

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 Cobb, Fendley & Associates, Inc. (hereinafter "Contractor"), a company authorized to conduct business in the State of Texas.

WITNESSETH

WHEREAS, County desires that Contractor provide certain professional engineering services for construction of a four-lane concrete boulevard between Katy Flewellen Road and Greenbusch Road, under the Fort Bend County 2013 Mobility Bond Program – Gaston Road Segment 1 – Project No. 13311 (hereinafter "Services") pursuant to SOQ 14-025; 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 Services to County as defined in the Scope of Services (attached hereto as Exhibit A).

**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 five hundred eighteen thousand four hundred seventy-four dollars and 00/100 (\$518,474.00). In no case shall the amount paid by County under this Agreement exceed the Maximum Compensation without an approved change order.

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 and two (2) original hard copies of invoices 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 five hundred eighteen thousand four hundred seventy-four dollars and 00/100 (\$518,474.00), 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 five hundred eighteen thousand four hundred seventy-four dollars and 00/100 (\$518,474.00).

### **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 twenty-four (24) months thereafter. 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

7.1.1 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, excluding Professional Liability, 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 DEFEND COUNTY AGAINST ALL LOSSES, LIABILITIES, CLAIMS, CAUSES OF ACTION, AND OTHER EXPENSES, INCLUDING REASONABLE ATTORNEYS FEES, ARISING FROM ACTIVITIES OF CONTRACTOR, ITS AGENTS, SERVANTS OR EMPLOYEES, PERFORMED UNDER THIS AGREEMENT THAT RESULT FROM THE NEGLIGENT ACT, 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: Cobb, Fendley & Associates, Inc.  
Attn: Dale Conger, President  
13430 Northwest Freeway, Suite 1100  
Houston, Texas 77040

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. Performance Warranty**

16.1 Contractor warrants to County that Contractor has the skill and knowledge ordinarily possessed by well-informed members of its trade or profession practicing in the greater Houston metropolitan area and Contractor will apply that skill and knowledge with care and diligence to ensure that the Services provided hereunder will be performed and delivered in accordance with the highest professional standards.

16.2 Contractor warrants to County that the Services will be free from material errors and will materially conform to all requirements and specifications contained in the attached Exhibit A.

#### **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**

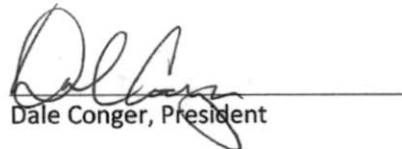
In the event there is a conflict between this Agreement and the attached exhibits, this Agreement controls.

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 5 day of May, 2015.

FORT BEND COUNTY

COBB, FENDLEY & ASSOCIATES, INC.

  
Robert E. Hebert, County Judge

  
Dale Conger, President

5-5-2015  
Date

4-23-15  
Date

ATTEST:

  
Laura Richard, County Clerk



APPROVED:

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

**AUDITOR'S CERTIFICATE**

I hereby certify that funds are available in the amount of \$518,474.00 to accomplish and pay the obligation of Fort Bend County under this contract.

  
Robert Edward Sturdivant, County Auditor

MDS

# EXHIBIT A

**2013 Mobility Bond Program**  
**Gaston Road from 300-ft North of Greenbusch to 100-ft south of Katy Flewellen**  
**Scope of Services**

Existing Conditions

The existing Gaston Road is a 2-lane asphalt roadway with roadside ditches from just north of Greenbusch to south of Katy Flewellen. The project area is approximately 8,700 linear feet (1.65 miles) in length. The existing right-of-way (ROW) for the majority of Gaston Road appears to be 60-ft wide. There are a total of eight (8) intersecting streets within the project limits and none are signalized. There are an excessive number of driveways accessing residential communities staggered along both sides of the roadway. There are several pipelines within an existing 50-ft pipeline easement located along Gaston Road's west ROW line for the entirety of the project. There are 2 drainage outfalls within the project limits. The primary outfall is Fort Bend County drainage ditch "VA 6" is located approximately 2,400-ft south of the Katy Flewellen intersection and the MUD 58 channel located approximately 2,000-ft north of the Greenbusch intersection.

Proposed Scope

The proposed project is comprised of 3 phases: Study (PER) update/preliminary design, final design, and bidding/construction phase services. The scope of services will include professional engineering, surveying and ROW mapping, geotechnical investigation, and environmental services. The project will involve construction of approximately 8,700 LF of a 4-lane divided concrete curb and gutter thoroughfare with closed system storm sewer drainage improvements. The project limits are from 300-ft north of Greenbusch to 100-ft south of the Katy Flewellen intersection. The proposed roadway section(s) and the ROW width will be evaluated along Gaston Road. It is anticipated that at a minimum a 20-ft ROW widening along Gaston Road will be required in order to accommodate left turn lanes at all intersecting public streets. The following roadway typical section alternatives were initially developed in the study phase and will be re-examined as part of the PER update:

1. 4-Lane divided, raised median, Boulevard section, 90-ft ROW (symmetrical ROW takings)
2. 4-Lane divided, raised median, Boulevard section, 100-ft ROW (ROW takings on one side)
3. 4-Lane divided, raised median, Boulevard section, 100-ft ROW (ROW taking on both side)

The existing posted speed limit is 30 MPH. The project will be designed based on 35 MPH design speed. Final Posted speed will be determined after the completion of the project.

The primary goals are to (1) establish a typical cross section and cross sections in non-standard areas, (2) positively determine right-of-way acquisition needs, (3) determine potential conflicts with existing facilities, (4) identify critical path items, (5) identify problem areas and potential resolution(s), and (6) prepare a reasonable construction cost estimate. CobbFendley will prepare and deliver a "30 percent" plan set as part of the preliminary design, consisting of all existing features 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.

#### The Preliminary Engineering Report (PER)

A study for this project was performed by CobbFendley in 2012. However; certain elements such as the Roesner intersection, pavement transitions north of Greenbusch, and other new topographical features within the project limits were not part of the topographical survey conducted for the initial study. The PER will be augmented and revised with new survey data and recently gathered information to reflect the current field conditions due to changes that have occurred since the completion of the study submitted to the county in 2011. The purpose of this PER is to clearly depict a more refined horizontal and vertical alignment design, incorporate the new project limits, and to document the six goals stated above. CobbFendley will not prepare a Presentation-quality document as the report will remain internal to Fort Bend County Engineering staff and the County's project management consultant. The updated PER will include a narrative, applicable plans, a drainage report, a revised construction cost estimate, and a geotechnical report, as applicable. CobbFendley will deliver Three (3) copies of the report to the County and no technical presentations are expected by the County at this time.

#### Surveying and ROW Mapping

##### A. Topographic survey

Topographic survey was performed previously for the prior study and will be updated and completed during the preliminary design. Horizontal & Vertical Control and Topographical Surveying and Roadway Cross-Sections will include but are not limited to the following:

- a. Horizontal and vertical project control shall be established relative to the North American Datum of 1983 (NAD 83, 2001 adjustment) and the North American Vertical Datum of 1988 (NAVD 88, 2001 adjustment/TSARP datum).
- b. Temporary benchmarks and baseline controls will be recovered and reset, both with 1,000-foot maximum spacing between points.
- c. During topographic survey, found property corners will be documented in order to determine the approximate location and width of the right-of-way. Visible property delineators such as fence corners and other existing monumentation will also be tied in order to evaluate alignment alternatives within the project limits.
- d. The topographical survey will also extend approximately 150 feet on both directions along all minor intersecting roads/streets.
- e. Roadway cross sections will be obtained at 100 ft. intervals. Cross-sections shall extend 20 feet beyond the proposed rights-of-way lines as applicable.
- f. Topographic survey will identify locations and elevations of physical features to include buildings, fences, walls, trees, sidewalks, driveways and driveway curbs, power poles, light poles, water meters, water wells, ponds, sprinklers, off-site drain pipes as applicable.

- g. Topographic survey of any/all existing structures in clear view and within 100 feet of the existing right-of-way.
- h. Determination of right-of-way acquisition parcels based on proposed alignment for road expansion as part of preliminary design.
- i. The survey data collection and survey base map will include: Horizontal and vertical location of existing utilities within, crossing and adjoining project limits. Utilities will be located and tied based on visual evidence and utilities based on maps and plans provided by the utility owners and marked by "One Call" within the projects limits, Flow line elevations, sizes, material types and directions of pipes will be obtained on storm sewer lines, sanitary sewer lines and culverts. The rim (top) and flow line elevations will be obtained on inlets, manholes, and drainage structures as applicable.
- j. A 3D topographical survey base map and digital terrain model (DTM), surface triangular irregular network (TIN) will be created for the existing roadway and drainage channel surface features from field data.
- k. The survey line work and surface TIN shall be provided to the Client on the Microstation/Geopak CADD platform.

#### B. Right of Way Mapping

##### Existing ROW envelope Determination

The existing ROW envelope will be performed upon completion and acceptance of the study phase findings and will include the following tasks:

- a. Perform abstract survey; obtain deeds of records, and plats for Gaston Road right-of-way, streets intersecting Gaston Road and tracts of land adjoining Gaston Road.
- b. Establish the existing right-of-way of Gaston Road and intersecting streets.
- c. Prepare existing Right-of Way Map of the project.
- d. Prepare Survey Control Sheet(s) for the project.
- e. Establish a recoverable existing and proposed iron rods and/or monumentation set for cutback corners along Gaston Road and at intersecting streets.

The Engineer shall evaluate the existing ROW envelope and make recommendations for the acquisition of ROW necessary based on the recommended typical section for the Project. The existing ROW will also include determination of existing utility easements, unobstructed view easement (UVE), detention, and outfalls. The Engineer shall prepare a ROW Acquisition Table which shall include a parcel ID number, acreage (and square footage) to be acquired, acreage of the parent tract, acreage remaining of the parent tract, current owner, recording information, current flood plain zone, and note any issues that may affect the acquisition of the parcels.

##### Proposed ROW Maps

Once right-of-way needs have been determined and approved by the County. The Engineer shall provide services including surveying in accordance with Category IA Condition II Land Title Survey to produce parcel maps and metes-and-bounds descriptions for any proposed parcels to be acquired in the project. These documents will be submitted separately from other design documents, and will be paid for on a per-parcel basis.

#### Utilities

Research to determine the existence and location of underground utilities (pipelines, duct banks, etc.) is the design consultant's responsibility (see SUE below). A reasonable amount of research should be conducted, including but not limited to contact with companies identified on above-ground markers, Railroad Commission website research, and map requests from prominent companies (CenterPoint, AT&T, etc.). CenterPoint Energy and AT&T I.D. numbers should be obtained. An appropriate attempt must be made to depict underground utilities accurately in the plan and profile drawings, and potential conflicts between existing utilities and proposed features should be identified. Any subsurface utility investigation (SUI) should be at the expense of the utility company. Contact with utility companies (both overhead and underground) to coordinate the adjustment of existing utilities will be made by the County and/or its project management consultant.

#### Geotechnical Report

Geotechnical investigations and reporting should be completed during preliminary design, in accordance with Harris County criteria. Standard TxDOT criteria with boring depths based on the depth of the outfall channel. The geotechnical engineer should calculate the equivalent single axle load (ESAL) for the County's standard pavement design (8 inches of concrete with 8 inches of lime stabilized subgrade). The scope of services covered in this proposal consist of field exploration, laboratory testing and the preparation of a geotechnical engineering report for the pavement, utilities, and open channel. The geotechnical engineering report will include pavement design section for concrete pavement, utility trench safety analysis, slope stability analysis for the proposed channel, channel liner design section, and culvert foundations.

The Engineer will prepare an engineering report that will present our findings and provide you with geotechnical design recommendations including:

- a. Subsurface stratigraphy and groundwater conditions;
- b. Utility excavation retention and groundwater control;
- c. Pavement subgrade preparation and pavement design in accordance with AASHTO standards for roads and available Fort Bend County/TxDOT Guidelines;
- d. A review of pinhole testing in combination with our field observations to determine the presence and extent of dispersive clays at the project site and recommend a treatment for dispersive soils;
- e. Based on the stability analysis for the three cases presented above, if a proposed slope is not stable we will recommend an alternate one with calculated factors of safety equal to or greater than the minimum recommended ones;

- f. The draft and final report will be provided in electronic pdf format.

#### Environmental Services

Preliminary wetlands investigations and project notification to the Texas Historical Commission will be performed by the County on a program-wide basis. CobbFendley will also be notified if a Phase 1 Environmental Site Assessment is needed for the project, which will be performed by the County designated environmental/geotechnical consultant.

#### Traffic Engineering

- a. Traffic Control Plans

Detailed Traffic control plans (TCP) will be prepared based on the approach and the number of construction phases decided in the conceptual TCP as part of the study. TCP will be designed according to the latest edition of The Texas Manual on Uniform Traffic Control Devices.

- b. Permanent Traffic Signal Design

The engineer will prepare PS&E design documents for the installation of a traffic signal at the intersection of Gaston Road and Roesner Road. The traffic signal design will be based upon roadway design plans, traffic control plans, and coordination with Fort Bend County traffic engineer.

- c. Traffic Engineering Coordination

The design of the project traffic signals will be coordinated with Fort Bend County Traffic Engineering.

#### SWPPP

Storm water pollution prevention plans (SWPPP) will be prepared and included in the construction documents and project manual based on FBC and/or HCFCDC criteria.

#### Subsurface Utility Engineering (SUE)

The Engineer shall perform such investigations, research, and other activities necessary to identify any potential utility/pipeline conflicts with the Project, including but not limited to:

- a. Locating and identifying existing utilities/pipelines including casings and vent pipes within the existing and proposed rights-of-way, including obtaining information from utility owners record drawings and site reconnaissance, as well as shooting elevations marked or uncovered by others, and providing Subsurface Utility Engineering Level B effort to locate all subsurface utilities within the existing and proposed ROW.
- b. Meeting with the utility companies and to provide information and schematics as necessary.
- c. Identifying major utilities (i.e. pipelines, concrete incased conduits, water, sanitary sewer, storm sewer, or other utilities of this nature) that may require relocation.
- d. Identifying any utilities that are within dedicated easement that will be within the proposed right-of-way (i.e. utilities for which the County may be responsible for the cost of any adjustments and/or relocations).

- e. Providing a table listing each utility identified with an ID number for, station number (at the left right-of-way, centerline, and right right-of-way), utility owner, contact person (name, address, phone number, and email address), notes in regards to potential conflict, and notes in regards to making recommendations for addressing potential conflicts.

#### Schedule

The Preliminary Design to update the PER is anticipated to be concluded in 90 days from the notice to proceed date. CobbFendley proposal for the preliminary and final engineering design work will include an hourly level of effort. It is mutually agreed that the preliminary and final design efforts will be paid in a single lump-sum fee, to be billed monthly on a percent complete basis by respective tasks performed. The invoices to the County will also accompany itemized major tasks for preliminary design, final design, survey, geotechnical, etc. performed within the billing cycle.

#### Design Criteria

Applicable design criteria include, in order of priority, (1) *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.

#### Final Design Deliverables (70%, 95%, and final submittal)

The goal is to prepare construction drawings and specifications accurately and efficiently. CobbFendley will deliver 70 percent and 95 percent, 100 percent completed plans, and the final bid ready submittal at the scheduled milestones. These submittals will include but not limited to design drawings, a specification table of contents (and/or special specifications, as applicable), and a construction cost estimate.

The 70 percent submittal will include the following deliverables:

- 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%)
- 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)
- Bridge layout and details (if applicable)
- Specification table of contents (typically Harris County specifications)
- Bid form with estimated unit and total costs (spreadsheet based)

CobbFendley will submit three (3) copies of the 70 percent completed plans on 11-inch by 17-inch sheets for County review.

The 95 percent completed plans will be stamped with 95 percent review and are considered complete. This deliverable will encompass 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 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

CobbFendley will submit three (3) copies of the 95 percent completed plans on 22-inch by 34-inch sheets for County review.

#### Final Submittal

Final design efforts will be considered complete when comments to the 95 percent submittal have been addressed.

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

#### 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 CobbFendley will be provided with the document in Adobe Acrobat (pdf) format.

A single project manual file in Adobe Acrobat format will be prepared which will include the following:

- (1) Administrative documents,
- (2) The bid form (prepared by CobbFendley),
- (3) A sealed specification table of contents, and
- (4) Applicable specifications and documents.

CobbFendley will prepare and provide to the County a single file in Adobe Acrobat format for the entire drawing set excluding the cover sheet, which contains approval signature(s), all drawings will be printed directly to Adobe Acrobat format with electronic seal and signature.

CobbFendley will provide the following services during the Bid phase services:

1. Prepare 27 compact discs, each containing the project manual file and the entire plan set. 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 management consultant. Hard copies of these documents are not required and will not be produced.
2. Attend a pre-bid meeting at the County Purchasing Office.
3. Briefly describe the project.
4. Preparation of meeting minutes will be by others.
5. Receive bidder questions and clarifications from the County's Purchasing Agent.
6. Provide answers to bidder questions, clarifications, and any other required document changes and prepare an addendum to include the responses and changes. The addendum will be distributed by the County's Purchasing Agent.

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

Prior to the preconstruction meeting, the project management consultant will inform CobbFendley of how many drawing and project manual sets are required, and the design consultant will provide these documents at the pre-construction meeting.

The following services will be performed by CobbFendley during the construction phase services:

1. Attend a pre-construction meeting with the County, project management consultant, general contractor, and construction materials testing contractor.
2. Review Shop Drawings (including detailed structural components)
3. Review contractor submittals and responding to Requests for Information
4. Respond to contractors RFI's (justifiable number of RFI's)
5. Participate in a substantial completion walkthrough

6. Prepare record drawings after project completion based on contractor as-built markups, the record drawings will be printed on paper and delivered to the County
7. Field visits and progress meetings will not be required unless requested by the County as an additional services.

The construction duration for this project is estimated to take 18 months. It is our mutual understanding that the bid and construction phase services will be paid on a time-and-materials basis. The not-to-exceed fee for these services will be determined by the County and/or its project management consultant and CobbFendley. The construction phase services will be performed and continued with prior Fort Bend County authorization. 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. Reimbursable expenses, such as scanning and reproduction, will be billed at actual cost (no markup). The County is tax-exempt and will not reimburse tax expenses. The project management consultant can provide a tax exemption form to the design consultant to ensure that tax is not charged.

**Total Fee Summary**  
**2013 Fort Bend County Mobility Program**  
**Gaston Road Segment I from Greenbusch to Katy Flewellen**  
**Fort Bend County Project No. 13**

Sponsor: Fort Bend County

Description: Reconstruct exist 2-lane rural to 4-lane concrete curb & gutter

Date: 4/13/15

Construction Cost: \$7,507,290

**Basic Services**

Final Design	\$	344,927
Phase III Limited CM Services (T&M)	\$	25,000
Expenses	\$	2,872
Topo & Apparent ROW Envelope =	\$	23,925
Exist. & Prop. ROW Map & Parcel M&B (27)=	\$	75,000
Geotechnical Investigation	\$	21,750
<hr/>		
Subtotal Basic Services	\$	493,474
Phase III Limited CM Services (T&M)	\$	25,000
<hr/>		
<b>PROJECT GRAND TOTAL</b>	<b>\$</b>	<b>518,474</b>

**Cobb Fendley Fee Summary**

**2013 Fort Bend County Mobility Program**

**Gaston Road Segment I from Greenbusch to Katy Flewellen**

Sponsor: Fort Bend County

Date: 4/13/15

OVERALL BASIC SERVICES			
Classification	Hours	Rate	Labor Cost
Principal	34	\$86.67	\$2,946.67
Project Manager	344	\$70.00	\$24,080.00
Senior Engineer	309	\$81.67	\$25,235.00
Project Engineer III	0	\$50.00	\$0.00
Project Engineer I	450	\$36.67	\$16,500.00
Senior Technician	320	\$41.67	\$13,333.33
CAD Operator	710	\$33.33	\$23,666.67
RPLS	0	\$50.00	\$0.00
3-Man Crew	0	\$50.00	\$0.00
Survey Tech I	0	\$31.67	\$0.00
Utility Specialist	0	\$43.33	\$0.00
Clerical	20	\$23.33	\$466.67
<b>Total Labor</b>	<b>2,187</b>		<b>\$106,228.33</b>
OVERHEAD	180.00%		\$191,211.00
OPERATING MARGIN	15%		\$44,615.90
EXPENSES			\$2,872.00
<b>TOTAL BASIC SERVICES PHASES I&amp;II</b>			<b>\$344,927.23</b>

PER UPDATE			
Classification	Hours	Rate	Labor Cost
Principal	2	\$86.67	\$173.33
Project Manager	10	\$70.00	\$700.00
Senior Engineer	0	\$81.67	\$0.00
Project Engineer III	0	\$50.00	\$0.00
Project Engineer I	16	\$36.67	\$586.67
Senior Technician	8	\$41.67	\$333.33
CAD Operator	28	\$33.33	\$933.33
RPLS	0	\$50.00	\$0.00
3-Man Crew	0	\$50.00	\$0.00
Survey Tech I	0	\$31.67	\$0.00
Utility Specialist	0	\$43.33	\$0.00
Clerical	0	\$23.33	\$0.00
<b>Total Labor</b>	<b>64</b>		<b>\$2,726.67</b>
OVERHEAD	180.00%		\$4,908.00
OPERATING MARGIN	15%		\$1,145.20
EXPENSES DURING PER PHASE			\$957.33
<b>TOTAL STUDY/SCHEMATICS</b>			<b>\$9,737.20</b>

FINAL DESIGN SERVICES (PHASE II)			
Classification	Hours	Rate	Labor Cost
Principal	32	\$86.67	\$2,773.33
Project Manager	334	\$70.00	\$23,380.00
Senior Engineer	309	\$81.67	\$25,235.00
Project Engineer III	0	\$50.00	\$0.00
Project Engineer I	434	\$36.67	\$15,913.33
Senior Technician	312	\$41.67	\$13,000.00
CAD Operator	682	\$33.33	\$22,733.33
RPLS	0	\$50.00	\$0.00
3-Man Crew	0	\$50.00	\$0.00
Survey Tech I	0	\$31.67	\$0.00
Utility Specialist	0	\$43.33	\$0.00
Clerical	20	\$23.33	\$466.67
<b>Total Labor</b>	<b>2,123</b>		<b>\$103,501.67</b>
OVERHEAD	180.00%		\$186,303.00
OPERATING MARGIN	15%		\$43,470.70
EXPENSES DURING DESIGN PHASE			\$1,914.67
<b>TOTAL PHASE II SERVICES</b>			<b>\$335,190.03</b>

## 2013 Fort Bend County Mobility Program

Fort Bend County Project No. 13

Sponsor: Fort Bend County

Gaston Road Segment 1 from Greenbusch to Katy Flewellen

Consultant: Cobb, Fendley & Associates, Inc.

Manhour Estimate													
Task	Principal	Project Manager	Senior Engineer	Project Engineer III	Project Engineer I	Senior Technician	CAD Operator	RPLS	3-Man Crew	Survey Tech I	Utility Specialist	Clerical	Total Hours
<b>Project Management</b>													
Project kick-off meeting (1)	0	4	4	0	0	0	0	0	0	0	0	0	8
Attend status meetings (6)	0	16	0	0	16	0	0	0	0	0	0	0	32
Prepare invoice (monthly) (9)	0	8	0	0	0	0	0	0	0	0	0	8	16
Update project status (9)	0	8	0	0	8	0	0	0	0	0	0	0	16
Project coordination (project staff & subs)	0	48	40	0	40	0	0	0	0	0	0	0	128
<b>Total Project Management</b>	<b>0</b>	<b>84</b>	<b>44</b>	<b>0</b>	<b>64</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>200</b>
<b>PRELIMINARY ENGINEERING</b>													
<b>PER UPDATE</b>													
Data collection	0	0	0	0	8	0	0	0	0	0	0	0	8
Typical sections	0	0	0	0	0	0	0	0	0	0	0	0	0
Horz/Vert alignments	0	2	0	0	0	8	8	0	0	0	0	0	18
Schematic Layout/ 30% Plan production	0	8	0	0	8	0	20	0	0	0	0	0	36
QA/QC	2	0	0	0	0	0	0	0	0	0	0	0	2
<b>Subtotal PER/PRELIMINARY Design Phase</b>	<b>2</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>8</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>64</b>
<b>Final Design</b>													
<b>Prepare 70% submittal</b>													
Refine horz/vert alignments	0	2	0	0	0	2	4	0	0	0	0	0	8
Drainage design, Drainage Area Map	0	4	4	0	8	0	24	0	0	0	0	0	40
Utility research	0	4	0	0	0	8	8	0	0	0	0	0	20
Cover sheet/Index Sheet (2 Sheets)	0	4	0	0	0	0	8	0	0	0	0	0	12
Typical sections (2 Sheets)	0	2	0	0	2	0	8	0	0	0	0	0	12
Layout sheet (2 Sheets)	0	1	0	0	0	1	16	0	0	0	0	0	18
Plan & profiles sheets Street(20)	0	40	28	0	32	32	8	0	0	0	0	0	140
Plan & profiles and intersection detail sheets (8)	0	16	16	0	24	24	40	0	0	0	0	0	120
Traffic control plan	0	8	16	0	0	16	48	0	0	0	0	0	88
Cross sections	0	4	4	0	0	40	40	0	0	0	0	0	88
Traffic Signal Warrant Study at Roesner & Gaston	0	2	24	0	40	0	8	0	0	0	0	0	74
Traffic signal at Roesner (Existing & Proposed Condition)	0	4	8	0	8	24	40	0	0	0	0	0	84
Signing & Pavement Marking	0	8	16	0	0	16	40	0	0	0	0	0	80
Misc.Details	0	8	8	0	0	0	24	0	0	0	0	0	40
Quantities	0	2	0	0	40	16	0	0	0	0	0	0	58
Cost Estimates	0	1	0	0	4	0	0	0	0	0	0	0	5
QA/QC	8	4	4	0	0	0	0	0	0	0	0	0	16
<b>Subtotal 70% Submittal</b>	<b>8</b>	<b>114</b>	<b>128</b>	<b>0</b>	<b>158</b>	<b>179</b>	<b>316</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>903</b>
<b>Prepare 95% submittal</b>													
Cover sheet/Index Sheet (2 Sheets)	0	0	0	0	0	0	1	0	0	0	0	0	1

Task	Principal	Project Manager	Senior Engineer	Project Engineer III	Project Engineer I	Senior Technician	CAD Operator	RPLS	3-Man Crew	Survey Tech I	Utility Specialist	Clerical	Total Hours
General notes/Special Provisions Specifications (3 Sheets)	0	8	8	0	0	0	4	0	0	0	0	8	28
Typical sections (2 Sheets)	0	0	0	0	0	4	8	0	0	0	0	0	12
Layout sheet (2 Sheets)	0	1	0	0	3	0	6	0	0	0	0	0	10
Drainage design, Drainage Area Map	0	2	4	0	2	16	16	0	0	0	0	0	40
Plan & profiles (20)	0	24	16	0	32	24	48	0	0	0	0	0	144
Plan & profiles and intersection detail sheets (8)	0	8	8	0	16	16	40	0	0	0	0	0	88
Utility Research	0	2	0	0	0	0	8	0	0	0	0	0	10
Traffic control plan	0	8	8	0	0	16	40	0	0	0	0	0	72
Cross sections	0	4	4	0	0	24	36	0	0	0	0	0	68
Stormwater pollution prevention plans	0	4	4	0	8	0	40	0	0	0	0	0	56
Traffic signal at Roesner (Existing & Proposed Condition)	0	4	12	0	0	18	18	0	0	0	0	0	52
Signing & pavement markings (10 sheets)	0	4	4	0	24	0	48	0	0	0	0	0	80
Misc.Details	0	4	4	0	16	0	16	0	0	0	0	0	40
Quantities	0	4	2	0	68	0	0	0	0	0	0	0	74
Cost Estimates	0	1	0	0	4	0	0	0	0	0	0	0	5
Prepare project manual (specifications, bid forms)	0	24	40	0	16	0	0	0	0	0	0	0	80
QA/QC	8	4	4	0	0	0	0	0	0	0	0	0	16
<b>Subtotal 95% Design Phase Submittal</b>	<b>8</b>	<b>106</b>	<b>118</b>	<b>0</b>	<b>189</b>	<b>118</b>	<b>329</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>876</b>
<b>Bid-Ready 100% - Final Submittal</b>													
Cover sheet/Index Sheet (2 Sheets)	0	0	0	0	0	0	1	0	0	0	0	0	1
General notes/Special Specifications & Special Provisions (3 Sheets)	0	4	2	0	1	0	1	0	0	0	0	0	8
Typical sections (2 Sheets)	0	0	0	0	0	0	1	0	0	0	0	0	1
Layout sheet (2 Sheets)	0	0	0	0	0	0	1	0	0	0	0	0	1
Drainage Comments	0	1	1	0	1	0	1	0	0	0	0	0	4
Plan & profiles (20)	0	2	2	0	4	4	4	0	0	0	0	0	16
Plan & profiles and intersection detail sheets (8)	0	1	1	0	0	2	2	0	0	0	0	0	6
Utility Research	0	1	0	0	2	0	0	0	0	0	0	0	3
Traffic control plan	0	1	1	0	0	1	2	0	0	0	0	0	5
Traffic signal at Roesner	0	1	1	0	0	1	1	0	0	0	0	0	4
Cross sections	0	1	1	0	0	4	4	0	0	0	0	0	10
Stormwater pollution prevention plans	0	1	0	0	0	1	1	0	0	0	0	0	3
Signing & pavement markings (10 sheets)	0	1	1	0	1	1	2	0	0	0	0	0	6
Details/Misc.	0	1	1	0	0	0	2	0	0	0	0	0	4
Compile standard Details	0	1	1	0	0	1	2	0	0	0	0	0	5
Agency approvals (FBC Drainage District, TDLR)	0	1	0	0	4	0	0	0	0	0	0	0	5
Quantities	0	2	1	0	2	0	0	0	0	0	0	0	5
Cost Estimates	0	1	0	0	4	0	0	0	0	0	0	0	5
Prepare complete project manual (specs, bid forms)	0	6	6	0	0	0	0	0	0	0	0	4	16
100% Submittal	0	2	0	0	4	0	4	0	0	0	0	0	10
100% Sign & Sealed Bid ready Package	0	2	0	0	0	0	8	0	0	0	0	0	10
QA/QC	16	0	0	0	0	0	0	0	0	0	0	0	16
<b>Subtotal Final Submittal</b>	<b>16</b>	<b>30</b>	<b>19</b>	<b>0</b>	<b>23</b>	<b>15</b>	<b>37</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>144</b>
<b>FINAL DESIGN</b>	<b>32</b>	<b>334</b>	<b>309</b>	<b>0</b>	<b>434</b>	<b>312</b>	<b>682</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>2123</b>
<b>TOTAL HOURS PER UPDATE &amp; FINAL DESIGN</b>	<b>34</b>	<b>344</b>	<b>309</b>	<b>0</b>	<b>450</b>	<b>320</b>	<b>710</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>2187</b>

**2013 Fort Bend County Mobility Program**

Fort Bend County Project No. 13

Sponsor: Fort Bend County

Gaston Road Segment I from Greenbush to Katy Freeway

Consultant: Cobb, Fendley & Associates, Inc.

Expense Estimate						
Task	Deliveries	Miles	Mileage (\$0.58 per mile)	Reproduction	Review Fees (TDLR)	Total Cost
<b>Project Management</b>						
Project kick-off meeting (1)	\$0	100	\$58	\$0	\$0	\$58
Attend status meetings (12)	\$0	500	\$290	\$0	\$0	\$290
Prepare invoice (monthly) (12)	\$0		\$0	\$0	\$0	\$0
Update project status (12)	\$0		\$0	\$0	\$0	\$0
Project coordination (project staff & subs)	\$0		\$0	\$0	\$0	\$0
<b>Preliminary Engineering Report</b>						
Data collection	\$0		\$0	\$0	\$0	\$0
Conduct field visits	\$0	300	\$174	\$0	\$0	\$174
Typical sections	\$0		\$0	\$0	\$0	\$0
Horz/Vert alignments	\$0		\$0	\$100	\$0	\$100
Alternatives analysis	\$0		\$0	\$0	\$0	\$0
Traffic studies	\$0		\$0	\$0	\$0	\$0
Drainage studies	\$0		\$0	\$0	\$0	\$0
Construction sequencing/TCP	\$0		\$0	\$0	\$0	\$0
Utility coordination	\$0		\$0	\$0	\$0	\$0
Right-of-Way requirements	\$0		\$0	\$0	\$0	\$0
Construction cost estimates	\$0		\$0	\$0	\$0	\$0
Interagency coordination	\$0		\$0	\$0	\$0	\$0
Prepare draft PER	\$0		\$0	\$0	\$0	\$0
Prepare final PER	\$0		\$0	\$750	\$0	\$750
QA/QC	\$0		\$0	\$0	\$0	\$0
<b>Final Design</b>						
Revise horz/vert alignments	\$0		\$0	\$0	\$0	\$0
Drainage design	\$0		\$0	\$0	\$0	\$0
Utility Research	\$0		\$0	\$0	\$0	\$0
Agency approvals (TxDOT, Drainage District, TDLR)	\$0		\$0	\$0	\$0	\$0
Prepare 50% submittal						
Cover sheet	\$0		\$0	\$0	\$0	\$0
Typical sections	\$0		\$0	\$0	\$0	\$0
Layout sheet	\$0		\$0	\$0	\$0	\$0
Drainage area map	\$0		\$0	\$0	\$0	\$0
Plan & profiles	\$0		\$0	\$0	\$0	\$0
Traffic control plan	\$0		\$0	\$0	\$0	\$0
Stormwater pollution prevention plans	\$0		\$0	\$0	\$0	\$0
Traffic signals	\$0		\$0	\$0	\$0	\$0
Illumination	\$0		\$0	\$0	\$0	\$0
Bridges	\$0		\$0	\$0	\$0	\$0
Details	\$0		\$0	\$0	\$0	\$0
Quantities	\$0		\$0	\$0	\$0	\$0
Cost Estimates	\$0		\$0	\$0	\$0	\$0
Technical specifications	\$0		\$0	\$0	\$0	\$0
QA/QC	\$0		\$0	\$0	\$0	\$0
Prepare 100% submittal						
Cover sheet	\$0		\$0	\$0	\$0	\$0
General notes	\$0		\$0	\$0	\$0	\$0
Typical sections	\$0		\$0	\$0	\$0	\$0
Layout sheet	\$0		\$0	\$0	\$0	\$0
Drainage area map	\$0		\$0	\$0	\$0	\$0
Plan & profiles	\$0		\$0	\$0	\$0	\$0
Traffic control plan	\$0		\$0	\$0	\$0	\$0
Cross sections	\$0		\$0	\$0	\$0	\$0
Stormwater pollution prevention plans	\$0		\$0	\$0	\$0	\$0
Traffic signals	\$0		\$0	\$0	\$0	\$0
Signing & pavement markings	\$0		\$0	\$0	\$0	\$0
Illumination	\$0		\$0	\$0	\$0	\$0
Bridges	\$0		\$0	\$0	\$0	\$0
Details	\$0		\$0	\$0	\$0	\$0
Quantities	\$0		\$0	\$0	\$0	\$0
Cost Estimates	\$0		\$0	\$0	\$0	\$0
Prepare project manual (specifications, bid forms)	\$0		\$0	\$1,500	\$0	\$1,500
QA/QC	\$0		\$0	\$0	\$0	\$0
Prepare final submittal						
Cover sheet	\$0		\$0	\$0	\$0	\$0
General notes	\$0		\$0	\$0	\$0	\$0
Typical sections	\$0		\$0	\$0	\$0	\$0
Layout sheet	\$0		\$0	\$0	\$0	\$0
Drainage area map	\$0		\$0	\$0	\$0	\$0
Plan & profiles	\$0		\$0	\$0	\$0	\$0
Traffic control plan	\$0		\$0	\$0	\$0	\$0
Cross sections	\$0		\$0	\$0	\$0	\$0
Stormwater pollution prevention plans	\$0		\$0	\$0	\$0	\$0
Traffic signals	\$0		\$0	\$0	\$0	\$0
Signing & pavement markings	\$0		\$0	\$0	\$0	\$0
Illumination	\$0		\$0	\$0	\$0	\$0
Bridges	\$0		\$0	\$0	\$0	\$0
Details	\$0		\$0	\$0	\$0	\$0
Quantities	\$0		\$0	\$0	\$0	\$0
Cost Estimates	\$0		\$0	\$0	\$0	\$0
Prepare complete project manual (specs, bid forms and front end docs)	\$0		\$0	\$0	\$0	\$0
QA/QC	\$0		\$0	\$0	\$0	\$0
<b>Total Cost</b>	<b>\$0</b>		<b>\$522</b>	<b>\$2,350</b>	<b>\$0</b>	<b>\$2,872</b>

**FORT BEND COUNTY  
GASTON ROAD IMPROVEMENTS**

ID	Task Name	Duration	Start	Finish	Predecessors	Timeline																											
						April 2015	May 2015	June 2015	July 2015	August 2015	September 2015	October 2015	November 2015																				
1	<b>Gaston Road Improvements</b>	<b>155 days</b>	<b>Thu 4/16/15</b>	<b>Wed 11/18/15</b>		[Gantt bar from 4/16 to 11/18/15]																											
2	Notice to Proceed	0 days	Thu 4/16/15	Thu 4/16/15		[Milestone diamond at 4/16]																											
3	Topo Survey	20 days	Thu 4/16/15	Wed 5/13/15	2	[Gantt bar from 4/16 to 5/13/15]																											
4	Geotechnical	30 days	Thu 4/16/15	Wed 5/27/15	2	[Gantt bar from 4/16 to 5/27/15]																											
5	Utility Research	40 days	Thu 4/16/15	Wed 6/10/15	2	[Gantt bar from 4/16 to 6/10/15]																											
6	ROW Maps & Metes-and-Bounds	20 days	Thu 6/18/15	Wed 7/15/15	13	[Gantt bar from 6/18 to 7/15/15]																											
7	Traffic Signal Warrant	15 days	Thu 4/16/15	Wed 5/6/15	2	[Gantt bar from 4/16 to 5/6/15]																											
8	<b>Update PER (30% Design)</b>	<b>30 days</b>	<b>Thu 5/14/15</b>	<b>Wed 6/24/15</b>		[Gantt bar from 5/14 to 6/24/15]																											
9	Alignments	15 days	Thu 5/14/15	Wed 6/3/15	3	[Gantt bar from 5/14 to 6/3/15]																											
10	Intersection Design	15 days	Thu 5/14/15	Wed 6/3/15	3	[Gantt bar from 5/14 to 6/3/15]																											
11	Schematic/Plans	10 days	Thu 6/4/15	Wed 6/17/15	9,3	[Gantt bar from 6/4 to 6/17/15]																											
12	Quantities & Estimate	2 days	Thu 6/18/15	Fri 6/19/15	11	[Gantt bar from 6/18 to 6/19/15]																											
13	ROW Determination	10 days	Thu 6/4/15	Wed 6/17/15	9	[Gantt bar from 6/4 to 6/17/15]																											
14	QA/QC	3 days	Thu 6/18/15	Mon 6/22/15	13	[Gantt bar from 6/18 to 6/22/15]																											
15	Address QA/QC Comments	2 days	Tue 6/23/15	Wed 6/24/15	14	[Gantt bar from 6/23 to 6/24/15]																											
16	30% Submittal	0 days	Wed 6/24/15	Wed 6/24/15	9,10,12,13,15	[Milestone diamond at 6/24]																											
17	Review (FBC & SPI)	10 days	Thu 6/25/15	Wed 7/8/15	16	[Gantt bar from 6/25 to 7/8/15]																											
18	<b>70% Design</b>	<b>30 days</b>	<b>Thu 7/9/15</b>	<b>Wed 8/19/15</b>	17	[Gantt bar from 7/9 to 8/19/15]																											
19	Refine alignments	5 days	Thu 7/9/15	Wed 7/15/15	17	[Gantt bar from 7/9 to 7/15/15]																											
20	Typical Sections	2 days	Thu 7/9/15	Fri 7/10/15	17	[Gantt bar from 7/9 to 7/10/15]																											
21	Plan and Profile Sheets	25 days	Thu 7/9/15	Wed 8/12/15	17	[Gantt bar from 7/9 to 8/12/15]																											
22	Intersection Layout	20 days	Thu 7/16/15	Wed 8/12/15	17,21FF	[Gantt bar from 7/16 to 8/12/15]																											
23	Drainage Design	20 days	Thu 7/16/15	Wed 8/12/15	17,21FF	[Gantt bar from 7/16 to 8/12/15]																											
24	Quantities & Estimate	5 days	Thu 8/6/15	Wed 8/12/15	21FF,23FF	[Gantt bar from 8/6 to 8/12/15]																											
25	Traffic Signal Design	15 days	Thu 7/23/15	Wed 8/12/15	22FF,7	[Gantt bar from 7/23 to 8/12/15]																											
26	Traffic Control Plan	15 days	Thu 7/23/15	Wed 8/12/15	21FF	[Gantt bar from 7/23 to 8/12/15]																											

Project: Gaston Schedule.mpp	Task	Summary	Inactive Milestone	Duration-only	Start-only	External Milestone	Manual Progress
	Split	Project Summary	Inactive Summary	Manual Summary Rollup	Finish-only	Deadline	
	Milestone	Inactive Task	Manual Task	Manual Summary	External Tasks	Progress	

