

STATE OF TEXAS                   §  
   §  
COUNTY OF FORT BEND       §

**AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES**

THIS AGREEMENT is made and entered into by and between Fort Bend County, (hereinafter "County"), a body corporate and politic under the laws of the State of Texas, and Halff Associates, Inc., (hereinafter "Contractor"), a company authorized to conduct business in the State of Texas.

**WITNESSETH**

WHEREAS, County desires that Contractor provide professional engineering services for the construction of a two-lane asphalt roadway with six-foot shoulders from Klauke Road to Cottonwood School Road for the Bamore Road – Segment 2 Project, Number 17105, under the 2017 Mobility Bond Program (hereinafter "Services") pursuant to SOQ 14-025; and

WHEREAS, County has determined Contractor is the most highly qualified provider of the desired Services on the basis of demonstrated competence and qualifications, and County and Contractor have negotiated to reach a fair and reasonable amount of compensation for the provision of such Services, as required under Chapter 2254 of the Texas Government Code; and

WHEREAS, Contractor represents that it is qualified and desires to perform such services.

NOW, THEREFORE, in consideration of the mutual covenants and conditions set forth below, the parties agree as follows:

**AGREEMENT**

**Section 1. Scope of Services**

Contractor shall render the professional engineering services, including the preliminary design, utility coordination, topographic survey, proposed right-of-way documents, geotechnical investigation, final design, bid phase services and limited construction phase services for the project as described Contractor's proposal dated April 26, 2018 attached hereto as Exhibit A, and incorporated herein for all purposes.

**Section 2. Personnel**

2.1 Contractor represents that it presently has, or is able to obtain, adequate qualified personnel in its employment for the timely performance of the Scope of Services required under this Agreement and that Contractor shall furnish and maintain, at its own expense, adequate and sufficient personnel, in the opinion of County, to perform the Scope of Services when and as required and without delays.

2.2 All employees of Contractor shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of Contractor who, in the opinion of County, is incompetent or by his conduct becomes detrimental to the project shall, upon request of County, immediately be removed from association with the project.

### **Section 3. Compensation and Payment**

3.1 Contractor's fees shall be calculated at the rates set forth in the attached Exhibit A. The Maximum Compensation for the performance of Services within the Scope of Services described in Exhibit A is two hundred eighty-five thousand fifteen dollars and no/100 (\$285,015.00) as set forth in Exhibit A. In no case shall the amount paid by County under this Agreement exceed the Maximum Compensation without a written agreement executed by the parties.

3.2 All performance of the Scope of Services by Contractor including any changes in the Scope of Services and revision of work satisfactorily performed will be performed only when approved in advance and authorized by County.

3.3 County will pay Contractor based on the following procedures: Upon completion of the tasks identified in the Scope of Services, Contractor shall submit to County staff person designated by the County Engineer, one (1) electronic (pdf) copy of the invoice showing the amounts due for services performed in a form acceptable to County. County shall review such invoices and approve them within 30 calendar days with such modifications as are consistent with this Agreement and forward same to the Auditor for processing. County shall pay each such approved invoice within thirty (30) calendar days. County reserves the right to withhold payment pending verification of satisfactory work performed.

### **Section 4. Limit of Appropriation**

4.1 Contractor clearly understands and agrees, such understanding and agreement being of the absolute essence of this Agreement, that County shall have available the total maximum sum of two hundred eighty-five thousand fifteen dollars and no/100 (\$285,015.00) specifically allocated to fully discharge any and all liabilities County may incur.

4.2 Contractor does further understand and agree, said understanding and agreement also being of the absolute essence of this Agreement, that the total maximum compensation that Contractor may become entitled to and the total maximum sum that County may become liable to pay to Contractor shall not under any conditions, circumstances, or interpretations thereof exceed two hundred eighty-five thousand fifteen dollars and no/100 (\$285,015.00).

### **Section 5. Time of Performance**

Time for performance of the Scope of Services under this Agreement shall begin with receipt of the Notice to Proceed and end no later than May 8, 2022. Contractor shall complete the tasks described in the Scope of Services, within this time or within such additional time as may be extended by the County.

## **Section 6. Modifications and Waivers**

6.1 The parties may not amend or waive this Agreement, except by a written agreement executed by both parties.

6.2 No failure or delay in exercising any right or remedy or requiring the satisfaction of any condition under this Agreement, and no course of dealing between the parties, operates as a waiver or estoppel of any right, remedy, or condition.

6.3 The rights and remedies of the parties set forth in this Agreement are not exclusive of, but are cumulative to, any rights or remedies now or subsequently existing at law, in equity, or by statute.

## **Section 7. Termination**

7.1 Termination for Convenience – County may terminate this Agreement at any time upon forty-eight (48) hours written notice.

### **7.2 Termination for Default**

7.2.1 County may terminate the whole or any part of this Agreement for cause in the following circumstances:

7.2.1.1 If Contractor fails to perform services within the time specified in the Scope of Services or any extension thereof granted by the County in writing;

7.2.1.2 If Contractor materially breaches any of the covenants or terms and conditions set forth in this Agreement or fails to perform any of the other provisions of this Agreement or so fails to make progress as to endanger performance of this Agreement in accordance with its terms, and in any of these circumstances does not cure such breach or failure to County's reasonable satisfaction within a period of ten (10) calendar days after receipt of notice from County specifying such breach or failure.

7.2.2 If, after termination, it is determined for any reason whatsoever that Contractor was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the County in accordance with Section 7.1 above.

7.3 Upon termination of this Agreement, County shall compensate Contractor in accordance with Section 3, above, for those services which were provided under this Agreement prior to its termination and which have not been previously invoiced to County. Contractor's final invoice for said services will be presented to and paid by County in the same manner set forth in Section 3 above.

7.4 If County terminates this Agreement as provided in this Section, no fees of any type, other than fees due and payable at the Termination Date, shall thereafter be paid to Contractor.

## **Section 8. Ownership and Reuse of Documents**

All documents, data, reports, research, graphic presentation materials, etc., developed by Contractor as a part of its work under this Agreement, shall become the property of County upon completion of this Agreement, or in the event of termination or cancellation thereof, at the time of payment under Section 3 for work performed. Contractor shall promptly furnish all such data and material to County on request.

## **Section 9. Inspection of Books and Records**

Contractor will permit County, or any duly authorized agent of County, to inspect and examine the books and records of Contractor for the purpose of verifying the amount of work performed under the Scope of Services. County's right to inspect survives the termination of this Agreement for a period of four years.

## **Section 10. Insurance**

10.1 Prior to commencement of the Services, Contractor shall furnish County with properly executed certificates of insurance which shall evidence all insurance required and provide that such insurance shall not be canceled, except on 30 days' prior written notice to County. Contractor shall provide certified copies of insurance endorsements and/or policies if requested by County. Contractor shall maintain such insurance coverage from the time Services commence until Services are completed and provide replacement certificates, policies and/or endorsements for any such insurance expiring prior to completion of Services. Contractor shall obtain such insurance written on an Occurrence form (or a Claims Made form for Professional Liability insurance) from such companies having Best's rating of A/VII or better, licensed or approved to transact business in the State of Texas, and shall obtain such insurance of the following types and minimum limits:

10.1.1 Workers' Compensation insurance. Substitutes to genuine Workers' Compensation Insurance will not be allowed. Employers' Liability insurance with limits of not less than \$1,000,000 per injury by accident, \$1,000,000 per injury by disease, and \$1,000,000 per bodily injury by disease.

10.1.2 Commercial general liability insurance with a limit of not less than \$1,000,000 each occurrence and \$2,000,000 in the annual aggregate. Policy shall cover liability for bodily injury, personal injury, and property damage and products/completed operations arising out of the business operations of the policyholder.

10.1.3 Business Automobile Liability insurance with a combined Bodily Injury/Property Damage limit of not less than \$1,000,000 each accident. The policy shall cover liability arising from the operation of licensed vehicles by policyholder.

10.1.4 Professional Liability insurance may be made on a Claims Made form with limits not less than \$1,000,000.

10.2 County and the members of Commissioners Court shall be named as additional insured to all required coverage except for Workers' Compensation and Professional Liability. All Liability policies including Workers' Compensation written on behalf of Contractor shall contain a waiver of subrogation in favor of County and members of Commissioners Court.

10.3 If required coverage is written on a claims-made basis, Contractor warrants that any retroactive date applicable to coverage under the policy precedes the effective date of the contract; and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of 2 years beginning from the time that work under the Agreement is completed.

#### **Section 11. Indemnity**

**CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS COUNTY AGAINST LOSSES, LIABILITIES, CLAIMS, AND CAUSES OF ACTION, INCLUDING THE REIMBURSEMENT OF COUNTY'S REASONABLE ATTORNEYS FEES IN PROPORTION TO CONTRACTOR'S LIABILITY, ARISING FROM ACTIVITIES OF CONTRACTOR, ITS AGENTS, SERVANTS OR EMPLOYEES, PERFORMED UNDER THIS AGREEMENT THAT RESULT FROM THE NEGLIGENT ACT, INTENTIONAL TORT, ERROR, OR OMISSION OF CONTRACTOR OR ANY OF CONTRACTOR'S AGENTS, SERVANTS OR EMPLOYEES.**

#### **Section 12. Confidential and Proprietary Information**

12.1 Contractor acknowledges that it and its employees or agents may, in the course of performing their responsibilities under this Agreement, be exposed to or acquire information that is confidential to County. Any and all information of any form obtained by Contractor or its employees or agents from County in the performance of this Agreement shall be deemed to be confidential information of County ("Confidential Information"). Any reports or other documents or items (including software) that result from the use of the Confidential Information by Contractor shall be treated with respect to confidentiality in the same manner as the Confidential Information. Confidential Information shall be deemed not to include information that (a) is or becomes (other than by disclosure by Contractor) publicly known or is contained in a publicly available document; (b) is rightfully in Contractor's possession without the obligation of nondisclosure prior to the time of its disclosure under this Agreement; or (c) is independently developed by employees or agents of Contractor who can be shown to have had no access to the Confidential Information.

12.2 Contractor agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Contractor uses in maintaining the confidentiality of its own confidential information, and not to copy, reproduce, sell, assign, license, market, transfer or otherwise dispose of, give, or disclose Confidential Information to third parties or use Confidential Information for any purposes whatsoever other than the provision of Services to County hereunder, and to advise each of its employees and agents of their obligations to keep Confidential Information confidential. Contractor shall use its best efforts to assist County in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limitation of the foregoing, Contractor shall advise County

immediately in the event Contractor learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Agreement and Contractor will at its expense cooperate with County in seeking injunctive or other equitable relief in the name of County or Contractor against any such person. Contractor agrees that, except as directed by County, Contractor will not at any time during or after the term of this Agreement disclose, directly or indirectly, any Confidential Information to any person, and that upon termination of this Agreement or at County's request, Contractor will promptly turn over to County all documents, papers, and other matter in Contractor's possession which embody Confidential Information.

12.3 Contractor acknowledges that a breach of this Section, including disclosure of any Confidential Information, or disclosure of other information that, at law or in equity, ought to remain confidential, will give rise to irreparable injury to County that is inadequately compensable in damages. Accordingly, County may seek and obtain injunctive relief against the breach or threatened breach of the foregoing undertakings, in addition to any other legal remedies that may be available. Contractor acknowledges and agrees that the covenants contained herein are necessary for the protection of the legitimate business interest of County and are reasonable in scope and content.

12.4 Contractor in providing all services hereunder agrees to abide by the provisions of any applicable Federal or State Data Privacy Act.

12.5 Contractor expressly acknowledges that County is subject to the Texas Public Information Act, TEX. GOV'T CODE ANN. §§ 552.001 *et seq.*, as amended, and notwithstanding any provision in the Agreement to the contrary, County will make any information related to the Agreement, or otherwise, available to third parties in accordance with the Texas Public Information Act. Any proprietary or confidential information marked as such provided to County by Consultant shall not be disclosed to any third party, except as directed by the Texas Attorney General in response to a request for such under the Texas Public Information Act, which provides for notice to the owner of such marked information and the opportunity for the owner of such information to notify the Attorney General of the reasons why such information should not be disclosed.

### **Section 13. Independent Contractor**

13.1 In the performance of work or services hereunder, Contractor shall be deemed an independent contractor, and any of its agents, employees, officers, or volunteers performing work required hereunder shall be deemed solely as employees of contractor or, where permitted, of its subcontractors.

13.2 Contractor and its agents, employees, officers, or volunteers shall not, by performing work pursuant to this Agreement, be deemed to be employees, agents, or servants of County and shall not be entitled to any of the privileges or benefits of County employment.

#### **Section 14. Notices**

14.1 Each party giving any notice or making any request, demand, or other communication (each, a "Notice") pursuant to this Agreement shall do so in writing and shall use one of the following methods of delivery, each of which, for purposes of this Agreement, is a writing: personal delivery, registered or certified mail (in each case, return receipt requested and postage prepaid), or nationally recognized overnight courier (with all fees prepaid).

14.2 Each party giving a Notice shall address the Notice to the receiving party at the address listed below or to another address designated by a party in a Notice pursuant to this Section:

County:	Fort Bend County Engineering Department Attn: County Engineer 301 Jackson Street Richmond, Texas 77469
With a copy to:	Fort Bend County Attn: County Judge 401 Jackson Street, 1 <sup>st</sup> Floor Richmond, Texas 77469
Contractor:	Halff Associates, Inc. Attn: Dan Tanksley, Esq., P.E. 1201 N. Bowser Road Richardson, Texas 75081

14.3 A Notice is effective only if the party giving or making the Notice has complied with subsections 14.1 and 14.2 and if the addressee has received the Notice. A Notice is deemed received as follows:

14.3.1 If the Notice is delivered in person, or sent by registered or certified mail or a nationally recognized overnight courier, upon receipt as indicated by the date on the signed receipt.

14.3.2 If the addressee rejects or otherwise refuses to accept the Notice, or if the Notice cannot be delivered because of a change in address for which no Notice was given, then upon the rejection, refusal, or inability to deliver.

#### **Section 15. Compliance with Laws**

Contractor shall comply with all federal, state, and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts or administrative bodies or tribunals in any matter affecting the performance of this Agreement, including, without limitation, Worker's Compensation laws, minimum and maximum salary and wage statutes and regulations, licensing laws and regulations. When required by County, Contractor shall furnish County with

certification of compliance with said laws, statutes, ordinances, rules, regulations, orders, and decrees above specified.

**Section 16. Standard of Care**

Contractor represents shall perform the Services to be provided under this Agreement with the professional skill and care ordinarily provided by competent engineers practicing under the same or similar circumstances and professional license. Further, Contractor shall perform the Services as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer.

**Section 17. Assignment**

17.1 Neither party may assign any of its rights under this Agreement, except with the prior written consent of the other party. That party shall not unreasonably withhold its consent. All assignments of rights are prohibited under this subsection, whether they are voluntarily or involuntarily, by merger, consolidation, dissolution, operation of law, or any other manner.

17.2 Neither party may delegate any performance under this Agreement.

17.3 Any purported assignment of rights or delegation of performance in violation of this Section is void.

**Section 18. Applicable Law**

The laws of the State of Texas govern all disputes arising out of or relating to this Agreement. The parties hereto acknowledge that venue is proper in Fort Bend County, Texas, for all legal actions or proceedings arising out of or relating to this Agreement and waive the right to sue or be sued elsewhere. Nothing in the Agreement shall be construed to waive the County's sovereign immunity.

**Section 19. Successors and Assigns**

County and Contractor bind themselves and their successors, executors, administrators and assigns to the other party of this Agreement and to the successors, executors, administrators and assigns of the other party, in respect to all covenants of this Agreement.

**Section 20. Third Party Beneficiaries**

This Agreement does not confer any enforceable rights or remedies upon any person other than the parties.

**Section 21. Severability**

If any provision of this Agreement is determined to be invalid, illegal, or unenforceable, the remaining provisions remain in full force, if the essential terms and conditions of this Agreement for each party remain valid, binding, and enforceable.

**Section 22. Publicity**

Contact with citizens of Fort Bend County, media outlets, or governmental agencies shall be the sole responsibility of County. Under no circumstances whatsoever, shall Contractor release any material or information developed or received in the performance of the Services hereunder without the express written permission of County, except where required to do so by law.

**Section 23. Captions**

The section captions used in this Agreement are for convenience of reference only and do not affect the interpretation or construction of this Agreement.

**Section 24. Conflict**

In the event there is a conflict between this Agreement and the attached exhibits, this Agreement controls.

**Section 25. Certain State Law Requirements for Contracts**

25.1 Agreement to Not Boycott Israel Chapter 2270 Texas Government Code: By signature below, Contractor verifies Contractor does not boycott Israel and will not boycott Israel during the term of this Agreement.

25.2 Texas Government Code Section 2251.152 Acknowledgment: By signature below, Contractor represents pursuant to Section 2252.152 of the Texas Government Code, that Contractor is not listed on the website of the Comptroller of the State of Texas concerning the listing of companies that are identified under Section 806.051, Section 807.051 or Section 2253.153.

[THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK.]

IN WITNESS WHEREOF, the parties hereto have signed or have caused their respective names to be signed to multiple counterparts to be effective on the date signed by the last party hereto.

FORT BEND COUNTY

HALFF ASSOCIATES, INC

\_\_\_\_\_  
Robert E. Hebert, County Judge

  
\_\_\_\_\_  
Michael Barbier, P.E.  
Public Works/Transportation Team Leader

\_\_\_\_\_  
Date

5-7-2018  
\_\_\_\_\_  
Date

ATTEST:

\_\_\_\_\_  
Laura Richard, County Clerk

APPROVED:

  
\_\_\_\_\_  
Richard W. Stolleis, P.E., County Engineer

APPROVED AS TO LEGAL FORM:

\_\_\_\_\_  
Marcus D. Spencer, First Assistant County Attorney

#### AUDITOR'S CERTIFICATE

I hereby certify that funds are available in the amount of \$ \_\_\_\_\_ to accomplish and pay the obligation of Fort Bend County under this contract.

\_\_\_\_\_  
Robert Ed Sturdivant, County Auditor

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# EXHIBIT A



April 26, 2018  
P034053

Fort Bend County Engineering  
301 Jackson St., 4<sup>th</sup> Floor  
Richmond, TX 77469

**Attn: Mr. Kevin Mineo, P.E. (BBI)**

**Re: Proposal for Professional Engineering Services  
Bamore Road Segment 2 – From Klauke Road to Cottonwood School Road**

Dear Mr. Mineo:

Halff Associates, Inc. (Halff) is pleased to present our proposal for Professional Engineering services for the Bamore Road Segment 2 project in support of the 2017 Fort Bend County Mobility Bond Program. The base project length is approximately 2,900 linear feet along a new alignment from Klauke Road to Cottonwood School Road.

We have developed the attached scope of services and a fee estimate based on the provided Summary of Design Process document and other supporting preliminary documents provided by Fort Bend County. The scope of services includes preliminary design, utility coordination, topographic survey, proposed right-of-way documents, geotechnical investigation, final design, bid phase services, and limited construction phase services. This scope is further detailed in the attached scope of services document. The total estimated fee for this scope of work is \$285,015.00 and is further detailed in the attached fee estimate breakdown.

We trust this proposal meets your requirements for this project. We appreciate the opportunity to be of service to you and trust that our continued association on this project will be mutually beneficial. Please feel free to contact me if you have any questions or comments concerning this matter.

Sincerely,  
*Halff Associates, Inc.*

A handwritten signature in dark ink, appearing to read "Michael Barbier", is written over a light blue horizontal line.

Michael Barbier, PE  
Transportation/Public Works Team Leader

**Scope of Services  
Bamore Road Segment 2  
From Klauke Road to  
Cottonwood School Road  
(approx. 2,900 LF)**

The project will be divided into three phases:

1. Preliminary Design
2. Final Design
3. Bid and Construction Phase Services

The following is an outline of the services during each phase.

**1. Preliminary Design**

The primary goals of preliminary design are to:

- A. Establish a typical cross section and cross section in non-standard areas
- B. Determine drainage system needs (drainage report and/or preliminary roadway drainage design)
- C. Determine right-of-way acquisition needs
- D. Determine potential conflicts with existing facilities
- E. Identify critical path items
- F. Identify problem areas and potential resolutions
- G. Determine permit and regulatory requirements
- H. Prepare a construction cost estimate
- I. Prepare 30% plans

**Preliminary Design Report (PER)**

A Preliminary Engineering Report will be prepared for preliminary design. The purpose of the report is to document the goals stated above. The report will be a "Letter Report" for internal use by the County Engineer. The report will include as applicable: a narrative, applicable plans, a drainage report, a geotechnical report, and a construction cost estimate. Three copies of the report will be submitted for review. No technical presentations will be required. Upon preliminary review and approval of the PER, the Design Consultant and Project Manager will conduct a review meeting to include key County staff. It is intended that all approvals or change requirements will be given at this meeting.

**30% Plans**

30% plan sets will be prepared, consisting of all existing features (seen and unseen) shown in plan and profile, and proposed improvements in plan only with minor annotation. These plans, along with a typical section sheet, are the only drawings that are necessary at this point. 30% plans will be prepared on 11" by 17" paper.

## Utility Coordination

Research to determine the existence and location of underground utilities (pipelines, duct banks, etc.) will be provided by the Design Consultant. Any subsurface utility investigation (SUI) should be at the expense of the utility company and is not included in this scope of services. Utility company signatures will not be required on completed drawings.

The Design Consultant will:

- Perform records research and field visits to determine the presence of underground or overhead private or public utilities
- Send records requests to utility companies to obtain I.D. numbers (CenterPoint and AT&T)
- Depict utilities to a reasonable degree of accuracy on the plan and profile drawings
- Prepare a conflict table to highlight conflicts between existing utilities and proposed improvements. This table will be updated during the Final Design phase as required
- Submit milestone-level drawings to applicable utility companies for their review

The County Project Manager will:

- Assist the Design Consultant in identifying major utilities, and providing contact information for various utilities as needed
- Coordinate directly with utility companies to facilitate utility adjustments required by the proposed improvements
- Coordinate with utility companies during the Construction phase as required

## Survey

Abstracting will be performed during preliminary design phase. Preliminary determination of property ownership and existing right-of-way widths will be researched and found property corners will be documented to approximate location of existing right-of-way and property boundaries.

Topographic survey will be initiated after a proposed roadway alignment is approved by the County. The topographic survey effort will include:

- Set horizontal and vertical controls. Temporary benchmarks and baseline control will be set with 1,000-foot maximum spacing between points
- The survey will encompass the proposed 100-foot right of way and extend 20 feet beyond the ROW on each side for a total of 140 feet.
- Structures in clear view within 100 feet of the right-of-way will also be surveyed
- The total length of the base roadway survey will be approximately 3,700 linear feet
- All existing above ground features within the survey limits will be documented

- Underground and overhead utilities will be located based on available data from markings, above ground features and record plans.
- Cross sections of the proposed right-of-way will be obtained at 100-foot intervals
- Based on the project scope, survey will also include up to a 2-acre parcel for detention and approximately 1,400 linear feet of survey for a proposed outfall
- 2-cross sections of Coon Creek will be taken for use in hydraulic analysis of the proposed outfall

Right-of-way acquisition survey will be provided for up to seven (7) parcels that the proposed roadway alignment crosses and an additional parcel for the proposed detention pond site. ROW acquisition survey will include

- Overall map showing the proposed right-of-way
- A Category 1A, Texas RPLS signed and sealed survey will be provided for up to seven (7) parcels
- These documents will be submitted separately from other design documents and will be paid for on a per-parcel basis.

#### Drainage Outfall and Detention Pond Survey

- Abstract an up to 2 acres parcel for the purposes of a detention pond.
- Additional 1,200 LF of additional right-of-way topographic survey for a potential drainage outfall
- Topographic survey of an up to 2-acre parcel for the purposes of a detention pond
- Obtain up to three (3) existing ditch cross sections for potential drainage outfall
- Parcel acquisition drawing and associated metes and bounds description of an up to 2-acre parcel for the purposes of a detention pond

#### Geotechnical Investigation

Geotechnical investigations and reporting will be completed in accordance with Harris County criteria. The geotechnical scope will include:

- Field exploration including 6-20' borings along the proposed roadway alignment, 1-20' boring near the proposed outfall, and 1-20' boring near the proposed detention pond location to be determined
- Laboratory testing will be performed based on Harris County criteria to determine properties of the existing soil
- Engineering recommendations based on geotechnical investigations will include subgrade preparation/earthwork recommendations, construction considerations for the proposed outfall, pavement design guidelines, and detention pond construction considerations.

#### Environmental Investigations

It is assumed that all required environmental investigations and documentation is being performed under a separate project and is not included in this scope of services.

## Compensation

Except as noted, all preliminary design efforts will be paid in a single lump-sum fee, to be billed monthly on a percent complete basis by task. Major tasks of preliminary design (design, survey, geotechnical, etc.) will be itemized in invoices.

## Schedule

The Preliminary Design Phase including survey, PER, 30% plans, and geotechnical services is anticipated to be completed no later than November 2018. This schedule could be impacted by unforeseen utility impacts, extended client review times, delayed notice to proceed, or right-of-way delays. A detailed schedule for the Preliminary Design Phase will be created upon receipt of notice to proceed.

## 2. Final Design

The goal is to prepare construction drawings and specifications accurately and efficiently. Interim submittals will be made at 70 percent and 95 percent completion, and will include drawings, a specification table of contents (and/or special specifications, as applicable), and a construction cost estimate.

Applicable design criteria include, in order of priority, (1) Fort Bend County Engineering or Drainage District criteria/standards, including Fort Bend County Drainage Criteria Manual (Fort Bend County Drainage District, November 1987, revised April 1999), (2) municipal design criteria if the project is located within the limits of a municipality and or/ ETJ that has design criteria, (3) Guidelines for Engineers Having Contracts with Harris County, Texas (Harris County Public Infrastructure Department, 1987), (4) applicable Texas Department of Transportation design criteria (all County-maintained traffic signals, other items as applicable), and (5) the Infrastructure Design Manual (City of Houston Department of Public Works and Engineering, current version, used for infrastructure for which design criteria do not exist in the preceding criteria documents). Municipalities contributing funds to the project may review the submittals.

The 70 percent submittal should include the following:

- Cover sheet (Fort Bend County name and seal, project name with limits, vicinity and location maps, names of County Judge and Commissioners, signature line for County Engineer, design firm name and registration number)
- Typical and non-standard cross sections (not-to-scale proposed sections with station limits for each section; show pavement/subgrade material and thickness, right-of-way and roadway width, applicable dimensions, profile grade line, and general location of existing and proposed utilities)
- Overall project layout (scale as appropriate with sheet references left blank since they are subject to change in subsequent submittals)
- Survey control map
- Drainage area map with hydraulic calculations (display calculations clearly for future use by area developers)

- Plan and profile sheets (1"=20' plan scale but printed half-size for a 1"=40' scale; all existing and proposed facilities correctly shown in plan and profile; separate drawings for roadway and storm sewer are not necessary; detailed callouts not required at 70%)
- Water and wastewater plan and profiles (if applicable)
- Traffic control plan (phasing and traffic control; avoid detours unless approved by the County; use of construction zone standards is encouraged)
- Storm Water Pollution Prevention Plan (drawings and text; drawings may consist of a layout and details)
- Specification table of contents
- Bid form with estimated unit and total costs (spreadsheet based)

Three copies of the 70 percent submittal will be required for County review, and drawings can be submitted on 11-inch by 17-inch sheets.

The 95 percent submittal should be considered complete with 95% interim seal, and shall include all of the 70 percent requirements plus the following:

- General notes sheet
- Verify earthwork quantities with cross sections at 100-foot intervals (only non-standard sections should be included in the plans)
- Signage and pavement marking plans (signs may be shown on plan and profile sheets and use of pavement marking standards is encouraged)
- Standard construction details
- Project manual (bid form, specification table of contents, any special specifications or conditions; contract documents excluded)
- Responses to 70 percent comments

Physical submittal requirements are the same as for the 70 percent submittal.

The 100 percent design submittal shall consist of one (11"x17") sealed and signed set of drawings delivered to the County, along with a PDF submittal of the drawings, specifications and estimate sent to the Project Manager. Final design efforts will be considered complete when the County has approved the documents as evidenced by the County Engineer's signature on the drawings.

### Compensation

All final design efforts will be paid in a single lump-sum fee, to be billed monthly on a percent complete basis.

### Schedule

The Final Design through final signed and sealed drawings is anticipated to be completed no later than November 2019. This design schedule could be impacted by extended client review times or unforeseen utility or right-of-way issues. A detailed schedule on the Final Design Phase will be created upon County acceptance of the PER.

### **3. Bid and Construction Phase Services**

Upon completion of final design services, the County will determine an advertisement and bid opening schedule. All administrative project manual documents (cover page, Notice to Bidders, etc.) will be prepared by the County and provided to the design consultant in PDF format. The Design Consultant will prepare a single project manual file in PDF format, consisting of:

- Administrative documents
- The bid form (prepared by the design consultant)
- A sealed specification table of contents
- Applicable specifications and documents

The Design Consultant will prepare a single file in PDF format for the entire drawing set. Except for the cover sheet, which contains approval signature(s), all drawings may be printed directly to Adobe Acrobat format with electronic seal and signature.

The Design Consultant will prepare 27 compact discs, each with one project manual file and one drawing file. Of these, 25 compact discs will be delivered to the County Purchasing Agent for advertising, and two discs will be provided to the County's Project Manager. Printed documents are not required.

The Design Consultant will attend a pre-bid meeting at the County Purchasing Office. It is not necessary to prepare for the meeting, other than to be able to briefly describe the project.

The Purchasing Agent will forward bidder questions to the Design Consultant. Answers to questions, as well as any other required changes, will be included in an addendum, prepared by the Design Consultant if necessary. The Purchasing Agent will distribute the addendum.

After the bid, the County's Project Manager will prepare a bid tabulation and provide a copy to the design consultant for filing.

The Design Consultant will attend a pre-construction meeting with the County, Project Manager, general contractor, and construction materials testing contractor. Prior to the meeting, the Project Manager will inform the Design Consultant of how many drawing and project manual sets are required, and the Design Consultant will provide these documents at the pre-construction meeting.

The Design Consultant will be responsible for reviewing contractor submittals and responding to Requests for Information.

Field visits and progress meetings will not be required unless requested by the County.

The Design Consultant will participate in a substantial completion walkthrough.

After project completion, the Design Consultant will prepare record drawings based on contractor as-built markups. The record drawings may be printed on paper and delivered to the County.

All bid and construction phase services will be paid on a time-and-materials basis. Monthly billing will include a breakdown of hours spent by personnel in the various employee categories, at billing rates agreed to by the County and the design consultant.

**Barnore Road Phase II - Fee Estimate**  
 Half Associates, Inc.  
 Project Manager: Michael Barbier

TASK DESCRIPTION	PRINCIPAL	PROJECT MANAGER	SENIOR ENGINEER	DRAINAGE ENGINEER	ENGINEER IN TRAINING	GIS TECHNICIAN	CADD OPERATOR	CLERICAL	TOTAL HOURS	SUBCONSULTANT	Task Total
<b>1. Preliminary Design (LS)</b>											\$ 157,210.00
Establish a Typical Cross Section		1	1		4		2		8		\$ 1,050.00
Drainage Analysis/Report		16	16	80	80			2	202		\$ 32,200.00
Determine ROW Acquisition Needs		2	2		2	8			6		\$ 1,040.00
Determine Potential Conflicts with existing facilities & utilities		2	2		2				6		\$ 1,040.00
Identify Critical Path Items		1	2						3		\$ 595.00
Identify Problem Areas and Potential Resolutions		2	4						6		\$ 1,190.00
Site Visit		2	2	4	4				12		\$ 2,040.00
Prepare a Construction Cost Estimate		1	2		16				19		\$ 2,915.00
Prepare 30% Plans		16	16		48		40		120		\$ 15,560.00
Prepare Preliminary Design Report (PER)		4	4		16			2	26		\$ 3,640.00
Utility Coordination		4	12		8			4	28		\$ 5,610.00
Abstracting									0		\$ 4,000.00
Topographic Survey									0		\$ 28,420.00
Additional Survey for Detention Pond and Outfall									0		\$ 9,300.00
Control & Monumentation - Prepare Survey Control Map									0		\$ 6,810.00
Right-of-way Parcel Exhibits (\$3,100 per parcel)									0		\$ 24,000.00
Geotechnical Investigation									0		\$ 14,000.00
Project Management & Meetings		2	8	8					18		\$ 3,700.00
Preliminary Phase Expenses											\$ 500.00
<b>2. Final Design (LS)</b>											\$ 107,465.00
Cover Sheet & Index		1	2		4		8		15		\$ 1,755.00
General Notes		1	2		4		2		9		\$ 1,245.00
Typical Sections		1	2		16		8		27		\$ 3,195.00
Project Layout		1	1		2		8		12		\$ 1,320.00
Drainage Area Maps		2	2	4	8		4		19		\$ 2,655.00
Drainage Calculations		1	4	16	16		4		43		\$ 6,740.00
Detention Pond		1	2	40	80		80		63		\$ 8,175.00
Plan and Profile Sheets (Roadway, Drainage, Public Utilities)		16	8	4	16		8		221		\$ 28,490.00
Intersection Layouts or Cross Street Details		1	1	2	4		4		34		\$ 4,570.00
TCP Advance Warning Signs		1	4	2	2		2		10		\$ 1,220.00
TCP Overview & Narrative		1	2	16	8		8		9		\$ 1,395.00
Traffic Control Plan		1	1		8		8		27		\$ 3,195.00
SWPPP Sheets		1	2		16		8		18		\$ 2,040.00
Signing & Pavement Markings		1	4		8		16		27		\$ 3,195.00
Detail Sheets		1	2		4		8		29		\$ 3,305.00
Standard Details		4	16		4		8		15		\$ 1,755.00
Technical Specifications		1	1		4				24		\$ 4,420.00
Bid Form		2	2		24				6		\$ 880.00
Construction Cost Estimate		1	4		8				29		\$ 3,990.00
Approvals & Signatures		4	4		32		4		16		\$ 2,560.00
Cross Sections with earthwork calculations		1	2		16				39		\$ 4,175.00
Responses to Comments		8	8						32		\$ 5,120.00
Project Management & Meetings		1	16						49		\$ 9,930.00
Final Design Phase Expenses											\$ 1,000.00
<b>3. Bid &amp; Construction Phase Services (T&amp;M)</b>											\$ 20,340.00
Project Manual & Plans (PDF Format on Compact Disc 27)		2	2		4			2	10		\$ 1,400.00
Attend Pre-Bid Meeting			2		2				4		\$ 630.00
Answer Bidder Questions & Addendum			2		4				6		\$ 870.00
Attend Pre-Construction Meeting		2	16		8				26		\$ 4,490.00
Review Contractor Submittals		2	16		8				26		\$ 4,490.00
Answering Requests for Information		2	8		8				18		\$ 2,830.00
Field Visits		2	2		2				4		\$ 630.00
Substantial Completion Walkthrough		2	8		8		4		22		\$ 3,270.00
Record Drawings											\$

**Bamore Road Phase II - Fee Estimate**  
**Half Associates, Inc.**  
**Project Manager: Michael Barbier**

TASK DESCRIPTION	PRINCIPAL	PROJECT MANAGER	SENIOR ENGINEER	DRAINAGE ENGINEER	ENGINEER IN TRAINING	GIS TECHNICIAN	CADD OPERATOR	CLERICAL	TOTAL HOURS	SUBCONSULTANT	Task Total
Bid & Construction Phase Expenses											\$ 1,000.00
MANHOUR SUBTOTAL	6	154	257	124	558	8	230	10	1,347		
	0%	11%	19%	9%	41%	1%	17%	1%			
LABOR RATE PER HOUR	\$250.00	\$205.00	\$195.00	\$190.00	\$120.00	\$110.00	\$85.00	\$50.00			
	\$1,500.00	\$31,570.00	\$50,115.00	\$23,560.00	\$66,960.00	\$980.00	\$19,550.00	\$600.00			
SUBTOTAL LABOR											
TOTAL											\$ 285,015.00



**Exhibit B**  
**Bamore Rd-Segment 2**  
**Fort Bend County Precinct 1**  
**Project Schedule**

ID	Task Name	Duration	Start	Finish	<div><div>June</div><div>July</div><div>August</div><div>September</div><div>October</div><div>November</div><div>December</div><div>January</div><div>February</div><div>March</div><div>April</div><div>May</div><div>June</div><div>July</div></div>																											
1	<b>Preliminary Design</b>	<b>147 days</b>	<b>Fri 6/1/18</b>	<b>Fri 10/26/18</b>	<div><div>June</div><div>July</div><div>August</div><div>September</div><div>October</div><div>November</div><div>December</div><div>January</div><div>February</div><div>March</div><div>April</div><div>May</div><div>June</div><div>July</div></div>																											
2	Project NTP	0 days	Fri 6/1/18	Fri 6/1/18	<div><div>June</div><div>July</div><div>August</div><div>September</div><div>October</div><div>November</div><div>December</div><div>January</div><div>February</div><div>March</div><div>April</div><div>May</div><div>June</div><div>July</div></div>																											
3	Topo Survey/ROW Documents	102 days	Mon 6/11/18	Fri 9/21/18	<div><div>June</div><div>July</div><div>August</div><div>September</div><div>October</div><div>November</div><div>December</div><div>January</div><div>February</div><div>March</div><div>April</div><div>May</div><div>June</div><div>July</div></div>																											
4	Geotechnical Investigation	102 days	Mon 6/11/18	Fri 9/21/18	<div><div>June</div><div>July</div><div>August</div><div>September</div><div>October</div><div>November</div><div>December</div><div>January</div><div>February</div><div>March</div><div>April</div><div>May</div><div>June</div><div>July</div></div>																											
5	PER/Preliminary Design	109 days	Mon 6/4/18	Fri 9/21/18	<div><div>June</div><div>July</div><div>August</div><div>September</div><div>October</div><div>November</div><div>December</div><div>January</div><div>February</div><div>March</div><div>April</div><div>May</div><div>June</div><div>July</div></div>																											
6	PER Review and Approval	14 days	Fri 9/21/18	Fri 10/5/18	<div><div>June</div><div>July</div><div>August</div><div>September</div><div>October</div><div>November</div><div>December</div><div>January</div><div>February</div><div>March</div><div>April</div><div>May</div><div>June</div><div>July</div></div>																											
7	Finalize ROW Documents	21 days	Fri 10/5/18	Fri 10/26/18	<div><div>June</div><div>July</div><div>August</div><div>September</div><div>October</div><div>November</div><div>December</div><div>January</div><div>February</div><div>March</div><div>April</div><div>May</div><div>June</div><div>July</div></div>																											
8	<b>Final Design</b>	<b>235 days</b>	<b>Mon 12/3/18</b>	<b>Fri 7/26/19</b>	<div><div>June</div><div>July</div><div>August</div><div>September</div><div>October</div><div>November</div><div>December</div><div>January</div><div>February</div><div>March</div><div>April</div><div>May</div><div>June</div><div>July</div></div>																											
9	Final Design NTP	0 days	Mon 12/3/18	Mon 12/3/18	<div><div>June</div><div>July</div><div>August</div><div>September</div><div>October</div><div>November</div><div>December</div><div>January</div><div>February</div><div>March</div><div>April</div><div>May</div><div>June</div><div>July</div></div>																											
10	70% Design	88 days	Mon 12/3/18	Fri 3/1/19	<div><div>June</div><div>July</div><div>August</div><div>September</div><div>October</div><div>November</div><div>December</div><div>January</div><div>February</div><div>March</div><div>April</div><div>May</div><div>June</div><div>July</div></div>																											
11	70% Review	28 days	Fri 3/1/19	Fri 3/29/19	<div><div>June</div><div>July</div><div>August</div><div>September</div><div>October</div><div>November</div><div>December</div><div>January</div><div>February</div><div>March</div><div>April</div><div>May</div><div>June</div><div>July</div></div>																											
12	95% Design	56 days	Fri 3/29/19	Fri 5/24/19	<div><div>June</div><div>July</div><div>August</div><div>September</div><div>October</div><div>November</div><div>December</div><div>January</div><div>February</div><div>March</div><div>April</div><div>May</div><div>June</div><div>July</div></div>																											
13	95% Review	28 days	Fri 5/24/19	Fri 6/21/19	<div><div>June</div><div>July</div><div>August</div><div>September</div><div>October</div><div>November</div><div>December</div><div>January</div><div>February</div><div>March</div><div>April</div><div>May</div><div>June</div><div>July</div></div>																											
14	Final Design	35 days	Fri 6/21/19	Fri 7/26/19	<div><div>June</div><div>July</div><div>August</div><div>September</div><div>October</div><div>November</div><div>December</div><div>January</div><div>February</div><div>March</div><div>April</div><div>May</div><div>June</div><div>July</div></div>																											

Project: Attachment B  
Date: Thu 4/26/18

Task  Milestone  Summary 