EXHIBIT

"A"

STATE OF TEXAS

\$
COUNTY OF WILLIAMSON

\$

SUPPLEMENTAL CONTRACT NO. 1 TO CONTRACT FOR ENGINEERING SERVICES

FIRM: K FRIESE & ASSOCIATES, INC. ("Engineer")
ADDRESS: 1120 S. Capital of Texas Highway CityView 2, Suite 100, Austin, TX 78746

PROJECT: Sam Bass Road 48-inch Water Transmission Main

This Supplemental Contract No. 1 to Contract for Engineering Services is made by and between the City of Round Rock, Texas, hereinafter called the "City" and K Friese & Associates, Inc., hereinafter called the "Engineer".

WHEREAS, the City and Engineer executed a Contract for Engineering Services, hereinafter called the "Contract", on the 5th day of December, 2019 for the Sam Bass Road 48-Inch Water Transmission Main Project in the amount of \$73,671.00; and

WHEREAS, it has become necessary to amend the Contract to modify the provisions for the scope of services and to increase the compensation by \$318,092.00 to a total of \$391,763.00;

NOW THEREFORE, premises considered, the City and the Engineer agree that said Contract is amended as follows:

I.

<u>Article 1, City Services</u> and <u>Exhibit A, City Services</u> shall be amended as set forth in the attached Addendum To Exhibit A.

II.

<u>Article 2, Engineering Services</u> and <u>Exhibit B, Engineering Services</u> shall be amended as set forth in the attached <u>Addendum to Exhibit B</u>. <u>Exhibit C, Work Schedule</u> shall be amended as set forth in the attached <u>Addendum to Exhibit C</u>.

III.

Article 4, Compensation and Exhibit D, Fee Schedule shall be amended by increasing by \$318,092.00 the lump sum amount payable under the Contract for a total of \$391,763.00, as shown by the attached Addendum to Exhibit D.

IN WITNESS WHEREOF, the City and the Engineer have executed this Supplemental Contract in duplicate.

[signature pages follow]

 Supplemental Contract
 Rev.06/16

 0199.1961; 00453720
 84275

K FRIESE & ASSOCIATES, INC.

By:

Thomas M. Owens, P.E., Exec. V.P

1 SEP 20

Date

CITY OF ROUND ROCK	APPROVED AS TO FORM:
By:	
Craig Morgan, Mayor	Stephan L. Sheets, City Attorney
Date	

City Services

The City of Round Rock (City) will provide the following information and other assistance to K Friese & Associates, (Engineer) that the City deems appropriate and necessary.

- 1. Any readily available pertinent existing information relating to the services to be performed by the Engineer; the City will provide one copy of such information in a format chosen by the City.
- 2. Clear direction and/or response to questions or requests made by the Engineer in the course of the Engineer's performance of services.
- 3. Timely review of deliverables that have been properly completed and submitted by the Engineer, and timely provision of comments, if any, to the Engineer resulting from said reviews.
- 4. Negotiate and execute Interlocal Agreement with Williamson County to allow for joint bidding the proposed Sam Bass Water Transmission Main with the Williamson Country Sam Bass Road Improvements.

Engineering Services

UNDERSTANDING

The City of Round Rock's (CORR) Water Distribution Master Plan has previously delineated a 48-inch water transmission main known as "Sam Bass I" from FM 1431 to Tonkawa Trail and a 42-inch water transmission known as "Sam Bass II" from Tonkawa Trail to Wyoming Springs Drive. The total anticipated length of the Sam Bass I/II alignment is approximately 14,000 linear feet. These projects were planned for 2021 and 2022, respectively. A combination of factors, such as Sam Bass Road Expansion in 2021/2022 by Williamson County, roadway planning/design of Wyoming Springs by the City of Round Rock, and continued development contributing to lower system pressures have accelerated the need to begin planning and design of the Sam Bass water transmission main.

K Friese & Associates, Inc. (KFA) recently completed a preliminary engineering report (PER) to determine a preferred alignment, pipeline material, construction methodology, and explore potential design, bidding, and construction alternatives to efficiently install the water transmission main within the Sam Bass Road ROW. The PER phase focused on a 48-inch water transmission main, but recent master planning and associated water modeling have determined that this pipeline shall be 42-inch diameter pipe.

The preferred alignment (Alignment A) was presented to Williamson County and approved for joint bid of the water transmission main with the Williamson County Sam Bass roadway and drainage improvements (Williamson County) project. The preferred pipeline alignment is anticipated to be a 42-inch steel pipeline that will be wholly constructed along and within the north side of the Sam Bass Road ROW, but one easement has been identified for constructability and future operation and maintenance activities.

The KFA Team for this assignment will include the following subconsultants:

- Survey and Mapping, LLC (SAM) Surveying/Easement Document
- Chapman Engineering, LLC Corrosion Protection

SCOPE OF SERVICES

The KFA Team will provide engineering design services including the following as detailed below:

- Phase A 60% Design Phase
- Phase B 90% Design Phase
- Phase C 100% Design and Bid Phase Services

This scope of services assumes that the detailed design will be based on open cut construction with some trenchless road crossings using jack and bore installation. Design of a tunnel using conventional tunnel boring machine or preparation of a Geotechnical Baseline Report is not included in this scope of services.

Comprehensive topographic survey, environmental/cultural review, and geotechnical investigations have previously been completed within the corridor for the Williamson County project. The KFA Team will utilize base CAD files compiled, utilized, and

Engineering Services

prepared for the Williamson County project. The KFA Team will conduct field investigation and soil resistivity testing to aid in developing the Cathodic Protection design and will also prepare one permanent easement for constructability and future operations and maintenance activities.

This project is anticipated to be joint bid with the Williamson County project and utilize base file data developed by the Williamson County project for design purposes. In addition, the transmission main project will coordinate and utilize the traffic control plans, detour plans, tree protection, erosion and sedimentation control plans developed by the Williamson County project. Anticipated plan sheets (11" x 17" sheets) to be prepared for this assignment include:

- 1 Cover
- 1 General Notes Sheet
- 1 Quantities Sheet
- 2 Project Layout Sheets
- 30 Plan and Profile Sheets for 42-inch diameter water main (1" = 40'H and 1"=10'V)
- 6 Detail Sheets

1. PROJECT MANAGEMENT

- 1.1. <u>Project Management/Administration</u> This task includes routine communication with the City; managing manpower, budgets, and schedules; invoicing; implementing and monitoring of QA/QC efforts; and other activities associated with managing the project.
- 1.2. <u>Quality Assurance/Quality Control</u> KFA will implement Quality Assurance activities throughout the project and will utilize uninvolved senior KFA Engineers and Project Managers to perform Quality Control reviews of each deliverable prior to submission.
- 1.3. Project Meetings and Status Reports KFA will attend regular coordination and status meetings with the City to review work plans, progress, and upcoming work. KFA will schedule, prepare agendas, and draft minutes for each meeting to document discussions and key decisions. KFA will also submit monthly status reports to the City documenting progress, budget, and schedule. KFA anticipates the following meetings:
 - 1.3.1. Design Kick-Off Meeting
 - 1.3.2. Design Progression Review Meetings
 - 1.3.2.1. 60% Design Review Meeting
 - 1.3.2.2. 90% Design Review Meeting
 - 1.3.2.3. 100% Design Review Meeting
 - 1.3.3. Williamson County utility coordination and design coordination meetings (two total)
 - 1.3.4. Pre-Bid Conference

Engineering Services

1.3.5. Bid Opening

2. PHASE A - 60% DESIGN PHASE

- 2.1. Site Investigation and Soil Resistivity Testing The KFA Team will preform a site investigation and collect data regarding soil resistivity in at least three (3) locations along the project corridor.
- 2.2. Plan Preparation and Coordination The KFA Team will prepare plan and profile sheets for approximately 13,300 LF of 42-inch diameter water main. The plans will also include cover sheet, notes sheets, layout plan, special details for items such as air valve vaults, verification of traffic control plans (Williamson County project), and restoration plans specific to water transmission main construction. Corrosion Protection detail sheets will be prepared by Chapman Engineering per the attached scope and fee.
- 2.3. Specifications The KFA Team will prepare Technical Specifications for the project. This will include special specifications for parts of the project that are not covered by standard CORR specifications.
- 2.4. Opinion of Probable Construction Cost KFA will prepare a project construction cost estimate based on the additional project detail developed during this phase.
- 2.5. Review and Respond to 60% Design Review Comments KFA will review and prepare responses to comments received from CORR and Williamson County on the 60% submittal.
- 2.6. Utility Coordination KFA will coordinate with Williamson County Utility Coordinator and utility companies, as necessary, and prepare for and attend the utility coordination meetings.

3. PHASE B - 90% DESIGN PHASE

- 3.1. Easement Document Preparation The KFA team will perform field survey and preparation of field note descriptions and exhibits for one permanent easement, as identified in the PER and verified/finalized during 60% design phase. The field survey and easement document will be performed and prepared by Survey and Mapping (SAM), LLC per the attached scope and fee.
- 3.2. Plan Preparation and Coordination The KFA Team will prepare updated plan and profile sheets for approximately 13,300 LF of 42-inch diameter water main. The plans will also include cover sheet, notes sheets, layout plan, special details, special traffic control plans (if necessary), and restoration plans. The KFA Team will coordinate plans with Williamson County project to eliminate redundant scope and verify application and phasing of environmental and traffic control measures.
- 3.3. Specifications The KFA Team will prepare Technical Specifications for the project. This will include special specifications for parts of the project that are not covered by standard CORR specifications.

Engineering Services

- 3.4. Opinion of Probable Construction Cost KFA will update the project construction cost estimate based on the additional project detail developed during this phase.
- 3.5. Review and Respond to 90% Design Review Comments KFA will review and prepare responses to comments received from CORR and Williamson County on the 90% submittal.
- 3.6. Utility Coordination KFA will coordinate with Williamson County Utility Coordinator and utility companies, as necessary, and prepare for and attend the utility coordination meetings.

4. PHASE C - 100% DESIGN PHASE AND BID PHASE

- 4.1. Plan Preparation The KFA Team will prepare final plan and profile sheets for approximately 13,300 LF of 42-inch diameter water main. The plans will also include cover sheet, notes sheets, layout plan, and special details.
- 4.2. Specifications The KFA Team will update Technical Specifications for the project. This will include special specifications for parts of the project that are not covered by standard CORR specifications. KFA will also assist in the preparation of front end specifications per Williamson County and CORR standards, and KFA will modify sections accordingly (Invitation to Bidders, Bid Proposal, Special Conditions, and Supplemental Conditions).
- 4.3. Opinion of Probable Construction Cost KFA will update the project construction cost estimate based on the additional project detail developed during this phase.
- 4.4. Review and Respond to 100% Design Review Comments KFA will review and prepare responses to comments received from CORR and Williamson County on the 100% submittal.
- 4.5. Preparation of Final "For Bid" Documents Address any final comments or changes required and prepare final construction documents for the project to be distributed to the Bidders.
- 4.6. Prebid Conference KFA will attend the Prebid Conference, prepare the meeting agenda, and provide a presentation for bidders on project details.
- 4.7. Contractor's Questions KFA will provide written interpretation of the intent of plans and specifications to CORR and Williamson County for distribution to Bidders.
- 4.8. Addenda KFA will prepare addenda required to clarify, correct, or change the bid documents.
- 4.9. Bid Evaluation and Award Recommendation Williamson County will provide a bid tabulation and bid packets from each bidder to KFA. KFA will review qualifications and accuracy of the bid tabulation relative to the water transmission main project, coordinate determination of the

Engineering Services

responsiveness of the low bidders, and assist in preparation of a letter of recommendation of award.

CLARIFICATIONS

- KFA will utilize existing Williamson County Sam Bass Road design files and data information as basis for the transmission main design.
- KFA will utilize existing Williamson County Corridor H Sam Bass Road Environmental Due Diligence Memorandum prepared by Cox|McLain Environmental Consultants, Inc. as the basis of the environmental and cultural resources review.
- KFA will utilize existing Geotechnical Engineering Study for Corridor H Sam Bass Road from FM 1431 to Wyoming Springs Drive prepared by Raba Kistner Consultants, Inc as the basis of subsurface geological characterization review.

EXCLUSIONS

- Comprehensive Topographical and/or boundary survey To be provided by Williamson County
- Subsurface Utility Engineering data To be provided by Williamson County
- Geotechnical investigations and/or reports To be provided by Williamson County
- Environmental/Cultural/Historical reports and/or permitting To be provided by Williamson County
- Hydraulic modeling
- Construction Phase and Close Out Services Due to the planned joint bidding of the Williamson County project and the Sam Bass 42-inch Water Transmission Main, KFA's needed level of involvement in construction is unknown. As the project develops and the interlocal agreement has been executed, the needed level of involvement will be better defined and covered via a future supplemental amendment.
- Subsurface Utility Exploration (SUE) If additional SUE is determined to be necessary, that effort will be covered via a future supplemental amendment.
- Small Diameter Utility Relocations As detailed design progresses, it may be
 necessary to relocate CORR small diameter water/sewer mains, and/or other
 water utilities to allow for construction of the new transmission main. This
 analysis will be completed during the 60% design phase as part of the base
 scope of services. If relocation is recommended, the corresponding design
 will be covered via a future supplemental amendment.

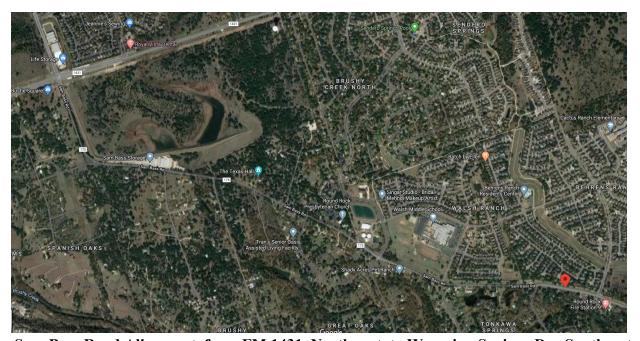


Cathodic Protection Field Measurements and Design, Round Rock Water Pipeline, Sam Bass Road Area, With K Friese + Associates, Inc.

Proposal Number	1800
Proposal Date	August 5, 2020
Proposal Writer	Cal Chapman, P. E., NACE CP Specialist
Proposal Reviewer	Mike Ames, Anita Bowen
Client Contact Name	Jason Bybel, P.E., PMP, Senior Engineer
Client Company Name	K Friese + Associates, Inc.
Client Contact Street Address	1120 S. Capital of Texas Highway
	CityView 2, Suite 100
Client Contact City, State, Zip	Austin, Texas 78746
Client Contact E-Mail Address	jbybel@kfriese.com

Dear Mr. Bybel:

Chapman Engineering is pleased to respond to your request for cathodic protection system design work for this Round Rock water pipeline project. An aerial photo shows the work area described in reporting you provided:



Sam Bass Road Alignment, from FM 1431, Northwest, to Wyoming Springs Dr., Southeast

Pertaining to the cathodic protection requirements likely to be involved in this project, we offer the following comments and possible work steps. Your feedback is most welcome.

- 1. Our evaluation of cathodic protection (CP) needs will include review of the geotechnical report and K Friese overview document for the project, which you provided today by email. From that review, we will send our Project Engineer/NACE-Certified Corrosion Technician to the field, for measurements of soil resistivity at a minimum of three locations along the alignment area;
- 2. An Impressed-current Cathodic Protection System (ICCP) for below-grade ferrous metal piping you describe is required. It is important, too, to learn if the new pipeline will be electrically isolated from other metal structures at each end, or if we must size up a CP system to give protection to additional metal. It is possible that galvanic anodes could be used, but with shallow rock contacts, they may not deliver protection for any significant distance;
- 3. Chapman Engineering has significant experience in coating types, how they are applied, how metal surfaces should be prepared before coating work is done, etc. We also have experience with interactions between electrical grounding and underground steel structures, CP application in these circumstances, etc. If you or your Client have standard specifications for use, these elements may already be covered. If not, we will provide this expertise to the team, if you deem it appropriate.

We anticipate learning much more site detail when the one site visit is made. If a meeting with you and your staff will help, then we can set up in-person or conference meeting time.

SCOPE OF WORK PROPOSED

The scope described includes CP design for 42-inch-nominal-diameter, underground water piping of about 13,500 total feet and likely to be lap-welded steel (AWWA C200). This pipe run will include various steel fittings, valves, vaults, etc., which must also be electrically bonded and protected. You suggest a possible coating type of factory-applied polyethylene for line pipe exterior. If better-quality coating is used, cathodic protection system sizing will be smaller.

"Design life" calculations will be provided in accordance with any requirements detailed, but typically are done for a 20-plus-year project life. Chapman Engineering has provided CP design, corrosion control survey services, and CP system installation across the Austin area for many years.

One significant concern is the very shallow contact with competent limestones. A CP system must have larger driving voltage to push protective current to the pipe metal from the anode bed. A deep anode bed is favored, to be installed in one fairly central location along the alignment. That will also be the location of an AC power supply and the rectifier. If you have a better sense of where the Client may want or be able to base the CP system, we will appreciate that information.

Based on your e-mail information, Chapman Engineering personnel will participate in one field survey visit, then provide consulting communications, CP system design, and specifications for installation, commissioning and longer-term monitoring. Our plans will include proposed test station locations. We usually intend to be involved, too, in the review of bid packages from CP contractor(s), to include evaluation of their experience, strength of project manager(s), and likelihood of good performance. But that can be saved for a later time, to add to scope.

Fee Schedule

We have attached our 2020 Rate Sheet, which is already in use on other K Friese projects. For the above described engineering design and project support work, Chapman Engineering is providing a fee estimate of \$8,580.00 broken down as follows:

Description	Time to	Cost Estimate & Hours
	Complete (days)	
Field Visit & Project Meeting	10	\$2,980.00 (16 hours plus travel)
Preliminary Design	20	\$3,200.00 (22 hours)
Final CP Design	15	\$2,400.00 (14 hours)

If any additional on-site work or project meetings are called for, we will propose those costs through written change orders.

KEY STAKEHOLDERS (CLIENT AND CHAPMAN ENGINEERING)

Client Project Leader	Jason Bybel, P.E., PMP, Senior Engineer
Client Sponsor	K Friese + Associates, Inc.
CE Project Managers	Cal Chapman, P. E. & Mike Ames

Client will be responsible for any local or state permits, sales taxes, and other fees which may apply. Because this work is all "professional services" in nature, sales tax should not apply.

ADDITIONAL WORK

Chapman Engineering will not exceed the cost estimate unless an approved written change order is signed by both parties. Chapman Engineering must have approval from K Friese + Associates, Inc. of such a change order prior to any additional costs being incurred.

PAYMENT TERMS

K Friese + Associates, Inc. agrees to pay Chapman Engineering invoice(s) in accordance with the existing Commercial Agreement Terms and Conditions governing Chapman Engineering's work. If no agreement is in place, K Friese + Associates, Inc. will pay all invoices within thirty (30) days. Any balance left unpaid after 30 days will be subject to a finance charge of 1.5% per month, or the maximum allowed by law.

Any requested changes to previously completed work, or additional work requested by K Friese + Associates, Inc., will be charged based on the attached T&M Rate Schedule, or the rate schedule previously agreed between both parties.

GENERAL

Any abnormal work conditions that cause delays, such as delays due to weather, delays associated with site conditions, right-of-way issues, unknown circumstances or project delays due to waiting on K Friese + Associates, Inc. or other contractors, and those delays cause Chapman Engineering

personnel to stand by, will be billed at T&M rates. In design phase, this is unlikely.

AUTHORIZATION

Please find attached an "Acceptance" block, for you to complete to give us authorization and "notice to proceed." Issuance of a PO is acceptance of the Terms and Conditions of this proposal. We appreciate the opportunity to work with you on this project. If you should have any comments or require any changes in our proposed scope of services, please contact the undersigned at (830) 816-3311.

CHAPMAN ENGINEERING AUTHORIZED SIGNATURES

William M. "Mike" Ames	
Vice President, Technical Operations	3

michael and

NACE CP Specialist #4343

NACE Sr. Corrosion Technologist #4343

Cal Chapman, P. E.

President

NACE CP Specialist #23357

Texas PE #81268

North Dakota PE #8286

New Mexico PE #19169

Oklahoma PE #26056

Model Law Engineer #35248, NCEES NACE-Certified Cathodic Protection

Specialist #23357

CC/ab

ACCEPTANCE

I,, on The Chapman Engineering to proceed with the v		Associates, Inc., authorize for the proposed Project Co	sts,
for Proposal 1800 as detailed above, and per	a schedule to be agree	ed between the parties.	
Signature of Contracting Authority	Title	Date	_
Printed Name of Contracting Authority			



4801 Southwest Parkway, Bldg. Two, Suite 100, Austin, TX 78735 Ofc 512.447.0575 Fax 512.326.3029 info@sam.biz www.sam.biz TBPLS # 10064300

Via Email: jbybel@kfriese.com

July 16, 2020

Mr. Jason Bybel, P.E., PMP Senior Engineer K Friese + Associates 1120 S. Capital of Texas Highway, City View 2, Suite 100 Austin, TX 78746

Re: Sam Bass Road Waterline Easement SAM Proposal No. 1017038216A

Dear Jason:

Surveying And Mapping, LLC (SAM) appreciates the opportunity to submit a proposal in response to your request for surveying services along Sam Bass Road. This proposal is based upon the information provided to us and includes those services required to provide easement exhibit preparation. See next page for a graphic representation of approximate project limits.

After reviewing the attached proposal, please do not hesitate to call me if you have any questions.

Sincerely,

Scott C. Brashear, RPLS

Sort C. P.

Project Manager

Cc: Donald Zdancewicz, RPLS



SCOPE OF SERVICES AND FEE Sam Bass Road Waterline Easement

PROJECT OVERVIEW

Surveying and Mapping, LLC (SAM) will provide professional surveying services to K Friese + Associates (Client) relating to the Sam Bass Road project in Williamson County, Texas. The approximate project limits are depicted below in red.





ASSUMPTIONS

Survey will be performed in accordance with the attached Survey Scope of Work, with the following assumptions. If these assumptions do not prove correct, it may require the negotiation of a supplemental agreement:

- Horizontal Datum and basis of bearings will be Texas Coordinate System, Central Zone (4203), NAD 83, and units will be U.S. Survey Feet, as derived from GPS observations and/or existing survey control in the immediate vicinity.
- Vertical Datum will be the North American Vertical Datum of 1988 (NAVD88) and units will be in U.S. Survey Feet, as derived from GPS observations and calculated using Geoid 12B, and/or existing survey control in the immediate vicinity.
- Unimpeded access to the property will be provided. Any locked gates will be made accessible to our field crews. Assumption is made that there are no delays accessing the property that would hamper our work.
- Sufficient existing monuments marking the control exist and can be found in good condition.
- Linework for easement will be provided by the client.
- SAM shall utilize our existing ROW basemap from previous Sam Bass Road (Corridor H) project.

EASEMENT EXHIBIT PREPARATION

- Utilizing the existing ROW basemap, SAM shall prepare easement documents for up to one (1) affected property. Documents shall consist of the following:
 - Easement plat
 - o Field note (metes and bounds) description
 - Closure reports
- All easement documents will be submitted to the client for review. Upon completion of a onetime review of all easement documents, SAM will make any necessary corrections. The final easement documents will then be delivered to the Client. Addressing any additional comments is outside of this scope of services.
- Upon approval of the preliminary easement documents, SAM shall set the easement corners (up to 4 corners). The easement corners shall consist of 5/8-inch iron rods with plastic caps stamped "SAM".



PROJECT DELIVERABLES

Deliverables to Client will consist of the following:

- Easement documents (plat/field note) signed/sealed by a Texas RPLS in PDF format
- Closure Reports

<u>FEE</u>

These professional services will be performed according to the following estimated fees:

Easement Preparation

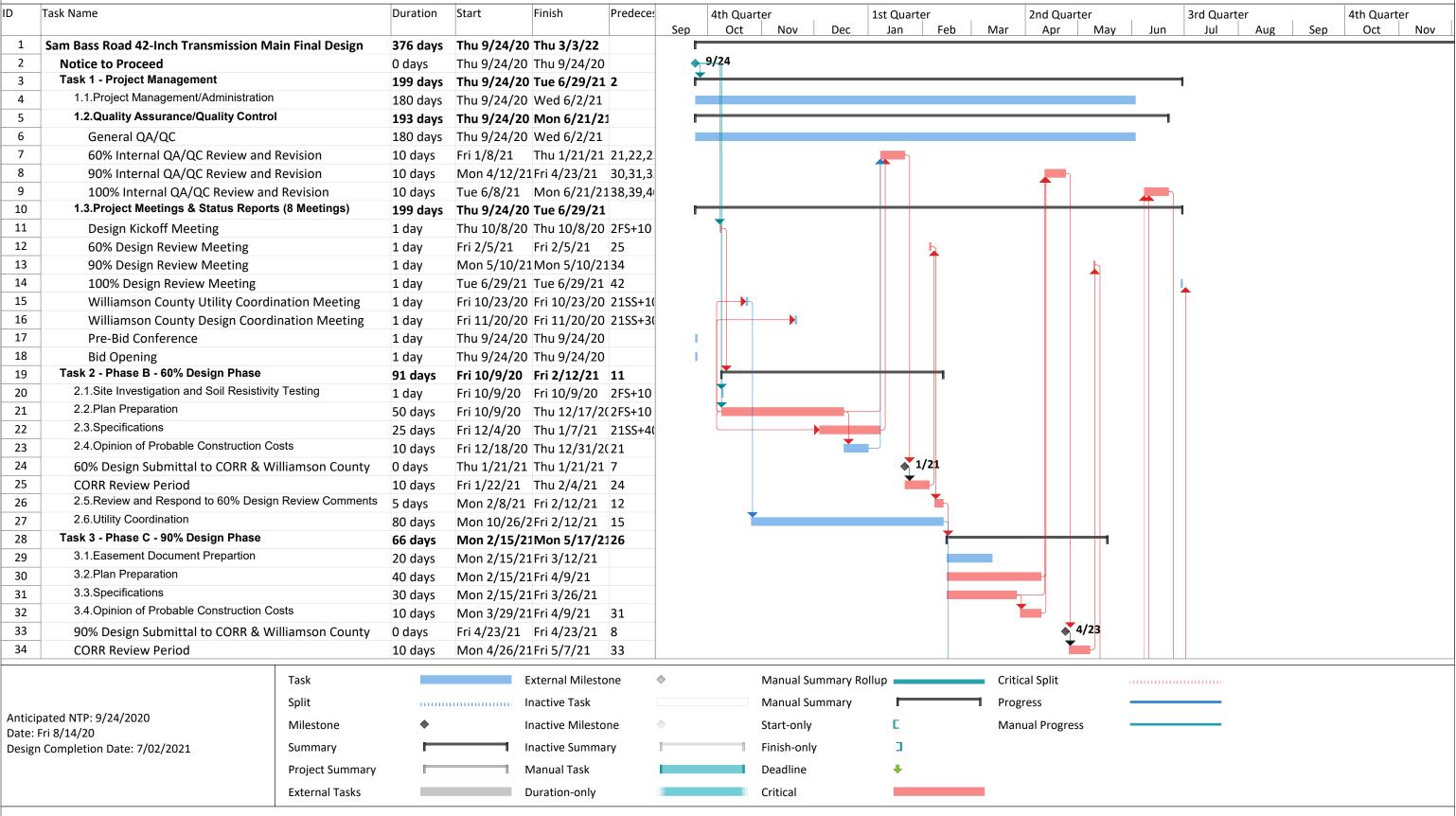
\$3,651.75

ADDENDUM TO EXHIBIT C Work Schedule

Attached Behind This Page

Sam Bass 42-Inch Water Transmission Main Final Design Exhibit C

Project Schedule

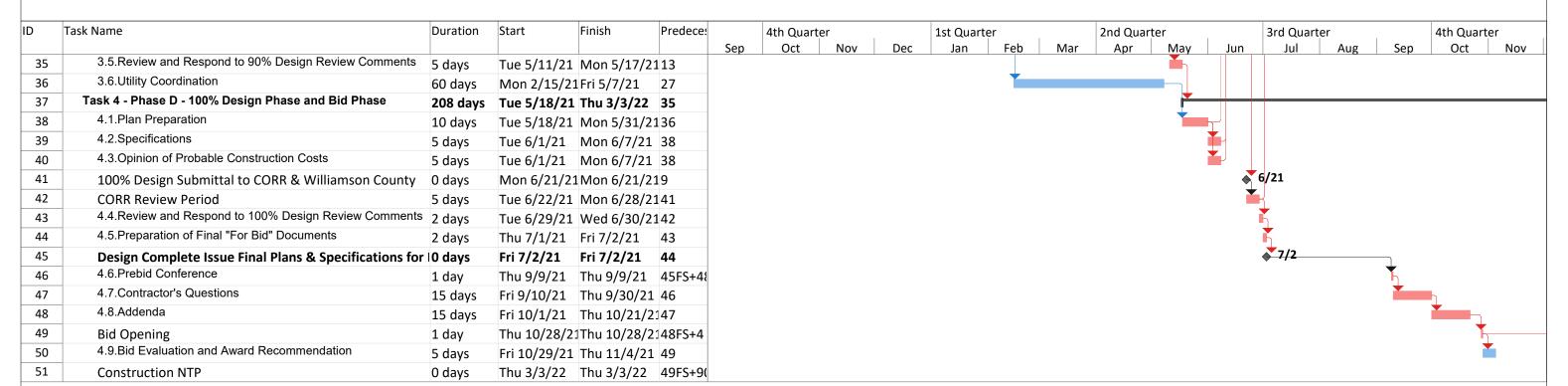


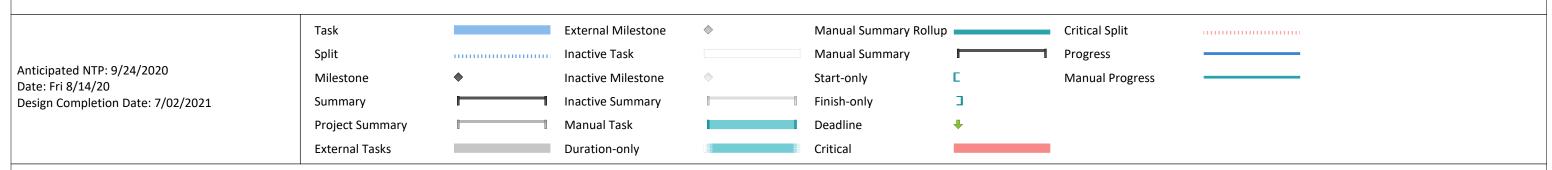
Version 1.0



Sam Bass 42-Inch Water Transmission Main Final Design Exhibit C

Project Schedule





Version 1.0

ADDENDUM TO EXHIBIT D Fee Schedule

Attached Behind This Page



SAM BASS 42-INCH WATER TRANSMISSION MAIN FINAL DESIGN EXHIBIT D FEE SCHEDULE

	Billing Rate	\$ 250.00	\$ 250.00	\$ 215.00	\$ 185.00	\$ 140.00	\$ 105.00	\$ 105.00	\$ 90.00						
			Senior		Senior										
			Project	Project	Project	Project		Sr. CADD	Project	Total			Chapman	_	
		Principal	Manager	Manager	Engineer	Engineer	EIT	Technician	Administrator	Labor	Total Labor	SAM, Inc.	Engineering	Expenses	Total
	Task	Hours	Hours	Hours	Cost	Cost	Cost	Cost	Cost						
	- Project Management									- 40	40.050				00.050
1.1.	Project Management/Administration (8 months)	1 4	2	32	24	40			8	43	\$8,350 \$18.840				\$8,350
1.2.	Quality Assurance/Quality Control Project Meetings & Status Reports (8 Meetings)	4	24	24 24	24	16 24				92 50	\$18,840 \$9.020			\$240	\$18,840 \$9,260
1.3.	Subtotal Task 1	E	28	80	24	40	0	0		185	\$36.210	\$0	\$0	\$240 \$240	
Took 2	- Phase B - 60% Design Phase	- 3	20	80	24	40	U	U	0	100	\$36,210	ψŪ	ψU	\$240	\$30,450
				4		2	4			40	\$1.560		\$2.980	\$30	\$4,570
2.1.	Site Investigation and Soil Resistivity Testing			-			-	400		10	. , ,		\$2,980	\$30	. ,
2.2.	Plan Preparation			120		120	160	160		560	\$76,200				\$76,200
2.3.	Specifications Opinion of Probable Construction Costs			40 8		56 12	4			100	\$16,860 \$4.660				\$16,860 \$4,660
2.4.				8 8		12	12 16	8		32 44	\$4,660 \$5,920				\$4,660
2.5.	Review and Respond to 60% Design Review Comments Utility Coordination			12		24	40	8		76	\$5,920 \$10.140				\$5,920
2.0.						226	236	400					60.000	***	
T 1 - 0	Subtotal Task 2	0	U	192	U	226	236	168	U	822	\$115,340	\$0	\$2,980	\$30	\$118,350
	- Phase C - 90% Design Phase									- 10	***	** ***			25.000
3.1.	Easement Document Prepartion			4		4		2		10	\$1,630	\$3,652			\$5,282
3.2.	Plan Preparation			120		160	160	100		540	\$75,500		\$3,200		\$78,700
3.3.	Specifications			24		40	24			88	\$13,280				\$13,280
3.4.	Opinion of Probable Construction Costs			4		4	8			16	\$2,260				\$2,260
3.5.	Review and Respond to 90% Design Review Comments			2		8	16	8		34	\$4,070				\$4,070
3.6.	Utility Coordination			12		24	40			76	\$10,140				\$10,140
	Subtotal Task 3	0	0	166	0	240	248	110	0	764	\$106,880	\$3,652	\$3,200	\$0	\$113,732
Task 4	- Phase D - 100% Design Phase and Bid Phase														
4.1.	Plan Preparation			24		32	40	16		112	\$15,520		\$2,400		\$17,920
4.2.	Specifications			20		32	24			76	\$11,300				\$11,300
4.3.	Opinion of Probable Construction Costs			4		4	8			16	\$2,260				\$2,260
4.4.	Review and Respond to 100% Design Review Comments			2		4	4	4		14	\$1,830				\$1,830
4.5.	Preparation of Final "For Bid" Documents			4		8	4	8		24	\$3,240				\$3,240
4.6.	Prebid Conference			4		4				8	\$1,420			\$30	\$1,450
4.7.	Contractor's Questions			8		12				20	\$3,400				\$3,400
4.8.	Addenda			8	2	8	12	8		38	\$5,310				\$5,310
4.9.	Bid Evaluation and Award Recommendation			4		8	8			20	\$2,820			\$30	\$2,850
	Subtotal Task 4	0	0	78	2	112	100	36	0	328	\$47,100	\$0		\$60	
	Project Totals	5	28	516	26	618	584	314	8	2099	305,530	\$3,652	\$8,580	\$330	\$318,092