

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 Isani Consultants, LP, (hereinafter "Contractor"), a company authorized to conduct business in the State of Texas.

WITNESSETH

WHEREAS, County desires that Contractor provide professional engineering services for the proposed improvements to Old Richmond Road under 2020 Mobility Bond Project No. 20409 (hereinafter "Services") pursuant to SOQ 14-025; and

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

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

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

AGREEMENT

Section 1. Scope of Services

Contractor shall render the professional engineering services as described in Contractor's proposal dated April 21, 2021, attached hereto as Exhibit A, and incorporated herein for all purposes.

Section 2. Personnel

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

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

Section 3. Compensation and Payment

3.1 Contractor's fees shall be calculated at the rates set forth in the attached Exhibit A. The Maximum Compensation for the performance of Services within the Scope of Services described in Exhibit A is one million two hundred ninety-three thousand seven hundred thirty-three dollars and no/100 (\$1,293,733.00) as set forth in Exhibit A. In no case shall the amount paid by County under this Agreement exceed the Maximum Compensation without a written agreement executed by the parties.

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

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

Section 4. Limit of Appropriation

4.1 Contractor clearly understands and agrees, such understanding and agreement being of the absolute essence of this Agreement, that County shall have available the total maximum sum of one million two hundred ninety-three thousand seven hundred thirty-three dollars and no/100 (\$1,293,733.00) 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 one million two hundred ninety-three thousand seven hundred thirty-three dollars and no/100 (\$1,293,733.00).

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

Section 6. Modifications and Waivers

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

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

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

Section 7. Termination

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

7.2 Termination for Default

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

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

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

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

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

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

Section 8. Ownership and Reuse of Documents

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

Section 9. Inspection of Books and Records

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

Section 10. Insurance

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

10.1.1 Workers' Compensation insurance. Substitutes to genuine Workers' Compensation Insurance will not be allowed.

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 Contractor shall contain a waiver of subrogation in favor of County and members of Commissioners Court.

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

Section 11. Indemnity

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

Section 12. Confidential and Proprietary Information

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

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

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

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

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

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

Section 13. Independent Contractor

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

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

Section 14. Notices

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

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

County: Fort Bend County Engineering Department
Attn: County Engineer
301 Jackson Street
Richmond, Texas 77469

With a copy to: Fort Bend County
Attn: County Judge
401 Jackson Street, 1st Floor
Richmond, Texas 77469

Contractor: Isani Consultants, LP
10448 Westoffice Drive
Houston, Texas 77042

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

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

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

Section 15. Compliance with Laws

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

Section 16. Standard of Care

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

Section 17. Assignment

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

17.2 Neither party may delegate any performance under this Agreement.

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

Section 18. Applicable Law

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

Section 19. Successors and Assigns

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

Section 20. Third Party Beneficiaries

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

Section 21. Severability

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

Section 22. Publicity

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

Section 23. Captions

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

Section 24. Conflict

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

Section 25. Certain State Law Requirements for Contracts

25.1 Agreement to Not Boycott Israel Chapter 2271 Texas Government Code: By signature below, Contractor verifies that if Contractor employs ten (10) or more full-time employees and this Agreement has a value of \$100,000 or more, Contractor does not boycott Israel and will not boycott Israel during the term of this Agreement.

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

Section 26. Human Trafficking

BY ACCEPTANCE OF AGREEMENT, CONTRACTOR 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.

[THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK.]

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

FORT BEND COUNTY

ISANI CONSULTANTS, LP

KP George, County Judge

Bobby V. P. Singh

Authorized Agent – Signature

Date

Bobby V. P. Singh

Authorized Agent – Printed Name

ATTEST:

Principal

Title

Laura Richard, County Clerk

6/21/21

Date

APPROVED:

J. Stacy Slawinski
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



civil \ design \ engineers

April 21, 2021

Mr. Robert T. McBride, P.E.

Sr. Project Manager

LJA Engineering, Inc.

3600 W. Sam Houston Parkway S

Suite 600

Houston, TX 77042

Subject: Fort Bend County Mobility Bond Program
FBC Project Number: 20409
Proposal for Professional Engineering Services: Old Richmond Road – From Voss Rd to Old Richmond Rd (Curves to the East), Precinct 4

Dear Mr. McBride:

Isani Consultants, LP is pleased to submit the proposal for **Preliminary Design, Final Design Phase, Bid and Construction Phase services** for the above referenced project. The following documents are attached herewith:

- **Exhibit A:** Scope of Services (Preliminary, Final Design, Bid and Construction Phase)
- **Exhibit B:** Compensation for Professional Engineering Services
- **Exhibit C:** Project Schedule (Preliminary and Final Design)
- **Exhibit D:** Project Team Sub-Consultants
- **Exhibit E:** 2021 Billing Rate Schedule
- **Exhibit F:** Project Limits

The total proposed fee for professional engineering and additional services including topographic Survey, Geotechnical Investigations, Traffic Signal modifications, Detention pond design, Bid and Construction Phase services will be **\$1,293,733.00**.

Please review and let us know if you have any comments or clarifications regarding the scope of services submitted.

We appreciate the opportunity to propose on this project. Please contact me if you have any questions or need additional supporting information regarding this request.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Murthy Made'.

Murthy Made, P.E.

Project Manager

Isani Consultants, LP

April 21, 2021

"EXHIBIT A" – Scope of Services

**Old Richmond Road – From 400' North of Voss Road to Old Richmond Road
(Curves to the east)**

FBC Project #20409, Precinct 4

Fort Bend County has requested a proposal for **Preliminary Engineering, Final Design Phase, Bid and Construction Phase Services** to improve the existing 2-lane asphalt undivided roadway (with roadside ditches) to a 3-lane concrete curb & gutter section with a two-way left-turn lane, storm sewer, detention, drainage outfalls, a 5-foot sidewalk at one side, modification to the existing traffic signals, culvert replacement, and all necessary appurtenances.

PROJECT LIMITS AND DETAILS:

1. The Old Richmond Road project will begin 400-feet north of the intersection of Old Richmond Road and Voss Road and end at the intersection of Old Richmond Road and Boss Gaston Road, approximately 1.65 miles. The Existing ROW for the project limits varies from 60-feet to 170-feet.
2. The road will be widened to accommodate a 3-lane concrete curb & gutter section, with a two-way left-turn lane. The existing ditches east and west of the existing roadway will be replaced with a storm sewer system.
3. The project has two existing traffic signals at the intersection of Old Richmond Road at West Airport Boulevard and Old Richmond Road at West Bellfort Avenue.

PROJECT SCOPE

GENERAL:

1. Coordination with Geotechnical, Survey, and Traffic consultants for the project will be performed during the Preliminary Engineering and Design Phase.
2. Coordination with McKaskle Road design engineer for Old Richmond Road and McKaskle intersection/pavement tie-in and drainage/detention requirements.
3. Coordination with MUD and FWSD engineer when needed.

PRELIMINARY ENGINEERING PHASE

A Preliminary Engineering Report (PER) shall serve as a summary document that incorporates the recommendations from the supporting investigative reports, results from working meetings with Fort Bend County, necessary approvals, and final recommendations from the Consultant's efforts. The document will serve as the

Old Richmond Road – From 400' North of Voss Road to Old Richmond Road (curves to the east), Precinct 4

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framework for the design phase, having addressed the major issues that affect the roadway design and supporting infrastructure.

The Preliminary Engineering Phase shall include the preparation and approval of reports necessary to support the recommendations and design of the roadway and all appurtenances included, but not limited to, Geotechnical Investigations, Hydrology and Hydraulic Analysis, including a drainage report. Environmental Site Assessments, Wetlands Assessment, Delineation, Concurrence/Permitting, and associated tasks will be performed by others. A schematic layout showing the proposed improvements for the Roadway will be prepared for the preliminary meeting followed by the Preliminary Construction Plans. The Preliminary Engineering Report will be following the requirements stated in the Mobility Design Manual.

Proposed Roadway geometry will be evaluated and the preliminary alternatives for the alignment and Proposed Right-of-Way (ROW) Acquisition will be presented to Fort Bend County during the preliminary stages of the PER.

The Preliminary Engineering Phase shall include working meetings with Fort Bend County and other consultants/sub-consultants and a drainage meeting with Fort Bend County Drainage District prior to submitting the draft Drainage Report for the project. During this phase, the topographic survey will be performed and the existing conditions will be evaluated including roadway geometrics, soils, and traffic. In addition, during this phase parcels should be defined.

Utility companies within the project limits will be contacted and coordinated for obtaining the facility maps and record drawings available and a contact list for the utility companies and a Utility Conflict Table will be prepared. Roadway Schematics and Aerial Exhibits will be prepared for review.

Proposed improvements will include Roadway Geometry, Pavement Structure, Storm Sewer System, Detention, Preliminary Phasing of Traffic Control Plans, and Traffic Signals. A Preliminary Construction Cost Estimate will be prepared and included in the Preliminary Engineering Report.

A Draft Preliminary Engineering Report will be submitted, after initial review of the existing conditions, which include, but not limited to, Exhibits, Preliminary Construction Drawings, Survey/Right-of-Way Acquisition Maps, Roadway Alignment, Geotechnical, Environmental Site Assessment, Drainage Report, and Utility Conflicts. Consultant shall provide preliminary schematics and exhibits to support discussions to solicit input from Fort Bend County on decision items. The draft PER is expected to be submitted 3 months from Notice to Proceed.

Exhibits/Attachments shall include:

- **Schematic Layout of Roadway**

- Provide a Plan View Layout with proposed roadway improvements. Include the location of the proposed trunk storm sewer and detention facilities as necessary. 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 limits. The schematic will 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. The location of soil borings will be identified.

- **Cost Estimates**

- Provide a preliminary construction cost estimate for the final recommendation provided in the Abbreviated Preliminary Engineering Report.

- **Utility Tables**

The consultant shall coordinate with utility companies that have existing facilities in or adjacent to project limits. The coordination shall include:

- Perform records research and field visits to determine the presence of underground or overhead private or public utilities during the Preliminary Design phase. A reasonable amount of research should be conducted, including but not limited to contact with companies identified on above-ground markers, Pipeline Crossings website research, and map requests from prominent companies (i.e., CenterPoint Energy, AT&T, etc.).

- **Level B SUE:**

Identify all existing utilities within the existing and proposed rights-of-way. Provide a list of existing utilities with owner and contact information. Coordinate with the utility companies and provide information and schematics, as necessary.

- Send records requests to utility companies and obtain I.D. numbers (CenterPoint and AT&T).
- Identify any utilities that are within dedicated easements that will be within the proposed right-of-way.

Old Richmond Road – From 400' North of Voss Road to Old Richmond Road (curves to the east), Precinct 4

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- Prepare a conflict table during the Preliminary Design phase to highlight conflicts. The table shall include the given ID number for the potential conflicts, stations along the centerline for the utilities and crossings, the owner of the utility, contact name, address, phone number, and email address, any notes such as it may be in a possible conflict.
- **Sight Distance**
 - The consultant shall investigate sight distance restrictions and general operating conditions of all existing and proposed intersections along Old Richmond Road within the project limits.
 - Sight distance restrictions will be investigated, and Approach and Departure Site Triangles will be developed for the intersections for determining the safe passing distance and stopping sight distance for the traffic.

SCOPE OF ADDITIONAL SERVICES FOR THE PROJECT:

SURVEYING (by IDS Engineering Group):

1. Topographic Survey:

Topographic Survey of Old Richmond Road from 400-feet north of Voss Rd to Old Richmond Rd (Curves to the east). Cross-section at 100 feet interval extending 20 feet past the proposed right of way. Provide Level B SUE and notify 811. Survey intersecting side streets 250-feet on either side of intersections. Survey the drainage outfalls. Locate soil boring by others. Provide data in Microstation, DTM, TIN file, and point file. Prepare survey control sheet with recovery sheet for control points. Location of pipeline and local utilities uncovered by others. Tie to NGS monument for horizontal and vertical control. Surveyors have the responsibility of obtaining the right-of-entry (ROE) for the properties.

2. Right of Way Survey

Prepare the Right of Way map to determine the existing ownership and existing right of way. Prepare a KMZ file with ownership information, proposed takings, and a preliminary roadway layout.

3. Detention Pond:

Provide a topographic survey of the proposed detention pond, location to be determined.

4. Optional Services

- a. Prepare parcel plats and metes and bounds for acquisitions. Stake line with iron pins
- b. Prepare parcel plats and metes and bounds for Unrestricted Visibility Easement (UVE)
- c. Stake the proposed right of way with laths at 100-foot intervals at two separate times, one before letting and the other one in the construction phase.

GEOTECHNICAL SCOPE OF SERVICES (by Geotest Engineering, Inc.):

The geotechnical scope of services based on the Fort Bend County Engineering Design Manual and HCFCD specifications for the detention pond are as follows:

1. Field Exploration

- Drilling and sampling **sixteen (16) borings** along the road alignment to a depth of 15-feet each for the proposed storm sewer and roadway design.
- Drilling and sampling **two (2) borings** to a depth of 25-feet for the proposed traffic signal foundations.
- Drilling and sampling **six (6) borings** to a depth of 20-feet for the proposed detention pond.
- Obtaining continuous soil samples to a depth of 15 feet, and then at five (5) foot intervals thereafter to the borings' termination depths.
- Geotest Engineering will perform granular soil sampling utilizing the Standard Penetration Test (split spoon sampler) by driving. Blow counts will be recorded as produced by a 140-pound weight falling 30 inches (ASTM D-1558). Cohesive soils will be sampled using a thin-walled sampler (Shelby Tube) hydraulically pushed into the soil (ASTM D-1587).

2. Laboratory Testing

- Performing laboratory tests on selected representative soil samples to develop the engineering properties of the soil. These tests may include pocket penetrometers, unconfined compression, present moisture content, percent passing 200 sieves, dry densities, Atterberg Limits, and swell tests, as deemed appropriate.

3. Engineering Analyses and Reporting

Utilizing the results of observations both in the field and in limited laboratory tests, Geotest Engineering will author a report that will include the following subjects:

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- Soil stratigraphy: soil encountered up to 20 feet.
- Groundwater conditions and groundwater control during construction
- The boring log information will include all laboratory test results and field observations.
- Develop design recommendations for the underground utilities. The recommendations will include buried structures such as manholes etc.
- Classify the soil types in accordance with OSHA requirements based on the characteristics of the soils along the alignment.
- Recommend the utility bedding in accordance with Fort Bend County, City of Houston specifications, and Harris County.
- Perform laboratory Proctor Compaction tests on the subgrade soil from the pavement areas in accordance with ASTM D-698 to obtain 95% soil density.
- Perform California Bearing Ratio test "CBR".
- Present Resilient Modulus "Mr" to be used for flexible pavement.
- Present Modulus of Subgrade Reaction "Ks" to be for Rigid pavement design.
- Provide rigid pavement recommendations.
- Present subgrade stabilization options such as lime/fly-ash for cohesion-less soils and lime for cohesive soils.
- Detention pond and the drainage channel recommendations including:
 - Stability of the basin side slopes for short- and long-term conditions
 - Evaluation of bottom instability due to excess hydrostatic pressure.
 - Groundwater table and its variability.
 - Identification of dispersive soils.
 - Potential erosion problems.
 - Constructability issues.
 - Evaluation of seepage (natural clay liner and/or sealing agents, if needed).
 - Recommend construction considerations, as deemed necessary.
 - Recommend back-fill material specifications.
 - Discuss effects of poor drainage and presence of trees on the performance of the utilities and pavement.

DRAINAGE (HYDROLOGY & HYDRAULIC ANALYSIS):

We will perform the following Hydraulic and Hydrologic support services during the preliminary design phase.

The scope of services includes the following tasks:

1. Preparation of Drainage Impact and Mitigation Analysis Report for submission and approval of Fort Bend County Drainage District:

- Determine existing and proposed condition discharge rates from the proposed roadway alignment and limits. Confirm the limits of the analysis with the preliminary layout for the proposed roadway. Discharge rates for proposed conditions will reflect the change in Tc and change of the drainage system from open ditch to storm sewers. Additionally, all new areas of Proposed Right-of-Way (ROW) will be accounted for in the drainage calculations.
- Develop hydrographs for existing and proposed conditions for design storms and determine required detention volume requirements to offset the increase in peak runoff rates for storms up to the 100-year events. Storms to be evaluated for the analysis will include the 2-year and 100-year events using Atlas 14 rainfall data.
- Perform drainage area delineations for the proposed conditions and develop onsite and offsite flow calculations for proposed conditions. Perform extreme event sheet flow analysis.
- Identify all mitigation requirements, including measures needed to eliminate impacts on flow rates and floodplain storage. Such measures may include a proposed detention pond, floodplain excavation, etc.
- Provide options for detention pond(s) size and location.

2. Preparation of Drainage Report:

- Prepare a written report detailing the assumptions made in the drainage study and hydraulic analysis, the obtained results, and proposed mitigation recommendations. The report will summarize background information, methodology, and results regarding the existing conditions and proposed improvements. Figures, tables, appendices, etc. will be provided to convey relevant information.

TRAFFIC SIGNAL-1: (By Consor Engineering, LLC):

Consor will develop the preliminary schematic for modifying the existing signalized intersection at Old Richmond Road and West Airport boulevard as per the Proposed Geometry for the intersection.

Modifications may include proposed locations for traffic signal poles, pedestrian signals and push buttons, vehicular detection, etc.

TRAFFIC SIGNAL-2: (By Costello, Inc.):

Costello will develop the preliminary schematic for modifying the existing signalized intersection at Old Richmond Road and West Belfort Avenue as per the Proposed Geometry for the intersection.

Modifications may include proposed locations for traffic signal poles, pedestrian signals and push buttons, vehicular detection, etc.

FINAL DESIGN PHASE

The Design Phase of the project shall consist of the preparation of completely approved construction documents that reflect the Preliminary Engineering Report recommendations accepted by Fort Bend County. The Design shall build upon the framework identified in the Preliminary Engineering Phase and include roadway design, profiles, signal design modifications, 5-foot sidewalk at one side, drainage system, drainage outfalls, culvert replacement, and appurtenances, and details, necessary for a complete design review. The submittal milestones for Fort Bend County shall follow the project schedule as shown in "Exhibit C".

A meeting will be held to discuss the traffic control and provide the following preliminary documents for communicating the significant construction traffic control concepts and to enable review and discussion at the meeting: phasing overview drawing (roll plots), typical cross-section(s) for each major phase and preliminary traffic control detail plans showing the temporary transitions at the ends of the project. Also, provide preliminary traffic control detail plans for intersections with existing traffic signal control and, if off-site detours are anticipated, a detour concept sketch.

The Design Submittal shall address all comments from the Preliminary Engineering phase of the project, design phase milestone submittals, and the construction review meetings. The Design Submittal shall include the submittal of the 11"x17" construction ready Plans, Specifications, and Cost Estimate (PS&E). The submittal milestones will be 70%, 95%, 100%.

The design phase shall also include preparation of Exhibits and Utility Conflict list and coordination with utility companies.

The design phase shall also include the coordination of utilities. The coordination shall include, but not limited to:

- Depict utilities to a reasonable degree of accuracy on the plan and profile drawings.

Old Richmond Road – From 400' North of Voss Road to Old Richmond Road (curves to the east), Precinct 4

Proposal for Professional Engineering Services | FBC Project # 20409

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- Utility Conflict Table to be updated during the Final Design phase as required. Refer to Appendix C, Fort Bend County Utility Conflict Table template.
- Submit milestone-level drawings to applicable utility companies for their review.

Additional Considerations for the Design Phase are:

Roadway and Drainage Design:

1. The Design Phase services will be performed in accordance with the DESIGN STANDARDS AND DETAILS, Fort Bend County Engineering Department, Latest Edition.
2. The Roadway design and construction of Old Richmond Road shall comply with the requirement of Fort Bend County regulations and follow MOBILITY DESIGN MANUAL, Latest Edition.
3. The design and construction of Old Richmond Road drainage systems shall comply with the requirement of Fort Bend County regulations and Fort Bend County Drainage District (FBCDD) DRAINAGE CRITERIA MANUAL and TxDOT (if required).
4. The pavement elevation shall be set in accordance with the Fort Bend County Guidelines.
5. The pavement section shall be evaluated by the Geotechnical Investigations and Report, if not adequately designed in accordance with the recommendations.
6. Provide coordination with Fort Bend County for any adjacent developments within the project area limits.
7. Plan and Profile sheets will be created for a scale of 1" = 40' for horizontal and 1"=4' for vertical with all the references attached and shown as per the Fort Bend County design requirements for all submittals and the Final Submittal will be a standard 11"x17". All the CAD work will follow Fort Bend County design standards.
8. Driveway width and location should match existing when feasible. Also, driveways should meet Fort Bend County Regulations of Subdivisions, Section 7 requirements. The centerline station and percent grade shall be indicated on the drawings for all driveways.

9. All the intersections or where the sidewalks exist shall include pedestrian ramps in accordance with the current ADA requirements

Traffic Control Plans (TCP) and Signing and Pavement Marking Plans:

1. A construction traffic control meeting shall be held prior to the 70% submittal and will be scheduled by the Fort Bend County Project Manager with Traffic Engineer and the Construction Programs Division. Provide the following preliminary documents for communicating the significant construction traffic control concepts and to enable review and discussion at the meeting: phasing overview drawing (roll plots), a typical cross-section(s) for each major phase, and preliminary traffic control detail plans showing the temporary transitions at the ends of the project.
2. Provide preliminary traffic control detail plans for intersections with existing traffic signal control and, if off-site detours are anticipated, a detour concept sketch.
3. Traffic Control Plans and Permanent Signing and Pavement Marking Plans will be provided as per the MUTCD and Fort Bend County Engineering Department Standards.

Traffic Signal Plans:

1. Proposed Traffic Signal Modifications Plans will be provided as per the Fort Bend County Engineering Department Standards at Old Richmond Road at West Airport Boulevard and at Old Richmond Road at West Bellfort Avenue.
2. Temporary Traffic Signal Design (Plans and Layouts, including Loop Detectors and Electrical Schedules) will be provided at Old Richmond Road at West Airport Boulevard and at Old Richmond Road at West Bellfort Avenue during the construction of the project if required.

Utilities:

Water:

1. If it is determined in PER that the existing water lines within the project limits require to be relocated, we will include the plan and profile sheets for the water line to be relocated. Any additional water line which is not existing will be an additional service.

Sanitary Sewer:

1. If it is determined in PER that the existing Sanitary Sewer lines within the project limits require to be relocated, we will include the plan and profile sheets for the Sanitary Sewer line to be relocated. Any additional Sanitary Sewer line which is not existing will be an additional service.

Storm Water Pollution Prevention Plans (SWPPP):

1. Prepare the drawings based on Fort Bend County Design Criteria.

BID PHASE AND CONSTRUCTION PHASE

The following services will be performed during the Bid Phase and Construction Phase of the project:

- **Bid Phase:**
 - The Design Consultant will prepare a single project manual file in PDF format consisting of:
 - Administrative documents
 - The bid form (prepared by the Design Consultant)
 - A sealed and signed specification table of contents (prepared by the Design Consultant)
 - Applicable specifications and documents (prepared by the Design Consultant)
 - The Design Consultant will submit 27 compact discs containing one project manual file and one drawing plan set (including signed cover sheet). Of these, 25 compact discs will be delivered to the Fort Bend County Purchasing Agent for advertising, and two discs will be provided to the Program Manager. Printed documents are not required. All compact discs must be labeled with project number, bid number (assigned by the Purchasing Agent) and project name with limits.
 - The Design Consultant will attend a pre-bid meeting at the Fort Bend County Purchasing Office. It is not necessary to prepare for the meeting, other than to be able to briefly describe the project and answer questions.
 - The Purchasing Agent will forward bidder questions to the Design Consultant. Answers to questions, as well as any other required changes, will be included in an addendum, prepared by the Design Consultant if necessary. The Purchasing Agent will distribute the addendum.
 - After the bid, the Program Manager will prepare a bid tabulation and provide a copy to the Design Consultant for filing.

- **Construction Phase:**

- The Design Consultant will attend a pre-construction meeting with Fort Bend County staff, Program Manager, Construction Manager, general contractor, and construction materials testing contractor. Prior to the meeting, the Program Manager will inform the Design Consultant of how many drawing plan sets and project manuals are required, and the Design Consultant will provide these documents at the pre-construction meeting.
- Temporary benchmarks and baseline control should be set, both with 1,000-foot maximum spacing between points. Baseline control shall be recovered or reestablished immediately prior to construction.
- The Design Consultant will be responsible for reviewing contractor submittals and responding to Requests for Information.
- Field visits and progress meetings will not be required unless requested by Fort Bend County.
- The Design Consultant will participate in a substantial completion walkthrough.
- After project completion, the Design Consultant will prepare record drawings based on contractor as-built markups. Design Consultant is to 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.

"EXHIBIT B" - Compensation for Professional Services

Project Name: Old Richmond Road

Project Limits: From 400' North of Voss to Old Richmond Road (Curves to the east)

FBC Project Number: 20409 | Isani Project Number: 21PVxx

BASIC SERVICES			
1	Preliminary Engineering Report		
	Preliminary Engineering Design (Lump Sum)		
1.1	(Includes coordination with Surveyor, Geotechnical, Traffic and Adjacent Project Consultants)	\$ 269,654.00	
1.2	Drainage (H&H)		
1.2.1	Existing Condition Analysis	\$ 38,270.00	
1.2.2	Proposed Condition Analysis	\$ 43,240.00	
1.2.3	Drainage Report (Approx. 50 pages)	\$ 30,722.00	
			\$ 381,886.00
	Final Design (Lump Sum)		
2	(Includes coordination with Surveyor, Geotech, Traffic, and adjacent project consultants. Also includes Waterline & Sanitary Sewer relocation)		\$ 535,659.00
3	Bid Phase (Lump Sum)		\$ 14,000.00
4	Construction Phase (T & M)		\$ 47,176.00
5	Geotechnical Investigations		
5.1	Geotechnical Report for Roadway and Drainage	\$ 34,483.00	
			\$ 34,483.00
6	Survey		
6.1	Topographic Survey (Lump Sum)	\$ 61,805.00	
6.2	ROW Maps	\$ 22,000.00	
			\$ 83,805.00
7	Traffic Signal Design (Old Richmond at W Airport Blvd)		
	(Design by Consor Engineers- includes Temporary Traffic Signal Design)	\$ 35,499.00	
			\$ 35,499.00
8	Traffic Signal Design (Old Richmond at W Bellfort Avenue)		
	(Design by Costello Engineers- includes Temporary Traffic Signal Design)	\$ 38,995.00	
			\$ 38,995.00
SUB-TOTAL FOR BASIC SERVICES (1-8)			\$ 1,171,503.00
OPTIONAL ADDITIONAL SERVICES			
9	Detention Pond Design (Lump Sum)		\$ 40,845.00
10	Survey		
10.1	Detention Pond Survey	\$ 8,275.00	
10.2	ROW and Property Corners Staking (Two Separate Times)	\$ 7,920.00	
10.3	Proposed ROW Parcel Plats, Metes & Bounds (11 Parcels @ \$3,200/Parcel)	\$ 35,200.00	
10.4	Level A SUE (@ Pipeline Crossings)	\$ 12,000.00	
			\$ 63,395.00
11	Geotechnical Investigations		
	Detention Pond	\$ 17,990.00	
			\$ 17,990.00
SUB-TOTAL FOR OPTIONAL SERVICES (9-11)			\$ 122,230.00
TOTAL SERVICES (BASIC & OPTIONAL)			\$ 1,293,733.00

OLD RICHMOND ROAD
FROM 400' NORTH OF VOSS ROAD TO OLD RICHMOND ROAD (CURVES TO THE EAST)
ISANI CONSULTANTS, L.P. PROPOSAL - APRIL 21, 2021
PRELIMINARY DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total	
Contract Rate Per Hour		\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00			
NO.	LEVEL OF EFFORT: TASK LIST	LEVEL OF EFFORT (ESTIMATED HOURS)									
PRELIMINARY DESIGN (TASK A)											
A1	PRELIMINARY ENGINEERING/DESIGN	4	134	136	450	554	264	8	1550	\$ 210,562.00	
A2	DRAINAGE ANALYSIS FOR ROADWAY (H&H)	2	106	82	236	330	28	8	792	\$ 112,232.00	
A3	GEOTECHNICAL INVESTIGATIONS (By GeoTest Engineering Inc.)										\$ 52,473.00
A3.1	COORDINATION WITH GEOTECHNICAL SUBCONSULTANT	2	8		12	8		6	36	\$ 5,224.00	
A4	TOPOGRAPHIC SURVEY AND ROW MAPS (By IDS Engineering Group)										\$ 92,080.00
A4.1	COORDINATION WITH SURVEYOR	4	12		24	12	2	10	64	\$ 9,270.00	
A5	PROJECT MANAGEMENT	3	66		118	62	8	32	289	\$ 41,598.00	
A6	OTHER EXPENSES										\$ 3,000.00
TOTAL ESTIMATE FOR PRELIMINARY DESIGN										\$ 526,439.00	
PRELIMINARY DESIGN											
PRELIMINARY ENGINEERING/DESIGN (TASK A1)											
1	Key Maps, Vicinity Maps and Other Maps				6	6	16		28	\$ 3,300.00	
2	Requesting Facility Maps and Record Drawings from the concerned companies/organizations		6		16	16		8	46	\$ 6,102.00	
3	Evaluate Existing Conditions										
3.1	Geometrics		4	4	6	10			24	\$ 3,500.00	
3.2	Topographic Conditions		1		8	8			17	\$ 2,345.00	
3.3	Traffic		2		6	6			14	\$ 1,990.00	
3.4	Structures (Culvert)		2		6	8			16	\$ 2,230.00	
4	Utilities Coordination and Contact List Table		4		16	24			44	\$ 6,020.00	
5	Major Utility Conflicts Table		4		16	36			56	\$ 7,460.00	
6	Proposed Improvements										
6.1	Geometrics (Design Criteria and Typical Sections)		3	4	12	16			35	\$ 4,935.00	
6.2	Paving		3	4	6	8			21	\$ 3,075.00	
6.3	Drainage		4	4	12	16			36	\$ 5,120.00	
6.4	Traffic		4	6	8	12			30	\$ 4,370.00	

OLD RICHMOND ROAD
FROM 400' NORTH OF VOSS ROAD TO OLD RICHMOND ROAD (CURVES TO THE EAST)
ISANI CONSULTANTS, L.P. PROPOSAL - APRIL 21, 2021
PRELIMINARY DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total
Contract Rate Per Hour		\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00		
NO.	LEVEL OF EFFORT: TASK LIST	LEVEL OF EFFORT (ESTIMATED HOURS)								
6.5	Structures (Culverts)		4	4	8	12			28	\$ 4,040.00
6.6	Permitting Requirements		2		8	12			22	\$ 3,010.00
7	Review and Check Topographic Survey (with field visit)		4	6	24	20			54	\$ 7,730.00
8	Study Existing ROW and provide Recommendations for Proposed ROW		3		6	8			17	\$ 2,415.00
9	Identify Problem Areas and Potential Resolutions		6		10	20			36	\$ 5,010.00
10	Basemaps & Existing Plan and Profiles	19	12	16	40	48	64		180	\$ 23,340.00
11	Proposed Horizontal Design/Alignments		12	8	16	32	40		108	\$ 13,980.00
12	Proposed Horizontal Design/Alignments (Storm Sewers)		6	8	16	20	24		74	\$ 9,750.00
13	Preparing Roadway Schematics		6	16	20	32	40		114	\$ 14,790.00
14	Sight Triangles (Proposed Cross & Side Streets)	24	10	16	64	64	80		234	\$ 30,170.00
15	Preliminary Engineering Report (PER)		2	16	80	64			182	\$ 26,420.00
16	PER Presentation		2	8	16	16			46	\$ 6,940.00
17	Specifications and Preliminary Construction Cost Estimate		8	16	24	40			88	\$ 12,520.00
	SHEETS/HOURS SUB-TOTALS	4	134	136	450	554	264	8	1550	
	TOTAL LABOR COSTS	\$960.00	\$24,790.00	\$22,440.00	\$67,500.00	\$66,480.00	\$27,720.00	\$672.00		\$ 210,562.00
	% DISTRIBUTION OF STAFFING	0.26%	8.65%	8.77%	29.03%	35.74%	17.03%	0.52%	100.00%	
	SUBTOTAL (TASK A1)									\$ 210,562.00
DRAINAGE ANALYSIS FOR ROADWAY (H&H) (TASK A2)										
1	Review of data including survey, record drawings, site visits and other information		8		12	16			36	\$ 5,200.00
2	Delineate all sub-drainage areas contributing to project limits		8	6	16	36			66	\$ 9,190.00
3	Perform Hydrologic calculations for Existing Conditions based on Atlas 14 data		12	8	24	40			84	\$ 11,940.00
4	Develop Hydraulic model for Existing Conditions based on Atlas 14 data		12	8	24	40			84	\$ 11,940.00

OLD RICHMOND ROAD
FROM 400' NORTH OF VOSS ROAD TO OLD RICHMOND ROAD (CURVES TO THE EAST)
ISANI CONSULTANTS, L.P. PROPOSAL - APRIL 21, 2021
PRELIMINARY DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total
Contract Rate Per Hour		\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00		
NO.	LEVEL OF EFFORT: TASK LIST	LEVEL OF EFFORT (ESTIMATED HOURS)								
5	Determine Change in 2-yr and 100-yr flows for change in Tc and New Imperviousness, Validate Drainage Boundaries and Hydrologic calculations		8	6	12	18	12		56	\$ 7,690.00
6	Determine Detention Volume based on ROW, hydrographs and physical constraints		6	4	12	16			38	\$ 5,490.00
7	Develop Preliminary Proposed Alternatives and Hydraulic models		16	12	48	64			140	\$ 19,820.00
8	Perform Mitigation Analysis and Finalize models		8	8	24	32			72	\$ 10,240.00
9	Prepare OPCC		8	4	12				24	\$ 3,940.00
10	Prepare and Present Preliminary Findings to Fort Bend County Engineering Department/Drainage District		8	6	12	12			38	\$ 5,710.00
11	Prepare Exhibits and Appendices required for the Drainage Report			4	8	16	16		44	\$ 5,460.00
12	Prepare Drainage Impact and Mitigation Analysis Report for Fort Bend County Engineering Department/Drainage District Submittal	1	8	12	24	32		8	85	\$ 11,812.00
13	Submit the Drainage Report with Roadway to Fort Bend County Engineering Department and Fort Bend County Drainage District	1	4	4	8	8			25	\$ 3,800.00
	SHEETS/HOURS SUB-TOTALS	2	106	82	236	330	28	8	792	
	TOTAL LABOR COSTS	\$480.00	\$19,610.00	\$13,530.00	\$35,400.00	\$39,600.00	\$2,940.00	\$672.00		\$ 112,232.00
	% DISTRIBUTION OF STAFFING	0.25%	13.38%	10.35%	29.80%	41.67%	3.54%	1.01%	100.00%	
	SUBTOTAL (TASK A2)									\$ 112,232.00

OLD RICHMOND ROAD
FROM 400' NORTH OF VOSS ROAD TO OLD RICHMOND ROAD (CURVES TO THE EAST)
ISANI CONSULTANTS, L.P. PROPOSAL - APRIL 21, 2021
PRELIMINARY DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification		No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total
Contract Rate Per Hour			\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00		
NO.	LEVEL OF EFFORT: TASK LIST	LEVEL OF EFFORT (ESTIMATED HOURS)									
GEOTECHNICAL INVESTIGATIONS (TASK A3) (by Geotest Engineering Inc.)											
1	Geotechnical Investigations and Report (Roadway, Drainage, Water/Sanitary)										\$ 34,483.00
2	Detention Pond										\$ 17,990.00
TOTAL LABOR COSTS											\$ 52,473.00
SUBTOTAL (TASK A3)											\$ 52,473.00
TOPOGRAPHIC SURVEY AND ROW MAPS (TASK A4) (by IDS Engineering Group)											
1	Establish existing right-of-way of streets in project area										\$ 7,500.00
2	Right-of-Entry										\$ 3,405.00
3	Topographic Survey										\$ 44,100.00
4	Survey Control										\$ 4,000.00
5	Control Sheets- Mapping										\$ 22,000.00
6	Topographic Survey for Detention Pond (approx. 10-acre pond)										\$ 8,275.00
7	Level B SUE (811 Markings & Locate Borings)										\$ 2,800.00
TOTAL LABOR COSTS											\$ 92,080.00
SUBTOTAL (TASK A4)											\$ 92,080.00

OLD RICHMOND ROAD
FROM 400' NORTH OF VOSS ROAD TO OLD RICHMOND ROAD (CURVES TO THE EAST)
ISANI CONSULTANTS, L.P. PROPOSAL - APRIL 21, 2021
PRELIMINARY DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total
Contract Rate Per Hour		\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00		
NO.	LEVEL OF EFFORT: TASK LIST	LEVEL OF EFFORT (ESTIMATED HOURS)								
PROJECT MANAGEMENT FOR PRELIMINARY ENGINEERING (TASK A5)										
1	Site/Field Visit		4		8	6			18	\$ 2,660.00
2	Co-ordination with Centerpoint Energy (Electric and Gas)		4		8			4	16	\$ 2,276.00
3	Co-ordination with AT&T		4		8			4	16	\$ 2,276.00
4	Coordination with Other Utility Companies		8		20	20		6	54	\$ 7,384.00
5	Coordination with Pipeline companies		8		12	12			32	\$ 4,720.00
6	Coordination with adjacent project Engineers		6		12	16			34	\$ 4,830.00
7	Project Management and Meetings		20		32			8	62	\$ 9,652.00
8	Approval from FBCED and FBCDD		4		6			4	14	\$ 1,976.00
9	Submittal Milestones (Draft Report and Final Report)		1	8	12	8	8	6	43	\$ 5,824.00
	SHEETS/HOURS SUB-TOTALS	3	66		118	62	8	32	289	
	TOTAL LABOR COSTS	\$720.00	\$12,210.00		\$17,700.00	\$7,440.00	\$840.00	\$2,688.00		\$ 41,598.00
	% DISTRIBUTION OF STAFFING	1.04%	22.84%		40.83%	21.45%	2.77%	11.07%	100.00%	
	SUBTOTAL (TASK A5)									\$ 41,598.00
OTHER EXPENSES (TASK A6)										
1	Printing/Plotting/Copying									\$ 2,000.00
2	Mileage/Postage/Courier									\$ 1,000.00
	SUBTOTAL (TASK A6)									\$ 3,000.00
TOTAL HOURS		9	306	218	804	946	300	48	2631	
TOTAL ESTIMATE FOR PRELIMINARY DESIGN		\$2,160	\$56,610	\$35,970	\$120,600	\$113,520	\$31,500	\$4,032		\$ 511,945.00

OLD RICHMOND ROAD
FROM 400' NORTH OF VOSS ROAD TO OLD RICHMOND ROAD (CURVES TO THE EAST)
ISANI CONSULTANTS, L.P. PROPOSAL - APRIL 21, 2021
FINAL DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification		No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total	
Contract Rate Per Hour			\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00			
NO.	LEVEL OF EFFORT: TASK LIST	LEVEL OF EFFORT (ESTIMATED HOURS)										
FINAL DESIGN (TASKS A TO K)												
A	ROADWAY DESIGN		10	108	144	410	532	620		1824	\$ 236,580.00	
B	DRAINAGE DESIGN		2	55	62	128	188	190		625	\$ 82,595.00	
C	DETENTION POND DESIGN			30	41	68	88	74		301	\$ 40,845.00	
D	TRAFFIC CONTROL PLANS			46	51	172	214	286		769	\$ 98,435.00	
E	TOPOGRAPHIC SURVEY & ROW MAPS (By IDS Engineering Group)											\$ 55,120.00
F	TRAFFIC SIGNAL DESIGN (By Consor Engineers, Inc.)											\$ 35,499.00
G	TRAFFIC SIGNAL DESIGN (By Costello, Inc.)											\$ 38,995.00
H	SIGNING AND STRIPING PLANS			14	27	50	68	56		215	\$ 28,585.00	
I	STORM WATER POLLUTION PREVENTION PLANS			16	12	36	64	52		180	\$ 23,480.00	
J	PROJECT MANAGEMENT FOR FINAL DESIGN		8	84	6	146	132		66	442	\$ 61,734.00	
K	OTHER EXPENSES											\$ 4,250.00
TOTAL ESTIMATE FOR FINAL DESIGN												\$ 706,118.00
FINAL DESIGN												
ROADWAY DESIGN (TASK A)												
1	Fort Bend County Design Criteria					4		6		10	\$ 1,230.00	
2	Cover Sheet, General Notes, and Project Layouts	6		6	6	8	10	16		46	\$ 6,180.00	
3	Horizontal and Vertical Design/Alignments			12	12	32	48	60		164	\$ 21,060.00	
4	Existing and Proposed Typical Sections	5		4	4	12	32	32		84	\$ 10,400.00	
5	Demolition Plans	10		4	6	16	24	32		82	\$ 10,370.00	
6	Outfall Details			4	8	16	16	24		68	\$ 8,900.00	
7	Design for Cross Streets	2		4	4	20	20	32		80	\$ 10,160.00	
8	Design for Cross Culverts		1	4	6	16	24	32		83	\$ 10,610.00	
9	Design for Driveway Culverts			8	8	24	32	40		112	\$ 14,440.00	

OLD RICHMOND ROAD
FROM 400' NORTH OF VOSS ROAD TO OLD RICHMOND ROAD (CURVES TO THE EAST)
ISANI CONSULTANTS, L.P. PROPOSAL - APRIL 21, 2021
FINAL DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total
Contract Rate Per Hour		\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00		
NO.	LEVEL OF EFFORT: TASK LIST	LEVEL OF EFFORT (ESTIMATED HOURS)								
10	Intersection Details/Layouts	6	1	6	8	16	24	32	87	\$ 11,310.00
11	Typical Street/Driveway Connection Details	2	1	4		24	16	16	61	\$ 8,180.00
12	Sidewalk (One side @ 5-foot wide)	2	1	4	4	12	12	12	45	\$ 6,140.00
13	Roadway Plan and Profile Sheets	19	2	16	32	100	120	160	430	\$ 54,920.00
14	Cross Sections at 100-foot Intervals	44	2	12	32	48	50	64	208	\$ 27,900.00
15	Existing Waterline Relocation (Included with Roadway Plan and Profile Sheets)		1	4	4	6	12	24	51	\$ 6,500.00
16	Existing Sanitary Sewer Relocation (Included with Roadway Plan and Profile Sheets)		1	4	4	8	16	32	65	\$ 8,120.00
17	Project Calculations and Earthwork Calculations	4		6	6	16	20		48	\$ 6,900.00
18	Specifications and Construction Cost Estimate			6		24	50		80	\$ 10,710.00
19	Standard Details/Drawings	6				8	6	6	20	\$ 2,550.00
	SHEETS/HOURS SUB-TOTALS	106	10	108	144	410	532	620	1824	
	TOTAL LABOR COSTS		\$2,400.00	\$19,980.00	\$23,760.00	\$61,500.00	\$63,840.00	\$65,100.00		\$ 236,580.00
	% DISTRIBUTION OF STAFFING		0.55%	5.92%	7.89%	22.48%	29.17%	33.99%	100.00%	
	SUBTOTAL (TASK A)									\$ 236,580.00
DRAINAGE DESIGN (TASK B)										
1	Drainage Area Maps	10		8	12	24	32	40	116	\$ 15,100.00
2	Hydraulic Data Sheets	10		8	12	16	20	24	80	\$ 10,780.00
3	Horizontal and Vertical Design/Alignments (Storm)		2	4	6	24	40		76	\$ 10,610.00
4	Drainage Plan and Profile Sheets (Included with Roadway Plan and Profile Sheets)	19		16	16	32	48	80	192	\$ 24,560.00
5	Drainage System Laterals	15		12	16	20	32	40	120	\$ 15,900.00
6	Standard Details/Drawings	4		1		4	4	6	15	\$ 1,895.00
7	Specifications and Construction Cost Estimate			6		8	12		26	\$ 3,750.00
	SHEETS SUB-TOTALS	58	2	55	62	128	188	190	625	
	TOTAL LABOR COSTS		\$480.00	\$10,175.00	\$10,230.00	\$19,200.00	\$22,560.00	\$19,950.00		\$ 82,595.00
	% DISTRIBUTION OF STAFFING		0.32%	8.80%	9.92%	20.48%	30.08%	30.40%	100.00%	
	SUBTOTAL (TASK B)									\$ 82,595.00

OLD RICHMOND ROAD
FROM 400' NORTH OF VOSS ROAD TO OLD RICHMOND ROAD (CURVES TO THE EAST)
ISANI CONSULTANTS, L.P. PROPOSAL - APRIL 21, 2021
FINAL DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification		No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total	
Contract Rate Per Hour			\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00			
NO.	LEVEL OF EFFORT: TASK LIST	LEVEL OF EFFORT (ESTIMATED HOURS)										
DETENTION POND DESIGN (TASK C)												
1	Detention Pond Design and Layout per FBC Standards			12	16	32	40	48		148	\$ 19,500.00	
2	Detention Pond Design Calculations	2		8	12	16	20			56	\$ 8,260.00	
3	Proposed Cross Sections for Detention Pond	4		4	8	8	8	16		44	\$ 5,900.00	
4	Standard Details/Drawings	3		2	1	4	8	10		25	\$ 3,145.00	
5	Specifications and Construction Cost Estimate			4	4	8	12			28	\$ 4,040.00	
SHEETS SUB-TOTALS		9		30	41	68	88	74		301		
TOTAL LABOR COSTS				\$5,550.00	\$6,765.00	\$10,200.00	\$10,560.00	\$7,770.00			\$ 40,845.00	
% DISTRIBUTION OF STAFFING				9.97%	13.62%	22.59%	29.24%	24.58%		100.00%		
SUBTOTAL (TASK C)												\$ 40,845.00
TRAFFIC CONTROL PLANS (TASK D)												
1	General Notes and Index	1				2	2	2	2	6	\$ 750.00	
2	Project Approach Signing	1				12	12	16		40	\$ 4,920.00	
3	Phasing Overview	1		6	4	8	8	16		42	\$ 5,610.00	
4	Phasing Description and Typical Sections	6		6	4	8	12	16		46	\$ 6,090.00	
5	TCP for Temporary Pavement Construction	10				12	14	32		58	\$ 6,840.00	
6	TCP Phase I	10		6	10	32	40	50		138	\$ 17,610.00	
7	TCP Phase II	10		6	10	32	40	50		138	\$ 17,610.00	
8	TCP Phase III	10		6	10	32	40	50		138	\$ 17,610.00	
9	TCP Tie-Ins	6		6	4	16	16	20		62	\$ 8,190.00	
10	Detour Plans	6		6	4	10	10	16		46	\$ 6,150.00	
11	TCP Specifications and Construction Cost Estimate			4	4	6	16	12		42	\$ 5,480.00	
12	Standard Details/Drawings	2			1	2	4	6		13	\$ 1,575.00	
SHEETS/HOURS SUB-TOTALS		63		46	51	172	214	286		769		
TOTAL LABOR COSTS				\$8,510.00	\$8,415.00	\$25,800.00	\$25,680.00	\$30,030.00			\$ 98,435.00	
% DISTRIBUTION OF STAFFING				5.98%	6.63%	22.37%	27.83%	37.19%		100.00%		
SUBTOTAL (TASK D)												\$ 98,435.00
TOPOGRAPHIC SURVEY AND ROW MAPS (TASK E) (by IDS Engineering Group)												
1	ROW and Property Corners Staking (Two Separate Times)										\$ 7,920.00	

OLD RICHMOND ROAD
FROM 400' NORTH OF VOSS ROAD TO OLD RICHMOND ROAD (CURVES TO THE EAST)
ISANI CONSULTANTS, L.P. PROPOSAL - APRIL 21, 2021
FINAL DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification		No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total
Contract Rate Per Hour			\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00		
NO.	LEVEL OF EFFORT: TASK LIST	LEVEL OF EFFORT (ESTIMATED HOURS)									
2	Proposed ROW Parcel Plats, metes & bounds (11 Parcels @ \$3,200/Parcel)										\$ 35,200.00
3	Level A SUE										\$ 12,000.00
	TOTAL LABOR COSTS										\$ 55,120.00
	SUBTOTAL (TASK E)										\$ 55,120.00
TRAFFIC (TASK F) (by Consor Engineers)											
1	Traffic Signal Design (Old Richmond at W. Airport Blvd)										\$ 35,499.00
	TOTAL LABOR COSTS										\$ 35,499.00
	SUBTOTAL (TASK F)										\$ 35,499.00
TRAFFIC (TASK G) (by Costello, Inc.)											
1	Traffic Signal Design (Old Richmond Rd at West Bellfort Avenue)										\$ 38,995.00
	TOTAL LABOR COSTS										\$ 38,995.00
	SUBTOTAL (TASK G)										\$ 38,995.00

OLD RICHMOND ROAD
FROM 400' NORTH OF VOSS ROAD TO OLD RICHMOND ROAD (CURVES TO THE EAST)
ISANI CONSULTANTS, L.P. PROPOSAL - APRIL 21, 2021
FINAL DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total
Contract Rate Per Hour		\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00		
NO. LEVEL OF EFFORT: TASK LIST										
SIGNING AND STRIPING PLANS (TASK H)										
LEVEL OF EFFORT (ESTIMATED HOURS)										
1	Signing and Striping Plans	10		10	20	40	48	50	168	\$ 22,160.00
2	SPM Specifications and Construction Cost Estimate			4	6	8	16		34	\$ 4,850.00
3	Standard Details/Drawings	2			1	2	4	6	13	\$ 1,575.00
	SHEETS/HOURS SUB-TOTALS	12		14	27	50	68	56	215	
	TOTAL LABOR COSTS			\$2,590.00	\$4,455.00	\$7,500.00	\$8,160.00	\$5,880.00		\$ 28,585.00
	% DISTRIBUTION OF STAFFING			6.51%	12.56%	23.26%	31.63%	26.05%	100.00%	
	SUBTOTAL (TASK H)									\$ 28,585.00
STORM WATER POLLUTION PREVENTION PLANS (TASK I)										
1	Storm Water Pollution Prevention Plans	10		12	12	20	40	50	134	\$ 17,250.00
2	SWPPP Specifications and Construction Cost Estimate			4		12	20		36	\$ 4,940.00
3	Standard Details/Drawings	1				4	4	2	10	\$ 1,290.00
	SHEETS/HOURS SUB-TOTALS	11		16	12	36	64	52	180	
	TOTAL LABOR COSTS			\$2,960.00	\$1,980.00	\$5,400.00	\$7,680.00	\$5,460.00		\$ 23,480.00
	% DISTRIBUTION OF STAFFING			8.89%	6.67%	20.00%	35.56%	28.89%	100.00%	
	SUBTOTAL (TASK I)									\$ 23,480.00
PROJECT MANAGEMENT FOR FINAL DESIGN (TASK J)										
1	Field Visit			8		8	8		6	\$ 4,144.00
2	Project Manual			6	6	12	20		4	\$ 6,636.00
3	Co-ordination with Centerpoint Energy/ (Electric and Gas)			4		8	6	4	22	\$ 2,996.00
4	Co-ordination with AT&T, and other private Utilities			4		8	6	4	22	\$ 2,996.00
5	Co-ordination with Pipeline Companies			4		8	12	4	28	\$ 3,716.00
6	Coordination with Surveying Consultants		1	8		16	8	6	39	\$ 5,584.00
7	Coordination with Geotechnical Consultants		1	4		6	4	2	17	\$ 2,528.00
8	Coordination with Traffic Engineering Consultants		2	10		16	16	10	54	\$ 7,490.00
9	Coordination with Designers of Adjacent Projects		2	12		24	24		72	\$ 10,020.00
10	Project Management and Meetings		2	16		24	16	8	66	\$ 9,632.00
11	Milestones (70%, 95%, and 100%)			8		16	12		44	\$ 5,992.00
	HOURS SUB-TOTALS		8	84	6	146	132	66	442	

OLD RICHMOND ROAD
FROM 400' NORTH OF VOSS ROAD TO OLD RICHMOND ROAD (CURVES TO THE EAST)
ISANI CONSULTANTS, L.P. PROPOSAL - APRIL 21, 2021
FINAL DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total
Contract Rate Per Hour		\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00		
LEVEL OF EFFORT: TASK LIST										
NO.	LEVEL OF EFFORT: TASK LIST	LEVEL OF EFFORT (ESTIMATED HOURS)								
	TOTAL LABOR COSTS	\$1,920.00	\$15,540.00	\$990.00	\$21,900.00	\$15,840.00		\$5,544.00		\$ 61,734.00
	% DISTRIBUTION OF STAFFING	1.81%	19.00%	1.36%	33.03%	29.86%		14.93%	100.00%	
	SUBTOTAL (TASK J)									\$ 61,734.00
OTHER EXPENSES (TASK K)										
1	Printing/Plotting/Copying (Including Mylars)									\$ 3,000.00
2	Mileage/Postage/Courier									\$ 1,250.00
	SUBTOTAL (TASK K)									\$ 4,250.00
	TOTAL HOURS	20	353	343	1010	1286	1278	66	4356	
	TOTAL ESTIMATE FOR FINAL DESIGN (TASKS A-K)	\$4,800	\$65,305	\$56,595	\$151,500	\$154,320	\$134,190	\$5,544		\$ 706,118.00
BID PHASE & CONSTRUCTION PHASE										
1	Bid Phase									\$ 14,000.00
2	Construction Phase Services (T&M)		4	32	32	100	80	80	24	\$ 47,176.00
	TOTAL ESTIMATE FOR BID PHASE AND CONSTRUCTION PHASE									\$ 61,176.00
	TOTAL ESTIMATE FOR FINAL DESIGN, BID AND CONSTRUCTION PHASE SERVICES									\$ 767,294.00

					May-21				Jun-21				Jul-21				Aug-21				Sep-21				Oct-21				Nov-21																																						
ID	Tasks Description				Dur.	Plan Start	Plan Finish	1	8	15	22	29	5	12	19	26	3	10	17	24	31	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27																													
OLD RICHMOND ROAD (VOSS RD TO OLD RICHMOND RD- Curves to the East)																																																																			
PROJECT PLANNING AND MANAGEMENT - PRELIMINARY DESIGN																																																																			
1	Notice to Proceed				.d	12-May-21	12-May-21																																																												
2	Project Coordination and Meetings				5.d	12-May-21	19-May-21																																																												
3	Data Collection/ Obtaining Right of Entry				30.d	24-May-21	5-Jul-21																																																												
4	Topographic Survey				30.d	24-May-21	7-Jul-21																																																												
5	Geotechnical Investigation				30.d	24-May-21	7-Jul-21																																																												
6	Environmental Report (By County) *																																																																		
7	Existing Drainage Evaluation				57.d	24-May-21	12-Aug-21																																																												
7.1	Preliminary Drainage Analysis and Calculations				40.d	24-May-21	21-Jul-21																																																												
7.2	Drainage Meeting with Fort Bend County/Drainage District				.d	22-Jul-21	22-Jul-21																																																												
7.3	Preparation and Approval of Impact Analysis - Report				15.d	22-Jul-21	12-Aug-21																																																												
8	Evaluate Existing Pavement				5.d	7-Jul-21	14-Jul-21																																																												
9	Evaluate Existing Conditions/Geometry				5.d	7-Jul-21	14-Jul-21																																																												
10	Prepare Preliminary Exhibits				10.d	14-Jul-21	28-Jul-21																																																												
11	Prepare Preliminary Roadway and Drainage Schematics				15.d	14-Jul-21	4-Aug-21																																																												
12	Prepare Basemaps and Preliminary P & P Sheets				20.d	14-Jul-21	11-Aug-21																																																												
13	Prepare Slight Triangle Sheets				5.d	28-Jul-21	4-Aug-21																																																												
14	Preliminary Cost Estimate				5.d	4-Aug-21	11-Aug-21																																																												
15	Coordination with Consultants for Adjacent projects				10.d	14-Jul-21	28-Jul-21																																																												
16	Preliminary Utility Conflict List				5.d	28-Jul-21	4-Aug-21																																																												
17	Preliminary Major Utility Table				5.d	4-Aug-21	11-Aug-21																																																												
18	Preliminary ROW Acquisition Table				5.d	28-Jul-21	4-Aug-21																																																												
19	Preliminary Engineering Report - Writeup				10.d	4-Aug-21	18-Aug-21																																																												
20	Isani Internal QA/QC and Incorporate Comments				7.d	11-Aug-21	20-Aug-21																																																												
21	Draft Preliminary Engineering Report Submittal				.d	23-Aug-21	23-Aug-21																																																												
22	Fort Bend County Program Manager Review				10.d	23-Aug-21	7-Sep-21																																																												
23	Incorporate Draft PER Review Comments				10.d	8-Sep-21	22-Sep-21																																																												
24	Preliminary Engineering Report Review Meeting **				.d	23-Sep-21	23-Sep-21																																																												
25	Resolve any pending Items with Fort Bend County				10.d	24-Sep-21	8-Oct-21																																																												
26	Finalize Geotechnical Report				10.d	24-Sep-21	8-Oct-21																																																												
27	Finalize Drainage Report				10.d	24-Sep-21	8-Oct-21																																																												
28	Finalize Exhibits				5.d	24-Sep-21	1-Oct-21																																																												
29	Finalize Sight Triangles				2.d	1-Oct-21	5-Oct-21																																																												
30	Finalize Roadway and Drainage Schematics				10.d	24-Sep-21	8-Oct-21																																																												
31	Finalize Preliminary Design				10.d	24-Sep-21	8-Oct-21																																																												
32	Finalize Cost Estimate				4.d	7-Oct-21	13-Oct-21																																																												
33	Finalize Utility Conflict List				10.d	29-Sep-21	13-Oct-21																																																												
34	Finalize Major Utility Table				10.d	29-Sep-21	13-Oct-21																																																												
35	Finalize ROW Acquisition Table				10.d	29-Sep-21	13-Oct-21																																																												
36	Finalize Plan & Profile Sheets				10.d	29-Sep-21	13-Oct-21																																																												
37	Finalize Preliminary Engineering Report				5.d	8-Oct-21	15-Oct-21																																																												
38	Isani Internal QA/QC and Incorporate Comments				7.d	8-Oct-21	19-Oct-21																																																												
39	Final Preliminary Engineering Report Submittal				.d	22-Oct-21	22-Oct-21																																																												
40	Preliminary Engineering Design Time Duration				115.d	12-May-21	22-Oct-21																																																												
* Environmental Report to be provided by Fort Bend County prior to PER submittal.																																																																			
** Comments to be provided at the PER Review meeting																																																																			
								Task Progress Bar: Project Management Bar: Milestones:																																																											

ID		Tasks Description				Dur.		Plan Start		Plan Finish		Gantt Chart													
OLD RICHMOND ROAD (YOSS ROAD TO OLD RICHMOND RD- Curves to the East)																									
PROJECT PLANNING AND MANAGEMENT - FINAL DESIGN																									
1		Notice to Proceed				.d		8-Nov-21		8-Nov-21		<div><div></div></div>													
2		Project Coordination and Meetings				5.d		8-Nov-21		15-Nov-21		<div><div></div></div>													
3		Proposed ROW Maps				20.d		15-Nov-21		15-Dec-21		<div><div></div></div>													
4		Roadway and Drainage Design				30.d		15-Nov-21		31-Dec-21		<div><div></div></div>													
5		Traffic Signal Design				15.d		15-Nov-21		8-Dec-21		<div><div></div></div>													
6		Cross Culvert Design				15.d		15-Nov-21		8-Dec-21		<div><div></div></div>													
7		Hydraulic Analysis				20.d		15-Nov-21		15-Dec-21		<div><div></div></div>													
8		Preliminary Geometric Layouts / Schematics for Meetings				15.d		15-Nov-21		8-Dec-21		<div><div></div></div>													
9		Title Sheet, Index and Other Sheets				3.d		15-Nov-21		18-Nov-21		<div><div></div></div>													
10		Typical Sections (Existing and Proposed)				10.d		15-Nov-21		1-Dec-21		<div><div></div></div>													
11		Roadway and Drainage Plan and Profile Sheets				30.d		1-Dec-21		17-Jan-22		<div><div></div></div>													
12		Traffic Control Plans Including Temporary Traffic Signal Layouts				20.d		15-Dec-21		17-Jan-22		<div><div></div></div>													
13		Signing and Pavement Marking Plans				5.d		10-Jan-22		17-Jan-22		<div><div></div></div>													
14		Intersection/Driveway Connection Details				5.d		10-Jan-22		17-Jan-22		<div><div></div></div>													
15		Drainage Area Maps				5.d		15-Dec-21		22-Dec-21		<div><div></div></div>													
16		Hydraulic Data Sheets				10.d		22-Dec-21		10-Jan-22		<div><div></div></div>													
17		Roadway Cross Sections				5.d		11-Jan-22		18-Jan-22		<div><div></div></div>													
18		Storm Water Pollution Prevention Plans				10.d		23-Dec-21		11-Jan-22		<div><div></div></div>													
19		Roadway Details/Standard Drawings				10.d		31-Dec-21		17-Jan-22		<div><div></div></div>													
20		Coordination with Consultants for adjacent projects				10.d		15-Nov-21		1-Dec-21		<div><div></div></div>													
21		ROW & Utility Tables				15.d		15-Dec-21		10-Jan-22		<div><div></div></div>													
22		Preliminary Construction Cost Estimate				10.d		10-Jan-22		24-Jan-22		<div><div></div></div>													
23		Isani Internal QA/QC and Incorporate Comments				7.d		18-Jan-22		27-Jan-22		<div><div></div></div>													
24		70% Submittal to Fort Bend County				.d		28-Jan-22		28-Jan-22		<div><div></div></div>													
25		Fort Bend County Review				10.d		28-Jan-22		11-Feb-22		<div><div></div></div>													
26		Incorporate Fort Bend County Comments				15.d		14-Feb-22		7-Mar-22		<div><div></div></div>													
27		Update Drawings for 95% Submittal				25.d		14-Feb-22		21-Mar-22		<div><div></div></div>													
28		Update Plan and Profile Sheets				25.d		14-Feb-22		21-Mar-22		<div><div></div></div>													
29		Update Traffic Control & Traffic Signal Plans				15.d		7-Mar-22		28-Mar-22		<div><div></div></div>													
30		Update Signing and Pavement Marking, SWPPP Sheets				10.d		14-Feb-22		28-Feb-22		<div><div></div></div>													
31		Construction Cost Estimate				5.d		24-Mar-22		31-Mar-22		<div><div></div></div>													
32		Isani Internal QA/QC and Incorporate Comments				7.d		29-Mar-22		7-Apr-22		<div><div></div></div>													
33		95% Submittal to Fort Bend County				.d		8-Apr-22		8-Apr-22		<div><div></div></div>													
34		Fort Bend County Review				10.d		11-Apr-22		25-Apr-22		<div><div></div></div>													
35		Incorporate Fort Bend County Comments				10.d		26-Apr-22		10-May-22		<div><div></div></div>													
36		Finalize Drawings				15.d		26-Apr-22		17-May-22		<div><div></div></div>													
37		Isani Internal QA/QC and Incorporate Comments				5.d		17-May-22		24-May-22		<div><div></div></div>													
38		100% (Final) Submittal to Fort Bend County				.d		25-May-22		25-May-22		<div><div></div></div>													
39		Bid Phase Services				.d		TBD		TBD		<div><div></div></div>													
40		Construction Phase Services				.d		TBD		TBD		<div><div></div></div>													
41		Final Design Time Duration				138.d		8-Nov-21		25-May-22		<div><div></div></div>													

1		8		15		22		29		6		13		20		27		3		10		17		24		31		7		14		21		28		7		14		21		28		4		11		18		25																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Nov-21		Nov-21		Nov-21		Nov-21		Nov-21		Dec-21		Dec-21		Dec-21		Dec-21		Dec-21		Jan-22		Jan-22		Jan-22		Jan-22		Jan-22		Feb-22		Feb-22		Feb-22		Feb-22		Mar-22		Mar-22		Mar-22		Mar-22		Apr-22		Apr-22		Apr-22		Apr-22		May-22		May-22		May-22		May-22		Jun-22		Jun-22		Jun-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22		Jul-22			



civil \ design \ engineers

Exhibit “D” - Project Team Sub-Consultants

<u>Project Name:</u>	Old Richmond Road
<u>Project Limits:</u>	From 400’ North of Voss Road to Old Richmond Road (Curves to the east)
<u>FBC Precinct:</u>	4
<u>Surveying:</u>	IDS Engineering Group
<u>Geotechnical:</u>	Geotest Engineering, Inc.
<u>Traffic Signal:</u>	Conzor Engineers LLC. - Old Richmond at W. Airport Blvd intersection. Costello, Inc.- Old Richmond at W. Belfort Ave intersection.

Exhibit "E"
Isani Consultants, LP
2021 Schedule of Raw Hourly Rates

<u>PERSONNEL/TITLE:</u>	<u>HOURLY RATE</u>
Principal	\$80.00
Senior Project Manager	\$70.00
Project Manager	\$62.00
Senior Project Engineer	\$57.00
Project Engineer	\$50.00
QA/QC Engineer	\$55.00
Senior Civil Engineer	\$51.00
Civil Engineer	\$43.50
Engineer-In-Training (EIT)	\$40.00
Senior Designer	\$48.00
Designer	\$43.50
Project Coordinator	\$38.00
CAD Technician	\$35.00
GIS Technician	\$35.00
Document Control	\$35.00
Administrative Assistant	\$28.00

EXHIBIT-F: PROJECT LIMITS
OLD RICHMOND ROAD FROM VOSS
ROAD TO OLD RICHMOND ROAD
(CURVES TO THE EAST)



PROJECT LIMITS

OLD RICHMOND ROAD



GEOTEST ENGINEERING, INC.

Geotechnical Engineers & Materials Testing

5600 Bintliff Drive

Houston, Texas 77036

Telephone: (713) 266-0588

Fax: (713) 266-2977

Proposal No. 1140529399

April 19, 2021

Mr. Murthy Made, P.E.
Project Manager
Isani Consultants
10448 Westoffice Dr.
Houston, TX 77042

**Re: Proposal for Geotechnical Investigation
Old Richmond Road Phase 2 –
from Voss Road to Old Richmond Road
Fort Bend, Texas**

Dear Mr. Made:

As per your request on April 14, 2021, Geotest Engineering, Inc. (Geotest) is pleased to submit this revised proposal for the above referenced project. The project consists of design and construction of approximately 8,700 LF of Old Richmond roadway widen from existing 2-lane asphalt roadway to 3-lane concrete roadway with curb and gutter along with storm sewer installation from Voss Road to Old Richmond Road in Fort Bend County, Texas. The proposed storm sewers are approximately 10 feet below the existing grade and will be installed by open cut method of construction.

The project also includes modification of two traffic signal at intersection of Old Richmond road at W. Airport Blvd and Old Richmond Road at W. Bellfort Ave.

Purpose and Scope

The purpose of this study is to explore the subsurface conditions and to develop geotechnical recommendations pertinent to the proposed Old Richmond Road Phase 2 reconstruction.

The scope of services is based on the information provided to us through an e-mail dated April 14, 2021, April 16, 2021 and on phone call conversation on April 15, 2021, April 16, 2021 and 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.
- Obtain pavement corings for boring access.

- drilling and sampling of
 - Sixteen (16) soil borings each to a depth of 15 feet for the proposed storm sewer and roadway design.
 - Two (2) soil borings each to a depth of 25 feet for the proposed traffic signal foundations. The proposed boring program is presented on Attachment No. 1 and also in Plan of Borings, Figure 1.
 - Six (6) soil borings each to a depth of 20 feet for the proposed detention pond after completion of PER phase.
- 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 storm sewer, pavement and traffic signal foundation design;
- perform slope analyses and evaluate dispersive characteristics of soil for the proposed detention pond in accordance with HCFCFCD criteria after completion of PER phase;
- Perform a desktop faults study to determine the presence of any known faults impacting the project alignment; and
- preparing a geotechnical investigation report.

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

Project Schedule

Roadway and Storm Sewer:

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 two (2) 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.

Detention Pond:

The geotechnical investigation report, which will include field and laboratory data and design recommendations, will be submitted in about six (6) weeks after receiving NTP for detention pond phase.


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 cost as given below:

Roadway and Storm Sewer (Attachment No. 2)	\$34,483.00
Detention Pond (Attachment No. 3)	<u>\$17,990.00</u>
Total	\$52,473.00

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 Manager


Mohan Ballagere, P.E.
Vice President

MB\xz\lego
Copies Submitted: (1-PDF)
Attachment No. 1 – Proposed Boring/Piezometer Program
Attachment No. 2 – Cost Breakdown – Roadway and Storm Sewer
Attachment No. 3 – Cost Breakdown – Detention Pond
Figure 1 - Proposed Plan of Borings
Scans\Geotechnical\Proposals\2021\40529399R.DOC

ACCEPTED BY: _____

PRINTED NAME: _____

TITLE: _____

DATE: _____

ATTACHMENT NO. 1

PROPOSED BORING PROGRAM - ROADWAY AND STORM SEWER

Structure	Borings		
	Quantity (number)	Depth (feet)	Footage (feet)
storm sewer and roadway	16	15	240
traffic signal foundations	2	25	50
	18		290

PROPOSED BORING PROGRAM - DETENTION POND

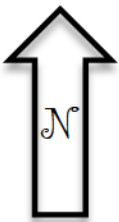
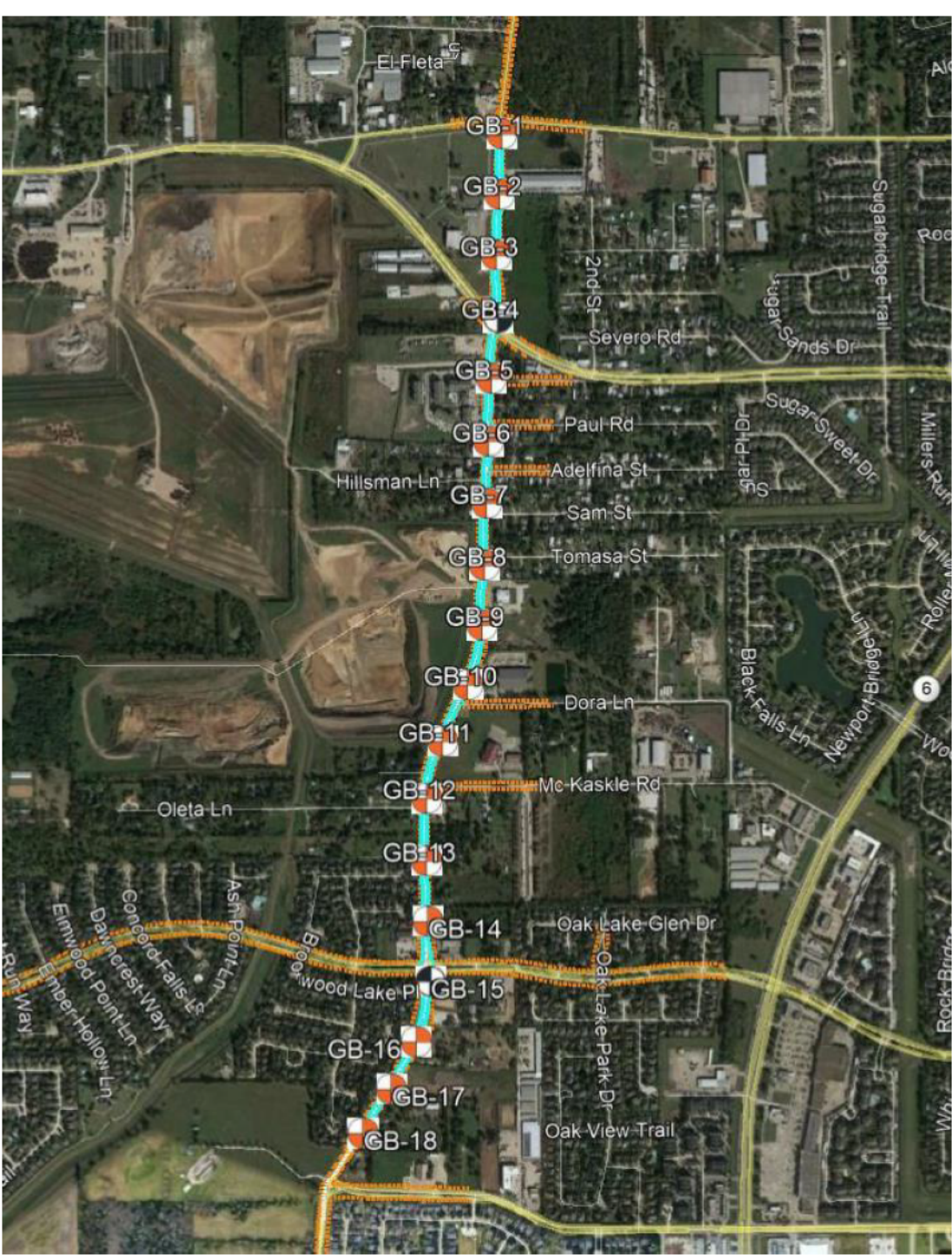
Structure	Borings		
	Quantity (number)	Depth (feet)	Footage (feet)
Detention Pond	6	20	120



ATTACHMENT NO. 2
COST BREAKDOWN - ROADWAY AND STORM SEWER

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>
<u>Field Investigation</u>				
Mob and Demob of Truck Mounted Drilling Rig	1	LS	\$600.00	\$600.00
Drilling and Continous Sampling (0'-20')	280.0	ft.	\$25.00	\$7,000.00
Drilling and Intermittent Sampling (0'-50')	10.0	ft.	\$21.00	\$210.00
Grouting of Completed Bore Holes	280.0	ft.	\$12.00	\$3,360.00
Utility Clerance for Boring Locations,Marking borings and Field Coordination	8.0	hr.	\$65.00	\$520.00
Asphalt coring for boring access	18.0	ea.	\$90.00	\$1,620.00
Vehicle Charge	8.0	hr.	\$10.00	\$80.00
Traffic Control Cost	4.0	day	\$650.00	\$2,600.00
			Subtotal	\$15,990.00
<u>Laboratory Testing</u>				
Liquid and Plastic Limits	29	ea.	\$71.00	\$2,059.00
Moisture Content Only	111	ea.	\$11.00	\$1,221.00
Mechanical Sieve Analysis, through No. 200 Sieve	4	ea.	\$65.00	\$260.00
Percent Passing No. 200 Sieve	25	ea.	\$55.00	\$1,375.00
Unconsolidated Undrained Triaxial Compression	29	ea.	\$72.00	\$2,088.00
			Subtotal	\$7,003.00
<u>Engineering Services</u>				
Sr. Project Manager	5.00	hr.	\$206.00	\$1,030.00
Sr. Engineer, P.E.	10.00	hr.	\$183.00	\$1,830.00
Project Engineer	20.00	hr.	\$149.00	\$2,980.00
Graduate Engineer	50.00	hr.	\$101.00	\$5,050.00
Support Personnel, Word Processing	10.00	hr.	\$60.00	\$600.00
			Subtotal	\$11,490.00
			Total	\$34,483.00

ATTACHMENT NO. 3
COST BREAKDOWN - DETENTION POND

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Amount</u>
<u>Field Investigation</u>				
Mob and Demob of Truck Mounted Drilling Rig	1	LS	\$600.00	\$600.00
Drilling and Continuous Sampling (0'-20')	120.0	ft.	\$25.00	\$3,000.00
Grouting of Completed Bore Holes	120.0	ft.	\$12.00	\$1,440.00
Utility Clearance for Boring Locations, Marking borings and Field Coordination	8.0	hr.	\$65.00	\$520.00
Vehicle Charge	8.0	hr.	\$10.00	\$80.00
			Subtotal	\$5,640.00
<u>Laboratory Testing</u>				
Liquid and Plastic Limits	12	ea.	\$71.00	\$852.00
Moisture Content Only	48	ea.	\$11.00	\$528.00
Mechanical Sieve Analysis, through No. 200 Sieve	4	ea.	\$65.00	\$260.00
Percent Passing No. 200 Sieve	8	ea.	\$55.00	\$440.00
Unconsolidated Undrained Triaxial Compression	12	ea.	\$72.00	\$864.00
<i>HCFC Criteria for Detention Pond</i>				
<i>Specific Gravity of Soil (ASTM 854)</i>	2	Ea.	\$67.00	\$134.00
<i>Double Hydrometer (ASTM 4221)</i>	2	Ea.	\$250.00	\$500.00
<i>Crumb Test (ASTM D 6572)</i>	4	Ea.	\$43.00	\$172.00
<i>Triaxial CU Test includes Back Pressure Saturation and Pore Pressure Measurements, 3 Specimens (ASTM D 4767)- Inhouse</i>	2	Ea.	\$1,800.00	\$3,600.00
			Subtotal	\$7,350.00
<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	\$17,990.00



LEGEND	GEOTEST ENGINEERING, INC.
<div data-bbox="678 1593 849 1642"> 15' Boring</div> <div data-bbox="678 1661 849 1709"> 25' Boring</div> <div data-bbox="699 1806 835 1845">Scale: NTS</div>	<div data-bbox="871 1632 1363 1709">OLD RICHMOND ROAD PHASE 2 FORT BEND COUNTY, TEXAS</div> <div data-bbox="963 1719 1270 1758">PLAN OF BORINGS</div>



April 20, 2021

Murthy Made, P.E.
Project Manager
Isani Consultants L.P.
10448 Westoffice Drive. Houston, TX 77042

RE: Surveying services for 20409 Old Richmond Road (2020 Mobility) From Voss Road to Old Richmond Road

Dear Mr. Made:

We appreciate the opportunity to propose land surveying services in conjunction with the above referenced project. It is our understanding that you are requesting a topographic survey.

SCOPE OF SERVICES

i. Existing ROW

Establish existing right-of-way of streets in the project area.

We will research the necessary deeds and recover sufficient right-of-way monumentation to establish the right-of-way of Old Richmond Road, West Airport Boulevard, Oleta Lane, McKaskle Road, Dora Lane, Tomasa Street, Sam Street, Aldelfina Street, Paul Road, Martinez Street, West Bellfort Avenue, and Boss-Gaston Road. We will prepare a KMZ file with ownership information, proposed takings, and a preliminary roadway layout. We will follow the Fort Bend County new guidelines. Texas Society of Professional Surveyors Manual of Practice for Category 1B, Condition 2 Survey – \$7,500.00

Right-of-Entry

We will use the county appraisal district(s) maps and records to identify each property and property owner along the project length. The ROE letter will include the owner's name and address, the address of the subject property that will be affected by the survey, what safety measures will be used to avoid property damage, a timeframe for the project, and the contact information for the IDS project manager (PM). A second mailing would be performed utilizing certified return receipt mail. If, after the second mailing, no responses were received, IDS will engage the field crews to physically take the letters to the landowners. - \$3,405.00

ii Topo and Survey Control

Topo

We will topo the existing roadways from right-of-way to right-of-way at 100 foot sections. We will locate fences, power poles, manholes, valves, hydrants, and inlets along with other visible structures or utilities within the proposed corridor and ~~10'~~ beyond necessary for design. We will topo the intersecting streets (West Airport Boulevard, Oleta Lane, McKaskle Road, Dora Lane, Tomasa Street, Sam Street, Aldelfina Street, Paul Road, Martinez Street, West Bellfort Avenue, and Boss-Gaston Road)

20-feet past the
proposed right of way

250' either side of intersections. We will provide this information in MicroStation. We will provide a DTM, TIN file, and point file. This will substantially conform to a Texas Society of Professional Surveying Manual of Practice for a Category 6, Condition II Survey - \$44,100.00

Survey Control

We will establish control monuments, resolve correlation between monuments, and establish secondary and tertiary control for the project. Texas Society of Professional Surveying Manual of Practice for a Category 11, Condition II Survey – \$4,000.00

Control Sheets – Mapping

We will prepare control sheets for control points established along the project. We will prepare the Index Sheets, Control Maps, Control Point Recovery Sketches, and Alignment Sheets for plan submittal. These mapping products will be provided in MicroStation. - \$22,000.00

iii Approx 10-acre detention pond topo

We will perform a topographic survey on a 10-acre detention pond site. This fee assumes that the 10 acres is approximately square and is wooded. \$8,275.00

~~iv Stake ROW before letting.~~

We will stake the proposed ROW before letting and again in the construction phase. We will set 5/8-inch iron rods with plastic caps at PCs, PTs, and angle points and lathes every 100 feet. - \$7,920.00

iv Level B SUE

811 Markings

We will locate the underground utilities by markings provided through an 811 call or by contacting an individual utility company. This data will be added to the topographic survey. - \$1,400.00

Locate borings

We will locate (X,Y,Z) borings established by the Geotech. - \$1,400.00

Grand Total = \$100,000.00

v Proposed ROW – Parcels

Parcel acquisition documents. We will prepare the Parcel Plats with parcel areas, etc. and metes and bounds descriptions for each parcel necessary for parcel acquisition and stake the property corners for each. - \$3,200.00/parcel

We will prepare Unrestricted Visibility easements (UVE). - \$2,550.00/parcel

Additionally, we will provide Abstractor's Certificates, if requested, which will show any encumbrances on the land (easements, etc.) - \$250.00/parcel.

If you have any questions regarding this proposal, please do not hesitate to call me. To indicate your acceptance of the above stated fee and to authorize us to proceed with the survey, please sign below and return a copy of this letter to our office.

Sincerely,



Douglas W. Turner, RPLS
Survey Director

TBPLS Firm Registration Number 10110700

cc: File

Accepted:

By: _____

Name: _____

Title: _____

Date: _____