

## ENGINEERING SERVICES AGREEMENT

THIS AGREEMENT is made and entered into by and between the Fort Bend Grand Parkway Toll Road Authority, a transportation corporation organized and operating under the laws of the State of Texas, hereinafter called the "FBGPTRA" and Brown & Gay Engineers, Inc., hereinafter called "Engineer."

### WITNESSETH

WHEREAS, the FBGPTRA proposes to study alternatives for Crabb River Road from US 59 to Rabbs Bayou in Fort Bend County, Texas, (the "Project"); and

WHEREAS, the FBGPTRA desires to enter into an agreement for the performance by Engineer of services during the Project, and which are within the "Scope of Services" as defined in paragraph 2 below; and

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

### AGREEMENT

#### 1. General

The Engineer shall render professional services to FBGPTRA related to the Project as defined in the Scope of Services in Attachment A and Attachment A-1.

The standard of care for all professional engineering and related services performed or furnished by Engineer under this Agreement will be the care and skill ordinarily used by members of Engineer's profession practicing under similar conditions at the same time and in the same locality.

#### 2. Compensation and Payment

- a. The Maximum Compensation under this contract is \$51,073.00. The amount paid under this Agreement may not exceed the Maximum Compensation without an approved change order.

Compensation for the performance of services within the Scope of Services described in Attachment A will be paid based on actual hourly billing rates and expenses in an amount not to exceed \$51,073.00, as shown in Attachment B. Progress payments for work detailed in Attachment A will be made when the Engineer has attained a level of completion equal to or greater than agreed upon milestones of completion in the reasonable opinion of FBGPTRA.

Compensation for services described in Attachment A-1 ("Additional Services") will be paid per the rates described in Attachment B-1 only for work authorized in writing prior to being performed and only for such work as was actually performed. The Engineer shall furnish satisfactory documentation of such work

(e.g. timesheets, billing rates, classifications, invoices, etc.) as may be required by FBGPTRA.

- b. All performance of the Scope of Services and any Additional Services including changes in the contractual scope of work and revision of work satisfactorily performed, will be performed only when approved in advance and authorized by the FBGPTRA, and Additional Services will be reimbursed based on the billing rates in effect at that time, to the extent that such labor costs, and subcontracts are reasonable and necessary for the performance of such services. Out-of-pocket expense costs may be reimbursed only when approved in advance and authorized by the FBGPTRA. Payment will be made on the basis of project completion certificate and, for Additional Services, time and expense records and in accordance with those payment procedures set forth in subparagraph d, below. Billing rates will be inclusive of all direct labor, fringe benefits, general overhead, and profit.
- c. Where subcontractors are employed by the Engineer to perform additional services not within the original Scope of Services, the Engineer will be reimbursed for subcontractors' actual salaries and hourly rates, including overtime rates. Reimbursement to the Subcontractor for non-salary costs incurred by subcontractor will be on the same basis as if the cost was incurred by the Engineer. For subcontractors employed for the convenience of the FBGPTRA, the Engineer will be paid a subcontract administrative fee equal to ten percent (10%) of all subcontractor invoiced amounts.
- d. It is understood and agreed that monthly payments will be made to the Engineer by the FBGPTRA based on the following procedures: On or about the fifteenth day of each month during the performance of services hereunder and on or about the fifteenth day of the month following completion of all services hereunder, the Engineer shall submit to the FBGPTRA two (2) copies of invoices showing the amounts due for services performed during the previous month, set forth separately for work under this Agreement and for additional services (accompanied by supporting certified time and expense records of such charges in a form acceptable to the FBGPTRA.) It is specifically understood that any requests for travel reimbursements shall comply with those procedures for travel reimbursement to Fort Bend County employees established by the Fort Bend County Auditor. The FBGPTRA 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. The County shall pay each such invoice as approved by the FBGPTRA within thirty (30) calendar days after the FBGPTRA's approval of same.

3. Time of Performance

It is understood and agreed that the time for performance of the Engineer's services under this Agreement shall begin with receipt of the Notice to Proceed and end 180 calendar days from that date.

4. The FBGPTRA's Option to Terminate

- a. The FBGPTRA has the right to terminate this Agreement at its sole option at any time, with or without cause, by providing 30 days written notice of such intentions to terminate and by stating in said notice the "Termination Date" which shall be less than 30 days later than the actual receipt of such written notice by the Engineer. Upon such termination, the FBGPTRA shall compensate the Engineer in accordance with paragraph 2, above, for those services which were provided under this Agreement prior to its termination and which have not been previously invoiced to the FBGPTRA. The Engineer's final invoice for said services will be presented to and paid by the FBGPTRA in the same manner set forth in paragraph 2(d), above.
- b. Termination of this Agreement and payment as described in subparagraph (a) of this paragraph shall extinguish all rights, duties, obligations, and liabilities of the FBGPTRA and the Engineer under this Agreement and this Agreement shall be of no further force and effect; provided, however, such termination shall not act to release the Engineer from liability for any previous default either under this Agreement or under any standard of conduct set by common law or statute. The obligations in paragraph 6, below, shall survive the termination of this Agreement.
- c. If the FBGPTRA terminates this Agreement as provided in this paragraph, no fees of any type, other than fees due and payable at the Termination Date, shall thereafter be paid to the Engineer.
- d. The FBGPTRA's rights and options to terminate this Agreement, as provided in any provision of this Agreement shall be in addition to, and not in lieu of, any and all rights, actions, options, and privileges otherwise available under law or equity to the FBGPTRA by virtue of this Agreement or otherwise. Failure of the FBGPTRA to exercise any of its said rights, actions, options, or privileges to terminate this Agreement as provided in any provision of this Agreement shall not be deemed a waiver of any rights, actions, options, or privileges otherwise available under the law or equity with respect to any continuing or subsequent breaches of this Agreement or of any other standard of conduct set by common law or statute.
- e. Copies of all completed and partially completed documents prepared under this Agreement shall be delivered to the FBGPTRA within 30 days or upon Engineer's receipt of termination payment, whichever is sooner, when and if this Agreement is terminated.

5. Inspection of the Engineer's Books and Records

The Engineer will permit the FBGPTRA, or any duly authorized agent of the FBGPTRA, to inspect and examine the books and records of the Engineer for the purpose of verifying

the amount of work performed on the Project. FBGPTRA's right to inspect survives the termination of this Agreement for a period of four years.

6. Ownership and Reuse of Documents

All documents, including original drawings, estimates, specifications, field notes, and data created, produced, developed, or prepared by Engineer or its approved outside advisory or support consultants (collectively, the "Documents") shall be the property of the FBGPTRA subject to all of the following terms and conditions; provided, however, FBGPTRA shall not own and shall have no right to receive any documents not deemed "final" by the Engineer until termination of this Agreement. Engineer will deliver the Documents to FBGPTRA within 30 days of the termination of this agreement and may retain a set of reproducible record copies of the Documents, provided that the Engineer has received full compensation due pursuant to the terms of this Agreement. It is mutually agreed that FBGPTRA will use the Documents solely in connection with the Project and for no other purposes, except with the express written consent of the Engineer, which consent will not be unreasonably withheld. Any use of the Documents without the express written consent of the Engineer will be at District's sole risk and without liability or legal exposure to Engineer.

FBGPTRA shall also be the owner of all intellectual property rights of the services rendered hereunder, including all rights of copyright therein. It is the intention of Engineer and FBGPTRA that the services provided are a "work for hire" as the term is used in the federal Copyright Act. Moreover, Engineer hereby agrees to assign, and by these presents, does assign to FBGPTRA all of Engineer's worldwide right, title, and interest in and to such work product and all rights of copyright therein.

Engineer agrees that all trademarks, trade names, service marks, logos, or copyrighted materials of FBGPTRA that Engineer is permitted to use in connection with the services will not be used without FBGPTRA's consent and shall remain in the sole and exclusive properties of FBGPTRA and this Agreement does not confer upon Engineer any right or interest therein or in the use thereof.

7. Personnel, Equipment, and Material

- a. The Engineer 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 the Engineer shall furnish and maintain, at its own expense, adequate and sufficient personnel and equipment, in the opinion of the FBGPTRA, to perform the Scope of Services when and as required and without delays. It is understood that the FBGPTRA will approve assignment and release of all key Engineer personnel and that the Engineer shall submit written notification of all key Engineer personnel changes for the FBGPTRA's approval prior to the implementation of such changes. For the purpose of this agreement, key Engineer personnel are defined as: Project Manager. Services described in this Agreement shall be performed under the

direction of an engineer licensed to practice professional engineering in the State of Texas.

- b. All employees of the Engineer shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of the Engineer who, in the opinion of the FBGPTRA, is incompetent or by his conduct becomes detrimental to the Project shall, upon request of the FBGPTRA, immediately be removed from association with the Project.
- c. Except as otherwise specified, the Engineer shall furnish all equipment, transportation, supplies, and materials required for its operation under this Agreement.

8. Items to be furnished to Engineer by the FBGPTRA

The following items will be supplied to the Engineer:

- a. Copies of preliminary studies by others.
- b. Assistance in coordination with all utility companies.
- c. Assistance in coordination with all public and governmental entities.

9. Subletting

The Engineer shall not sublet, assign, or transfer any part of its rights or obligations in this Agreement without the prior written approval of the FBGPTRA. Responsibility to the FBGPTRA for sublet work shall remain with the Engineer.

10. Conference

At the request of the FBGPTRA, the Engineer shall provide appropriate personnel for conferences at its offices, or attend conferences at the various offices of the FBGPTRA, or at the site of the Project, and shall permit inspections of its offices by the FBGPTRA, or others when requested by the FBGPTRA.

11. Appearance as Witness

If requested by the FBGPTRA, or on its behalf, the Engineer shall prepare such engineering exhibits and plans as may be requested for all hearings and trials related to the Project and, further, it shall prepare for and appear at conferences at the office of the FBGPTRA's Executive Director and shall furnish competent expert engineering witnesses to provide such oral testimony and to introduce such demonstrative evidence as may be needed throughout all trials and hearings with reference to any litigation relating to the Project. Trial preparation and appearance by the Engineer in courts regarding litigation matters are Additional Services and compensation will be made in accordance with the schedule contained in Exhibit B-1.

12. Compliance with Laws

The Engineer 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, the Engineer shall furnish the FBGPTRA with certification of compliance with said laws, statutes, ordinances, rules, regulations, orders, and decrees above specified.

13. Insurance

The Engineer shall obtain and maintain, throughout the term of the Agreement, insurance of the types and in the minimum amounts set forth in Attachment C.

14. Indemnification

With respect to claims brought by third parties against either Engineer or the FBGPTRA relating to the property or facilities with respect to which this Agreement pertains, Engineer and the FBGPTRA agree as follows:

- a. **ENGINEER WILL INDEMNIFY AND HOLD HARMLESS THE FBGPTRA, ITS DIRECTORS, OFFICERS, EMPLOYEES, AND AGENTS AGAINST ANY CLAIMS, DEMANDS, SUITS, OR CAUSES OF ACTION, AND ANY COSTS, LOSSES, LIABILITIES, DAMAGES, PENALTIES, EXPENSES, AND JUDGMENTS INCURRED IN CONNECTION THEREWITH, INCLUDING REASONABLE ATTORNEY'S FEES, EXPENSES, AND COURT COSTS, BROUGHT BY ANY OF ENGINEER'S EMPLOYEES OR REPRESENTATIVES, OR BY ANY OTHER THIRD PARTY, BASED UPON, IN CONNECTION WITH, RESULTING FROM, OR ARISING OUT OF THE NEGLIGENT ACTS, ERRORS, OR OMISSIONS OF ENGINEER OR ITS EMPLOYEES OR REPRESENTATIVES; PROVIDED HOWEVER, ENGINEER'S CONTRACTUAL OBLIGATION OF INDEMNIFICATION SHALL NOT EXTEND TO THE NEGLIGENCE OR OTHER FAULT OF THE FBGPTRA OR STRICT LIABILITY IMPOSED UPON THE FBGPTRA AS A MATTER OF LAW (INCLUDING STRICT LIABILITY IMPOSED UPON THE FBGPTRA AS A RESULT OF THE CONDITION OF THE PROPERTY OR FACILITIES WITH RESPECT TO WHICH THIS AGREEMENT PERTAINS).**
- b. In the event that both the FBGPTRA and Engineer are adjudicated negligent or otherwise at fault or strictly liable without fault with respect to damage or injuries sustained by the claimant, each shall be responsible for its own costs of litigation and pro rata share of damages as determined by the proceedings.

It is a condition precedent to the indemnitor's contractual obligation of indemnification under this Agreement that the party seeking indemnity shall provide written notice of a

third party claim, demand, or cause of action within 30 days after such third party claim, demand, or cause of action is received by the party seeking indemnity. It is a further condition precedent to the indemnitor's contractual obligation of indemnification under this Agreement that the indemnitor shall thereafter have the right to participate in the investigation, defense, and resolution of such third party claim.

15. Dispute Resolution

Except as expressly provided in paragraph 4, above, if a dispute arises out of, or relates to, the breach thereof, and if the dispute cannot be settled through negotiation, then the FBGPTRA and the Engineer agree to submit the dispute to non-binding mediation. In the event the FBGPTRA or the Engineer desires to mediate any dispute, that party shall notify the other party in writing of the dispute desired to be mediated. If the parties are unable to resolve their differences within 10 days of the receipt of such notice, such dispute shall be submitted for mediation in accordance with the procedures and rules of the American Arbitration Association (or any successor organization) then in effect. The deadline for submitting the dispute to mediation can be changed if the parties mutually agree in writing to extend the time between receipt of notice and submission to mediation. The expenses of the mediator shall be shared 50 percent by the FBGPTRA and 50 percent by the Engineer. This requirement to seek mediation shall be a condition required before filing an action at law or in equity.

16. Delivery of Notices, Etc.

- a. All written notices, demands, and other papers or documents to be delivered to the FBGPTRA under this Agreement shall be delivered to the Fort Bend Grand Parkway Toll Road Authority, P.O. Box 2789, Sugar Land, Texas 77487-9740, Attention: Bill Jameson, or at such other place or places as it may from time to time designate by written notice delivered to the Engineer. For purposes of notice under this Agreement, a copy of any notice or communication hereunder shall also be forwarded to the following address: Fort Bend County Clerk, 301 Jackson Street, Richmond, Texas 77469, Attention: County Judge.
- b. All written notices, demands, and other papers or documents to be delivered to the Engineer under this Agreement shall be delivered to Brown & Gay Engineers, Inc., 10777 Westheimer, Suite 400, 77042, Attention: Gary Gehbauer, PE or such other place or places as the Engineer may designate by written notice delivered to the FBGPTRA.

17. Reports of Accidents, Etc.

Within 24 hours after the occurrence of any accident or other event which results in, or might result in, injury to the person or property of any third person (other than an employee of the Engineer), whether or not it results from or involves any action or failure to act by the Engineer or any employee or agent of the Engineer, and which arises in any manner from the performance of this Agreement, the Engineer shall send a written report of such accident or other event to the FBGPTRA, setting forth a full and concise

statement of the facts pertaining thereto. The Engineer shall also immediately send the FBGPTRA a copy of any summons, subpoena, notice, or other documents served upon the Engineer, its agents, employees, or representatives, or received by it or them, in connection with any matter before any court arising in any manner from the Engineer's performance of work under this Agreement.

18. The FBGPTRA's Acts

Anything to be done under this Agreement by the FBGPTRA may be done by such persons, corporations, or firms as the FBGPTRA may designate.

19. Limitations

Notwithstanding anything herein to the contrary, all covenants and obligations of the FBGPTRA under this Agreement shall be deemed to be valid covenants and obligations only to extent authorized by the Act creating the FBGPTRA and permitted by the laws and the Constitution of the State of Texas. This Agreement shall be governed by the laws of the State of Texas, and no officer, director, or employee of the FBGPTRA shall have any personal obligation hereunder.

20. Captions Not a Part Hereof

The captions of subtitle of the several paragraphs and divisions of this Agreement constitute no part of the content hereof, but are only labels to assist in locating and reading the provisions hereof.

21. Controlling Law, Venue

This Agreement shall be governed and construed in accordance with the laws of the State of Texas, excluding any choice of law rules that would direct the application of the laws of another jurisdiction. The parties hereto acknowledge that venue is proper solely in Fort Bend County, Texas, for all disputes relating to or arising hereunder and waive the right to sue or be sued elsewhere.

22. Successors and Assigns

The FBGPTRA and the Engineer 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.

23. Appendices

The Appendices attached to this Agreement, which consists of:

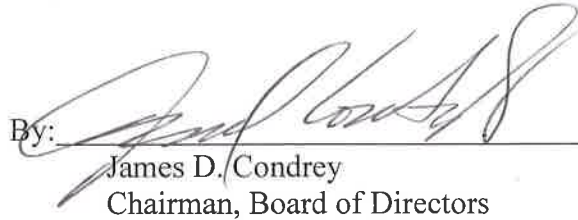
Attachment A            Scope of Services

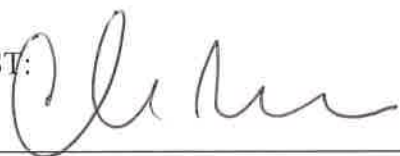
Attachment A-1        Additional Services

Attachment B	Compensation for Scope of Services
Attachment B-1	Compensation for Additional Services
Attachment C	Insurance Requirements

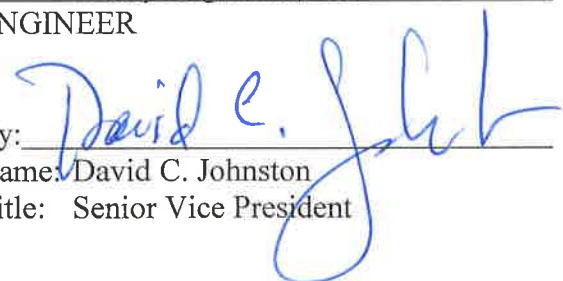
IN WITNESS WHEREOF, the parties hereto have signed or have caused their respective names to be signed to multiple counterparts to be effective on the 18<sup>th</sup> day of December, 2013.

FORT BEND GRAND PARKWAY TOLL ROAD  
AUTHORITY, a local government Texas  
corporation

By:   
James D. Condrey  
Chairman, Board of Directors

ATTEST:   
By \_\_\_\_\_  
Secretary, Board of Directors

Brown & Gay Engineers, Inc.  
ENGINEER

By:   
Name: David C. Johnston  
Title: Senior Vice President

**ATTACHMENT A  
SCOPE OF SERVICES**

**CRABB RIVER ROAD ALTERNATIVES**

**GENERAL**

The work to be performed by the Engineer shall consist of providing preliminary engineering services for determining possible alternative alignments for Crabb River Road between US 59 and Rabbs Bayou.

The work will evaluate existing Centerpoint Electric facilities (towers), existing and proposed right-of-way, utilities, existing roadway, construction sequencing, environmental constraints, and drainage. Each alternative alignment will also be evaluated on possible impacts to future roadway development along the corridor. In addition, coordination with Fort Bend County Engineering will part of the work.

**Schematic Design and Development**

The Engineer shall prepare an alignment and proposed roadway schematic layout to include projected traffic volumes, existing and proposed typical sections. The Engineer shall furnish Microsoft Office and Microstation V8 or V8i-Geopak computer generated media containing the roadway schematic layout. All supporting attachments and exhibits shall accompany the schematic layout.

The Engineer shall obtain, review, and evaluate existing and projected traffic data for use in the preparation of the schematic design layout.

The Engineer shall prepare preliminary drawings to identify any potential adverse impacts within the project corridor. Identification of all existing and proposed utilities (public and private), structures, burial grounds, neighborhood communities, historical landmarks, and undeveloped areas is required. Any potential utility conflicts and structural impediments must be identified as such. The Engineer shall propose alternative alignments which would avoid or minimize displacements and damages, and prepare any additional attachments or exhibits required illustrating a preferred alternative alignment. The Engineer shall render assistance to the County for agency meetings as necessary during the development of the schematic design as requested. The Engineer shall also render assistance to the County for public meetings, if requested.

An itemization of the schematic design and engineering work activity to be performed under this contract is detailed below. All designs shall be prepared in accordance with the latest version of: TxDOT Roadway Design Manual, AASHTO Policy on Geometric Design of Highways and Streets, TxDOT Standard Specifications for Construction of Highways, Streets, and Bridges, TxDOT Traffic Operations Manual on Highway Operations, Texas Manual on Uniform Traffic Control Devices, and Highway Capacity Manual - Transportation Research Board.

The schematic layout will adhere to a design scale of 1 in. = 100 ft. The schematic layout, exhibits, and attachments will be developed in English units. All Microsoft Office and Microstation V8 or V8i - Geopak computer graphic files furnished to the County must be submitted in electronic format by means of a CD media. Final copies of the schematic design shall be signed by a professional engineer licensed in the State of Texas.

## **Preliminary Analysis:**

### *Data Collection*

The Engineer shall conduct field reconnaissance and collect data as necessary to complete the schematic design. Data shall include the following information:

1. Design data from record drawings of existing and proposed facilities
2. Existing and future design year traffic data
3. Roadway inventory information, including the number of lanes, speed limits, pavement widths and rating, bridge widths and ratings, and ROW widths
4. Aerial photos, planimetric mapping, and DTM
5. Environmental Data
6. Previously prepared drainage studies
7. Adopted land use maps and plans as available
8. Federal Emergency Management Agency (FEMA) Flood Boundary Maps
9. Public and private utility information

### *Survey*

The Engineer shall conduct a topographic survey of any features within the project area necessary for the schematic design, including:

1. Appurtenances that have changed or been added since the most recent project surveys.
2. Utility features that may affect the design.
3. Drainage features necessary for the drainage analysis.

The Engineer shall add these features to the project topographic file and DTM.

### *Develop Base Maps*

The Engineer shall identify existing ROW, property owners and the approximate location of major utilities in the preparation of base maps.

### *Analyze Existing Conditions*

Using collected data and base maps, the Engineer shall develop an overall analysis of the existing conditions in order to develop the schematic design. The analysis shall include, but not be limited to the following:

1. ROW determination
2. Horizontal alignment
3. Profile grades
4. Pavement cross slopes and pavement type
5. Intersection design and analysis
6. Sight distance
7. Roadside signing
8. Level-of-service
9. Locations of critical constraints
10. Drainage
11. Traffic control and construction phasing sequence

#### *Utility Base Map*

The Engineer shall obtain information on existing utilities from utility owners and shall identify and evaluate all known existing and proposed public and private utilities. The Engineer shall identify potential conflicts and attempt to minimize the potential adverse utility impacts in the preparation of the schematic design. The Engineer shall prepare a base map depicting the utility locations.

#### *Schematic Alternatives*

The Engineer shall identify, perform preliminary design, and analyze up to 3 schematic alternatives to minimize potential adverse impacts, major utility conflicts, structural impediments, or exceptions to the State or FHWA design criteria. The Engineer shall prepare exhibits showing alternatives that are necessary for review and approval.

#### *Environmental Constraints*

The Engineer shall consider impacts to environmentally sensitive sites during the schematic design process. The environmental sensitive sites may include historic structures, cemeteries, residential areas, historical landmarks, and farmland.

#### **Geometric Design Schematics**

The Engineer shall develop geometric design schematics based on the conceptual design after the basic layout, lane arrangement, and ROW requirements are approved.

The geometric schematic plan view shall contain the following design elements:

1. Geopak calculated roadway alignments for mainlanes, ramps, direct connectors, HOV lane, managed lanes, frontage roads and cross streets at grade separations and horizontal curve data shown in tabular format
2. Pavement edges, curb lines, sidewalks for all roadway improvements
3. Typical sections of existing and proposed roadways
4. Proposed structure locations including abutment, bent and rail locations
5. Existing and proposed major utilities
6. Existing property lines and respective property ownership information
7. ROW requirements adequate for preparation of ROW maps
8. Control-of-access limits
9. Existing and projected traffic volumes
10. Location and text of the proposed mainlane guide signs and the preliminary locations for changeable message signs
11. Lane lines, shoulder lines, and direction of traffic flow arrows indicating the number of lanes on all roadways

The geometric schematic profile view shall contain the following design elements:

1. Calculated profile grade and vertical curve data including "K" values for the mainlanes
2. Existing ground line profiles along the mainlanes
3. Grade separations and overpasses

### *Typical Sections*

The Engineer shall develop both existing and proposed typical sections that depict the number and type of lanes, shoulders, median width, curb offsets, cross slope, border width, clear zone widths, and ROW limits.

### *Cross-Sections*

The Engineer shall use Geopak to generate preliminary cross-sections every 100 feet in conjunction with the Geometric Schematic. The Engineer shall determine earthwork volumes for use in the cost estimate.

### *Drainage*

The Engineer shall use data from as-built plans and Federal Emergency Management Agency (FEMA) maps to locate drainage out fall(s) and to determine existing storm sewer and culvert sizes, design flows, and water surface elevations for use in the design of roadway geometry. The Engineer shall determine and evaluate the adequacy of the Right-of-Way (ROW) needed to accommodate the proposed drainage system. The drainage studies shall identify the impacts to abutting properties and the 100-year floodplain due to proposed highway improvements, identify the water surface elevations for the 2, 5, 10, 25, 50 and 100 year storm events, drainage area maps, drainage outfall descriptions, storm water detention facilities, recommendations for mitigation of impacts, and scour analysis, etc.

### *ROW Requirements*

The Engineer shall determine the ROW requirements based on the proposed alignment, typical sections, access control, terrain, construction requirements, drainage, clear zone, maintenance, and environmental mitigation requirements.

### *Preliminary Cost Estimate*

The Engineer shall prepare a preliminary cost estimate for the project, including the costs of construction and eligible utility adjustments. Current State unit bid prices will be used in preparation of the estimate.

### **Project Management and Coordination**

The Engineer shall direct and coordinate the various elements and activities associated with developing the design schematic.

The Engineer shall provide ongoing quality assurance and quality control to ensure completeness of product.

**ATTACHMENT B  
COMPENSATION FOR SCOPE OF SERVICES  
CRABB RIVER ROAD ALTERNATIVES**

**FEE SCHEDULE SUMMARY**

WORK TASK	DESCRIPTION	TOTAL
1	PRELIMINARY ANALYSIS	\$ 13,825.00
2	GEOMETRIC SCHEMATICS	\$ 28,580.00
3	PROJECT MANAGEMENT AND COORDINATION	\$ 4,600.00
4	SURVEY	\$ 3,505.00
5	DIRECT EXPENSES	\$ 563.00
TOTAL		\$61,073.00

**ATTACHMENT A-1  
ADDITIONAL SERVICES**

**CRABB RIVER ROAD ALTERNATIVES**

**ADDITIONAL SERVICES - SCOPE OF WORK**

No additional services to be performed, unless approved by FBGPTRA.

ATTACHMENT B-1  
2014 HOURLY RATE SCHEDULE

JOB CLASSIFICATION	Salary Rates (2014)	
	Minimum	Maximum
Project Manager	\$ 180.00	\$ 225.00
Senior Engineer	\$ 160.00	\$ 225.00
Project Engineer	\$ 120.00	\$ 190.00
Design Engineer	\$ 100.00	\$ 150.00
EIT	\$ 75.00	\$ 110.00
Sr Tech / Sr CADD	\$ 80.00	\$ 130.00
Tech / CADD	\$ 50.00	\$ 90.00
Chief Surveyor	\$ 180.00	\$ 225.00
RPLS	\$ 120.00	\$ 175.00
Survey Party Chief	\$ 80.00	\$ 120.00
Clerical	\$ 40.00	\$ 80.00

**FIELD CREW HOURLY RATES**

SURVEY CREW*	\$ 150.00
SURVEY CREW W/ GPS*	\$ 180.00

\*The hourly rate includes imputed costs for survey equipment, vehicles, materials (stakes, flagging, iron rods, etc.) and for personnel

Expenses (mileage, delivery, reproduction, etc.) will be reimbursed at actual costs

Note: Salary rates and field crew rates shown above are effective for first year of contract and are subject to annual 4% escalations.

## ATTACHMENT C

The Engineer shall furnish certificates of insurance to the FBCTRA evidencing compliance with the insurance requirements hereof. Certificates shall indicate name of the Engineer, name of insurance company, policy number, term of coverage and limits of coverage. The Engineer shall cause its insurance companies to provide the FBCTRA with at least 30 days prior written notice of any reduction in the limit of liability by endorsement of the policy, cancellation or non-renewal of the insurance coverage required under this Agreement. The Engineer shall obtain such insurance from such companies having a Best's rating of B+/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:

- a. Workers' Compensation insurance in accordance with the laws of the State of Texas, or state of hire/location of Services, and Employers' Liability coverage with a limit of not less than \$1,000,000 each employee for Occupational Disease, \$1,000,000 policy limit for Occupational Disease; and Employer's Liability of \$1,000,000 each accident.
- b. Commercial General Liability insurance including coverage for Products/Completed Operations, Blanket Contractual, Contractors' Protective Liability Broad Form Property Damage, Personal Injury/Advertising Liability, and Bodily Injury and Property Damage with limits of not less than:

\$2,000,000	general aggregate limit
\$1,000,000	each occurrence, combined single limit
\$2,000,000	aggregate Products, combined single limit
\$1,000,000	aggregate Personal Injury/Advertising Liability
\$50,000	Fire Legal Liability
\$5,000	Premises Medical
- c. Business Automobile Liability coverage applying to owned, non-owned and hired automobiles with limits not less than \$1,000,000 each occurrence combined single limit for Bodily Injury and Property Damage combined.
- d. Umbrella Excess Liability insurance written as excess of Employer's Liability, with limits not less than \$2,000,000 each occurrence combined single limit.
- e. Professional Liability insurance with limits not less than \$2,000,000 each claim/annual aggregate.

The FBCTRA and the FBCTRA's Directors shall be named as additional insureds to all coverages required above, except for those requirements in paragraphs "a" and "e." All policies written on behalf of the Engineer shall contain a waiver of subrogation in favor of the FBCTRA and the FBCTRA's Directors, with the exception of insurance required under paragraph "e."