

Section 3. Compensation and Payment

3.1 Consultant'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 thirty-five thousand one hundred nineteen dollars and no/100 (\$235,119.00) as set forth in Exhibit A. In no case shall the amount paid by County under this Agreement exceed the Maximum Compensation without a written agreement executed by the parties.

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

Section 4. Limit of Appropriation

4.1 Consultant 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 thirty-five thousand one hundred nineteen dollars and no/100 (\$235,119.00) specifically allocated to fully discharge any and all liabilities County may incur.

4.2 Consultant does further understand and agree, said understanding and agreement also being of the absolute essence of this Agreement, that the total maximum compensation that Consultant may become entitled to and the total maximum sum that County may become liable to pay to Consultant shall not under any conditions, circumstances, or interpretations thereof exceed two hundred thirty-five thousand one hundred nineteen dollars and no/100 (\$235,119.00).

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 December 31, 2025. Consultant shall complete the tasks described in the Scope of Services, within this time or within such additional time as may be extended by the County.

Section 6. Modifications and Waivers

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

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

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

Section 7. Termination

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

7.2 Termination for Default

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

7.2.1.1 If Consultant 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 Consultant 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 Consultant 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 Consultant 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. Consultant'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 Consultant.

Section 8. Ownership and Reuse of Documents

All documents, data, reports, research, graphic presentation materials, etc., developed by Consultant 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. Consultant shall promptly furnish all such data and material to County on request.

Section 9. Inspection of Books and Records

Consultant will permit County, or any duly authorized agent of County, to inspect and examine the books and records of Consultant 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, Consultant 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. Consultant shall provide certified copies of insurance endorsements and/or policies if requested by County. Consultant 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. Consultant 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.

10.1.2 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.

10.1.3 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.

10.1.4 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.

10.1.5 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 Consultant 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, Consultant 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

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

Section 12. Confidential and Proprietary Information

12.1 Consultant 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 Consultant 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 Consultant 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 Consultant) publicly known or is contained in a publicly available document; (b) is rightfully in Consultant'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 Consultant who can be shown to have had no access to the Confidential Information.

12.2 Consultant agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Consultant 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. Consultant 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, Consultant shall advise County immediately in the event Consultant 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 Consultant will at its expense cooperate with County in seeking injunctive or other equitable relief in the name of County or Consultant against any such person. Consultant agrees that, except as directed by County, Consultant 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, Consultant will promptly turn over to County all documents, papers, and other matter in Consultant's possession which embody Confidential Information.

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

12.5 Consultant 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 Consultant

13.1 In the performance of work or services hereunder, Consultant 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 Consultant 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, 1st Floor
Richmond, Texas 77469

Consultant: KCI Technologies, Inc.
15021 Katy Freeway, Suite 200
Houston, Texas 77094

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

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

Section 16. Standard of Care

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

Section 17. Assignment

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

17.2 Neither party may delegate any performance under this Agreement.

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

Section 18. Applicable Law

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

Section 19. Successors and Assigns

County and Consultant 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 Consultant release any material or information developed or received in the performance of the Services hereunder without the express written permission of County, except where required to do so by law.

Section 23. Captions

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

Section 24. Conflict

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

Section 25. Certain State Law Requirements for Contracts

For purposes of sections 2252.152, 2271.002, and 2274.002, Texas Government Code, as amended, Consultant hereby verifies that Consultant and any parent company, wholly owned subsidiary, majority-owned subsidiary, and affiliate:

25.1 Unless affirmatively declared by the United States government to be excluded from its federal sanctions regime relating to Sudan or Iran or any federal sanctions regime relating to a foreign terrorist organization, is not identified on a list prepared and maintained by the Texas Comptroller of Public Accounts under Section 806.051, 807.051, or 2252.153 of the Texas Government Code.

25.2 If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, Consultant does not boycott Israel and is authorized to agree in such contracts not to boycott Israel during the term of such contracts. "Boycott Israel" has the meaning provided in section 808.001 of the Texas Government Code.

25.3 If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, Consultant does not boycott energy companies and is authorized to agree in such contracts not to boycott energy companies during the term of such contracts. "Boycott energy company" has the meaning provided in section 809.001 of the Texas Government Code.

25.4 If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, Consultant does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and is authorized to agree in such contracts not to discriminate against a firearm entity or firearm trade association during the term of such contracts. "Discriminate against a firearm entity or firearm trade association" has the meaning provided in section 2274.001(3) of the Texas Government Code. "Firearm entity" and "firearm trade association" have the meanings provided in section 2274.001(6) and (7) of the Texas Government Code.

Section 26. Human Trafficking

BY ACCEPTANCE OF AGREEMENT, CONSULTANT ACKNOWLEDGES THAT THE COUNTY IS OPPOSED TO HUMAN TRAFFICKING AND THAT NO COUNTY FUNDS WILL BE USED IN SUPPORT OF SERVICES OR ACTIVITIES THAT VIOLATE HUMAN TRAFFICKING LAWS.

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

FORT BEND COUNTY

KCI TECHNOLOGIES, INC

KP George, County Judge

DocuSigned by:
Erick Fry
9CD3EDB016EA46B...

Authorized Agent – Signature

Date

Erick Fry

Authorized Agent – Printed Name

ATTEST:

Vice President

Title

Laura Richard, County Clerk

11/2/2021

Date

APPROVED:

J. Stacy Slawinski, P.E., County Engineer

AUDITOR'S CERTIFICATE

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

Robert Ed Sturdivant, County Auditor

EXHIBIT A



ISO 9001:2015 CERTIFIED

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

15021 Katy Freeway, Suite 200 • Houston, Texas 77094 • Phone 832-975-1565

August 26, 2021

Mr. Stacy Slawinski, P.E.
County Engineer
301 Jackson St, 1st floor
Richmond, Texas 77469

Re: **20401 – West Belfort Ave. at SH 6**
West Belfort Ave. improvement at SH 6

Dear Mr. Slawinski:

KCI Technologies, Inc. is pleased to present this proposal for the supplemental engineering services for the above referenced project.

1.0 PROJECT INFORMATION

We understand the project involves the proposed intersection improvements for West Belfort Avenue at State Highway 6.

The work to be performed by the Engineer under this contract consists of providing preliminary and final design services for the project, coordination with County and County designated Program Manager, and preparation of construction documents containing plans, specifications and details pertaining to paving, grading, drainage, storm sewers, storm water pollution prevention, traffic signal, pavement markings, sequence of construction and traffic control plans, construction cost estimate and time of construction estimate. Supplementary topographic survey and ROW documents, Drainage analysis and design, and Geotechnical engineering services will be provided by Engineer's sub-consultants.

2.0 SCOPE OF SERVICES

See Attachment A for Scope of Services.

3.0 COMPENSATION

For the scope of services outlined in this letter, we submit a cost not to exceed \$235,119.00. Attachments provide a scope of services, a breakdown of man-hours and budget requirements for individual tasks associated with the project, schedule, and scope and fee proposals for the sub-consultants.

We appreciate the opportunity to submit this proposal for your consideration.

Sincerely,



Wade Zhao, P.E.

8/26/2021

Date

Approved
FORT BEND COUNTY

Date

EXHIBIT A – SCOPE OF SERVICES

WEST BELFORT AVE AT SH6

PROJECT 20401

FORT BEND COUNTY, PRECINCT 4

Project Overview

The work to be performed by the Engineer under this contract consists of providing preliminary design and final design services for the project, coordination with County and/or County designated Program Manager, and preparation of construction documents containing plans, specifications and details pertaining to paving, grading, drainage, traffic signal, pavement marking and signing, storm water pollution prevention, sequence of construction and traffic control plans, construction cost estimate and time of construction estimate. Supplementary topographic survey and ROW documents, and Geotechnical engineering services will be provided by Engineer's sub-consultants.

The West Belfort Avenue at SH6 project area is located in Precinct 4 of Fort Bend County. West Belfort Avenue is a four-lane boulevard section thoroughfare running east west direction. State Highway 6 in the area is a six-lane divided roadway facility. The proposed improvements include adding exclusive right turn lanes, modifying medians, repaving the intersection, modifying traffic signal system, and modifying existing storm sewers.

The Engineer, KCI Technologies Inc (KCI), has formed a project design team (KCI Team) which consists of KCI and two subconsultants (MBCO for topographic survey and ROW mapping, and Geotest Engineering, Inc. for geotechnical services) to perform the subject engineering services. Besides providing contracted engineering services, KCI is responsible for general management of the project and coordinating the work of subconsultants. KCI will review subconsultants' work and be satisfied with its quality before submitting it to Fort Bend County and/or Program Manager (LJA) for review. KCI will also ensure that the subconsultants adhere to the schedule. This contract shall cover the Preliminary Design, Design, Bid Phase, and Construction Phases of this project as described below:

A. Preliminary Design Phase

The Preliminary Design Phase shall include the preparation and approval of reports necessary to support the recommendations and design of the roadway, drainage system, and all appurtenances included, but not limited to,

Topographic survey, Right-of-Way (ROW) mapping, Geotechnical Investigations, and Drainage Studies.

As a result of the study, a Preliminary Engineering Report will be generated. The Report shall serve as a summary document that incorporates necessary recommendations from the supporting investigative reports, results from the working meetings with Fort Bend County, as well as approvals and final recommendations from the project team's efforts. The document will serve as the outline and framework for the design phase, addressing the major design issues and concerns that affect the roadway drainage design and supporting infrastructure.

1. Topographic Survey and ROW Mapping (Sub)

See attachment scope for Topographic Survey and ROW Mapping from sub-consultant (MBCO)

2. Geotechnical Services (Sub)

See attachment scope for Geotechnical Services from sub-consultant (Geotest Engineering, Inc.)

3. Preliminary Design Phase Deliverables:

The Study Phase Deliverables are to include the following:

- 1) Exhibits, including intersection layouts, lane configurations, traffic signal layout, and sight triangles
- 2) Survey Control Map
- 3) Existing Right-of-Way (ROW) and Topographic Survey (Topo) Map
- 4) Drainage exhibits
- 5) Geotechnical Report
- 6) Utility Conflict Table
- 7) Preliminary Cost Estimate
- 8) Preliminary Engineering Report (PER, draft and final)
- 9) PER Presentation

4. Preliminary Design Phase Project Management

KCI will provide general project management services throughout the Preliminary Design Phase, including:

- 1) Monthly progress reports and billings oversight
- 2) Progress meetings
- 3) Special tasks or information requests from the FBC/Program Manager or other FBC senior staff.
- 4) Sub-Consultant Management/Coordination.
- 5) Review and comment on third party development applications as they relate to the project.

5. Preliminary Engineering Report Presentation

Depending on Fort Bend County Engineering Department staff input with review of presentation exhibits, the presentation items will be refined as needed for the sub-sequent PER Presentation.

6. Preliminary Engineering Report

After the PER Presentation, a final Preliminary Engineering Report will be prepared to include exhibits, supporting reports, and final recommendations. Any remaining issues identified by the project team or Fort Bend County during the final preparation of the final study report, will require a decision from Fort Bend County prior to final Preliminary Engineering Report submittal.

B. Design Phase

The Design Phase will use the alignment and layout conceptual design developed during the Preliminary Design Phase and will further develop the geometric plan and profile designs and other final design details to bring the design drawings to a bid ready level of detail.

1. Roadway Design

- 1) Prepare existing typical section of West Belfort Ave.
- 2) Prepare proposed typical sections of West Belfort Ave that show lane configuration and pavement structure.
- 3) Prepare project site map and horizontal alignment data sheets for West Belfort Ave, including benchmarks (1" = 100' printed half-size).

- 4) Prepare roadway plan and profile sheets (1" = 40' printed half-size).
- 5) Prepare intersection layout and grading sheets to include top of pavement elevations of the intersection (1" = 20' printed half-size).
- 6) Identify and modify as necessary standard roadway detail sheets for conformance with Fort Bend County Engineering Department standard details.
- 7) Show existing ROW with bearings and distances on plan and profile sheets for reference to ensure all proposed improvements are fully located within ROW.

2. Drainage Design

- 1) Prepare detailed drainage area maps necessary.
- 2) Prepare detailed hydraulic calculations necessary to perform the design of the storm sewer system.
- 3) Design storm sewer/ditch systems for 2-year storm.
- 4) Include storm sewer plan and profile data on roadway plan and profile sheets, which will include plan and profile information for storm sewers, manholes, inlets and existing utilities.
- 5) Identify and modify as necessary standard drainage details sheets.

3. Signing and Pavement Markings

- 1) Prepare proposed layouts showing signs and pavement markings (1" = 100' – double bank printed half-size). Design of permanent signing and markings will be in accordance with Fort Bend County standards and the latest version of *Texas Manual of Uniform Traffic Control Devices for Streets and Highways(TMUTCD)*.
- 2) Prepare summary of small signs. Summary will include sign number, text, size, post, anchor and mounting information.
- 3) Identify and modify as necessary standard and modified pavement marking detail sheets.

4. Signalization

- 1) Prepare existing condition sheets to reflect pre-improvement intersection condition.
- 2) Evaluate current intersection design. Modify intersection layout, add/modify pedestrian sidewalk and ramps if needed.
- 3) Modify existing traffic signal system at the intersection. Assume the signal system includes four poles, span-wire, and VIVDS vehicle detections, and pedestrian signals and push buttons. Design elements should be in accordance with latest City, County, and TxDOT policies and standards.
- 4) Prepare quantities and construction cost estimate.
- 5) Assist in obtaining TxDOT ROW permit for the intersection.

5. Traffic Control

- 1) Prepare advanced warning sign layout (1" = 400').
- 2) Prepare sequence of construction with general traffic control plan layout.
- 3) Prepare construction sequencing and traffic control plan layouts for each phase/step (1" = 100').
- 4) Identify and modify as necessary standard construction and barricade detail sheets.

6. Storm Water Pollution Prevention Plans (SW3P)

- 1) Develop SW3P Narrative.
- 2) Prepare SW3P plans (1" =100' double bank) showing temporary control measures during each phase of construction. SW3P controls may include but are not limited to:
 - Temporary Sediment Fence
 - Rock Berms
 - Construction Entrance/Exit
 - Inlet Protection Barriers
- 3) Prepare NOI and SWMP forms/sheets, if required.

7. Miscellaneous Roadway

- 1) Prepare Title Sheet for project per FBC standard details.
- 2) Prepare Index Sheet. Index Sheet will include a listing of the required standards.
- 3) Prepare General Notes sheet and include notes applicable for grading, paving, drainage, and utilities.
- 4) Earthwork Cross-Sections (1" = 40' H, 1" = 4' V) showing existing and proposed roadway sections will be prepared every 100' for the proposed roadway. The cross-sections will be generated from vertical topographic information
- 5) Compute and tabulate construction quantities and prepare estimate. Estimates will be prepared and submitted with each review submittal.
- 6) Provide for the preparation of a geotechnical analysis report of the proposed roadway and bridges.

8. TxDOT Permits

- 1) Obtain forms of appropriate permit applications.
- 2) Prepare necessary exhibits and documents of intersection improvements.
- 3) Coordinate with TxDOT permit office in obtaining ROW permit, Utility permit (if required), and Signal construction permit.

9. Utility Coordination

- 1) Represent existing utilities in plan and profile.
- 2) Update utility contact and conflict table.
- 3) Signature block: Attend utility coordination meetings and route completed plans for final signatures if required.

10. Design Phase Meetings

- 1) Traffic Control Meeting
- 2) 70% submittal review
- 3) 95% submittal review
- 4) 100% submittal review

11. Deliverables (70%, 95%, and final 100% submittals)

- 1) 70% submittals containing a digital copy (Adobe Acrobat format, PDF) of the drawings, specifications, and estimate. Specifically the submittal contains
 - a) Cover Sheet with a 70 percent interim seal
 - b) Sheet Index
 - c) Typical and Non-standard Cross Sections
 - d) Project Layout Sheet
 - e) Survey Control
 - f) Horizontal Alignment Data
 - g) Drainage Area Map with Hydraulic Calculations
 - h) Traffic Control Plan
 - i) Storm Water Pollution Prevention Plan
 - j) Traffic Signal and Details
 - k) Cross Sections
 - l) Specification Table of Contents (Use Harris County Specifications.
 - m) TxDOT Specifications and others to be used as necessary depending on jurisdiction).
 - n) Construction Cost Estimate (PDF and Excel format)
 - o) Bid Form (PDF and Excel format). Ensure that bid items and units match those shown in the applicable specification.
 - p) 70% Review Checklist.
 - q) KMZ file if required.
- 2) 95% submittals containing a digital copy (PDF) of the drawings, specifications, and estimate. The 95% submittal will include a 95% interim seal, and all of the 70% requirements plus the following:
 - a) General notes sheet
 - b) Verify earthwork quantities with cross sections at 100-foot intervals.
 - c) Signage and pavement marking plans
 - d) Standard construction details.

- e) Project manual (bid form, specification table of contents, any special specifications or conditions; contract documents excluded)
 - f) Responses to 70% comments
 - g) 95% Review Checklist.
 - h) KMZ file if required
- 3) 100% submittals containing a digital copy in Adobe Acrobat format (PDF) of the drawings (sealed and signed). The 100% submittal should be considered ready for project advertisement and should include the following:
- a) Project manual
 - b) Construction cost estimate
 - c) Responses to 95% comments
 - d) Recommended maximum number of calendar days for construction
 - e) 100% Review Checklist
 - f) KMZ files if required

12. Project Management

KCI will provide General Project Management Services throughout the Design Phase, including:

- 1) Monthly progress reports and invoicing
- 2) Progress meetings
- 3) Obtain all necessary agency approvals

13. QA/QC

KCI will provide quality assurance and quality control throughout the process and will include:

- 1) Routine checking of PS&E documents by the Project Manager
- 2) Close collaboration between the task leader and Project Manager to ensure all County procedures for the project are met
- 3) Regular internal review of project status
- 4) Maintain documentation of the QA/QC process

C. Bid Phase

- 1) Prepare construction bid package to include Notice to Bidders, Instruction and Information to Bidders, Bid Proposal Form, Standard Form of Agreement, Bond Forms, General Conditions, Special Conditions if any, Technical Specifications and Construction Plans, in accordance with County standards.
- 2) Provide 27 compact discs, each with one project manual file and one drawing file.
- 3) Attend and coordinate pre-bid meeting.
- 4) Answer Contractor questions and prepare any required addenda.
- 5) Attend bid opening, tabulate, analyze and review bids for completeness and accuracy.
- 6) Provide review on Contractors references.
- 7) Provide bid tabulation and recommendation of award letter.

D. Construction Phase

- 1) Attend a pre-construction meeting with Fort Bend County staff, Program Manager, Construction Manager, general contractor, and construction materials testing contractor. Provide drawing plan sets and project manuals at the meeting (Program Manager to provide number of sets).
- 2) Review contractor submittals and responding to Requests for Information.
- 3) Make periodic visits to the site to observe the progress and quality of the work if required.
- 4) Participate in a substantial completion walkthrough.
- 5) Prepare record drawings based on contractor as-built markups after project completion. Deliver to Fort Bend County one set of the record drawings in pdf format on a CD/DVD with each sheet stamped "Record Drawings." The CD/DVD shall also include electronic files (AutoCAD or Microstation) as well as a KMZ file showing the existing/proposed right-of-way and proposed improvements.

E. Ownership and Reuse of Documents

In the event County, County's other contractors or subcontractors, or anyone for whom County is legally liable makes or permits to be made any changes or modifications to the documents, data, reports, research, graphic presentation materials, etc., including electronic files, without obtaining KCI's prior written consent, County assumes full responsibility for such changes or modifications, including any consequences thereof. County agrees to waive any and all claims against KCI and to release KCI from any liability arising directly or indirectly from unauthorized changes or modifications.

EXHIBIT B
PROJECT SCHEDULE

| ID | Task Mode | Task Name | Duration | Start | Finish | September | October | November | December | January | February | March | April | May | June | July | August |
|----|-----------|--|-----------------|---------------------|---------------------|-----------|---------|----------|----------|---------|----------|-------|-------|-----|------|------|--------|
| 1 | | Preliminary Design Phase | 78 days | Mon 9/20/21 | Wed 1/5/22 | | | | | | | | | | | | |
| 2 | | NTP | 1 day | Mon 9/20/21 | Mon 9/20/21 | | | | | | | | | | | | |
| 3 | | Kick-Off Meeting | 1 day | Tue 9/21/21 | Tue 9/21/21 | | | | | | | | | | | | |
| 4 | | Surveying | 35 days | Wed 9/22/21 | Tue 11/9/21 | | | | | | | | | | | | |
| 5 | | Submit Existing ROW and Topo | 35 days | Wed 9/22/21 | Tue 11/9/21 | | | | | | | | | | | | |
| 6 | | Geotechnical Services | 30 days | Wed 9/22/21 | Tue 11/2/21 | | | | | | | | | | | | |
| 7 | | Submit Final Geotechnical Report | 30 days | Wed 9/22/21 | Tue 11/2/21 | | | | | | | | | | | | |
| 8 | | Drainage Services | 50 days | Wed 9/22/21 | Tue 11/30/21 | | | | | | | | | | | | |
| 9 | | Data Collection & Analysis of Existing Conditi | 10 days | Wed 9/22/21 | Tue 10/5/21 | | | | | | | | | | | | |
| 10 | | Analysis of Peak Discharge Flows | 10 days | Wed 10/6/21 | Tue 10/19/21 | | | | | | | | | | | | |
| 11 | | Alternatives Investigation | 15 days | Wed 10/20/21 | Tue 11/9/21 | | | | | | | | | | | | |
| 12 | | Drainage Impact Study Exhibits | 15 days | Wed 11/10/21 | Tue 11/30/21 | | | | | | | | | | | | |
| 13 | | Working Documents | 15 days | Wed 11/10/21 | Tue 11/30/21 | | | | | | | | | | | | |
| 14 | | Intersection Exhibits | 15 days | Wed 11/10/21 | Tue 11/30/21 | | | | | | | | | | | | |
| 15 | | Sight Triangles | 5 days | Wed 11/10/21 | Tue 11/16/21 | | | | | | | | | | | | |
| 16 | | Culvert Exhibits | 10 days | Wed 11/10/21 | Tue 11/23/21 | | | | | | | | | | | | |
| 17 | | Preliminary Engineering Report | 76 days | Wed 9/22/21 | Wed 1/5/22 | | | | | | | | | | | | |
| 18 | | PER Draft | 50 days | Wed 9/22/21 | Tue 11/30/21 | | | | | | | | | | | | |
| 19 | | PER Final | 10 days | Wed 12/1/21 | Tue 12/14/21 | | | | | | | | | | | | |
| 20 | | PER Presentation | 1 day | Wed 12/15/21 | Wed 12/15/21 | | | | | | | | | | | | |
| 21 | | County Review | 15 days | Thu 12/16/21 | Wed 1/5/22 | | | | | | | | | | | | |
| 22 | | Parcel Mapping | 23 days | Thu 12/16/21 | Mon 1/17/22 | | | | | | | | | | | | |
| 23 | | Design Phase | 130 days | Thu 1/6/22 | Wed 7/6/22 | | | | | | | | | | | | |
| 24 | | Project Kick-Off Meeting | 1 day | Thu 1/6/22 | Thu 1/6/22 | | | | | | | | | | | | |
| 25 | | Utility Coordination | 120 days | Thu 1/6/22 | Wed 6/22/22 | | | | | | | | | | | | |
| 26 | | 70% Submittal | 65 days | Thu 1/6/22 | Wed 4/6/22 | | | | | | | | | | | | |
| 27 | | 70% Review | 15 days | Thu 4/7/22 | Wed 4/27/22 | | | | | | | | | | | | |
| 28 | | 95% Submittal | 20 days | Thu 4/28/22 | Wed 5/25/22 | | | | | | | | | | | | |
| 29 | | 95% Review | 15 days | Thu 5/26/22 | Wed 6/15/22 | | | | | | | | | | | | |
| 30 | | Final PS&E Package | 15 days | Thu 6/16/22 | Wed 7/6/22 | | | | | | | | | | | | |

Project: Needville Fairchild's Inte
Date: Wed 8/25/21

| | | | | |
|-----------|--------------------|-----------------------|--------------------|-----------------|
| Task | Project Summary | Manual Task | Start-only | Deadline |
| Split | Inactive Task | Duration-only | Finish-only | Progress |
| Milestone | Inactive Milestone | Manual Summary Rollup | External Tasks | Manual Progress |
| Summary | Inactive Summary | Manual Summary | External Milestone | |

"EXHIBIT C" - Compensation for Professional Services**Fort Bend County Engineering Department****West Belfort Ave. at SH 6**

Precinct 4, Project 20401

8/26/2021

Basic Services

| | | |
|---------------------------|----|-----------|
| Pre-Design Phase | \$ | 47,994.00 |
| Design Phase | \$ | 97,899.00 |
| Bid Phase | \$ | 6,930.00 |
| Construction Phase | \$ | 30,342.00 |

Subtotal Basic Services \$ 183,165.00**Supplemental Services and Direct Expenses**

| | | |
|---|----|-----------|
| Topographic Surveying & ROW Mapping (Sub MBCO) | \$ | 36,870.00 |
| Geotechnical Investigations (Sub Geotest) | \$ | 11,584.00 |
| Direct Expense and Reproduction | \$ | 3,500.00 |

Subtotal Supplemental Services and Direct Expenses \$ 51,954.00**TOTAL SERVICES \$ 235,119.00**

Level of Efforts

Client: Fort Bend County, Precinct 4
Project: 20401 - West Belfort Ave. at SH 6
Description: RTL east and west approaches. LTL extensions
Date: 5/8/2021

| Manhour Estimate | | | | | | | | | |
|---|-----------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|---------------------|
| Task | Principal | Sr. Project Manager | Senior Engineer | Project Engineer | Engineer | Graduate Engineer | CADD Technician | Clerical | Total Hours |
| Billing Rate (\$/hr) | \$330.00 | \$270.00 | \$243.00 | \$210.00 | \$189.00 | \$114.00 | \$99.00 | \$93.00 | |
| Preliminary Design Phase | | | | | | | | | |
| Project Management (Coordination, invoicing, etc) | 1 | 6 | | 6 | | | | 6 | 19 |
| Data Collection/Field Visit | | 2 | 6 | 8 | | 4 | | | 20 |
| Sub Coordination | | 4 | | | 6 | | | | 10 |
| Roadway Alignment (Horizontal & Vertical) | | | 1 | 2 | | 4 | 4 | | 11 |
| Typical Sections | | | 2 | 2 | | 4 | 4 | | 12 |
| Supporting Exhibits (intersections, survey) | | | 4 | 4 | | 8 | 20 | | 36 |
| Utility Exhibit & Table | | | 2 | | 4 | | 8 | | 14 |
| Traffic Control Plan Concept | | 2 | 2 | 6 | | 8 | 8 | | 26 |
| Sight Triangles | | | | | 6 | | 16 | | 22 |
| ROW Acquisition Table | | | 2 | | 4 | | 16 | | 22 |
| Quantities & Cost Estimate | | 1 | 1 | | 10 | 20 | | | 32 |
| Preliminary Engineering Report (draft & final) | | 4 | 8 | | 36 | | | 6 | 54 |
| PER Presentation | | 6 | 6 | | | | | 2 | 14 |
| Total Hours= | 1 | 25 | 34 | 28 | 66 | 48 | 76 | 14 | 292 |
| Total Cost= | \$330.00 | \$6,750.00 | \$8,262.00 | \$5,880.00 | \$12,474.00 | \$5,472.00 | \$7,524.00 | \$1,302.00 | \$47,994.00 |
| Design Phase | | | | | | | | | |
| Project Management (meetings, invoices, etc.) | 2 | 6 | | 12 | | | | 12 | 32 |
| Project Layout and Alignment (1 sheet) | | 1 | | | 2 | | 8 | | 11 |
| Typical Sections(2 sheet) | | | 2 | | 4 | | 4 | | 10 |
| Plan & Profiles (4 sheets) | | 6 | 6 | | 28 | 50 | | | 90 |
| Intersection Layout (1 Sheet) | | | 4 | | | 8 | 16 | | 28 |
| Construction Sequencing/TCP(6 sheets) | | 1 | 8 | 12 | | 50 | | | 71 |
| Drainage Area Maps (2 sheets) | | | 2 | 4 | | | 10 | | 16 |
| Drainage Calcs (2 sheets) | | 2 | 2 | | | 16 | 8 | | 28 |
| Traffic Signal (5 sheets) | | 1 | 8 | 16 | 8 | 16 | 32 | | 81 |
| Pavement Markings and Signs (2 sheets) | | | 2 | 8 | | 16 | 16 | | 42 |
| SWPPP (2 sheets) | | | 2 | 4 | | 10 | 16 | | 32 |
| TxDOT Permits | | 2 | | 5 | | 16 | | | 23 |
| Cross-Sections & Earthwork | | | 5 | 5 | | | 10 | | 20 |
| Quantities & Construction Cost Estimate | | | | 10 | 10 | | | | 20 |
| Standards & Details | | | 6 | 6 | | 16 | | | 28 |
| QC/QA | | 6 | | 12 | | | | | 18 |
| Address Review Comments | | | 2 | 4 | | 8 | 16 | | 30 |
| 70% Plan Revision | | | 5 | 10 | | 5 | 20 | | 40 |
| 95% Plan Revision | | | 5 | 5 | | | 20 | | 30 |
| Total Hours= | 2 | 25 | 59 | 113 | 52 | 211 | 176 | 12 | 650 |
| Total Cost= | \$660.00 | \$6,750.00 | \$14,337.00 | \$23,730.00 | \$9,828.00 | \$24,054.00 | \$17,424.00 | \$1,116.00 | \$97,899.00 |
| Bidding Phase | | | | | | | | | |
| Bid Package Preparation | | 4 | 2 | | 8 | | | | 14 |
| Pre-Bid meeting | | 4 | | | | | | | 4 |
| Tabulate Bids | | | | 4 | 8 | | | | 12 |
| Recommendation Letter | | | | 2 | | | | | 2 |
| Total Hours= | | 8 | 2 | 6 | 16 | | | | 32 |
| Total Cost= | | \$2,160.00 | \$486.00 | \$1,260.00 | \$3,024.00 | | | | \$6,930.00 |
| Construction Phase | | | | | | | | | |
| Pre-Construction Meeting | | | 4 | 4 | | | | | 8 |
| Submittals, RFIs, and Shop drawings | | 8 | 16 | 32 | | | 20 | | 76 |
| Field visit and progress reports | | 1 | 16 | 16 | | | 4 | 6 | 43 |
| Final Walk-through | | 1 | 6 | | | | | | 7 |
| Record/As-Built drawings | | 1 | | 12 | | | 8 | | 21 |
| Total Hours= | | 11 | 42 | 64 | | | 32 | 6 | 155 |
| Total Cost= | | \$2,970.00 | \$10,206.00 | \$13,440.00 | | | \$3,168.00 | \$558.00 | \$30,342.00 |
| Grand Total Hours | | | | | | | | | 1129 |
| Grand Total Cost | | | | | | | | | \$183,165.00 |



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PROPOSAL FOR LAND SURVEYING SERVICES

August 25, 2021

Wade Zhao, Ph.D., P.E.
Senior Project Manager
KCI Technologies Inc., 15021 Katy Freeway, Suite 200
Houston, Texas 77094

Re: Fort Bend County
West Bellfort Avenue at S.H. 6 Topographic Survey and Right-of-Way (ROW) acquisition

Dear Dr. Zhao,

MBCO Engineering, LLC (MBCO) is pleased to submit this scope and fee proposal for professional surveying services. The proposal will consist of topographic and right-of-way services based on information provided in your email dated April 30, 2021, and as shown in Exhibit "A" of this proposal.

CONTROL SURVEY: \$1,885.00

- MBCO will perform survey services in accordance with Fort Bend County Engineering Design Manual (EDM) and Right-of-Way Taking Area Digital Submittals Guide, and the Texas Society of Professional Surveyors (TSPS) Standards and Manual of Practice.
- MBCO will establish horizontal control based on the Texas Coordinate System of 1983, South Central Zone No. 4204, and will utilize the Fort Bend County Monument System for vertical datum.

BOUNDARY SURVEY: \$10,700.00

- MBCO will perform a right-of-way and boundary survey along the length of West Bellfort Avenue to meet the conditions of a Category 1A, Condition II Land Title Survey for the purpose of preparation of right-of-way acquisition documents for the area highlighted in blue on Exhibit "A", being a portion of Fort Bend County Appraisal District Parcel No. **R331895**:
 - Recovering property corners to identify current and existing ROW.
 - Preparation of metes & bounds for proposed ROW taking.
 - Preparation of exhibit for proposed ROW taking.
 - MBCO will monument the proposed ROW takings.
 - Identify all Unobstructed Visibility Easements with ROW documents.
 - Property title abstracting.



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- MBCO will perform a right-of-way and boundary survey along the length of West Bellfort Avenue to meet the conditions of a Category 1A, Condition II Land Title Survey for the purpose of preparation of right-of-way acquisition documents for the area highlighted in green on Exhibit "A", being a portion of Fort Bend County Appraisal District Parcel No. **R274960**:
 - Recovering property corners to identify current and existing ROW.
 - Preparation of metes & bounds for proposed ROW taking.
 - Preparation of exhibit for proposed ROW taking.
 - MBCO will monument the proposed ROW takings.
 - Identify all Unobstructed Visibility Easements with ROW documents to facilitate simultaneous acquisition.
 - Property title abstracting.

TOPOGRAPHIC SURVEY: \$19,660.00

- MBCO will perform a topographic survey of the area shown in red on Exhibit "A" which meets the standards described in the TSPS Manual of Practice for Land Surveying in the State of Texas for a Category 1B, Condition II Standard Land Survey and a Category 6, Condition II Topographic Survey and as defined in section 6 of the Fort Bend County EDM, which includes, but is not limited to:
 - Providing elevation cross-sections at 100-foot intervals to include 20 feet beyond existing ROW, and (where applicable) 20 feet beyond proposed ROW.
 - Showing topographic detail along West Bellfort Avenue for an approximate distance of 1,545 feet, and along SH 6 for an approximate distance of 150 feet north and south of West Bellfort Avenue, as shown in red on Exhibit "A".
 - Providing location of all structures in clear view and within 100 feet of existing or proposed ROW.
 - Locating and identifying all visible underground structures such as inlets, manholes, and junction boxes with size, type, and depth.
 - Provide 811 locate requests.
 - Locating any and all 811 paint/flags marked in the field. MBCO will not be responsible for accuracy or completeness of said markings as provided.
 - Researching all available utility records from Fort Bend County, Municipal Utility Districts (MUDs), CenterPoint, and AT&T, showing available utility information on the survey for horizontal location only.
 - Providing design engineer with copies of utility record plans and drawings.
 - Trees of 8" caliper and greater within survey limits.



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- Separate trip to locate boreholes drilled by the geotechnical firm for up to 10 holes.
- Establish temporary benchmarks (TBM) per section 6 of Fort Bend County EDM
- Preparation of survey control maps.

CONSTRUCTION STAKING : \$ 4,625.00

- MBCO will provide construction staking services:
 - Per email from KCI Technologies, Inc. (KCI) dated April 30, 2021 and August 23, 2021, Monumenting existing ROW and design baseline at beginning, end, street intersections, angle points, beginning and ends of curves, and at even 1000-foot stations on a two-trip basis for the purposes of pre-construction and utility relocation on a two-trip basis.

ASSUMPTIONS:

- MBCO will not prepare right-of-entry (ROE) letters as the required survey areas are all fully accessible and open to the public.
- Fort Bend County Monuments are in-place and in observable condition.
- The design engineer shall coordinate with MBCO regarding the calculation/design of the baseline for monumentation.
- MBCO will not be providing curb and gutter layout per this proposal.

If any of the above said Assumptions are not provided and or adhered to, MBCO will initialize a change order to compensate for the additional time spent at a rate of \$175/hour for a Two-Man Survey Crew and \$125/hour for Survey Tech.

DELIVERABLES:

- Signed and sealed 22"x 34" .pdf of the topographic and boundary survey.
- 8.5" x 11" .pdf of parcel acquisition exhibits and accompanying Word document of the metes & bounds descriptions.
- AutoCad Civil 3D 2020 .dwg file of the boundary and topographic survey.
- MicroStation .dgn file converted from Civil 3D.
- .TIN (Triangular Irregular Network) surface file.
- Control Maps including index sheet and details of each primary control point within the project limits.
- Digital submittal files for ROW takings per Fort Bend County ROW Taking Area Digital Submittals to GIS



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- Point File (P,N,E,Z,D) in excel format.

SCHEDULE:

- MBCO will complete the above-described tasks within 45 calendar days from receiving the signed Notice to Proceed.
- MBCO anticipates starting work within seven (7) calendar days from receiving the signed Notice to Proceed.

COMPENSATION:

With the exception of the Construction Staking phase, the above-mentioned Surveying Services is a Lump Sum fee, which will be billed at project completion or percent completion at the end of every month for the duration of the project to be paid in full within 30 days of invoice date.

Construction Staking services will be billed on an hourly basis of \$175/hour for a two-man Survey Crew, \$195/hour for a three-man Survey Crew, and \$125/hour for a Survey Technician. This phase will be billed at completion of individual task requested.

Total for all Tasks : \$36,870.00

This cost proposal is valid for 30 days and may be re-evaluated after such time to account for any changes with the project scope, environmental factors, and/or the general rate schedule.

If this proposal is acceptable, please sign and return a copy. If you have any questions, you may reach me at Marion.Clark@mbcoengineering.com.

Thank you for the opportunity and we appreciate doing business with you.

Sincerely,

A handwritten signature in blue ink that reads 'Marion R. Clark'.

Marion Clark, RPLS
Vice President, Surveying



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Acceptance: If this proposal meets with your approval, please so indicate your acceptance by executing it in the space provided below and return two originals. Your written acceptance of this proposal will consummate the Agreement which can be terminated by either party upon receipt of written notice. Upon termination, all fees currently earned under the terms of this Agreement will be due and promptly paid.

BY:

DATE:

NAME:

TITLE:

ADDRESS:

MBCO ENGINEERING, LLC

BY:

DATE:

NAME:

Bonnie Moss, P.E.

TITLE:

President

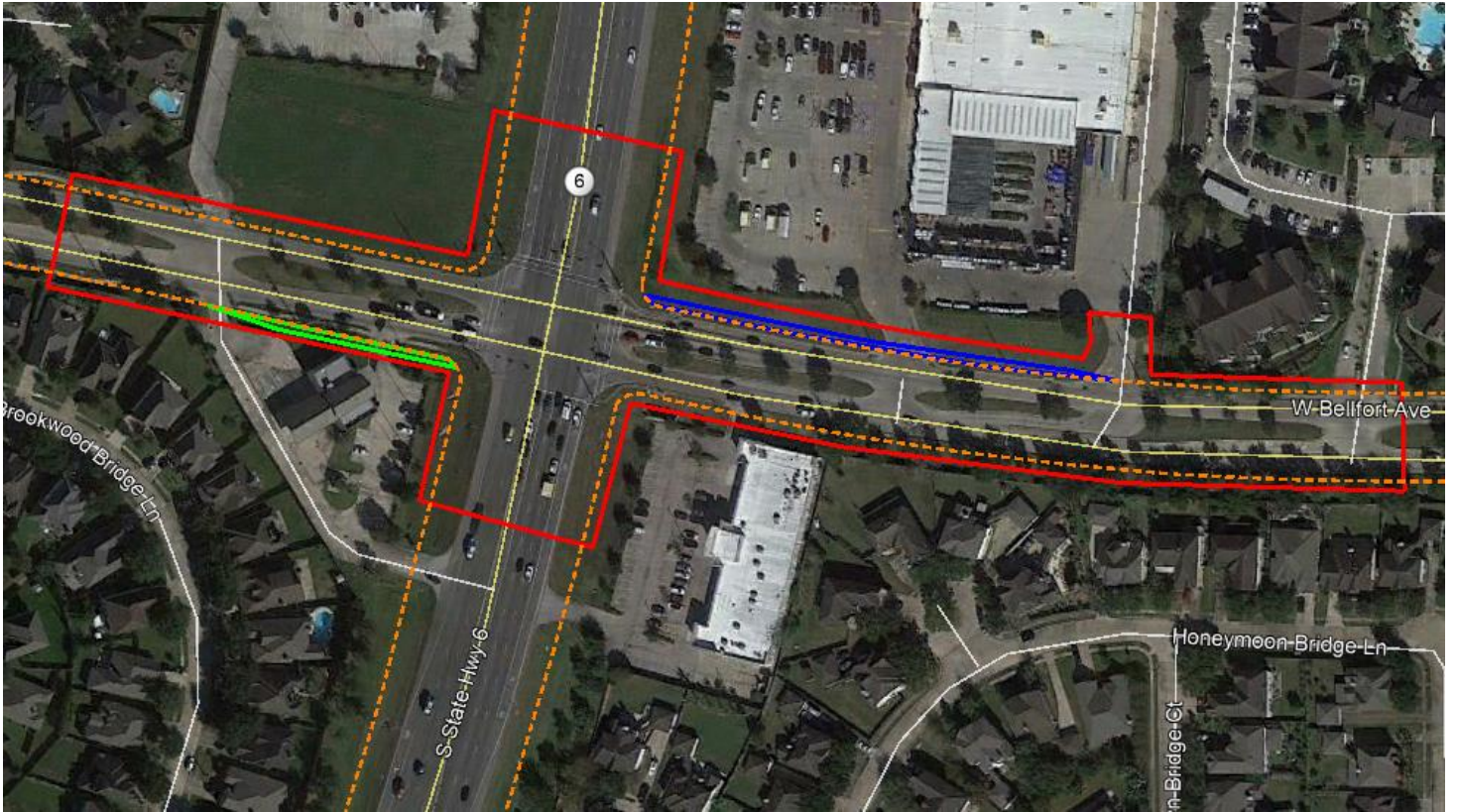
ADDRESS:



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Exhibit "A"

Topographic Survey Area in red
ROW Taking Areas in blue and green
Existing ROW shown as orange dashed line



MBCO ENGINEERING, LLC
Exhibit "B"

| TASK DESCRIPTION | SURVEY PROJECT MANAGER | RPLS | SURVEY TECHNICIAN | SURVEY TECHNICIAN - GPS, SIT | 2-MAN SURVEY CREW | 3-Man SURVEY CREW | ABTRACTOR SET FEE | ADMIN/ CLERICAL | TOTAL HRS. | TOTAL LABOR HRS. & COSTS |
|----------------------------------|------------------------|------|-------------------|------------------------------|-------------------|-------------------|-------------------|-----------------|------------|--------------------------|
| CONTROL | | | | | | | | | | |
| Primary Control Setting | | 1 | | | 1 | | | | | \$ 325.00 |
| Primary Control Traverse | | | | | | | | | | \$ - |
| Tie Fort Bend Monuments | | | | | 1 | | | | | \$ 175.00 |
| GPS Sessions Primary Control | 1 | | | | 3 | | | | | \$ 660.00 |
| Primary Control Elevation Loop | | | | | 1 | | | | | \$ 175.00 |
| Secondary Control Traverse | | | | | | | | | | \$ - |
| Secondary Control Level Loop | | | | | | | | | | \$ - |
| Control Data Processing | | | | 3 | | | | | | \$ 375.00 |
| Mobilization | | | | | 1 | | | | | \$ - |
| BOUNDARY | | | | | | | | | | |
| Boundary Location | | | | | 8 | | | | | \$ 1,400.00 |
| 1 B Condition II Boundary | | | | | | | | | | |
| Boundary Research | | 1 | | | 6 | | | | | \$ 900.00 |
| Boundary Drawing | | | | 8 | | | | | | \$ 1,000.00 |
| 1 A Condition II Boundary | | | | | | | | | | |
| Parcel 274960 | | | | | | | | | | \$ 3,000.00 |
| Parcel 331895 | | | | | | | | | | \$ 3,000.00 |
| Monumenting ROW takings | | | | | 8 | | | | | \$ 1,400.00 |
| | | | | | | | | | | \$ - |
| | | | | | | | | | | \$ - |
| Mobilization | | | | | | | | | | \$ - |
| | | | | | | | | | | \$ - |
| Field Topo | | | | | | | | | | |
| Belfort Ave. | 1 | | | | | | | | | \$ 135.00 |
| HWY 6 | | | | | 15 | | | | | \$ 2,625.00 |
| Utilities | | | | | 5 | | | | | \$ 875.00 |
| Utilities | | | | | 2 | | | | | \$ 350.00 |
| Inverts | | | | | 10 | | | | | \$ 1,750.00 |
| Tree location | | | | | 1 | | | | | \$ 175.00 |
| | | | | | | | | | | \$ - |
| | | | | | | | | | | \$ - |
| | | | | | | | | | | \$ - |
| Mobilization | | | | | 3 | | | | | \$ 525.00 |
| OFFICE | | | | | | | | | | |
| Crew Meeting and Line Out | | | | | 2 | | | | | \$ 250.00 |
| Survey Data Processing | | | | | 5 | | | | | \$ 625.00 |
| Utility Research | | | | | 3 | | | | | \$ 330.00 |
| Record Drawing Research | | | | | 8 | | | | | \$ 880.00 |
| Record Drawing Drawing | | | | | 8 | | | | | \$ 880.00 |
| Utility Coordination | | | | | 1 | | | | | \$ 110.00 |
| Client Coordination | 2 | | | | | | | | | \$ 270.00 |
| Survey Drawing | | | | 40 | | | | | | \$ 4,400.00 |
| Surface | | | | | | | | | | \$ 1,000.00 |
| Cad Support | | | | | 8 | | | | | \$ 250.00 |
| Sheet Setup | | | | 4 | | | | | | \$ 440.00 |



GEOTEST ENGINEERING, INC.

Geotechnical Engineers & Materials Testing

5600 Bintliff Drive

Houston, Texas 77036

Telephone: (713) 266-0588

Fax: (713) 266-2977

Proposal No. 1140530699

May 4, 2021

Mr. Wade Zhao, P.E.
KCI Technologies, Inc.
15021 Katy Freeway, Suite 200
TX 77094

**Re: Proposal for Geotechnical Investigation
West Bellfort Avenue at SH6
Fort Bend, Texas**

Dear Mr. Zhao:

As per your request on April 30, 2021 and our phone call conversation on May 3, 2021, Geotest Engineering, Inc. (Geotest) is pleased to submit this proposal for the above referenced project. The project consists of design and construction of approximately 1,800 LF of roadway improvements along West Bellfort Avenue in Fort Bend County, Texas.

Based on the provided information, the proposed roadway improvements including right turn lane and left turn lane extension at the intersection of SH6 along West Bellfort Avenue. The project also includes modify existing storm sewer, relocate existing light post and new sidewalk construction. Based on the information provided, the storm sewer will be placed at maximum depth of 10 feet.

Purpose and Scope

The purpose of this study is to explore the subsurface conditions and to develop geotechnical recommendations pertinent to the proposed West Bellfort Avenue intersection improvements.

The scope of services consists of the following tasks:

- Calling Texas 811 and coordinating with utility locators to get areas for the proposed borings cleared and mark the boring locations and coordinate with representatives of utility companies to clear the marked boring locations.
- drilling and sampling of three (3) soil borings each to a depth of 25 feet for the proposed roadway improvements, storm sewer modification, light post relocated and sidewalk construction. The proposed boring program is presented on Attachment No. 1 and also shown in Plan of Borings, Figure 1.
- performing laboratory tests on selected representative soil samples to determine engineering properties of the soils and to select design soil parameters;
- performing engineering analyses in accordance with Fort Bend County Guidelines and to develop geotechnical recommendations for the design and construction of the proposed roadway turn lane pavement including subgrade stabilization, storm sewer installation and light post foundation;

Mr. Wade Zhao, P.E.

Page 2

Proposal No. 1140530699

May 4, 2021

- preparing a geotechnical investigation report.

It is understood that the survey information of the completed borings will be provided by project surveyor.

Project Schedule

We should be able to start the field work within one (1) week after receiving your written authorization. The field work will be completed in about one (1) week, barring bad weather. The laboratory tests will be completed in about three (3) weeks. The geotechnical investigation report, which will include field and laboratory data and design recommendations, will be submitted in about six (6) weeks after completion of the field work.

Cost

Based on the scope of work outlined above, the cost of the field investigation, laboratory testing, engineering analyses, and a final report will be a lump sum of \$11,584.00. The cost breakdown provided in Attachment No. 2 is for additional information only.

We appreciate the opportunity to propose on this project. We hope this proposal meets your approval. Please sign one copy of this letter in the space below and return it to us along with your purchase order. If you have any questions, please contact us.

Very truly yours,
GEOTEST ENGINEERING, INC.

Xiaoyan C. Zhao
Assistant Project Manger

Mohan Ballagere, P.E.
Vice President

MB\xz\ego
Copies Submitted: (1-PDF)
Attachment No. 1 – Proposed Boring/Piezometer Program
Attachment No. 2 – Cost Breakdown
Figure 1 - Proposed Plan of Borings
Scans\Geotechnical\Proposals\2021\40530699.DOC

ACCEPTED BY: _____

PRINTED NAME: _____

TITLE: _____

DATE: _____

Geotechnical Investigation
West Bellfort Avenue at SH6 improvements
Fort Bend County, Texas

Geotest Engineering, Inc.
Proposal No. 1140530699

ATTACHMENT NO. 1
PROPOSED BORING PROGRAM

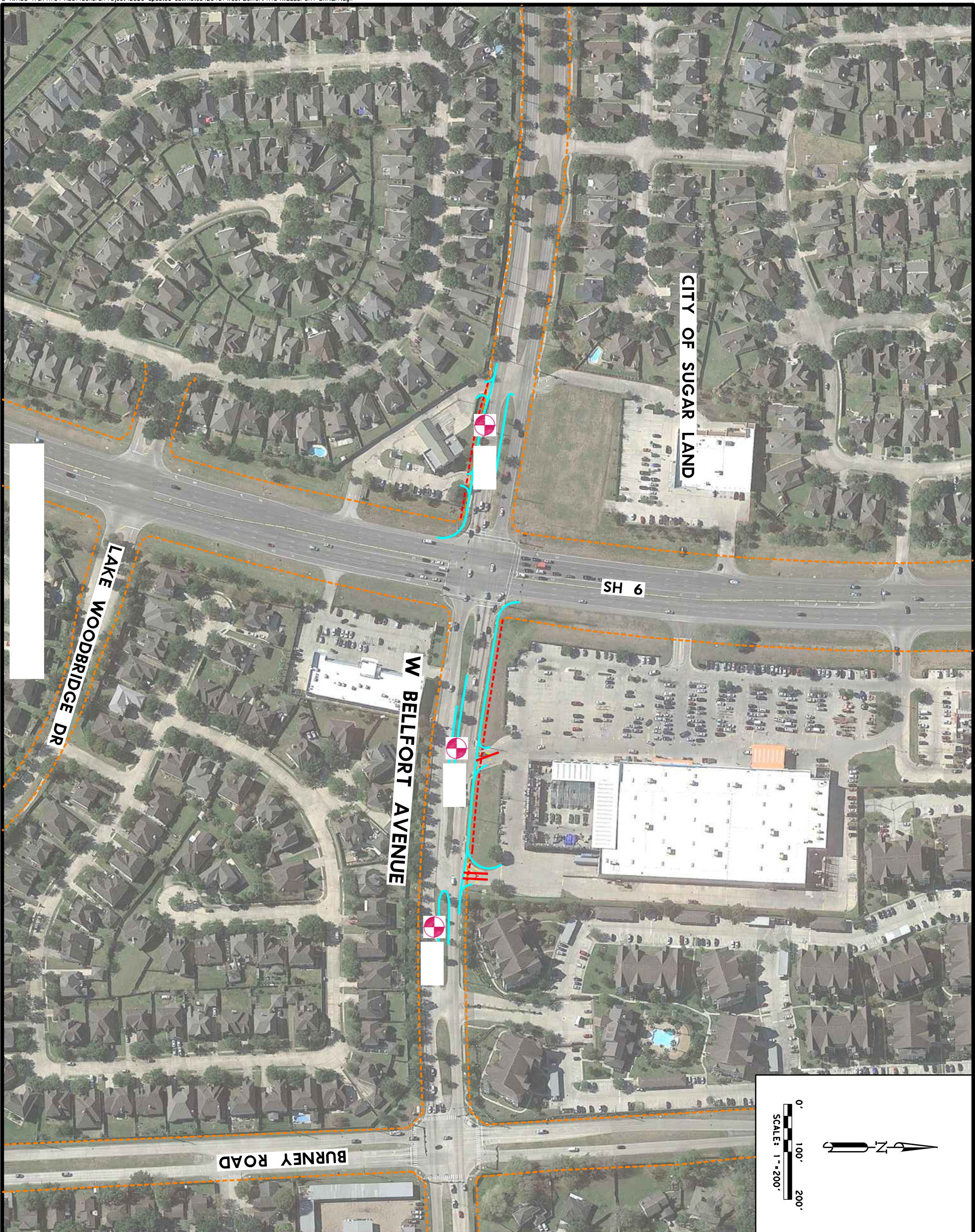
| Structure | Borings | | |
|---|------------------------------|-------------------------|---------------------------|
| | Quantity (number) | Depth (feet) | Footage (feet) |
| Right turn lanes and left turn lanes extention for eastbound and westbound approaches | 3 | 25 | 75 |
| Total | 3 | | 75 |

Geotechnical Investigation
West Belfort Avenue at SH6 improvements
Fort Bend County, TX

Geotest Engineering, Inc.
Proposal No. 1140530699

ATTACHMENT NO. 2
COST BREAKDOWN

| | Quantity | Unit | Unit Cost | Amount |
|--|-----------------|-------------|------------------|--------------------|
| <u>Field Investigation</u> | | | | |
| Mob and Demob of Truck Mounted Drilling Rig | 1 | LS | \$600.00 | \$600.00 |
| Drilling and Continous Sampling (0'-20') | 60.0 | ft. | \$25.00 | \$1,500.00 |
| Drilling and Intermittent Sampling (0'-50') | 15.0 | ft. | \$21.00 | \$315.00 |
| Grouting of Completed Bore Holes | 75.0 | ft. | \$12.00 | \$900.00 |
| Concrete Coring | 3.0 | each | \$105.00 | \$315.00 |
| Concrete Coring (Additional Thickness) | 12.0 | in. | \$9.00 | \$108.00 |
| Utility Clearance for Boring Locations, Marking borings and Field Coordination | 4.0 | hr. | \$65.00 | \$260.00 |
| Traffic Control | 1.0 | day | \$700.00 | \$700.00 |
| Vehicle Charge | 4.0 | hr. | \$10.00 | \$40.00 |
| | | | Subtotal | \$4,738.00 |
| <u>Laboratory Testing</u> | | | | |
| Liquid and Plastic Limits | 8 | ea. | \$71.00 | \$568.00 |
| Moisture Content Only | 22 | ea. | \$11.00 | \$242.00 |
| Mechanical Sieve Analysis, through No. 200 Sieve | 2 | ea. | \$65.00 | \$130.00 |
| Percent Passing No. 200 Sieve | 6 | ea. | \$55.00 | \$330.00 |
| Unconsolidated Undrained Triaxial Compression | 8 | ea. | \$72.00 | \$576.00 |
| | | | Subtotal | \$1,846.00 |
| <u>Engineering Services</u> | | | | |
| Sr. Project Manager | 2.00 | hr. | \$206.00 | \$412.00 |
| Sr. Engineer, P.E. | 4.00 | hr. | \$183.00 | \$732.00 |
| Project Engineer | 8.00 | hr. | \$149.00 | \$1,192.00 |
| Graduate Engineer | 24.00 | hr. | \$101.00 | \$2,424.00 |
| Support Personnel, Word Processing | 4.00 | hr. | \$60.00 | \$240.00 |
| | | | Subtotal | \$5,000.00 |
| | | | Total | \$11,584.00 |



0'
100'
200'
SCALE: 1" = 200'

PROJECT:

WEST BELLFORT RTL

PROJECT NO. 20401






FROM: W BELLFORT AVENUE AT SH 6

1,800 LF

DESCRIPTION:

RIGHT TURN LANES FOR EASTBOUND AND WESTBOUND APPROACHES. LTL EXTENSION FOR EASTBOUND AND WESTBOUND

LEGEND:

-  **PROPOSED ROADWAY**
-  **ROAD CENTERLINE**
-  **EXISTING ROW**
-  **PROPOSED ROW**
-  **Proposed Boring**

**FORT BEND COUNTY
2020 MOBILITY BOND PROGRAM**



FIGURE 1