

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 K.C. United, 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 the construction of a four-lane concrete road with open-ditch drainage between the proposed Humphrey Way and the existing West Tavener Road under the Emmanuel King from Humphrey Way to West Tavener Project No. X26 (hereinafter "Services") pursuant to SOQ 07-080; 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 I. Scope of Services**

Contractor shall render Services to County as defined in the Scope of Services (attached hereto as Exhibit A).

**Section II. 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 III. Compensation and Payment**

3.1 Contractor's fees shall be calculated at the rates set forth in the attached Exhibit A. The Maximum Compensation for the performance of Services within the Scope of Services described in Exhibit A is two hundred seven thousand forty-seven dollars and 00/100 (\$207,047.00). 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 IV. Limit of Appropriation**

4.1 Contractor clearly understands and agrees, such understanding and agreement being of the absolute essence of this Agreement, that County shall have available the total maximum sum of two hundred seven thousand forty-seven dollars and 00/100 (\$207,047.00), specifically allocated to fully discharge any and all liabilities County may incur.

4.2 Contractor does further understand and agree, said understanding and agreement also being of the absolute essence of this Agreement, that the total maximum compensation that Contractor may become entitled to and the total maximum sum that County may become liable to pay to Contractor shall not under any conditions, circumstances, or interpretations thereof exceed two hundred seven thousand forty-seven dollars and 00/100 (\$207,047.00).

### **Section V. 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 VI. 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 VII. 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 VIII. 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 IX. 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 X. 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 from such companies having Bests 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 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. All Liability policies including Workers' Compensation written on behalf of Contractor shall contain a waiver of subrogation in favor of County and members of Commissioners Court.

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

#### **Section XI. 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 XII. 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 XIII. 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 XIV. 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: K.C. United, Inc.  
Attn: Ke Chen  
6161 Savoy, Suite 310  
Houston, Texas 77036

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 XV. 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 XVI. 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 XVII. 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 XVIII. 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 XIX. 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 XX. Third Party Beneficiaries**

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

**Section XXI. 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 XXII. 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 XXIII. 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.

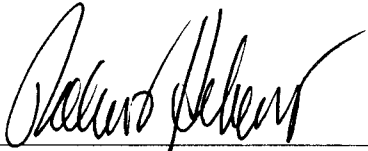
**Section XXIV. Conflict**

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 24<sup>th</sup> day of February, 2015.

FORT BEND COUNTY

K.C. United, Inc.



Robert E. Hebert, County Judge



Ke Chen, President

2-24-15

Date

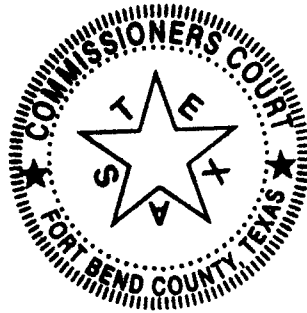
2-16-2015

Date

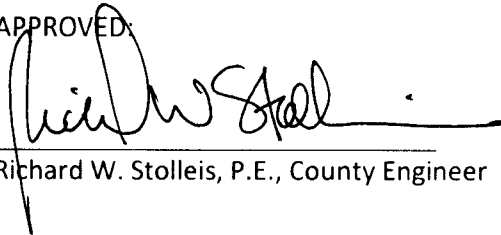
ATTEST:



Laura Richard, County Clerk



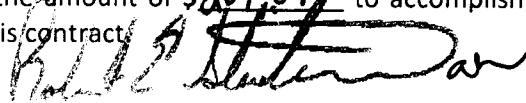
APPROVED:



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

**AUDITOR'S CERTIFICATE**

I hereby certify that funds are available in the amount of \$207,047 to accomplish and pay the obligation of Fort Bend County under this contract.



Robert Edward Sturdivant, County Auditor

MDS

# EXHIBIT A

# K. C. United, Inc.

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Consulting Civil Engineers and Surveyors

January 29, 2015

Mr. Mark C. Dessens, P.E.  
Engineering Manager  
Schaumburg & Polk, Inc.  
11767 Katy Frwy., Suite 900  
Houston, Texas 77079

Re: **Fort Bend County Proposal No. 1409.FBC-KTX003 rev. 5**  
Fort Bend County "Engineering Services for Roadway and Underground Utilities"  
Kendleton, Texas

Dear Mr. Dessens:

K.C. United, Inc. is pleased to resubmit this proposal to perform the following:  
Engineering design and construction document preparation for preliminary and final design, as well as construction phase services, in addition to boundary and topographic surveying of the above referenced project. The scope of work and fee will be as follows:

## SCOPE OF WORK

Topographic survey will be done for the estimated area for King Road development project as shown in the attached exhibit. The surveying requirement consist of approximate 3,640 feet of 58 feet (4-lane) concrete pavement street (Emmanuel King Road) within 120-foot R-O-W, Waterline, Sanitary Sewer and Storm water facility. The number of total parcels is estimated at 18 for this requirement.

Street Name	Limit	Length (ft)
Emmanuel King Road	West Tavener to Proposed Humphrey	3,640
<b>Total</b>		<b>3,640</b>

Survey Shall conform to requirements as outlined in the Fort Bend County Regulations of Subdivisions, Section 3 – Plat Submittal Procedure Requirements and Rules Governing Water and Wastewater Infrastructure. Under the general scope, the following task will be performed.

## **ENGINEERING DESIGN**

1. Project Management includes kick off meeting and all other meetings and coordination
2. Data Collection
3. R-O-W Requirements and Study
4. Drainage Study ("By others")
5. Street Geometric Design
6. Geotechnical Services ("By others")
7. Project Management
8. Cross Section
9. Construction Cost Est.
10. Agency Approvals
11. QA/QC
12. Plans and Profile
13. Pavement Design
14. Pavement Mark
15. Storm Water Facility implementation (HH by Others)
16. Quantity Takeoff and cost estimate

## **SURVEYING**

17. Identify all visible existing utilities (manholes, culverts, power poles) are located.
18. Any pipeline company will be contacted to probe and mark their pipeline (if any) locations to be tied to survey.
19. A complete set of Base (Plan & Profile) drawings will be prepared containing all topographic information, apparent ROW and visible utility features according to Harris County standards in AutoCAD or compatible format. Profile shall include NG A7 & both ROW.
20. Survey control map will be prepared to Harris County standard showing swing ties to traverse and baseline points. Survey control map will be signed and sealed by responsible professional land surveyor in charge of the project. The named surveyor will be Mr. Georg Lardizabal (RPLS – Registration No. 6051).
21. Establishment of the design baseline (If different than the survey baseline).
22. Signed and sealed field notes containing notes as well as coordinates, and descriptions.
23. Surveying of channels, bridges and other drainage structures. Survey drainage structures, infall and outfall areas – sizes and flowlines of pipes. Shall include cross section of channels at 100 ft. intervals for 500 ft. upstream and downstream of Brooks Branch, at E. King rd., Braxton rd., and on channel under rail road, Spur 541 and approximate location of 3" F.M. crossing on Brooks Branch.

24. Several records and filings for the area lack proper field notes and benchmarks to satisfy this project. Certain properties will require additional research and legal assistance for completion.
25. Clearing, bush removal, and preparation of site for performing survey work.
26. Topographic data will be provided in format suitable (ASCII file in comma delineated form in P,N,E,Z format) for use in creation of surface tin (3D model) in AutoCAD civil 3D format or similar software.
27. R-O-W document preparation of properties including recordation. (maps, metes & bounds descriptions)
28. The current estimated quantity of parcels is eighteen (18). The calculated cost is \$2,633.00/parcel for any additional parcels that may be required.

**CONSTRUCTION PHASE**

29. Assist as needed in the bid and construction phase services.

\*Note – Construction Phase activities are considered “Additional Services” and are not included in the preliminary cost.

**FEE & SCHEDULE:**

A total fee of \$207,047.00 based upon the estimate is as shown in the below table A.

Table A.

Task	Scope	Unit Rate	Total Fee
Items 1 to 16	Engineering Design	16.38/FT.	\$ 168,274
Items 17 - 27	Surveying - (1) outfall	\$4.92/FT.	\$ 17,908
<b>Sub Total</b>			<b>\$ 186,182</b>
Items 28	Est. number of parcels in survey is (18). Additional parcels over a qty. of 18 will be calculated at the following cost/parcel.	\$2,633/parcel	
Items 29	*Construction Phase (Additional Services)	\$146/Hr.	\$ 20,865
<b>Total</b>			<b>\$ 207,047</b>

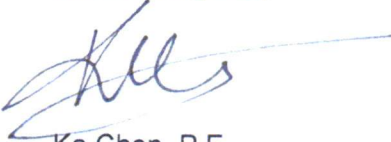
\*The “level of effort” is provided in the attached tables – (LOE 1, LOE 2, LOE 3)

Schedule

Task	Date Commitment	Comments
Preliminary Engineering Report and Design	Approx. 3 months after NTP	KCU commits to delivery date of the specified task
All design work completed and prepared for bid	31-May-15	KCU commits to delivery date of the specified task
Construction contractors selected and ready to start construction	1-Sep-15	KCU commits to delivery date of the specified task

KCU appreciates having this opportunity to submit this proposal. If you require additional information or clarification of any details contained within this proposal, please do not hesitate to contact me directly.

Kindest Regards,



Ke Chen, P.E.  
President  
KC United, Inc.

Attachments:

- Levels of Effort
- Fema Map
- Project Area Map

# LEVEL OF EFFORT TABLES

## Engineering Design

LOE 1

Level of Effort for Street, Water and Sanitary Design (Items 1-16)												
Task	Sub Task	Principal	PM	PE	Grad Engr. (EIT)	Sr. Designer	CAD	Clerical	QA/QC (PE)	Hrs.	Total	TOTAL
		\$ 225	\$ 150	\$ 150	\$ 90	\$ 105	\$ 90	\$ 60	\$ 150			
Preliminary Engineering	Project Management includes kick off meeting and all other meetings and coordination	6	8	8	4			10	6	42	\$ 5,610.00	
	Data Collection									0	\$ -	
	R-O-W Requirements and Study									0	\$ -	
	Drainage Study ("By others")									0	\$ -	
	Street Geometric Design	6	27	54	73	75	75	13	6	329	\$ 36,345.00	
	Geotechnical Services ("By others")									0	\$ -	\$ 41,955.00
Final Engineering Design and Specs	Project Management	4	8	8	4			10	6	40	\$ 5,160.00	
	Cross Section									0	\$ -	
	Construction Cost Est.	2	8	4	4			10		28	\$ 3,210.00	
	Agency Approvals									0	\$ -	
	QA/QC									0	\$ -	
	Plans and Profile	3	24	58	145	205	335	10	24	804	\$ 81,900.00	
	Pavement Design	2	7	10	20	15	23	13	9	98	\$ 10,500.00	
	Pavement Mark	1	3	9	17	6	23	13	9	79	\$ 8,216.25	
	Storm Water Facility implementation (HH by Others)	1	3	12	15	15	30	14	8	97	\$ 9,971.25	
	Quantity Takeoff and cost estimate	1	3	12	17	6	15	17	3	73	\$ 7,361.25	
	Sub totals	21	82	166	295	322	500	99	65	1,548	\$117,948.75	\$ 126,318.75
	<b>Total</b>											<b>\$ 168,273.75</b>

## Limit of Work:

LOE 2

Surveying Length =

**3,640 LF**

Level of Efforts for Topographic Surveying (Items 17-28)												
Task	Sub Task	Licensed State Surveyor	Crew (3 Man)	SIT	CADD	CT				Hrs.	Total	TOTAL
		\$ 150	\$ 150	\$ 85	\$ 85	\$ 85						
Document Preparation	Property documents and recordation	0.9		1.8		14.0				16.70	\$ 1,478	\$ 1,478
Survey Control	Setting additional controls		0.6	0.3						0.90	\$ 116	
	Establish/verify Horizontal control work	0.3	0.9	0.6						1.80	\$ 231	
	Establish/verify Vertical control work	0.3	1.8	6.0						8.10	\$ 825	
	Preparing control map	0.3		9.0	3.6					12.90	\$ 1,116	
	Setting center line		1.8	0.6						2.40	\$ 321	\$ 2,609
Topo Survey	One call coordination			0.6						0.60	\$ 51	
	Surveying roadway & topo features	0.9	31.5	1.8						34.20	\$ 5,013	
	Manhole inverts		3.6	0.9						4.50	\$ 617	
	Borehole survey		1.5	0.6						2.10	\$ 276	
	QA/QC	0.9		0.9						1.80	\$ 212	\$ 6,168
Preparation of Basemap	ROW delineation for topo survey	0.9		1.8	1.8					4.50	\$ 441	
	Plan drawing with topo features and manhole inverts only (no utility lines)			1.8	18.0					19.80	\$ 1,683	
	QA/QC	0.9								0.90	\$ 135	\$ 2,259
Site Prep	Clearing path for surveying work		15.0							15.00	\$ 2,250	\$ 2,250
Document Control	Research and corrections to filed documents					20.0				20.00	\$ 1,700	\$ 1,700
	<b>Sub Total</b>									<b>0.00</b>	<b>\$ -</b>	<b>\$ 16,464</b>
Outfall Survey	Control work	0.6	0.9	0.6						2.10	\$ 276	
	Outfall Survey		4.5	0.3						4.80	\$ 701	
	<b>Sub Total</b>									<b>0.00</b>	<b>\$ -</b>	<b>\$ 977</b>
For each Monument	Survey field work		1.5	0.3						1.80	\$ 251	
	Preparation of Monument sheet	0.6		0.6	0.9					2.10	\$ 218	
	<b>Sub Total</b>									<b>0.00</b>	<b>\$ -</b>	<b>\$ 468</b>
	<b>Total</b>									<b>0</b>	<b>\$ -</b>	<b>\$ 17,908.00</b>

FBC Proposal No. 1409.FBC-KTX003- Fort Bend County "Engineering Services for Roadway and Underground Utilities" Kandleton, Texas



**Construction Phase Design**

LOE 3

Level of Effort for Construction Phase Services (Items 29)								
Task	Sub Task	Principal	PPM	Clerical	QA/QC (PE)	Hrs.	Total	TOTAL
		\$ 225	\$ 150	\$ 60	\$ 150			
Construction Phase Activities	Bid and construction phase services	21	49	24	49	143	\$20,865.00	
	<b>Total</b>							<b>\$ 20,865.00</b>

**BASIC SERVICES:**

Preliminary Phase:

Preliminary phase shall be performed for the entire project that includes Emmanuel King Road (3640 feet).

Services also included in the preliminary phase shall be as follows:

Develop a Layout containing the following exhibits and attachments:

- Standard Topo Survey Exhibit
  - Provide a complete topo survey and immediately prepare plan/profile drawings on the survey background. The sheets, prepared for "preliminary design," will be the plan/profile sheets for our final design in order to minimize cost.
- Schematic Layout of Roadway and Detention
  - Provide a plan view layout with sufficient detail to insure that the final design can be constructed without any major issues. Include the location of the proposed storm ditches, culverts and detention facilities. The schematic layout shall be at a scale of 1" = 40' on 11"x17" sheets. Include a Cover Sheet with a Vicinity Map with the project limit. The schematic should show the pavement marking concept so that traffic movements can be considered and reviewed during the study phase. Provide the proposed typical sections on the schematic. Typical Sections shall be drawn at 1"=20' horizontal and 1" = 2' vertical scale on 11"x17" sheets.

- Cost Estimates
  - Provide a preliminary construction cost estimate for the final recommendation provided in the Study Report. Provide subtotals for each section and total construction cost. Include a section for cost related to the relocation of existing utilities. Include an additional section for the estimated cost of the right-of-way to be acquired. Provide a grand total for the project that includes the estimate construction cost, estimated cost for the relocation of utilities and estimated cost for the acquisition of right-of-way.
- Utility Tables
  - Provide a table of the existing utilities. The table shall include ID number for the potential conflicts, stations at the left right-of-way, the centerline, and right right- of-way, the utility in conflict, the owner of the utility, contact name, address, phone number, and email address, notes, and an estimated cost to relocate if necessary. Identify the conflict on the schematic with the ID number.
- ROW Acquisition Table
  - Provide individual parcel maps, with accompanying metes and bounds description, both sealed and signed, for each parcel to be acquired. The parcel maps will be on 8-1/2 by 11-inch paper. The final product provided will be sealed legal documents for acquisition which shall also include abstracting.
- Geotechnical Investigation (Additional service as needed)
  - This shall be a standalone report that presents the recommendations for the permanent roadway section including reinforcing, storm ditches and other design features necessary for the development of the roadway and appurtenances. The report shall be submitted to the FBC Project Manager as soon as report is complete. A review shall be provided by FBC and comments addressed prior to submittal of the Study Report.
- Environmental Site Assessment Report (Additional service as needed)
  - This shall be a standalone report that identifies all potential environmental issues. Should additional studies be necessary, a separate proposal shall be submitted. If it is known that studies beyond the limits of the Phase One ESA will be required prior to the submittal of the proposal, the scope shall be included in the original proposal. Obtain Environmental Section approval prior to submitting any scope beyond the Phase One ESA. The report shall be submitted to the FBC Project Manager as soon as report is complete. A review shall be provided by FBC and comments addressed prior to submittal of the Study Report.

- Wetlands Assessment, Delineation, and Concurrence (Additional service as needed)
  - This shall be a standalone report that can be submitted to the necessary agencies for a concurrence of findings. If there are wetlands within the limits of the roadway and wetlands are below the threshold of an appropriate Nationwide Permit, the concurrence can be replaced with the permit application of the appropriate Nationwide Permit. If a permit is required beyond the limits of a nationwide permit, a separate proposal shall be requested. The report shall be submitted to the FBC Project Manager as soon as report is complete. A review shall be provided by FBC and comments addressed prior to submittal of the Study Report.
- Threatened and Endangered Species (Additional service as needed)
  - This report may be included as part of the ESA report. Include a copy of the letter sent to the Texas Parks and Wildlife where the report was submitted. The report shall be submitted to the FBC Project Manager as soon as report is complete. A review shall be provided by FBC and comments addressed prior to submittal of the Study Report.
- Cultural Resources and Concurrence (Additional service as needed)
  - This shall be a stand along report that shall be submitted to the Texas Historical Commission for concurrence. Include a copy of the concurrence with the report. The report shall be submitted to the FBC Project Manager as soon as report is complete. A review shall be provided by FBC and comments addressed prior to submittal of the Study Report.

#### Variations

- Should any variances be required, a letter request shall be submitted and approved prior to the submittal of the Study Report. The variance shall include the variance sought along with the reasons the variance is necessary. The requested should include support documentation from other design guidelines and any risk associated with the request.
- Travel Expenses
  - Travel and/or subsistence for the purpose of surveying and land acquisition to points other than ENGINEER'S or FBC offices, local regulatory agencies and project site;

### **Boundary and Topographic Survey**

Establish R-O-W line and topographic survey for the entire project limits established by the owner. The survey will performed in accordance with the criteria set by Fort Bend County for roadway project. All right-of-way points of curve, angle points, cut back corners, and parcel corners in the property acquisition limits will be monument with 5/8-inch iron rods 26 inches long with TxDOT aluminum caps.

1. Project Setup
2. Secure Right-of-Entry
3. Control Survey
  - a. Prepare Control Data Sheets
  - b. Prepare Survey Control map
4. Survey And Mapping
  - a. Utilities – Contract DigTest and Located Tone Marks, Locate Visible Utilities. Locate and identify utility/pipeline conflicts with the proposed construction, including obtaining information from utility owners record drawings and site reconnaissance, as well as shooting elevations marked or uncovered by others.
  - b. Survey Drainage structures, Infall and Outfall Areas – size and flowlines of Pipes. Includes Cross Section of Ditches @ 100' Intervals
  - c. Rods/Monumentation
5. Tie Bore Holes
6. Tie Coordinate geometry to FEMA benchmarks
7. Project Management (Meetings)
8. Plan view 3D Cad file with TIN file (topographic, utilities, and boundary)
9. The survey shall conform to Fort Bend County standards

## **DESIGN PHASE**

Design Phase shall be performed for Emmanuel King Road.

Civil Engineering Design Service – The Service will consist of complete set of civil engineering design plans and specifications for the proposed Emmanuel King road Extension. The plans and specifications shall include: Roadway alignment and geometric design, pavement and pavement mark, waterline, and sanitary sewer design. The design will be based on requirements and criteria published by the Fort Bend County for Roadway project. The service also include preparation of construction cost estimate, standard Fort Bend County project Bid documents. The design package will be submitted to the county and city at 50% and 100% completion. The design shall include:

1. Paving layout
2. Utility Design

### **ADDITIONAL SERVICES:**

All work performed by K C United, Inc. which is either described in this section or not included in the Services defined above shall constitute "Additional Services". Additional Services shall also include the following:

1. Copies of construction documents in excess of five (5) sets;
2. Revisions to substantially completed construction documents or approved preliminary documents occasioned by changes in scope of work;
3. Revisions to construction documents to indicate "Record" conditions;
4. Services as an expert witness including preparation of engineering data and reports on behalf of the CLIENT or in connection with litigation or other controversies, or in consultation with CLIENT or attorneys;
5. Additional or extended services during construction made necessary by work damaged by fire or other cause during construction; defective or neglected work of contractor; prolongation of construction contract time by more than 20% (unless due to the fault of the ENGINEER), acceleration of work schedule involving services beyond normal working hours; or default under construction contract due to delinquency or insolvency;
6. Services after issuance of Certificate of Substantial Completion;
7. Services to investigate existing conditions or facilities or to make measured drawings thereof, or to verify accuracy of drawings or other information furnished by Owner;
8. Other services not otherwise included in the Agreement or not customarily furnished in accordance with generally accepted engineering practice.
9. Services in conjunction with preparation of construction plans and specifications outside project boundary.

**Construction Phase:** After completion of Design Phase and when authorized by the Fort Bend County, K C United, Inc. will assist Fort Bend County with the following as an additional service.

1. Securing and analyzing bids or negotiated proposals.
2. Recommend awards of construction contracts and consult with Fort Bend County during construction.
3. Attend and participate in coordination meetings.
4. Review and comment on shop drawings.
5. Provide material and equipment tests.
6. Perform audit and assurance function on completed construction for conformity to contract documents and specifications.
7. Issue Certificate(s) of Substantial Completion at which time Basic Services shall be deemed complete.



MAP SCALE 1" = 2000'



PANEL 0375L

# FIRM FLOOD INSURANCE RATE MAP FORT BEND COUNTY, TEXAS AND INCORPORATED AREAS

**PANEL 375 OF 575**  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
FORT BEND COUNTY	480228	0375	L
BEASLEY, CITY OF	481654	0375	L
KENDLETON, CITY OF	481651	0375	L
ROSENBERG, CITY OF	480232	0375	L

Note to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

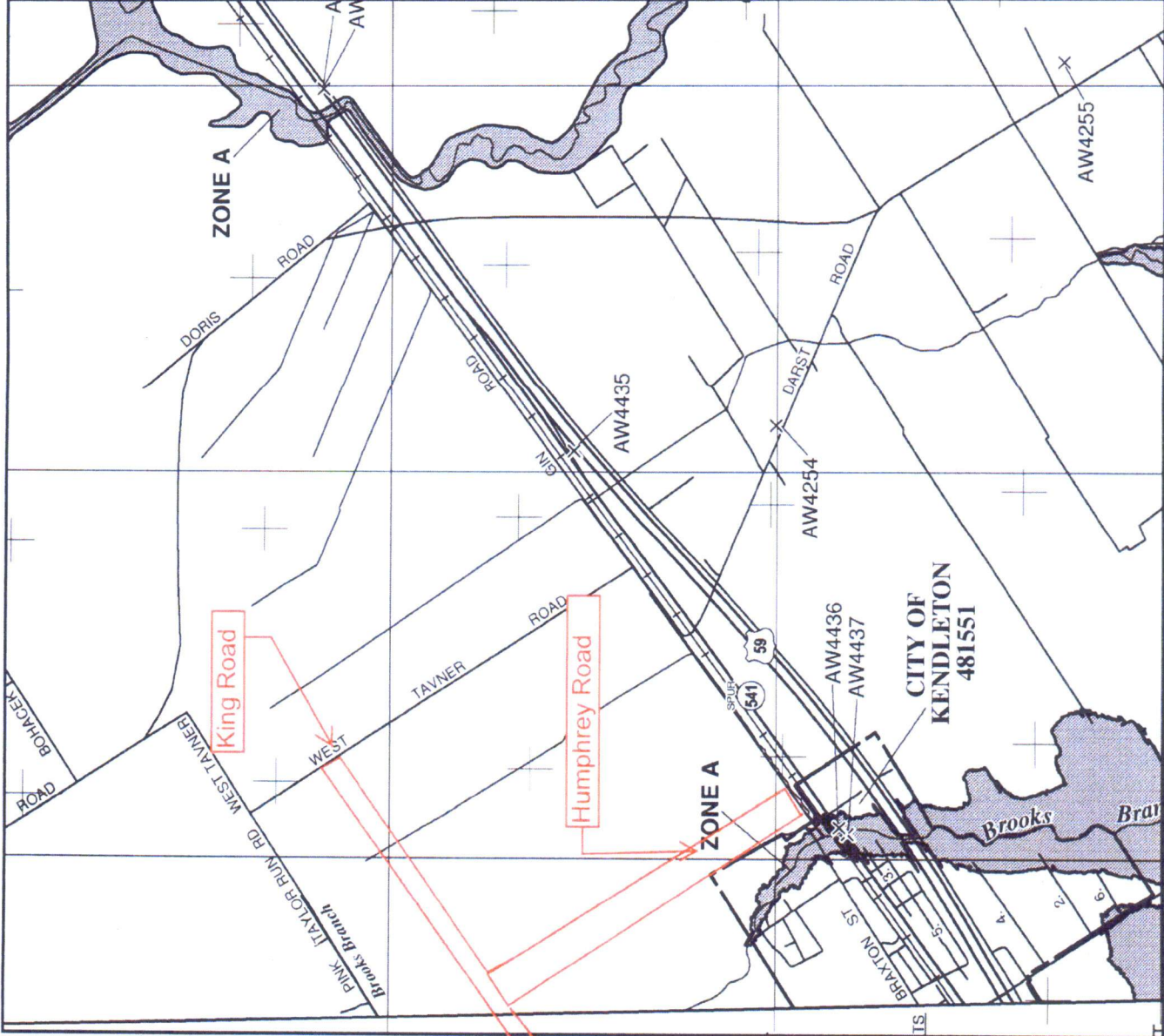


MAP NUMBER  
48157C0375L  
MAP REVISED  
APRIL 2, 2014

Federal Emergency Management Agency

NATIONAL FLOOD INSURANCE PROGRAM

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)



KENDLETON CITY LIMITS AND ETJ'S  
Fort Bend County



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KC JOB # 800-01