

**AGREEMENT BETWEEN
THE CITY OF SAN MARCOS AND
PROFESSIONAL FIRM FOR
ENGINEERING SERVICES**

This Agreement is made as of [REDACTED], 20 [REDACTED] (the “**Effective Date**”), by and between:

The Owner: The City of San Marcos, Texas

and

The Professional Firm: K Friese & Associates, Inc.

for

The Project: Sessom Waterline Repair

Owner Standard Terms and Conditions: Parties have read and agree to be bound by the General Terms and Conditions found at <http://www.sanmarcostx.gov/DocumentCenter/Home/View/6608>.

Further;

The Owner and the Professional Firm agree as follows:

**ARTICLE 1
PROFESSIONAL FIRM’S SERVICES**

Professional Firm agrees to perform the services specifically described in **Exhibit 1** and all other professional services reasonably inferable from **Exhibit 1** and necessary for complete performance of Professional Firm’s obligations under this Agreement (collectively, “**Professional Firm’s Services**”). To the extent of any conflict between the terms in **Exhibit 1** and this Agreement, the terms of this Agreement shall prevail.

**ARTICLE 2
PROFESSIONAL FIRM’S RESPONSIBILITIES**

Professional Firm agrees to use Professional Firm's best efforts, skill, judgment, and abilities so as to perform Professional Firm's Services in an expeditious and timely manner consistent with professional standards of care and the orderly progress of the Project. Professional Firm shall at all times provide sufficient personnel to accomplish Professional Firm's Services in a timely manner. Professional Firm shall manage its services, administer the Project and coordinate other professional services as necessary for the complete performance of Professional Firm’s obligations under this Agreement.

Professional Firm agrees to perform Professional Firm's Services in compliance with all applicable national, federal, state, municipal, and State of Texas laws, regulations, codes, ordinances, orders and with those of any other body having jurisdiction over the Project.

Professional Firm's Services shall be reasonably accurate and free from material errors or omissions. Professional Firm shall promptly correct any known or discovered error, omission, or other defect in the plans, drawings, specifications, or other services provided by Professional Firm without any additional cost or expense to Owner.

Professional Firm shall designate a representative primarily responsible for Professional Firm's Services under this Agreement. The designated representative shall act on behalf of Professional Firm with respect to all phases of Professional Firm's Services and shall be available as required for the benefit of the Project and Owner. The designated representative shall not be changed without prior approval of the Owner, which approval shall not be unreasonably withheld.

The Professional Firm shall carry such professional liability and errors and omissions insurance, covering the services provided under this Agreement, with a minimum limit of \$1,000,000 each claim and \$1,000,000 aggregate. The fees for such insurance will be at the expense of the Professional Firm. The Professional Firm shall deliver a Certificate of Insurance indicating the expiration date, and existence, of the Professional Firm's professional liability insurance before commencement or continuation of performance of the services under this Agreement.

ARTICLE 3 **THE OWNER'S RESPONSIBILITIES**

The Owner shall provide the Professional Firm with a full description of the requirements of the Project.

The Owner shall furnish surveys, geotechnical reports or other special investigations of the Project site as requested by the Professional Firm and as reasonably necessary for the completion of Professional Firm's Services. The Owner shall furnish structural, mechanical, chemical and other laboratory tests as reasonably required.

The Owner will review the Professional Firm's drawings, specifications and other documents of service produced by Professional Firm's in the performance of its obligations under this Agreement (collectively the "**Design Documents**") as required. Owner will notify Professional Firm of any design fault or defect in Professional Firm's Services or Design Documents of which Owner becomes aware.

The Owner shall furnish required information and services and shall render approvals and decisions as expeditiously as necessary for the orderly progress of Professional Firm's Services.

The Owner designates Kirk Abbott as its representatives authorized to act in the Owner's behalf with respect to the Project. The contact information for Owner's representative is listed below:

Name: Kirk Abbott
Title: Project Engineer
630 East Hopkins
San Marcos, Texas 78666
Ph. 512-393-8149
E-mail:kabbott@sanmarcostx.gov

ARTICLE 4 **OWNERSHIP AND USE OF DOCUMENTS**

The Design Documents prepared by Professional Firm as instruments of service are and shall remain the property of the Professional Firm whether the Project for which they are created is executed or not. However, the Owner shall be permitted to retain copies, including reproducible copies, of the Design Documents for information and reference in connection with the Owner's use and occupancy of the Project. In addition, Owner shall have an irrevocable, paid-up, perpetual license and right, which shall survive the termination of this Agreement, to use the Design Documents and the ideas and designs contained in them for any purpose, with or without participation of the Professional Firm.

ARTICLE 5 **DISPUTE RESOLUTION**

If a dispute arises out of or relates to the Agreement or these Terms and Conditions, or a breach thereof, the parties agree to negotiate prior to prosecuting a suit for damages. However, this section does not prohibit the filing of a lawsuit to toll the running of a statute of limitations or to seek injunctive relief. Either party may make a written request for a meeting within fourteen (14) calendar days after receipt of the request or such later period as agreed by the parties. Each party shall include, at a minimum, one (1) senior level individual with decision-making authority regarding the dispute. The purpose of this and any subsequent meeting is to attempt in good faith to negotiate a resolution of the dispute. If, within thirty (30) calendar days after such meeting, the parties have not succeeded in negotiating a resolution of the dispute, they will proceed directly to mediation as described below. Negotiation may be waived by a written agreement signed by both parties, in which event the parties may proceed directly to mediation as described below.

If the efforts to resolve the dispute through negotiation fail, or the parties waive the negotiation process, the parties may select, within thirty (30) calendar days, a mediator trained in mediation skills to assist with resolution of the dispute. Should they choose this option, the Owner and the Professional Firm agree to act in good faith in the selection of the mediator and to give consideration to qualified individuals nominated to act as mediator. Nothing in the Contract prevents the parties from relying on the skills of a person who is trained in the subject matter of the dispute or a contract interpretation expert. The parties agree to participate in mediation in good faith for up to thirty (30) calendar days from the date of the first mediation session. The Owner and Professional Firm will share the mediator's fees equally and the parties will bear their own costs of participation such as fees for any consultants or attorneys they may utilize to represent them or otherwise assist them in the mediation.

ARTICLE 6
PROJECT TERMINATION OR SUSPENSION

This Agreement may be terminated by either party upon seven days written notice should the other party fail substantially to perform in accordance with its terms through no fault of the terminating party and such failure is not fully cured in the seven day notice period. This Agreement may be terminated by the Owner for any reason upon 15 days written notice to Professional Firm.

In the event of termination through no fault of the Professional Firm, Professional Firm shall be equitably compensated for all Professional Firm Services performed and Reimbursable Expenses incurred prior to termination in accordance with this Agreement.

ARTICLE 7
MISCELLANEOUS PROVISIONS

Entire Agreement. This Agreement supersedes all prior agreements, written or oral, between Professional Firm and Owner and constitutes the entire and integrated Agreement and understanding between the parties with respect to the subject matter of the Agreement. This Agreement may only be amended by a written instrument signed by both parties.

Assignment. This Agreement is a personal service contract for the services of Professional Firm, and Professional Firm's interest in this Agreement, duties hereunder and/or fees due hereunder may not be assigned or delegated to a third party.

Applicable Law. The Agreement will be governed by and construed under the laws of the State of Texas. Any controversy, claim or dispute arising out of or relating to this Agreement will be brought in a state court of competent jurisdiction in Hays County or, if in federal court, in the Federal Western District of Texas, Austin Division for trial.

Waiver. A delay or omission by either party in exercising any right or power under the Agreement shall not be construed as a waiver of that right or power. A waiver by either party of any term or condition of the Agreement shall not be construed as a waiver of any subsequent breach of that term or condition or of any other term or condition of the Agreement.

Severability. If any provision of this Agreement is determined to be invalid or unenforceable in any respect, that determination shall not affect any other provision of this Agreement which shall be interpreted as if the invalid or unenforceable provision had not been included.

Independent Contractor. Professional Firm recognizes that Professional Firm is engaged as an independent contractor and acknowledges that Owner shall have no responsibility to provide Professional Firm or its employees with any benefits normally associated with employee status. Professional Firm will neither hold itself out as nor claim to be an officer, partner, employee or agent of Owner.

Family Code Child Support Certification. If State funds are being used in in the procurement of the services described in Exhibit A, pursuant to Section 231.006, Texas Family Code, Professional Firm certifies that it is not ineligible to receive the award of or payments under this Agreement and

acknowledges that this Agreement may be terminated and payment may be withheld if this certification is inaccurate.

Prohibition on Contracts with Companies Boycotting Israel. Pursuant to Chapter 2270 and 808, Texas Government Code, Professional Firm certifies that is not ineligible to receive the award of or payments under the Agreement and acknowledges that the Agreement may be terminated and payment may be withheld if this certification is inaccurate. Failure to meet or maintain the requirements under this provision will be considered a material breach.

Section 2252 Compliance. Section 2252 of the Texas Government Code restricts the Owner from contracting with companies that do business with Iran, Sudan, or a foreign terrorist organization. Professional Firm hereby certifies that is not ineligible to receive the award of or payments under this Agreement. Failure to meet or maintain the requirements under this provision will be considered a material breach.

Proprietary Interests. All information owned, possessed or used by Owner which is communicated to, learned, developed or otherwise acquired by Professional Firm in the performance of services for Owner, which is not generally known to the public, shall be confidential and Professional Firm shall not disclose any such confidential information, unless required by law. Professional Firm shall not announce or advertise its engagement by Owner in connection with the Project or publicly release any information regarding the Project without the prior written approval of Owner.

Termination Due to Loss of Funding. If Owner funds are utilized to fund any part of this Agreement, the Professional Firm understands that those Owner funds for the payment for work performed by the Professional Firm under this Agreement have been provided through the Owner's budget approved by Owner Council for the current fiscal year only. State statutes prohibit the obligation and expenditure of public funds beyond the fiscal year for which a budget has been approved. The Owner cannot guarantee the availability of funds, and enters into this Agreement only to the extent such funds are made available. The Professional Firm acknowledges and agrees that it will have no recourse against the Owner for its failure to appropriate funds for the purposes of this Agreement in any fiscal year other than the year in which this Agreement was executed. The fiscal year for the Owner extends from October 1st of each calendar year to September 30th of the following calendar year.

Ethics Matters; No Financial Interest. Professional Firm and its employees, agents, representatives, and subcontractors have read and understand Owner's Ethics Policy available at <http://www.sanmarcostx.gov/380/Ethics>, and applicable state ethics laws and rules. Neither Professional Firm nor its employees, agents, representatives or subcontractors will assist or cause Owner employees to violate Owner's Conflicts of Interest Policy, provisions described by Owner's Standards of Conduct Guide, or applicable state ethics laws or rules. Professional Firm represents and warrants that no member of the City Council of San Marcos has a direct or indirect financial interest in the transaction that is the subject of this Agreement.

Subcontracting. The Professional Firm will not subcontract any work under this Agreement without prior written approval from the Owner. In the event approval is given by the Owner, the Professional Firm will specify any work or services, the appropriate insurance requirements and miscellaneous provisions by separate written agreement with the subcontractor.

Mutual Waiver of Consequential Damages. In no event shall either party be liable, whether in contract or tort or otherwise, to the other party for loss of profits, delay damages, or for any special incidental or consequential loss or damage of any nature arising at any time or from any cause whatsoever.

Texas Tax Code 171.1011(g)(3). Notwithstanding anything in this agreement and for the purpose of complying with Texas Tax Code 171.1011(g)(3), the City agrees to the following:

- (1) Prior to commencing performance under this Agreement, Professional Firm will provide the City with a list of proposed subconsultants, subcontractors, or agents to be used in Professional Firm's services under this Agreement. The City shall have the right to accept or reject the use of any subconsultant, subcontractor, or agent on the Professional Firm's list. Such acceptance or rejection shall be given within a commercially reasonable time from the date the Professional Firm delivers it. and;
- (2) Any payment made by the Owner to Professional Firm that includes fees payable to a subconsultant, subcontractor or agent of Professional Firm under this Agreement shall constitute an acceptance by the Owner of Professional Firm's use of any such subconsultant, subcontractor or agent of Professional Firm under this Agreement.

Limitation of Liability. In recognition of the relative risks and benefits of the Agreement to both the Owner and Professional Firm, to the fullest extent permitted under applicable law, Owner agrees that Professional Firm's total liability for any and all claims, losses, costs, damages, or expenses including, without limitation, reasonable attorneys' fees and costs, of any nature whatsoever, shall not exceed the Professional Firm's total fee under the Agreement. It is intended that this limitation of liability shall apply to any and all liability or cause of action, whether in contract, warranty, tort, or otherwise, however alleged or arising.

Force Majeure. Professional Firm shall have no liability for any delay caused by an event of force majeure, the Owner or any of its consultant's or contractors, or circumstances outside of its reasonable control.

Termination for Convenience. The Owner may terminate the Agreement at any time upon 30-calendar days notice in writing to Professional Firm. Upon receipt of such notice, Professional Firm shall, unless the notice directs otherwise, discontinue all services in connection with the performance of the Agreement. As soon as practicable after the receipt of notice of termination, Professional Firm shall submit a statement to the appropriate department(s) showing in detail the services performed or items delivered under the Agreement to date of termination. The Owner agrees to compensate the Professional Firm for that portion of the prescribed charges for which the services were actually performed or items delivered under the Agreement and not previously paid.

Notices. All notices referenced in this Agreement shall be provided in writing. Notices shall be deemed effective when delivered by hand delivery or on the third business day after the notice is deposited in the U.S. Mail. Notices shall be sent to the following addresses:

If to Owner: The City of San Marcos
630 East Hopkins
San Marcos, Texas 78666
Attn: Engineering & Capital Improvements
kabbott@sanmarcostx.gov

With Copies to: The City of San Marcos
630 East Hopkins
San Marcos, Texas 78666
Attn: City Attorney's Office
LegalInfo@sanmarcostx.gov

If to Professional Firm K Friese & Associates, Inc.
1120 S. Capital of Texas Highway, CityView 2, Ste. 100
Austin, Texas 78746
towens@kfriese.com

The parties may designate alternative persons or addresses for receipt of notices by written notice.

Changes in Service. If a Party requires a change or amendment to this Agreement or its Exhibits, the Parties agree to use the Authorization on Change in Services Form in **Exhibit 2** to do so. The Authorization on Change in Services Form must be agreed to and signed by both Parties before any change to this Agreement is effective.

ARTICLE 8 **REIMBURSABLE EXPENSES**

Reimbursable Expenses are in addition to Compensation for Professional Firm's Services and include actual and reasonable expenses incurred by the Professional Firm, that are (i) outside the services listed in **Exhibit 1**; and (ii) solely and directly in connection with the performance of Professional Firm's Services. Such Reimbursable Expenses must be approved in writing by the Owner and may include the following:

Expense of transportation (coach class air travel only) and living expenses in connection with out-of-state travel as directed and approved in advance by the Owner. Transportation and living expenses incurred within the State of Texas are not reimbursable unless expressly approved by the Owner in advance.

Fees paid for securing approval of authorities having jurisdiction over the Project.

Professional models and renderings if requested by the Owner.

Reproductions, printing, binding, collating and handling of reports, and drawings and specifications or other project-related work product, other than that used solely in-house for Professional Firm.

Shipping or mailing of all reports, drawings, specifications, and other items in connection with the Project.

Expense of any additional insurance coverage or limits, excluding professional liability and errors and omissions insurance, required under this Agreement or requested by the Owner that is in excess of that normally carried by the Professional Firm.

ARTICLE 9 **ADDITIONAL SERVICES**

Additional Services are services not included in the Professional Firm's Services and not reasonably inferable from Professional Firm's Services. Additional Services shall be provided only if authorized or confirmed in writing by the Owner. Prior to commencing any Additional Service, Professional Firm shall prepare for acceptance by the Owner an Additional Services Proposal detailing the scope of the Additional Services and the proposed fee for those services. Professional Firm shall proceed to perform Additional Services only after written acceptance of the Additional Services Proposal by Owner.

Upon acceptance by Owner, each Additional Services Proposal and the services performed by Professional Firm pursuant to such Additional Services Proposal shall become part of this Agreement and shall be subject to all the terms and conditions of this Agreement.

ARTICLE 10 **PAYMENTS TO PROFESSIONAL FIRM**

Professional Firm shall present monthly Applications for Payment to the Owner detailing the Professional Firm's Services and approved Additional Services performed and the approved Reimbursable Expenses incurred for the Project in the previous month. With each application for payment, Professional Firm shall submit payroll information, receipts, invoices and any other evidence of payment which Owner or its designated representatives shall deem necessary to support the amount requested.

Owner shall promptly review the Application for Payment and notify Professional Firm whether the Application is approved or disapproved, in whole or in part. Owner shall promptly pay Professional Firm for all approved services and expenses. For purposes of Texas Government Code § 2251.021(a)(2), the date performance of services is completed is the date when the Owner's representative approves the Application for Payment.

Owner shall have the right to withhold from payments due Professional Firm such sums as are necessary to protect Owner against any loss or damage which may result from negligence by Professional Firm or failure of Professional Firm to perform its obligations under this Agreement.

ARTICLE 11
PROFESSIONAL FIRM'S ACCOUNTING RECORDS

Records of Professional Firm costs, reimbursable expenses pertaining to the Project and payments shall be available to Owner or its authorized representative during business hours and shall be retained for three years after final Payment or abandonment of the Project, unless Owner otherwise instructs Professional Firm in writing. Professional Firm's records shall be kept on the basis of generally accepted accounting principles.

ARTICLE 12
INSURANCE

For services performed on Owner's premises, Professional Firm shall furnish to Owner Certificates of Insurance as set forth below prior to the commencement of any work hereunder and shall maintain such coverage during the full term of the Agreement.

Worker's Compensation	Statutory Limits
Employer's Liability	\$1,000,000 each occurrence
	\$1,000,000 aggregate
Comprehensive General Liability	\$1,000,000 each occurrence
	\$1,000,000 aggregate
Comprehensive Auto Liability	\$1,000,000 each person
Bodily Injury	\$1,000,000 each occurrence
Property Damage	\$1,000,000 each occurrence
Professional Liability	\$1,000,000

Professional Firm shall include the Owner as an additional insured on the General Liability policy, and the Worker's Compensation policy shall include a waiver of subrogation in favor of the Owner.

Required insurance shall not be cancelable without thirty (30) days' prior written notice to Owner.

Upon request Professional Firm shall furnish complete sets of its insurance policies to Owner for review. If additional insurance or changes to this article are required, they shall be explicitly laid out in **Exhibit 1**.

ARTICLE 13
INDEMNITY

Professional Firm shall hold Owner, The City of San Marcos, and its City Council, officers, agents and employees harmless and free from any loss, damage or expense arising out of any occurrence relating to this Agreement or its performance and shall indemnify Owner, and its City Council, officers, agents and employees, customers, agents, successors and assigns against any damage or claim of any type arising to the extent caused by the negligent or intentional acts or omission of Professional Firm, its employees, agents and/or assigns.

ARTICLE 14
PROFESSIONAL FIRM'S COMPENSATION

The Professional Firm's compensation for Professional Firm's Services shall be as follows:

Service Fees: The maximum fee for Professional Firm's Services shall not exceed seventy eight thousand six hundred and fifty dollars (\$78,650.00).

Reimbursable Expenses: For Reimbursable Expenses approved by the Owner (ref. Article 8 and **Exhibit 3**), Professional Firm shall be compensated for the actual expense incurred by Professional Firm. Notwithstanding the foregoing, Owner's payment to Professional Firm for Reimbursable Expenses will not exceed a maximum of amount agreed upon in this Agreement and Exhibits without the prior written approval of the Owner.

Additional Services: The Professional Firm's Compensation for any approved Additional Services shall be as described in the Additional Services Proposal accepted by the Owner.

The Owner and Professional Firm have entered into this Agreement as of the Effective Date.

OWNER:

THE CITY OF SAN MARCOS

By: _____

Name: Bert Lumbreras

Title: City Manager

Date: _____

PROFESSIONAL FIRM:

K FRIESE & ASSOCIATES, INC.

By: 

Name: Thomas M. Owens, P.E.

Title: Executive Vice President

Date: 1 DEC 17

Exhibits:

EXHIBIT 1 – Scope of Services and Deliverables

EXHIBIT 2 – Authorization of Change in Service Form

EXHIBIT 3 – Detailed Fee Schedule

EXHIBIT 4 – Other Language as Required by Federal, State, or Local Laws

EXHIBIT 1
SCOPE OF SERVICES AND DELIVERABLES

PROJECT UNDERSTANDING

The project consists of the replacement of approximately 500 linear feet of 12-inch diameter waterline in Sessom Drive between Aquarena Springs Drive and Ed J L Green Drive. The waterline crosses a 10-feet by 5-feet (10 x 5) box culvert and will be installed under the culvert by trenchless construction.

The below Scope of Services includes the tasks to develop the Construction Plans and Technical Specifications for the improvements and assist the City with Bid and Construction Phase Services.

SCOPE OF SERVICES

1. Phase A – Preliminary Phase (30%)

1. Project Management and QA/QC: This task includes routine communication with the City; managing subconsultants, manpower, budgets, and schedules; invoicing; implementing and monitoring of QA/QC efforts; and other activities associated with managing the project.

2. Meetings

- a. Kick-off Meeting: K Friese + Associates (KFA) will prepare for and attend one kick-off meeting on site with the City and sub-consultants to kick off the project.
- b. 30% Comments Review Meeting: Meet with the City to review the 30% Design Submittal and receive the City's comments.

3. Data Collection/Review

- a. KFA will obtain and review reports, studies, as-builts, and other data related to the projects. This will include the City's current utility GIS layers.
- b. Work with the City to gather existing design data for the project area, including the design and survey CAD files used for the Sessom Creek Wastewater Improvements Phase I Project (by KFA) and Sessom Bike/Ped & State St. Improvements Project (by Halff). KFA will merge the data sets and identify discrepancies that may need to be resolved, which could include elevation data or existing utility information.

4. Field Investigations

- a. Subsurface Utility Locates: It has been assumed that the City will provide subsurface utility locates through the City's on-call contract. It is anticipated that up to eight locates may be requested. KFA will identify the locations following the approval of the preliminary alignment by the City.
- b. Geotechnical Investigation: Arias will perform one 30-foot deep geotechnical boring located near the 10 x 5 box culvert in Sessom Drive. In addition, Arias will conduct appropriate laboratory testing and summarize the field investigation results and recommendations in a geotechnical report.
- c. Archaeological Research: Cox|McLain will conduct database searches and gather additional information to be integrated into a coordination letter to the Texas Historical Commission.

5. Pipelines

- a. Alignment: Using the merged design and survey information, a proposed route will be identified. System integration will be evaluated, including an assessment of existing utility interference. Traffic control will be considered when analyzing the possible alignments. KFA will evaluate workspace and analyze various construction methods for crossing the 10 x 5 box culvert, including horizontal directional drilling (HDD) and jack and bore.
6. Project Permitting/Design Requirements: KFA will determine project permitting and design requirements for local, state and federal entities. Based on a preliminary review it is anticipated that only City, TxDOT, and THC approvals may be required.
7. Identify Utility Providers: KFA will review the existing design and survey data and coordinate with the City to determine utility service providers in the vicinity of the project. KFA will contact providers to request the plans and/or schematics of their utility lines within the project area that do not appear to be shown in the existing data.
8. Identify Utility Conflicts: Develop a Utility Conflicts Analysis Table based on the 30% design.
9. Develop Construction Cost Estimates: A Class C ($\pm 25\%$) opinion of probable cost for the preferred route will be developed.
10. Deliverables:
 - a. Draft Preliminary Engineering Design Memorandum: A Design Memorandum will be prepared summarizing the investigation and recommendations. At a minimum the Design Memorandum will include:
 - i. 30% Plan & Profile Sheets of the preferred alignment for the waterline using the existing survey data and showing existing and proposed appurtenances (valves, fire hydrants, services), and proposed workspace. Sheets shall be 11" x 17" at a scale of 1" = 40';
 - ii. Class C ($\pm 25\%$) opinion of probable cost for the preferred route;
 - iii. Trenchless installation method recommendation;
 - iv. Permitting requirements and associated timeframes;
 - v. Updated Design and Construction Schedule
 - vi. KFA will provide one (1) electronic copy in pdf format of the Draft Design Memorandum to the City.
 - b. Final Preliminary Engineering Design Memorandum: Following the review meeting with the City, KFA will address City comments and submit a Final Preliminary Engineering Design Memorandum in pdf Format and electronic copy of the 30% Design Plans in DGN format.

B. Phase B – Design Phase (90%/100%)

1. Project Management and QA/QC: This task includes routine communication with the City; managing subconsultants, manpower, budgets, and schedules; invoicing; implementing and monitoring of QA/QC efforts; and other activities associated with managing the project.
2. Meetings
 - a. Project Meetings: Two project meetings with the City have been budgeted for the Design Phase to review the City's comments on the 90% and 100% submittals.
3. Tasks

- a. Traffic Control: Traffic control sequencing for construction of the improvements will be developed.
 - b. Permitting:
 - i. TxDOT Permits: Prepare any required TxDOT permits for work or traffic control within TxDOT Right-of-Way.
 - c. Notifications:
 - i. Texas Historical Commission: Cox|McLain will prepare a Texas Antiquities Permit to be signed by the City and submit the permit to Texas Historical Commission.
4. Construction Plans: KFA shall prepare one set of construction plans for the Sessom Waterline Replacement Project suitable for public bidding to include notes, plan and profile sheets, details, environmental protection, traffic control, construction phasing, and work and storage locations. For the purposes of this proposal the plan set is assumed to be 11" x 17" paper, plan and profile sheets are assumed to be at 1" = 40' horizontal and 1" = 10' vertical scale. The construction plans will be in accordance with City of San Marcos CADD Standards and will contain the following:
- a. Cover Sheet
 - b. Project Layout
 - c. Notes
 - d. Quantities: Quantities will be indicated by sheet
 - e. Traffic Control Plans and Phasing
 - f. Signing and Pavement Markings
 - g. Erosion & Sedimentation Control and Tree Protection
 - h. Plan and Profile Sheets (Estimated Number of Sheets: 2)
 - i. Details
5. Deliverables:
- a. 90%: Two (2) hard copies of 90% deliverables and one (1) pdf electronic copy. The 90% submittal will contain the following:
 - i. Construction Plans – full set including quantity sheets
 - ii. Technical Specifications
 - 1. List of Standard Technical Specifications
 - 2. Special Provisions to the Standard Technical Specifications
 - 3. Project Specific/Special Technical Specifications
 - iii. Engineer's Opinion of Probable Construction Cost: A Class B estimate (\pm 10%) will be provided.
 - iv. Construction Project Schedule: KFA will develop a Construction Schedule for the project consisting of design, bid and construction phases. The schedule will be updated during design.
 - b. 100% Submittal: Two (2) hard copies of 100% deliverables and one (1) CAD copy of the sealed plans will be provided. The 100% submittal will contain the following:

- i. Construction Plans
- ii. Technical Specifications (PDF)
- iii. Bid Form: Provide the Bid Form in Excel format.
- iv. Engineer's Opinion of Probable Construction Cost: A Class B estimate ($\pm 10\%$) will be provided.
- v. Construction Project Schedule: KFA will develop a Construction Schedule for the project consisting of design, bid and construction phases. The schedule will be updated during design.
- vi. Construction Check List

C. Phase C - Bid Phase

1. Project Management: This task includes routine communication with the City; managing manpower, budgets, and schedules; invoicing; and other activities associated with managing the project.
2. Attend Pre-Bid Meeting: Assist the City in conducting pre-bid meeting and developing the agenda.
3. Answer Questions: Coordinate with the City for issuing responses to technical questions and requests for additional information. KFA will issue addenda to Purchasing, as necessary and provide conformed plans per changes made during this process, if any.
4. Bid Tabulation and Recommendation of Award: Review all bids and evaluate them for responsiveness and bid amount. KFA will also check references, by telephone, of the low bidder and second low bidder, and will prepare a letter summarizing the review and evaluation and include recommendations for award of the contract for construction, or other action as may be appropriate. The City shall make the final decision on the award of the contract for construction and the acceptance or rejection of all bids.
5. Deliverables: KFA will incorporate addenda items in the Construction Plans and issue a "Conformed" set of plans for construction.
 - a. Conformed Plans: Provide one (1) electronic copy of Construction Plans in pdf, one (1) CAD copy, two (2) 22" x 34" plan sets, and four (4) 11" x 17" plan sets

D. Phase D – Construction Phase

1. Project Management: This task includes routine communication with the City; managing manpower, budgets, and schedules; invoicing; and other activities associated with managing the project.
2. Construction Meetings and Site Visits: Attend regular construction meetings with the City, Contractor, and other parties as appropriate. KFA will visit the site to check the progress of the work and verify general conformance with the project plans and technical specifications. For budgeting purposes we have assumed four combined site visits/meetings.
3. Pre-Construction Conference: Attend a pre-construction conference for the project with the City, Contractor, and other parties as appropriate.
4. Submittal Review: KFA will review submittals and maintain a log of submittal and return dates and approval status.
5. Response to Requests for Information/Modifications: KFA will respond to all requests for information (RFI's) from the Contractor related to possible clarifications of plans and technical specifications.

6. Final Pay Application Review: Review Contractor's Final Pay Application after quantity concurrence by the City's Construction Inspector.
 7. Review of Change Orders: Provide review of all Contractors' requests for Change Orders and coordinate Change Orders with the City as appropriate.
 8. Substantial and Final Completion: Participate in two site visits to determine outstanding items and document "punch list items". KFA will issue an Engineer's Concurrence for Project Acceptance when the contract requirements have been met, and will also notify TCEQ and other jurisdictional agencies of completion.
- E. Phase E – Record Drawings
1. Record Drawings: Review the Contractor's redline as-built drawings and incorporate deviations from the construction drawings as appropriate. KFA will deliver one set of 22" x 34" drawings, one 11" x 17" pdf electronic copy, and one CAD copy for review.
 2. Deliverables: After review, two sets of 22" x 34" drawings, two sets of 11" x 17" drawings, one pdf electronic copy and one CAD copy will be delivered to the City. The surface to grid conversion scale factor for GIS will also be provided.

ASSUMPTIONS AND ADDITIONAL SERVICES

1. Topographic Surveying: It has been assumed that existing survey and design data from the Sessom Creek Wastewater Improvements Phase I Project (by KFA) and Sessom Bike/Ped & State St. Improvements Project (by Half) will provide sufficient base files to develop the Construction Plans. If additional base file information is needed or significant discrepancies between the existing data files exist, field survey may be required as an additional service.
2. Subsurface Utility Locates: It has been assumed that the City will provide subsurface utility locates through the City's on-call contract. It is anticipated that up to eight locates may be requested. KFA will identify the locations following the approval of the preliminary alignment by the City.
3. Stormwater Permitting – Since the project will disturb less than one acre, coverage under the TCEQ Construction General Permit is not required.
4. Antiquities Permit – It has been assumed that the Texas Historical Commission will allow monitoring during construction for antiquities and that no investigations will be required prior to construction.
5. The City of San Marcos will contract directly with Texas State University Center for Archaeological Studies to perform monitoring during construction activities and final reporting, as required by the THC permit.
6. Since this is an upsizing of an existing waterline and does not increase the number of connections, TCEQ Review and Approval of Construction Plans and Technical Specifications will not be required.



13581 Pond Springs Road, Suite 210, Austin, Texas 78729 • Phone: (512) 428-5550 • Fax: (512) 428-5525

November 20, 2017
Arias Project No. 2017-974

VIA Email: towens@kfriese.com

Mr. Tom Owens, P.E.
K Friese + Associates
1120 S. Capital of Texas Highway, CityView 2, Suite 100
Austin, TX 78746

RE: Proposal for Geotechnical Investigation
E Sessom Waterline Replacement
San Marcos, Texas

Dear Mr. Owens,

Arias & Associates, Inc. (Arias) is pleased to provide this proposal for geotechnical engineering services for the above-reference project. Our understanding of the project is based on information provided by you. The following sections present our understanding of the project, proposed investigation, fee compensation requirements, and proposed schedule.

Project Information

The project will include replacement of an existing waterline along E Sessom Drive, near Aquarena Springs Drive, in San Marcos, Texas. The investigation will be located at a proposed trenchless installation at an existing 10' by 5' box culvert beneath Sessom Drive. This investigation is not intended to serve as a Geotechnical Baseline Report for trenchless installations.

Proposed Investigation

The site is mapped as being underlain by alluvium associated with the San Marcos River, further underlain by either shale or limestone. As requested, we propose to drill one boring to the 30-foot depth near the box culvert in the traffic lane. Drilling will require traffic control consisting of a lane closure with flagman operation

Borings will be advanced using augering and sampling techniques. Rock (shale or limestone) will be continuously core sampled if encountered beneath alluvium. Arias will retain a subcontract driller to perform drilling. Arias personnel will locate the borings, direct the sampling efforts, and visually classify recovered samples.

Soils will be sampled by either pushing a thin-walled tube (ASTM D 1587) or with a split barrel sampler while performing the Standard Penetration Test (ASTM D 1586). Rotary rock coring will be performed in general accordance with ASTM D2113. This proposal assumes that a truck mounted drill rig will be used to drill the boring, and traffic control will be required.

If groundwater is encountered, the groundwater level within the open borehole will be recorded at the time of drilling and immediately following drilling. The borehole will be backfilled with a mixture of cuttings and bentonite pellets, and capped with at least 2 ft of concrete and surficial cold-patch asphalt, upon completion of drilling.

Laboratory testing will be performed on recovered samples selected by the geotechnical engineer to aid in soil classification and to measure engineering properties. Laboratory testing is expected to include moisture content, Atterberg limits, fines content (percent passing the No. 200 sieve), and unconfined compression strength testing of soil and rock cores. The actual laboratory program will depend upon the type of soils and rock encountered.

Reporting

We will issue an electronic copy of our formal engineering report prepared by a licensed professional engineer in the State of Texas that will include:

- Description of the field exploration program;
- Description of the laboratory testing program;
- Soil boring plan that depicts borehole locations on a base map provided by Client;
- Soil boring logs with soil classifications based on the Unified Soil Classification System (ASTM D 2487);
- Generalized site stratigraphy and engineering properties developed from field and laboratory data at the explored locations;
- Depth to groundwater, if encountered, and potential impact on construction;
- Recommendations for waterline installation including comments regarding excavation potential, and bedding and backfill recommendations for bore pits; and
- General recommendations for earthwork and construction.

This report is not intended to serve as a Geotechnical Baseline Report.

Proposed Fee

We propose that the fee for the performance of the scope of work for this project as described in this proposal be **\$5,500**. The work will be performed as outlined in the General Conditions included with this proposal. A Geotechnical Cost Breakdown is presented in the following table.

Scope Item	Cost
Mobilization and Drilling (1 boring to 30-ft)	\$1,700
Traffic Control and Permitting (lane closure with flagman/police escort)	\$2,000
Laboratory Testing (soil classification, rock compression)	\$400
Engineering and Report	\$1,400
TOTAL	\$5,500

We will invoice on a monthly basis. This proposal assumes the following:

- The boring will be drilled using a truck-mounted drill rig;
- The boring will be drilled during daytime hours, from 9 am to 4 pm;
- Traffic control will consist of a lane closure with either a flagman operation and/or police escort;
- Right to drill and necessary permitting will be facilitated by the project team; and

If an additional boring is desired, we can add one 30-ft deep boring within the same traffic control plan, presumably on the other side of the box culvert, for an additional fee of \$1,000.

Schedule

Upon receiving written authorization, and weather and site conditions permitting, we can perform our field investigation within 1 to 2 weeks. Drilling of the borehole(s) will take 1 day. Laboratory testing and reporting will take another 2 to 3 weeks. We will submit a final written report within 4 weeks of formal authorization. We will keep you verbally informed of our findings as they become available.

Delays sometime occur due to adverse weather, utility clearance requirements, and other factors outside of our control. In this event, we will communicate the nature of the delay with you and provide a revised schedule at the earliest possible date.

Proposal Acceptance

Please let us know if this proposal meets your expectations. If acceptable, the authorization table at the end of this proposal should be completed as applicable. We will begin work upon receipt of a signed copy of the proposal by an authorized representative. Please return the entire signed proposal to us by fax, mail or email to russo@ariasinc.com . If the billing address is different, include that information as well.

Should you have any questions, please do not hesitate to contact us. The undersigned with manage and perform the work. Thank you for this opportunity.

Sincerely,

ARIAS & ASSOCIATES, INC.

TBPE Registration No: F-32



Rebecca A. Russo, P.E.
Senior Geotechnical Engineer



Michael C. Fucinari, P.E.
Geotechnical Engineer

Attachments

General Conditions



November 17, 2017

Tom Owens, P.E.
Executive Vice President
K. Friese + Associates, Inc.
1120 S. Capital of Texas Highway
CityView 2, Suite 100
Austin, TX 78746

Re: CMEC Proposal for Archeological Services for the Sessom Water Line Repair Project, City of San Marcos, Hays County, Texas

Dear Mr. Owens:

Cox|McLain Environmental Consulting, Inc. (CMEC) is pleased to submit this proposal to provide archeological services for the above-referenced project, which involves approximately 0.1 miles of water line repair/replacement along Sessom Drive in the City of San Marcos, Hays County, Texas. CMEC understands that the project is owned and funded by the City, rendering it subject to the Antiquities Code of Texas, but that there is no federal nexus that would trigger Section 106 of the National Historic Preservation Act (NHPA), as amended. CMEC further understands that the project is partially or wholly located within site 41HY161, a listed State Antiquities Landmark (SAL) along the San Marcos River.

Scope of Work

Task 1 – Archeological Background Research and THC Coordination

CMEC cultural resources personnel will conduct database searches of the restricted Sites Atlas maintained by the Texas Historical Commission (THC) and Texas Archeological Research Laboratory (TARL) to identify previously documented archeological sites, cemeteries, historical markers, properties and districts listed on the National Register of Historic Places (NRHP), and SALs. Results of the search will be integrated with soil information, geologic maps, topographic maps, and other appropriate data sources and will be presented in a coordination letter to be submitted by the City to the THC.

Task 2 – Archeological Permit and Monitoring

If required by the THC, CMEC cultural resources personnel will integrate the information described above with updated data and/or reviewer comments in an application for a Texas Antiquities Permit on behalf of the City. After a valid permit number is obtained, monitoring field investigations will be conducted (Category 7 under 13 TAC 26.15) during construction-phase excavations at and near listed SAL 41HY161. CMEC assumes a maximum of 5 days on site.

It is assumed that the project area is publicly owned; therefore, a maximum of 10 diagnostic artifacts from subsurface contexts will be collected and curated along with project records. Field methods will comply with the requirements of 13 TAC 26, as elaborated by the THC and the Council of Texas Archeologists (CTA). In addition, this investigation will evaluate archeological resources for their potential eligibility for inclusion in the NRHP per Section 106 of the NHPA or designation as a SAL under the provisions of the Texas Antiquities Code. Draft and final reporting of results, including preliminary NRHP/SAL evaluations of any identified archeological



resources, will comply with THC and CTA guidelines and will be coordinated with the City and the THC per the terms of the approved archeological permit.

Assumptions and Exclusions

- Assumes total project length of approximately 0.1 miles.
- Task 1 assumes no fieldwork; background research and THC coordination only.
- Task 2 assumes archeologists would be needed on site for 5 work days.
- Assumes digital archeological site registration only (discounted fee) and that no paper site form submittals would be required.
- Exclusions: ecological services; right-of-entry coordination; human environment/socioeconomic justice studies; Section 4(f) services; historic resources background, reconnaissance, intensive studies, NRHP nominations, or HABS/HAER documentation; archeological survey, testing, or data recovery; human remains evaluation, coordination, removal, or reinternment; or detailed analysis of artifacts. All excluded services could be provided under separate scope/budget.

The cultural resource services described above will be conducted for an estimated fee of **\$10,986.25**, to be billed on a **time and materials** basis. A detailed breakdown of costs is presented in the spreadsheet below. This fee proposal is valid for 180 days.

CMEC greatly appreciates the opportunity to submit this proposal. Please feel free to contact me at 512-338-2223 or chris@coxmcclain.com if you have any questions.

Sincerely,

Chris Dayton, PhD, RPA
Cultural Resources Program Manager
Cox|McLain Environmental Consulting, Inc.

Attachment - Cost Proposal
KFA - COSM Sessom Water Line Repair - Archeological Coordination, Permit Coordination, and Construction Monitoring
Cox|McLain Environmental Consulting, Inc.

LABOR

Description	Sr. Env. Scientist II		Sr. Env. Scientist I		Env. Prof. II		Env. Prof. I		Env. Staff II		Env. Staff I		Env. Tech II		Env. Tech I		Admin/ Clerical/ Tech Edit		Totals	
	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours
Task 1 Background research, THC letter	0	4	8	0	8	0	0	0	0	0	0	0	0	0	0	0	2			22
Task 2a Antiquities Permit Prep, Editing	0	2	4	0	4	0	0	0	0	0	0	0	0	0	0	0	2			12
Task 2b Construction Phase Monitoring (5 days)	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0			40
Task 2c Draft and Final Reporting	0	8	24	0	12	0	0	12	0	0	0	0	12	0	0	4				60
Total Labor Hours	0	14	36	0	64	0	0	64	0	0	0	0	12	0	0	8				134
Rate	\$125.00	\$110.00	\$85.00	\$81.00	\$65.00	\$60.00	\$55.00	\$42.00	\$55.00	\$60.00	\$60.00	\$60.00	\$55.00	\$42.00	\$55.00	\$55.00				
SUBTOTAL Labor Cost	\$0	\$1,540	\$3,060	\$0	\$4,160	\$0	\$4,160	\$0	\$660	\$0	\$660	\$0	\$660	\$0	\$440	\$440				\$9,860.00

EXPENSES

	Unit	Quantity	Rate	Total
Backhoe + operator (at cost)	Day	0	\$1,200.00	\$0
Mileage (Allowable IRS Rate)	Miles	500	\$0.535	\$268
Hotel (At cost; taxes included)	Day	0	\$89.00	\$0
Per Diem	Day	0	\$51.00	\$0
Car Rental (at cost)	Day	0	\$75.00	\$0
SUV/ATV Rental	Day	0	\$150.00	\$0
Rental vehicle fuel	Day/Gal	0	\$3.00	\$0
Airfare (at cost)	R/T	0	\$500.00	\$0
Overnight Delivery	Letter	1	\$30.00	\$30
Field Supplies (At cost)	Misc	0	\$100.00	\$0
Photocopies - Color 8.5x11	Page	10	\$1.20	\$12
Photocopies - Color 11x17	Page	5	\$2.25	\$11
Photocopies - B/W 8.5x11	Page	30	\$0.15	\$5
Photocopies - B/W 11x17	Page	10	\$0.30	\$3
Historical Aerials (cost)	Each	0	\$500.00	\$0
TARL site registration (digital only)	Site	1	\$48.00	\$48
Curator fees	Drawer	0.5	\$1,500.00	\$750
TOTAL Nonlabor Expenses				\$1,126.25

Notes/Assumptions: Assumes project area of approximately 0.1 miles in length within existing public ROW within/adjacent to SAL 41HY161. Assumes 5 field days for Task 2, if required by THC. Assumes public land and that collection/curator required. Exclusions: ecological services, historic resources background, recon, or intensive study, NRHP nominations, HABS/HAER documentation, archeological survey, testing, or data recovery, human remains evaluation/coordination/removal. All excluded services could be provided under separate scope/budget.

TOTAL COSTS - CMEC \$10,986.25

E SESSOM WATERLINE REPAIR PROJECT

ID	Task Name	Duration	Start	Finish	4, 2017	Qtr 1, 2018	Qtr 2, 2018	Qtr 3, 2018	Qtr 4, 2018	Qtr 1, 2019								
					Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	E. SESSOM WATERLINE REPAIR PROJECT	50 wks	Mon 1/22/18	Fri 1/4/19														
2	PHASE A - PRELIMINARY PHASE (30%)	13 wks	Mon 1/22/18	Fri 4/20/18														
3	Notice-to-Proceed	0 wks	Mon 1/22/18	Mon 1/22/18														
4	Kick-off Meeting	1 wk	Mon 1/22/18	Fri 1/26/18														
5	Data Collection	2 wks	Mon 1/22/18	Fri 2/2/18														
6	Field Investigations	5 wks	Mon 1/29/18	Fri 3/2/18														
7	Geotech	5 wks	Mon 1/29/18	Fri 3/2/18														
8	Archaeological Research	5 wks	Mon 1/29/18	Fri 3/2/18														
9	Pipeline Alignment Options	2 wks	Mon 2/5/18	Fri 2/16/18														
10	Permitting/Design Requirements	1 wk	Mon 2/19/18	Fri 2/23/18														
11	Utility Conflicts	1 wk	Mon 2/19/18	Fri 2/23/18														
12	Cost Estimates	1 wk	Mon 2/26/18	Fri 3/2/18														
13	Draft Preliminary Eng Design Memo	1 wk	Mon 2/26/18	Fri 3/2/18														
14	QA/QC	2 wks	Mon 3/5/18	Fri 3/16/18														
15	Draft PEDM Submittal	0 wks	Fri 3/16/18	Fri 3/16/18														
16	City Review & Review Meeting	3 wks	Mon 3/19/18	Fri 4/6/18														
17	Final PEDM	2 wks	Mon 4/9/18	Fri 4/20/18														
18	PHASE B - DESIGN PHASE (90%/100%)	15 wks	Mon 4/23/18	Fri 8/3/18														
19	90% Design	9 wks	Mon 4/23/18	Fri 6/22/18														
20	Construction Plans	3 wks	Mon 4/23/18	Fri 5/11/18														
21	Specifications	1 wk	Mon 5/14/18	Fri 5/18/18														
22	Cost Estimates	1 wk	Mon 5/14/18	Fri 5/18/18														
23	QA/QC	1 wk	Mon 5/21/18	Fri 5/25/18														
24	P/U Comments & Reproduction	1 wk	Mon 5/28/18	Fri 6/1/18														
25	90% Submittal	0 wks	Fri 6/1/18	Fri 6/1/18														
26	City Review & Review Meeting	3 wks	Mon 6/4/18	Fri 6/22/18														
27	100% Design	6 wks	Mon 6/25/18	Fri 8/3/18														
28	Construction Plans	3 wks	Mon 6/25/18	Fri 7/13/18														
29	Specifications	1 wk	Mon 7/16/18	Fri 7/20/18														
30	Cost Estimates	1 wk	Mon 7/16/18	Fri 7/20/18														
31	QA/QC	1 wk	Mon 7/23/18	Fri 7/27/18														
32	P/U Comments & Reproduction	1 wk	Mon 7/30/18	Fri 8/3/18														
33	100% Submittal	0 wks	Fri 8/3/18	Fri 8/3/18														
34	PHASE C - BID PHASE	12 wks	Mon 8/6/18	Fri 10/26/18														
35	PHASE D - CONSTRUCTION PHASE	8 wks	Mon 10/29/18	Fri 12/21/18														
36	PHASE E - RECORD DRAWINGS	2 wks	Mon 12/24/18	Fri 1/4/19														

EXHIBIT 2

**AUTHORIZATION OF CHANGE IN SERVICES
CITY OF SAN MARCOS, TEXAS**

**AGREEMENT/ SERVICES:
CITY REPRESENTATIVE:
CONTRACTOR:
AUTHORIZATION NO.:
CONTRACT EFFECTIVE DATE:
THIS AUTHORIZATION DATE:**

WORK TO BE ADDED TO OR DELETED FROM SCOPE OF SERVICES

Previous contract amount: \$ _____ (NTE annual fee)
Net increase/decrease in contract amount: \$ -0-
Revised annual Agreement amount: \$ _____ (NTE annual fee)

Contractor Name

By: _____

Date: _____

Printed Name, Title

Approved by:

City of San Marcos:

Date: _____

By: _____

Printed Name, Title

City Department (PM, etc.) only below this line.

Account Number(s): _____, _____

Previous Changes in Service:

_____; date; amount

_____; date; amount

_____; date; amount

EXHIBIT 3 DETAILED FEE SCHEDULE

Task	Principal Hrs	Senior Engineer Hrs	Project Manager Hrs	Project Engineer Hrs	Senior Technician Hrs	Admin Hrs	Total Hrs	Labor Cost \$	CMEC \$	Arias \$	Total Subconsultants \$	Expenses \$	Total Cost \$
Phase A - Preliminary Phase (30%)													
1 Project Management & QA/QC	1	8	8			8	25	\$3,900			\$0		\$3,900
2 Project Meetings (2)			8	8			16	\$2,400			\$0	\$100	\$2,500
3 Data Collection and Base Mapping		8	4	4	4		20	\$2,840			\$0		\$2,840
4 Field Investigations - Geotechnical Investigation													
a Subsurface Utility Locates			1	2			3	\$400			\$0		\$400
b Geotechnical Investigation			2		1		3	\$490	\$5,500		\$5,500		\$5,990
c Archaeological Research			2				2	\$400	\$1,800		\$1,800		\$2,200
5 Pipelines - Alignment			4	8	4		16	\$1,980			\$0		\$1,980
6 Project Permitting/Design Requirements			1	2			3	\$400			\$0		\$400
7 Identify Utility Providers				2			2	\$200			\$0		\$200
8 Identify Utility Conflicts			2	4			6	\$800			\$0		\$800
9 Construction Cost Estimates			2	4			6	\$800			\$0		\$800
10 Deliverables													
a Draft Preliminary EDM			2	8	2		12	\$1,380			\$0		\$1,380
b Final Preliminary EDM			2	4	2		8	\$980			\$0		\$980
Subtotal Phase A	1	16	38	46	13	8	122	\$16,950	\$1,800	\$5,500	\$7,300	\$100	\$24,350
Phase B - Design Phase (90%/100%)													
1 Project Management & QA/QC	1	12	12			4	29	\$4,980			\$0		\$4,980
2 Meetings													
a Project Meetings (2)			8	8			16	\$2,400			\$0	\$100	\$2,500
3 Tasks													
a Traffic Control		4	2	8			14	\$1,840			\$0		\$1,840
b Permitting - TxDOT			2	4			6	\$800			\$0		\$800
c Notifications - THC			2				2	\$400	\$950		\$950		\$1,350
4 Construction Plans (18 Shts)			12	80	80		172	\$17,600			\$0		\$17,600
5 Deliverables													
a 90% Submittal			8	16	2		26	\$3,380			\$0	\$200	\$3,580
b 100% Submittal			8	16	2		26	\$3,380			\$0	\$200	\$3,580
Subtotal Phase B	1	16	54	132	84	4	291	\$34,780	\$950	\$0	\$950	\$500	\$36,230
Phase C - Bid Phase													
1 Project Management	1		1			1	3	\$590			\$0		\$590
2 Pre-Bid Meeting			4	4			8	\$1,200			\$0	\$50	\$1,250
3 Answer Questions			4	4			8	\$1,200			\$0		\$1,200
4 Bid Tabulation and Recommendation of Award			1	4			5	\$600			\$0		\$600
5 Deliverables - Conformed Plans			1	2	2		5	\$580			\$0	\$200	\$780
Subtotal Phase C	1	0	11	14	2	1	29	\$4,170	\$0	\$0	\$0	\$250	\$4,420
Phase D - Construction Phase													
1 Project Management	1		4			4	9	\$1,460			\$0		\$1,460
2 Construction Mtgs & Site Visits (4)			8	8			16	\$2,400			\$0	\$200	\$2,600
3 Pre-Construction Conference			4	4			8	\$1,200			\$0	\$50	\$1,250
4 Submittal Review			4	12			16	\$2,000			\$0		\$2,000
5 RFIs			4	4	2		10	\$1,380			\$0		\$1,380
6 Final Pay Application Review			1				1	\$200			\$0		\$200
7 Change Orders			4	4			8	\$1,200			\$0		\$1,200
8 Substantial and Final Completion			8	8			16	\$2,400			\$0	\$100	\$2,500
Subtotal Phase D	1	0	37	40	2	4	84	\$12,240	\$0	\$0	\$0	\$350	\$12,590
Phase E - Post Construction Phase													
1 Record Drawings			1		4		5	\$560			\$0		\$560
2 Deliverables			1	1			2	\$300			\$0	\$200	\$500
Subtotal Phase E	0	0	2	1	4	0	7	\$860	\$0	\$0	\$0	\$200	\$1,060
Basic Scope Total	4	32	142	233	105	17	533	\$69,000	\$2,750	\$5,500	\$8,250	\$1,400	\$78,650

The hours listed above are an estimate. The hours assigned to the Phase are not exclusive to the Phase which they are assigned. The total fee will not exceed the total contract amount as discussed in Article 14. The hourly rates of this contract shall apply to throughout the remainder of this contract and to all change in services.

Payment to the ENGINEER will be made as follows:

1. Basic Services - The amounts of these invoices will be based upon the extent of work completed by the Engineer on an hourly basis.
2. Supplemental Services - The Engineer will receive approval in writing before performing supplemental services. The amounts of these invoices will be based upon the extent of work completed by the Engineer on an hourly basis.
3. Reimbursable expense - Reimbursable expenses including such things as expenses for plotting, reproduction of documents, auto travel mileage (current IRS approved mileage rate), delivery charges, long distance communications, freight, and state accessibility will be invoiced with appropriate backup documentation.

Invoice and Time of Payment

Invoices will be prepared in a format approved by the City prior to submission of the first monthly invoice. Invoices shall be submitted monthly and paid within 30 days.

Hourly Billing Rates:

Principal	\$300.00
Senior Engineer	\$160.00
Project Manager	\$200.00
Design Engineer	\$120.00
Project Engineer	\$100.00
Senior Technician	\$90.00
Admin	\$90.00

EXHIBIT 4
FEDERAL, STATE, AND LOCAL REQUIRED PROVISIONS