	\$4,120.00
Bid Phase	0	13	10	1	0	0	0	24	\$3,210.00
12. Bid Phase									
12.010. Submit 100% Plans		1	4					5	\$565.00
12.020. Final Project Bid Documents		4	4					8	\$1,060.00
12.030. Finalize Constructability Review		1	2					3	\$365.00
12.040. Review Utility Conflict Report and Address Pending Items		1						1	\$165.00
12.050. Attend 100% Review Meeting/Precon walkthrough		2						2	\$330.00
12.080. Attend Pre-Bid Meeting		1						1	\$165.00

	Principal	Sr. Project Manager	EIT	Admin/Clerical	RPLS	Survey Tech	Survey Crew - 2 man		
	\$200.00	\$165.00	\$100.00	\$65.00	\$165.00	\$85.00	\$145.00		
TASK CODE AND DESCRIPTION	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	TASK HOURS	TASK / PHASE FEE
12.090. Respond to Contractor Questions		1						1	\$165.00
12.100. Prepare and Distribute Necessary Addenda		1						1	\$165.00
12.110. Prepare Bid Tabulation and Letter of Recommendation		1		1				2	\$230.00
Construction Phase	0	16	38	0	1	1	8	64	\$7,850.00
13. Construction Management									
13.010. Reestablish Project Control					1	1	8	10	\$1,410.00
13.020. Review Contractor Pay Estimates		4	16					20	\$2,260.00
13.040. Review Shop Drawings		1	2					3	\$365.00
13.050. Respond to RFI's		1						1	\$165.00
13.060. Project Site Visits & Reports (1 visits per month - 6 months)		4	20					24	\$2,660.00
13.080. Final Walkthrough and Punchlist Review		4						4	\$660.00
13.100. Pre Construction Meeting		2						2	\$330.00
Project Closeout	0	1	4	0	0	0	0	5	\$565.00
14. Project Closeout									
14.010. Prepare Record Drawings		1	4					5	\$565.00
14.020. Final Warranty Inspection								-	-
Additional Services									
Environmental constraints analysis - Adams Environmental									\$4,124.00
Geotechnical - Arias & Associates									\$4,860.00
TOTAL BASE FEE WITH HOUR BREAKDOWN	10	73	188	3	32	141	120	551	\$101,444.00