

§

§

§

AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

(Engineering, Design, and Bid Phase services– Project No. 23112)

This Agreement for Professional Engineering Services ("Agreement") is made and entered into by and between Fort Bend County, Texas ("County"), a political subdivision of the state of Texas, and Isani Consultants, LP ("Engineer"), a a Texas limited partnership. County and Engineer may be referred to individually as a "Party" or collectively as the "Parties."

WHEREAS, Engineer is provides professional engineering services in the Greater Houston Area; and

WHEREAS, County desires for Engineer to provide such professional engineering services for Engineering, Design, and Bid Phase services for Pool Hill Road, Seg. 3 under Mobility Bond Project No. 23112; and

WHEREAS, Engineer represents that it is qualified and desires to perform such services for County; and

WHEREAS, pursuant to the requirements of Chapter 2254 of the Texas Government Code, County has determined that Engineer is the most highly qualified provider of such professional services and the Parties have negotiated a fair and reasonable price for the same; and

WHEREAS, this Agreement is not subject to competitive bidding requirements under Section 262.023 of the Texas Local Government Code because this Agreement is for professional engineering services and may not be competitively bid pursuant to Chapter 2254 of the Texas Government Code.

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained herein, the Parties do mutually agree as follows:

1. **Recitals.** The recitals set forth above are incorporated herein by reference and made a part of this Agreement.
2. **Scope of Services.** Engineer shall render services to County as provided in Engineer's Proposal attached hereto as "Exhibit A" and incorporated herein by reference (the "Services").

3. **Time for Performance.** Time for performance for the Services provided under this Agreement shall begin with Engineer's receipt of Notice to Proceed and shall end no later than December 31, 2028. Engineer shall complete such tasks described in the Scope of Services, within this time or within such additional time as may be extended by County.

4. **Compensation and Payment Terms.**

Engineer's fees for the Services shall be calculated at the rate(s) set forth in Exhibit "A" attached hereto. The Maximum Compensation to Engineer for the Services performed under this Agreement is \$782,546.14. In no event shall the amount paid by County to Engineer under this Agreement exceed said Maximum Compensation without an approved change order.

- (a) Engineer understands and agrees that the Maximum Compensation stated is an all-inclusive amount and no additional fee, cost or reimbursed expense shall be added whatsoever to the fees stated in the attached Exhibit "A."
 - (b) County will pay Engineer based on the following procedures: Upon completion of the tasks identified in the Scope of Services, Engineer 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. Engineer shall submit invoices no more frequently than on a monthly basis. 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.
 - (c) Accrual and payment of interest on any overdue payments assessed by Engineer, if any, shall be governed by Chapter 2251 of the Texas Government Code.
 - (d) Engineer understands and agrees that County's obligation to make any payment(s) hereunder is dependent upon Engineer's completion of the Services in a timely, good, and professional manner and in accordance with the performance representations made in Section 25 of this Agreement. Therefore, County reserves the right to withhold payment pending verification of satisfactory work performed.
5. **Limit of Appropriation.** Engineer understands and agrees that the Maximum Compensation for the performance of the Services within the Scope of Services described in Section 2 above is \$782,546.14. In no event shall the amount paid by County under this Agreement exceed the Maximum Compensation without a County approved change order. Engineer 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 \$782,546.14 specifically allocated to fully discharge any and all liabilities County may incur under this Agreement. Engineer does further understand and agree, said understanding and agreement also being of the absolute essence of this Agreement, that the total Maximum Compensation that Engineer may become entitled to and the total maximum sum that County may become liable to pay Engineer under this Agreement shall not under any conditions, circumstances, or interpretations thereof exceed \$782,546.14.

6. **Non-appropriation.** Engineer understands and agrees that in the event no funds or insufficient funds are appropriated by the County under this Agreement, County shall immediately notify Engineer in writing of such occurrence and the Agreement shall thereafter terminate and be null and void on the last day of the fiscal period for which appropriations were received or made without penalty, liability or expense to the County. In no event shall said termination of this Agreement or County's failure to appropriate said funds be deemed a breach or default of this Agreement or create a debt by County in any amount(s) in excess of those previously funded.
7. **Taxes.** Engineer understands and agrees that County is a governmental entity and political subdivision of the state of Texas, and as such, is exempt from payment of any sales and use taxes. County shall furnish evidence of its tax-exempt status upon written request by Engineer.
8. **Insurance.** Prior to commencement of the Services, Engineer 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. Engineer shall provide certified copies of insurance endorsements and/or policies if requested by County. Engineer 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. Engineer shall obtain such insurance written on an Occurrence form 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:
 - (a) Workers Compensation in accordance with the laws of the State of Texas. Substitutes to genuine Workers' Compensation Insurance will not be allowed.
 - (b) 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.
 - (c) 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.

- (d) Business Automobile Liability coverage applying to owned, non-owned and hired automobiles with limits not less than \$1,000,000 each occurrence combined single limit for Bodily Injury and Property Damage combined.
- (e) Professional Liability insurance with limits not less than \$1,000,000.

County and members of the Fort Bend County Commissioners Court shall be named as additional insured to all required coverage except for Workers' Compensation and Professional Liability (if required). All Liability policies written on behalf of Engineer shall contain a waiver of subrogation in favor of County.

If required coverage is written on a claims-made basis, Engineer warrants that any retroactive date applicable to coverage under the policy precedes the Effective Date of this Agreement 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 the work under this Agreement is completed.

Engineer shall not commence any portion of the work under this Agreement until it has obtained the insurance required herein and certificates of such insurance have been filed with and approved by County.

No cancellation of or changes to the certificates, or the policies, may be made without thirty (30) days prior, written notification to County.

Approval of the insurance by County shall not relieve or decrease the liability of the Engineer.

9. **Indemnity. PURSUANT TO SECTION 271.904 OF THE TEXAS LOCAL GOVERNMENT CODE, ENGINEER SHALL INDEMNIFY AND HOLD HARMLESS COUNTY, ITS OFFICIALS, OFFICERS, AND EMPLOYEES FROM AND AGAINST ALL CLAIMS, LOSSES, DAMAGES, CAUSES OF ACTION, SUITS, LIABILITY, AND COSTS, INCLUDING THE REIMBURSEMENT OF REASONABLE ATTORNEY FEES, ARISING OUT OF OR RESULTING FROM AN ACT OF NEGLIGENCE, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER COMMITTED BY ENGINEER OR ENGINEER'S AGENTS, EMPLOYEES, OR ANOTHER ENTITY OVER WHICH ENGINEER EXERCISES CONTROL. IN ADDITION, HALL FURTHER PROCURE AND MAINTAIN LIABILITY INSURANCE WITH COVERAGE AS PROVIDED IN SECTION 8 OF THIS AGREEMENT.**

ENGINEER SHALL TIMELY REPORT TO COUNTY ALL SUCH MATTERS ARISING UNDER THE INDEMNITY PROVISIONS ABOVE. UPON THE RECEIPT OF ANY CLAIM, DEMAND, SUIT,

ACTION, PROCEEDING, LIEN, OR JUDGMENT, AND NO LATER THAN THE FIFTEENTH DAY OF EACH MONTH, ENGINEER SHALL PROVIDE COUNTY WITH A WRITTEN REPORT ON EACH MATTER, SETTING FORTH THE STATUS OF EACH MATTER, THE SCHEDULE OR PLANNED PROCEEDINGS WITH RESPECT TO EACH MATTER, AND THE COOPERATION OR ASSISTANCE, IF ANY, OF COUNTY REQUIRED BY ENGINEER IN THE DEFENSE OF EACH MATTER. IN THE EVENT OF ANY DISPUTE BETWEEN THE PARTIES AS TO WHETHER A CLAIM, DEMAND, SUIT, ACTION, PROCEEDING, LIEN, OR JUDGMENT APPEARS TO HAVE BEEN CAUSED BY OR APPEARS TO HAVE ARISEN OUT OF OR RESULTS FROM AN ACT OF NEGLIGENCE, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER COMMITTED BY ENGINEER, OR ITS AGENTS, EMPLOYEES, OR ANOTHER ENTITY OVER WHICH ENGINEER EXERCISES CONTROL, ENGINEER SHALL, NEVERTHELESS, FULLY DEFEND SUCH CLAIM, DEMAND, SUIT, ACTION, PROCEEDING, LIEN, OR JUDGMENT UNTIL AND UNLESS THERE IS A DETERMINATION BY A COURT OF COMPETENT JURISDICTION THAT SAID ACTS AND/OR OMISSIONS OF ENGINEER ARE NOT AT ISSUE IN THE MATTER.

THE INDEMNITY PROVISIONS OF THIS SECTION SHALL SURVIVE THE TERMINATION OF THIS AGREEMENT HOWEVER CAUSED, AND NO PAYMENT, PARTIAL PAYMENT, OR ISSUANCE OF CERTIFICATION OF COMPLETION OF THE SERVICES UNDER THIS AGREEMENT BY COUNTY, WHETHER IN WHOLE OR IN WHOLE OR IN PART, SHALL WAIVE OR RELEASE ANY OF THE PROVISIONS OF THIS SECTION.

10. **Public Information Act.** Engineer expressly acknowledges and agrees that County is a public entity and as such, is subject to the provisions of the Texas Public Information Act under Chapter 552 of the Texas Government Code. In no event shall County be liable to Engineer for release of information pursuant to Chapter 552 of the Texas Government Code or any other provision of law. Except to the extent required by law or as directed by the Texas Attorney General, County agrees to maintain the confidentiality of information provided by Engineer expressly marked as proprietary or confidential. County shall not be liable to Engineer for any disclosure of any proprietary or confidential information if such information is disclosed under Texas law or at the direction of the Texas Attorney General. Engineer further acknowledges and agrees that the terms and conditions of this Agreement are not proprietary or confidential information.
11. **Compliance with Laws.** Engineer shall comply with all federal, state, and local laws, statutes, ordinances, rules, regulations, and the 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. Engineer, in providing all services hereunder, further agrees to abide by the provisions of any applicable Federal or State Data Privacy Act.
12. **Independent Contractor.** In the performance of work or services hereunder, Engineer 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 Engineer. Engineer 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.

13. **Use of Customer Name.** Engineer may use County's name without County's prior written consent only in Engineer's customer lists. Any other use of County's name by Engineer must have the prior written consent of County.
14. **County/County Data.** Nothing in this Agreement shall be construed to waive the requirements of Section 205.009 of the Texas Local Government Code.
15. **Personnel.** Engineer represents that it presently has, or is able to obtain adequate qualified personnel in its employment for the timely performance of the Services required under this Agreement and that Engineer shall furnish and maintain, at its own expense, adequate and sufficient personnel, in the opinion of County, to perform the Services when and as required and without delays.

All employees of Engineer shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee or agent of Engineer who, in County's opinion, is incompetent or by his conduct becomes detrimental to providing Services pursuant to this Agreement, shall, upon request of County, immediately be removed from association with the Services required under this Agreement.

When performing Services on-site at County's facilities, Engineer shall comply with, and will require that all Engineer's Personnel comply with, all applicable rules, regulations and known policies of County that are communicated to Engineer in writing, including security procedures concerning systems and data and remote access thereto, building security procedures, including the restriction of access by County to certain areas of its premises or systems for security reasons, and general health and safety practices and procedures.

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

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

Engineer 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. Engineer 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.

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

17. **Ownership and Reuse of Documents.** All work product and data produced or developed under this Agreement by Engineer including any documents, data, notes, reports, research, graphic presentation materials, and any other related material (collectively, "Materials"), shall at all times be the property of County. County, at all times, shall have a right of access to the Materials. Engineer shall promptly furnish and deliver all such Materials to County on request. Notwithstanding the foregoing, Engineer shall bear no liability or responsibility for Materials that have been modified post-delivery to County or used by County for a purpose other than that for which they were prepared under this Agreement.

18. **Inspection of Books and Records.** Engineer shall permit County, or any duly authorized agent of County, to inspect and examine the books, records, information, and documentation (collectively, "Records") of Engineer which relate to the Services provided under this Agreement for the purposes of making audits, examinations, excerpts, copies, and transcriptions. Engineer shall maintain all such Records in a readily available state and location, reasonably accessible to County or their authorized representatives. County's right to inspect such books and records shall survive the termination of this Agreement for a period of four (4) years, or until any litigation concerning any of the Services has been satisfactorily resolved, whichever occurs later. **ENGINEER SHALL NOT DESTROY OR DISCARD ANY RECORDS REASONABLY RELATED TO THIS AGREEMENT OR THE SERVICES, UNLESS THE TIME PERIOD FOR MAINTAINING THE SAME HAS EXPIRED.**
19. **Termination.**
- (a) Without Cause. County, in its sole discretion, and without prejudice to any other remedy to which it may be entitled to at law or in equity, may terminate this Agreement, in whole or in part, without cause, upon thirty (30) days prior written notice to Engineer.
- (b) With Cause. County, in its sole discretion, and without prejudice to any other remedy to which it may be entitled to at law or in equity, may terminate this Agreement, in whole or in part, with cause, for any of the following reasons, each of which shall constitute a material breach and "Default" of the Agreement:
- (1) Engineer fails to perform any portion of the Scope of Services within the timeframe(s) provided under this Agreement.
 - (2) Engineer fails to comply with County's documentation and reporting requirements, terms and requirements of this Agreement, or applicable federal, state, or local laws and regulations.
 - (3) Non-performance and suspension of the Agreement by Engineer that exceeds thirty (30) calendar days due to Force Majeure.
 - (4) Engineer fails to perform any obligation under this Agreement or as required by law, ordinance, or regulation and such failure creates an imminent threat to the public health and/or safety.
 - (5) Engineer otherwise 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.

- (6) County shall notify Engineer in writing of the alleged Default in reasonable detail ("Notice"). Upon receipt of said Notice, Engineer shall have opportunity to cure such Default within the time specified in the Notice by County. If Engineer fails to cure such Default within such time, and to the reasonable satisfaction of County, then County may elect to terminate this Agreement for cause.
 - (7) If, after termination of the Agreement by County for cause, it is determined for any reason whatsoever that Engineer was not in Default, or that the Default was excusable, the rights and obligations of the Parties hereunder shall be the same as if the termination had been issued by County without cause in accordance with this Agreement.
 - (c) Upon termination of this Agreement for any reason, Engineer shall cease all work and activity for the Services by the date specified by County and shall not incur any new obligations or perform any additional services for the work performed hereunder beyond the specified date. County shall compensate Engineer in accordance with Section 4, above, for such work provided by Engineer under this Agreement prior to its termination and which has not been previously presented for payment by Engineer to County.
 - (d) 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 Engineer.
20. **Force Majeure.** In the event either Party is rendered unable, wholly or in part, by Force Majeure to carry out any of its obligations under this Agreement, then, within a reasonable time after the occurrence of such event, but no later than ten (10) calendar days after, the Party whose obligations are so affected (the "Affected Party") thereby shall notify the other in writing stating the nature of the event and the anticipated duration. The Affected Party's obligations under this Agreement shall be suspended during the continuance of any delay or inability caused by the event, but for no longer period. The Affected Party shall further endeavor to remove or overcome such delay or inability as soon as is reasonably possible.

For purposes of this Agreement, Force Majeure includes, but is not limited to: acts of God, strikes, lockouts, or other industrial disturbances, acts of the public enemy, orders of any kind of the government of the United States of America or the State of Texas or any civil or military authority other than a Party to this Agreement, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, hurricanes, severe storms, floods, washouts, drought, arrests, restraint of government and people, civil disturbances, explosions, breakage or accidents to machinery, pipelines or canals, and any other incapacities of any Party, similar to those enumerated, which are not within the control of

the Party claiming such inability, which such Party could not have avoided by the reasonable exercise of due diligence and care.

21. **Assignment.** Engineer shall not assign this Agreement to another party without the prior written consent of County, which consent shall not be unreasonably withheld, conditioned, or delayed. Any purported or attempted assignment or transfer in violation of this Section shall be null and void.
22. **Successors and Assigns Bound.** County and Engineer each bind themselves and their successors and assigns to the other Party and to the successors and assigns of such other Party, with respect to all covenants of this Agreement.
23. **Publicity.** Contact with citizens of Fort Bend County, media outlets, or other governmental agencies shall be the sole responsibility of County. Under no circumstances, whatsoever, shall Engineer release any material or information developed or received during the performance of Services hereunder unless Engineer obtains the express written approval of County or is required to do so by law.
24. **Notice.** Any and all notices required or permitted under this Agreement shall be in writing and shall be mailed by certified mail, return receipt requested, or personally delivered to the following addresses:

If to County: Fort Bend County Engineering
Attn: County Engineer
301 Jackson Street, 4th Floor
Richmond, Texas 77469

And

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

If to Engineer: Isani Consultants, LP
10448 Westoffice Dr
Houston, Texas 77042

Within five (5) business days of the Effective Date of this Agreement, each Party to this Agreement shall designate in writing to the other Party one person and one alternate person to be that Party's designated spokesperson for communications between the Parties.

25. **Standard of Care.** Pursuant to Section 271.904 of the Texas Local Government Code, Engineer represents to County that Engineer has the skill and knowledge ordinarily possessed by well-informed members of its trade or profession (“Professionals”) practicing in the greater Houston metropolitan area. Engineer shall provide the Services to County with the same professional skill and care ordinarily provided by such Professionals under the same or similar circumstances and professional license and as expeditiously as is prudent considering the ordinary professional skill and care of a competent Professional.
26. **Travel Policy.** Mutually approved travel and mileage expenses incurred in the performance of the Services hereunder will be reimbursed to Engineer only to the extent that those costs do not exceed Fort Bend County travel reimbursement allowances. A copy of County’s Travel Policy with those reimbursement limits shall be provided to Engineer upon request.
27. **Arbitration, Litigation Waiver, and Attorney Fees.** County does not agree to submit disputes arising out of this Agreement to binding arbitration nor does County agree to pay any and/or all attorney fees incurred by Engineer in any way associated with this Agreement. Therefore, any references in Engineer’s Proposal to binding arbitration, waiver of a right to litigate a dispute, or payment of attorney fees are hereby deleted.
28. **No Waiver of Jury Trial.** County does not agree that all disputes (including any claims or counterclaims) arising from or related to this Agreement shall be resolved without a jury. Therefore, any references in Engineer’s Proposal to County’s waiver of jury trial are hereby deleted.
29. **Limitations.** Limitations for the right to bring an action, regardless of form, shall be governed by the applicable laws of the State of Texas, and any provisions to the contrary in Engineer’s Proposal are hereby deleted.
30. **Indemnification by County. ENGINEER UNDERSTANDS AND AGREES THAT UNDER THE TEXAS CONSTITUTION AND THE LAWS OF THE STATE OF TEXAS, COUNTY CANNOT ENTER INTO AN AGREEMENT WHEREBY COUNTY AGREES TO INDEMNIFY OR HOLD HARMLESS ANOTHER PARTY. THEREFORE, ANY AND ALL REFERENCES IN ENGINEER’S PROPOSAL TO COUNTY DEFENDING, INDEMNIFYING, OR HOLDING OR SAVING HARMLESS ENGINEER OR ANY OTHER PARTY, FOR ANY REASON WHATSOEVER, ARE HEREBY DELETED.**
31. **Entire Agreement and Modification.** This Agreement constitutes the entire Agreement between the Parties and supersedes all previous agreements, written or oral, pertaining

to the subject matter of this Agreement. Any amendment to this Agreement must be in writing and signed by each Party to come into full force and effect. **IT IS ACKNOWLEDGED BY ENGINEER THAT NO OFFICER, AGENT, EMPLOYEE, OR REPRESENTATIVE OF COUNTY HAS ANY AUTHORITY TO CHANGE THE TERMS OF THIS AGREEMENT OR ANY ATTACHED EXHIBITS HERETO UNLESS EXPRESSLY AUTHORIZED BY THE FORT BEND COUNTY COMMISSIONERS COURT.**

32. **Conflict.** In the event there is a conflict among the terms of this document entitled “Agreement for Professional Engineering Services” and the terms of Engineer’s Proposal or any other exhibit attached hereto, the terms of this document shall prevail with regard to the conflict.
33. **Understanding Fair Construction.** By execution of this Agreement, the Parties acknowledge that they have read and understood each provision, term, and obligation contained herein. This Agreement, although drawn by one party, shall be construed fairly and reasonably and not more strictly against the drafting Party than the non-drafting Party.
34. **Severability.** In case any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision hereof and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.
35. **No Waiver of Immunity.** Neither the execution of this Agreement nor any other conduct of either Party relating to this Agreement shall be considered a waiver or surrender by County of its governmental powers or immunity under the Texas Constitution or the laws of the state of Texas.
36. **Applicable Law and Venue.** This Agreement shall be construed according to the laws of the state of Texas. Venue for any claim arising out of or relating to the subject matter of this Agreement shall lie in a court of competent jurisdiction of Fort Bend County, Texas.
37. **Certain State Law Requirements for Contracts** The contents of this Section are required by Texas law and are included by County regardless of content For purposes of Sections 2252.152, 2271.002, and 2274.002, Texas Government Code, as amended, Engineer hereby verifies that Engineer and any parent company, wholly owned subsidiary, majority-owned subsidiary, and affiliate:
 - (a) Unless affirmatively declared by the United States government to be excluded from its federal sanctions regime relating to Sudan or Iran or any federal sanctions regime relating to a foreign terrorist organization, Engineer is not identified on a list prepared and maintained by the Texas Comptroller of Public Accounts under Section 806.051, 807.051, or 2252.153 of the Texas Government Code.

- (b) If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, Engineer does not boycott Israel and is authorized to agree in such contracts not to boycott Israel during the term of such contracts. "Boycott Israel" has the meaning provided in § 808.001 of the Texas Government Code.
 - (c) If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, Engineer does not boycott energy companies and is authorized to agree in such contracts not to boycott energy companies during the term of such contracts. "Boycott energy company" has the meaning provided in § 809.001 of the Texas Government Code.
 - (d) If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, Engineer does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and is authorized to agree in such contracts not to discriminate against a firearm entity or firearm trade association during the term of such contracts. "Discriminate against a firearm entity or firearm trade association" has the meaning provided in § 2274.001(3) of the Texas Government Code. "Firearm entity" and "firearm trade association" have the meanings provided in § 2274.001(6) and (7) of the Texas Government Code.
38. **Human Trafficking. BY ACCEPTANCE OF THIS AGREEMENT, ENGINEER ACKNOWLEDGES THAT FORT BEND 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.**
39. **Captions.** The section captions used in this Agreement are for convenience of reference only and do not affect the interpretation or construction of the Agreement.
40. **Electronic and Digital Signatures.** The Parties to this Agreement agree that any electronic and/or digital signatures of the Parties included in this Agreement are intended to authenticate this writing and shall have the same force and effect as the use of manual signatures.
41. **Certification.** By his or her signature below, each signatory individual certifies that he or she is the properly authorized person or officer of the applicable Party hereto and has the requisite authority necessary to execute this Agreement on behalf of such Party, and each Party hereby certifies to the other that it has obtained the appropriate approvals or authorizations from its governing body as required by law.

IN WITNESS WHEREOF, and intending to be legally bound, County and Engineer hereto have executed this Agreement to be effective on the date signed by the last Party hereto.

FORT BEND COUNTY, TEXAS

KP George, County Judge

Date

ATTEST:

Laura Richard, County Clerk

ISANI CONSULTANTS, LP



Authorized Agent – Signature

Murthy Made

Authorized Agent- Printed Name

Project Manager

Title

3/14/2025

Date

APPROVED:



J. Stacy Slawinski, County Engineer

AUDITOR'S CERTIFICATE

I hereby certify that funds in the amount of \$_____ are available to pay the obligation of Fort Bend County, Texas within the foregoing Agreement.

Robert Ed Sturdivant, County Auditor

EXHIBIT A

(Engineer's Proposal Follows Behind)



civil \ design \ engineers

February 14, 2025

Mr. Lee Shelton, P.E.
Sr. Project Manager
KCI Technologies, Inc.
15021 Katy Freeway, Suite 200
Houston, TX 77094

Subject: Fort Bend County Mobility Bond Program
FBC Project Number: 23112
**Proposal for Professional Engineering Services: Pool Hill Road Segment 3-
From 6400' North of FM 1093 to FM 1093, Precinct 1**

Dear Mr. Shelton:

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

- **Exhibit A:** Scope of Services (Preliminary and Final Design)
- **Exhibit B:** Compensation for Professional Engineering Services
- **Exhibit C:** Project Schedule (Preliminary and Final Design)
- **Exhibit D:** Project Team Sub-Consultants
- **Exhibit E:** 2024 Billing Rate Schedule
- **Exhibit F:** Project Limits

The total proposed fee for professional engineering and additional services including Topographic Survey and Geotechnical Investigations, will be **\$782,546.14**.

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 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'.

Murthy Made, P.E., PMP, ENV SP
Project Manager
Isani Consultants, LP

October 25, 2024

“EXHIBIT A” – Scope of Services

Pool Hill Road – Segment 3

From 6400' North of FM 1093 to FM 1093

FBC Project #23112, Precinct 1

Fort Bend County has requested a proposal for **Preliminary Engineering, Final Design Phase Services, Bid Phase, and Construction Phase Services** to improve the existing 2-lane asphalt undivided roadway (with roadside ditches) to a 2-lane concrete curb & gutter half boulevard section with storm sewers, detention, drainage outfalls, and all necessary appurtenances.

PROJECT LIMITS AND DETAILS:

1. The Pool Hill Road- Segment 3 project will begin 6400' North of FM 1093 and ends at the intersection of Pool Hill Rd & FM 1093. The Existing ROW for the project limits varies from 45 feet to 70 feet. The proposed ROW is to be acquired 100 feet within the project limits to accommodate the ultimate condition of a 4-lane boulevard.
2. The road will be widened to accommodate a 2-lane concrete curb & gutter half boulevard section, with left-turn lanes as needed. The pavement for the half boulevard is to be designed toward the future outside curb line to accommodate the ultimate condition of a 4-lane boulevard. The existing ditches east and west of the existing roadway will be replaced with a storm sewer system.

PROJECT SCOPE

GENERAL:

1. Coordination with Geotechnical, drainage, and Survey consultants for the project will be performed during the Preliminary Engineering and Design Phase.
2. Coordination with Pool Hill Rd Segment 2 (FBC Proj. 23111) and Bowser Rd (FBC Proj. 20306) design engineer will be done for pavement tie-in and drainage/detention requirements.
3. Coordination with MUD engineer as needed.
4. Coordination with the City of Simonton ETJ and the City of Fulshear ETJ as 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 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, 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. 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 and Detention. 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, 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 approximately 3 months from the 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. Alignment coordination will be performed with Pool Hill Road Segment 2 Designers.
- **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, Railroad Commission 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.
 - 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 Pool Hill Road (Seg. 3) within the project limits including the roundabout.
 - 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 Civil Corp, LLC):

1. Topographic Survey:

Topographic Survey of Pool Hill Road (Seg. 3) from 6400' north of FM 1093 to FM 1093. 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 100 feet past the existing or proposed right of way. 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. Project abstracting; without the benefit of a title company, obtain deeds of records and plats relating to Pool Hill Road (Seg. 3), adjoining tracts, and intersecting roadways. Prepare a KMZ file with ownership information, proposed takings, and a preliminary roadway layout. Prepare Survey Control Sheets to be delivered in PDF format.

3. 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 right of way with laths at 100-foot intervals.

GEOTECHNICAL SCOPE OF SERVICES (by Earth 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 **14 borings** along the road alignment to a depth of 15-feet each.
- Obtaining continuous soil samples to a depth of 15 feet, and then at five (5) foot intervals thereafter to the borings' termination depths.
- Earth 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, Earth Engineering will author a report that will include the following subjects:

- Soil stratigraphy: soil encountered up to 25 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 Ration 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.
- The 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 the effects of poor drainage and the presence of trees on the performance of the utilities and pavement.

DRAINAGE:

The scope of services includes the following tasks:

- Coordination with the Pool Hill Road corridor drainage engineer and provide the initial data for the preparation of the drainage analysis and report.

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, drainage system 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%, and 100%.

The design phase shall also include the preparation of an 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 be limited to:

- Depict utilities to a reasonable degree of accuracy on the plan and profile drawings.
- 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 Pool Hill Road (Seg. 3) shall comply with the requirement of Fort Bend County regulations and follow MOBILITY DESIGN MANUAL, Latest Edition.
3. The design and construction of Pool Hill Road (Seg. 3) 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 the 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.

Utilities:

Water and Sanitary:

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

Storm Water Pollution Prevention Plans (SWPPP):

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

"EXHIBIT B" - Compensation for Professional Services
Project Name: Pool Hill Road- Segment 3
Project Limits: From 6400' North of FM 1093 to FM 1093
FBC Project Number: 23112 | Isani Project Number: 24PVxx

BASIC SERVICES

1 Preliminary Engineering Report

Preliminary Engineering Design (Lump Sum)

1.1 (includes Project Management & Coordination with sub-consultants) \$ 171,070.00

1.2 Drainage

1.2.1 *Drainage Coordination and Providing the initial Data* \$ 11,350.00

\$ 182,420.00

2 Final Design (Lump Sum)

\$ 337,935.00

3 Bid Phase (Lump Sum)

\$ 17,030.00

4 Geotechnical Investigations (Earth Eng)

4.1 *Field Exploration (14 boreholes)* \$ 9,406.00

4.2 *Laboratory Testing* \$ 5,318.00

4.3 *Engineering and Report Writing* \$ 11,800.00

\$ 26,524.00

5 Survey (CivilCorp)

5.1 *Existing ROW Mapping* \$ 54,616.60

5.2 *Topographic Surveying* \$ 47,509.60

\$ 102,126.20

SUB-TOTAL FOR BASIC SERVICES (1-6) \$ 666,035.20

OPTIONAL ADDITIONAL SERVICES

6 Survey (CivilCorp)

6.1 *Level B SUE* \$ 12,384.14

6.2 *Proposed ROW Map, Metes & Bound (36 Parcels @ \$2250/parcel)* \$ 81,000.00

6.3 *Construction Staking* \$ 8,811.80

\$ 102,195.94

7 Final Design (Waterline Design)

7.1 *Existing Waterline Relocation* \$ 14,315.00

\$ 14,315.00

SUB-TOTAL FOR OPTIONAL SERVICES (7) \$ 116,510.94

TOTAL SERVICES (BASIC & OPTIONAL) \$ 782,546.14

POOL HILL ROAD SEGMENT 3
FROM 6400' NORTH OF FM 1093 TO FM 1093
ISANI CONSULTANTS, L.P. PROPOSAL - FEBRUARY 14, 2025
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		\$300.00	\$205.00	\$180.00	\$160.00	\$140.00	\$120.00	\$95.00		
NO.	LEVEL OF EFFORT (ESTIMATED HOURS)									
PRELIMINARY DESIGN (TASK A)										
A1		2	80	58	236	322	180		878	\$ 131,880.00
A2			14	4	24	28			70	\$ 11,350.00
A3										\$ 26,524.00
A4										\$ 102,126.20
A5		4	58		90	54		12	218	\$ 36,190.00
A6										\$ 3,000.00
TOTAL ESTIMATE FOR PRELIMINARY DESIGN										\$ 311,070.20
PRELIMINARY DESIGN										
PRELIMINARY ENGINEERING/DESIGN (TASK A1)										
1	Key Maps, Vicinity Maps and Other Maps Requesting Facility Maps and Record Drawings from the concerned companies/organizations Evaluate Existing Conditions				4	4	12		20	\$ 2,640.00
2			4		8	12			24	\$ 3,780.00
3										
3.1	Geometrics		2	2	4	8			16	\$ 2,530.00
3.2	Topographic Conditions		1		6	6			13	\$ 2,005.00
3.3	Traffic		1		2	2			5	\$ 805.00
4	Utilities Coordination and Contact List Table		2		8	16			26	\$ 3,930.00
5	Major Utility Conflicts Table		2		8	20			30	\$ 4,490.00
6	Proposed Improvements									
6.1	Geometrics (Design Criteria and Typical Sections)		2	4	8	8			22	\$ 3,530.00
6.2	Paving		2	2	6	8			18	\$ 2,850.00
6.3	Drainage		2	2	8	12			24	\$ 3,730.00
6.4	Permitting Requirements		2		4	4			10	\$ 1,610.00
7	Review and Check Topographic Survey (with field visit)		4	2	12	12			30	\$ 4,780.00
8	Study Existing ROW and provide Recommendations for Proposed ROW		2		4	6			12	\$ 1,890.00
9	Identify Problem Areas and Potential Resolutions		4		8	16			28	\$ 4,340.00
10	Basemaps & Existing Plan and Profiles	15		8	32	48	60		156	\$ 22,120.00

POOL HILL ROAD SEGMENT 3

FROM 6400' NORTH OF FM 1093 TO FM 1093
ISANI CONSULTANTS, L.P. PROPOSAL - FEBRUARY 14, 2025
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		\$300.00	\$205.00	\$180.00	\$160.00	\$140.00	\$120.00	\$95.00		
LEVEL OF EFFORT: TASK LIST										
NO.	LEVEL OF EFFORT (ESTIMATED HOURS)									
11	Proposed Horizontal Design/Alignments		6	4	10	20	24		64	\$ 9,230.00
12	Proposed Horizontal Design/Alignments (Storm Sewers)		4	2	8	12	12		38	\$ 5,580.00
13	Preparing Roadway Schematics		6	6	16	24	32		84	\$ 12,070.00
14	Sight Triangles (Proposed Cross Streets)	4	2	2	8	12	12		36	\$ 5,170.00
14	Preliminary Engineering Report (PER)		2	12	40	40	20		126	\$ 19,620.00
15	Prepare PER Presentation Slides		8	4	16	8	8		44	\$ 7,000.00
16	Specifications and Preliminary Construction Cost Estimate		4	8	16	24			52	\$ 8,180.00
	SHEETS/HOURS SUB-TOTALS	2	80	58	236	322	180		878	
	TOTAL LABOR COSTS	\$600.00	\$16,400.00	\$10,440.00	\$37,760.00	\$45,080.00	\$21,600.00			\$ 131,880.00
	% DISTRIBUTION OF STAFFING	0.23%	9.11%	6.61%	26.88%	36.67%	20.50%		100.00%	
	SUBTOTAL (TASK A1)									\$ 131,880.00
DRAINAGE (TASK A2)										
1	Review of data including survey, record drawings, site visits, and providing the initial data to drainage consultants		6	4	12	16			38	\$ 6,110.00
2	Drainage Coordination with Drainage Consultants		8		12	12			32	\$ 5,240.00
	SHEETS/HOURS SUB-TOTALS		14	4	24	28			70	
	TOTAL LABOR COSTS		\$2,870.00	\$720.00	\$3,840.00	\$3,920.00				\$ 11,350.00
	% DISTRIBUTION OF STAFFING		20.00%	5.71%	34.29%	40.00%			100.00%	
	SUBTOTAL (TASK A2)									\$ 11,350.00
GEOTECHNICAL INVESTIGATIONS (TASK A3) (by Earth Engineering, Inc.)										
1	Field Exploration (14 boreholes)									\$ 9,406.00
2	Laboratory Testing									\$ 5,318.00
3	Engineering and Report Writing									\$ 11,800.00
	TOTAL LABOR COSTS									\$ 26,524.00
	SUBTOTAL (TASK A3)									\$ 26,524.00
TOPOGRAPHIC SURVEY AND ROW MAPS (TASK A4) (by Civil Corp, LLC)										
1	Existing ROW Mapping									\$ 54,616.60
2	Topographic Surveying									\$ 47,509.60
	TOTAL LABOR COSTS									\$ 102,126.20

POOL HILL ROAD SEGMENT 3

FROM 6400' NORTH OF FM 1093 TO FM 1093

ISANI CONSULTANTS, L.P. PROPOSAL - FEBRUARY 14, 2025

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		\$300.00	\$205.00	\$180.00	\$160.00	\$140.00	\$120.00	\$95.00		
LEVEL OF EFFORT (ESTIMATED HOURS)										
NO.	LEVEL OF EFFORT: TASK LIST									
	SUBTOTAL (TASK A4)									\$ 102,126.20
PROJECT MANAGEMENT FOR PRELIMINARY ENGINEERING (TASK A5)										
1	Site/Field Visit		2		6	4			12	\$ 1,930.00
2	Co-ordination with Centerpoint Energy (Electric and Gas)		2		6	4			12	\$ 1,930.00
3	Co-ordination with AT&T		2		6	4			12	\$ 1,930.00
4	Coordination with Other Utility Companies		4		10	10			24	\$ 3,820.00
5	Coordination with Adjacent Project Engineers		6		8	8			22	\$ 3,630.00
6	Coordination with Surveying Consultants		8		16	16		2	42	\$ 6,630.00
7	Coordination with Geotechnical Consultants		6		8	8		2	24	\$ 3,820.00
8	Project Management and Meetings	4	24		24			4	56	\$ 10,340.00
9	Approval from FBCED and FBCDD		4		6			4	14	\$ 2,160.00
	SHEETS/HOURS SUB-TOTALS	4	58		90	54		12	218	
	TOTAL LABOR COSTS	\$1,200.00	\$11,890.00		\$14,400.00	\$7,560.00		\$1,140.00		\$ 36,190.00
	% DISTRIBUTION OF STAFFING	1.83%	26.61%		41.28%	24.77%		5.50%	100.00%	
	SUBTOTAL (TASK A5)									\$ 36,190.00
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		6	152	62	350	404	180	12	1166
	TOTAL ESTIMATE FOR PRELIMINARY DESIGN		\$1,800	\$31,160	\$11,160	\$56,000	\$56,560	\$21,600	\$1,140	\$ 311,070.20

POOL HILL ROAD SEGMENT 3
FROM 6400' NORTH OF FM 1093 TO FM 1093
ISANI CONSULTANTS, L.P. PROPOSAL - FEBRUARY 14, 2025
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		\$300.00	\$205.00	\$180.00	\$160.00	\$140.00	\$120.00	\$95.00		
LEVEL OF EFFORT: TASK LIST										
LEVEL OF EFFORT (ESTIMATED HOURS)										
FINAL DESIGN (TASKS A TO I)										
A ROADWAY DESIGN			50	77	242	300	300		969	\$ 140,830.00
A1 WATERLINE DESIGN (OPTIONAL ADDITIONAL)			7	6	22	30	34		99	\$ 14,315.00
B DRAINAGE DESIGN		2	26	22	104	160	122		436	\$ 63,570.00
C LEVEL B & PROPOSED ROW MAPS (OPTIONAL ADDITIONAL)										\$ 102,195.94
D TRAFFIC CONTROL PLANS			21	25	72	98	118		334	\$ 48,205.00
E SIGNING AND STRIPING PLANS			9	9	26	34	34		112	\$ 16,465.00
F STORM WATER POLLUTION PREVENTION PLANS			9	9	26	34	34		112	\$ 16,465.00
G PROJECT MANAGEMENT FOR FINAL DESIGN		8	74	4	96	90	12	18	302	\$ 49,400.00
H OTHER EXPENSES										\$ 3,000.00
TOTAL ESTIMATE FOR FINAL DESIGN										\$ 454,445.94
FINAL DESIGN										
ROADWAY DESIGN (TASK A)										
1 Fort Bend County Design Criteria					4	6			10	\$ 1,480.00
2 Cover Sheet, General Notes, and Project Layouts	5		4	3	6	8	12		33	\$ 4,880.00
3 Horizontal and Vertical Design/Alignments			6	4	16	20	30		76	\$ 10,910.00
4 Existing and Proposed Typical Sections	4		2	4	8	20	20		54	\$ 7,610.00
5 Demolition Plans	6		2	4	12	18	24		60	\$ 8,450.00
6 Design for Cross Streets	2		2	2	16	16	24		60	\$ 8,450.00
7 Intersection Details/Layouts	2		2	4	8	12	16		42	\$ 6,010.00
8 Typical Street/Driveway Connection Details	2				12	8	10		30	\$ 4,240.00
9 Roadway Plan and Profile Sheets	15		16	32	80	100	120		348	\$ 50,240.00
10 Corridor Modeling & Cross Sections at 100-foot Intervals	20		6	16	48	40	40		150	\$ 22,190.00
11 Project Calculations and Earthwork Calculations	3		4	4	12	16			36	\$ 5,700.00
12 Specifications and Construction Cost Estimate			4	4	16	32			56	\$ 8,580.00
13 Standard Details/Drawings	10		2		4	4	4		14	\$ 2,090.00
SHEETS/HOURS SUB-TOTALS	69		50	77	242	300	300		969	
TOTAL LABOR COSTS			\$10,250.00	\$13,860.00	\$38,720.00	\$42,000.00	\$36,000.00			\$ 140,830.00
% DISTRIBUTION OF STAFFING			5.16%	7.95%	24.97%	30.96%	30.96%		100.00%	

POOL HILL ROAD SEGMENT 3
FROM 6400' NORTH OF FM 1093 TO FM 1093
ISANI CONSULTANTS, L.P. PROPOSAL - FEBRUARY 14, 2025
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		\$300.00	\$205.00	\$180.00	\$160.00	\$140.00	\$120.00	\$95.00		
LEVEL OF EFFORT: TASK LIST										
SUBTOTAL (TASK A)										\$ 140,830.00
WATERLINE DESIGN (TASK A1) (OPTIONAL ADDITIONAL)										
1 Existing Waterline Relocation (Included with Roadway Plan and Profile Sheets)			4	4	12	20	32		72	\$ 10,100.00
2 Specifications and Construction Cost Estimate			2	2	8	8			20	\$ 3,170.00
3 Standard Details/Drawings	2		1		2	2	2		7	\$ 1,045.00
SHEETS/HOURS SUB-TOTALS	2		7	6	22	30	34		99	
TOTAL LABOR COSTS			\$1,435.00	\$1,080.00	\$3,520.00	\$4,200.00	\$4,080.00			\$ 14,315.00
% DISTRIBUTION OF STAFFING			7.07%	6.06%	22.22%	30.30%	34.34%		100.00%	
SUBTOTAL (TASK A1)										\$ 14,315.00
DRAINAGE DESIGN (TASK B)										
1 Drainage Area Maps	7		4	4	20	32	40		100	\$ 14,020.00
2 Hydraulic Data Sheets	4		4	4	12	16	16		52	\$ 7,620.00
3 Horizontal and Vertical Design/Alignments (Storm)		2	4	4	24	40			74	\$ 11,580.00
4 Drainage Plan and Profile Sheets (Included with Roadway Plan and Profile Sheets)			4	6	24	40	40		114	\$ 16,140.00
5 Drainage System Laterals	6		4	4	12	20	20		60	\$ 8,660.00
6 Standard Details/Drawings	4		2		4	4	6		16	\$ 2,330.00
7 Specifications and Construction Cost Estimate			4		8	8			20	\$ 3,220.00
SHEETS SUB-TOTALS	21	2	26	22	104	160	122		436	
TOTAL LABOR COSTS		\$600.00	\$5,330.00	\$3,960.00	\$16,640.00	\$22,400.00	\$14,640.00			\$ 63,570.00
% DISTRIBUTION OF STAFFING		0.46%	5.96%	5.05%	23.85%	36.70%	27.98%		100.00%	
SUBTOTAL (TASK B)										\$ 63,570.00

POOL HILL ROAD SEGMENT 3
FROM 6400' NORTH OF FM 1093 TO FM 1093
ISANI CONSULTANTS, L.P. PROPOSAL - FEBRUARY 14, 2025
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		\$300.00	\$205.00	\$180.00	\$160.00	\$140.00	\$120.00	\$95.00		
LEVEL OF EFFORT: TASK LIST										
LEVEL B & PROPOSED ROW MAPS (TASK C) (OPTIONAL ADDITIONAL)										
1 Level B SUE										\$ 12,384.14
2 Proposed ROW Map, Metes & Bound (36 Parcels @ \$2250/parcel)										\$ 81,000.00
3 Construction Staking										\$ 8,811.80
SHEETS SUB-TOTALS										
TOTAL LABOR COSTS										\$ 102,195.94
% DISTRIBUTION OF STAFFING			#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
SUBTOTAL (TASK C)										\$ 102,195.94
TRAFFIC CONTROL PLANS (TASK D)										
1 General Notes and Index	1		1	1	2	2	2		8	\$ 1,225.00
2 Project Approach Signing	1		1	1	4	6	6		18	\$ 2,585.00
3 Phasing Overview	1		1	1	4	6	8		20	\$ 2,825.00
4 Phasing Description and Typical Sections	4		2	2	4	12	8		28	\$ 4,050.00
5 TCP for Temporary Pavement Construction	2		1	1	4	6	10		22	\$ 3,065.00
6 TCP Phase I	6		4	6	16	20	28		74	\$ 10,620.00
7 TCP Phase II	6		4	6	16	20	28		74	\$ 10,620.00
8 TCP Tie- Ins	4		2	2	8	8	8		28	\$ 4,130.00
9 Detour Plans	2		2	2	8	8	8		28	\$ 4,130.00
10 TCP Specifications and Construction Cost Estimate			2	2	4	8	8		24	\$ 3,490.00
11 Standard Details/Drawings	4		1	1	2	2	4		10	\$ 1,465.00
SHEETS/HOURS SUB-TOTALS	31		21	25	72	98	118		334	
TOTAL LABOR COSTS			\$4,305.00	\$4,500.00	\$11,520.00	\$13,720.00	\$14,160.00			\$ 48,205.00
% DISTRIBUTION OF STAFFING			6.29%	7.49%	21.56%	29.34%	35.33%		100.00%	
SUBTOTAL (TASK D)										\$ 48,205.00
SIGNING AND STRIPING PLANS (TASK E)										
1 Signing and Striping Plans	7		6	6	16	24	32		84	\$ 12,070.00
2 SPM Specifications and Construction Cost Estimate			2	2	8	8			20	\$ 3,170.00

POOL HILL ROAD SEGMENT 3
FROM 6400' NORTH OF FM 1093 TO FM 1093
ISANI CONSULTANTS, L.P. PROPOSAL - FEBRUARY 14, 2025
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		\$300.00	\$205.00	\$180.00	\$160.00	\$140.00	\$120.00	\$95.00		
LEVEL OF EFFORT (ESTIMATED HOURS)										
NO.	LEVEL OF EFFORT: TASK LIST									
3	Standard Details/Drawings	2		1	1	2	2		8	\$ 1,225.00
	SHEETS/HOURS SUB-TOTALS	9		9	9	26	34		112	
	TOTAL LABOR COSTS			\$1,845.00	\$1,620.00	\$4,160.00	\$4,080.00			\$ 16,465.00
	% DISTRIBUTION OF STAFFING			8.04%	8.04%	23.21%	30.36%		100.00%	
	SUBTOTAL (TASK E)									\$ 16,465.00
STORM WATER POLLUTION PREVENTION PLANS (TASK F)										
1	Storm Water Pollution Prevention Plans	7		6	6	16	24		84	\$ 12,070.00
2	SWPPP Specifications and Construction Cost Estimate			2	2	8	8		20	\$ 3,170.00
3	Standard Details/Drawings	2		1	1	2	2		8	\$ 1,225.00
	SHEETS/HOURS SUB-TOTALS	9		9	9	26	34		112	
	TOTAL LABOR COSTS			\$1,845.00	\$1,620.00	\$4,160.00	\$4,080.00			\$ 16,465.00
	% DISTRIBUTION OF STAFFING			8.04%	8.04%	23.21%	30.36%		100.00%	
	SUBTOTAL (TASK F)									\$ 16,465.00
PROJECT MANAGEMENT FOR FINAL DESIGN (TASK G)										
1	Field Visit			4		4	4		12	\$ 2,020.00
2	Project Manual			4		8	12	2	30	\$ 4,690.00
3	Co-ordination with Centerpoint Energy (Electric and Gas)				4					
4	Co-ordination with AT&T, and other private Utilities			2		4	4	2	12	\$ 1,800.00
5	Coordination with Surveying Consultants			2		6	4	4	16	\$ 2,310.00
6	Coordination with Geotechnical Consultants			4		12	12		29	\$ 4,720.00
7	Coordination with Designers of Adjacent Projects			2		6	6		15	\$ 2,510.00
8	Preparing Exhibits for TxDOT Coordination & Permit			1		8	12	2	31	\$ 5,130.00
9	Project Management and Meetings			4		24	16	4	88	\$ 5,710.00
10	Milestones (70%, 95%, and 100%)			6		12	8	4	30	\$ 15,860.00
	HOURS SUB-TOTALS		8	74	4	96	90	18	302	
	TOTAL LABOR COSTS		\$2,400.00	\$15,170.00	\$720.00	\$15,360.00	\$12,600.00	\$1,710.00		\$ 49,400.00
	% DISTRIBUTION OF STAFFING		2.65%	24.50%	1.32%	31.79%	29.80%	5.96%	100.00%	
	SUBTOTAL (TASK G)									\$ 49,400.00

POOL HILL ROAD SEGMENT 3
FROM 6400' NORTH OF FM 1093 TO FM 1093
ISANI CONSULTANTS, L.P. PROPOSAL - FEBRUARY 14, 2025
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		\$300.00	\$205.00	\$180.00	\$160.00	\$140.00	\$120.00	\$95.00		
LEVEL OF EFFORT (ESTIMATED HOURS)										
OTHER EXPENSES (TASK H)										
1 Printing/Plotting/Copying (Including Mylars)										\$ 2,000.00
2 Mileage/Postage/Courier										\$ 1,000.00
SUBTOTAL (TASK H)										\$ 3,000.00
TOTAL NO. OF SHEETS										
TOTAL HOURS	139	10	196	152	588	746	654	18	2364	
TOTAL ESTIMATE FOR FINAL DESIGN (TASKS A-H)		\$3,000	\$40,180	\$27,360	\$94,080	\$104,440	\$78,480	\$1,710		\$ 454,445.94
BID PHASE										
1 Pre-Bid Conference			2		6	6		2	16	\$ 2,400.00
2 Answer Bidder Questions			2		8	8			18	\$ 2,810.00
3 Issue Addenda			2		8	8		2	20	\$ 3,000.00
4 Bid Review and Award Recommendation			4	4	16	12		2	38	\$ 5,970.00
5 Pre-Construction Meeting		4	4		4			2	14	\$ 2,850.00
HOURS SUB-TOTALS		4	14	4	42	34		8	106	
TOTAL LABOR COSTS		\$1,200.00	\$2,870.00	\$720.00	\$6,720.00	\$4,760.00		\$760.00		\$ 17,030.00
% DISTRIBUTION OF STAFFING		3.77%	13.21%	3.77%	39.62%	32.08%		7.55%	100.00%	
TOTAL ESTIMATE FOR BID PHASE										
										\$ 17,030.00
TOTAL ESTIMATE FOR FINAL DESIGN AND BID PHASE										
										\$ 471,475.94

Exhibit "D" - Project Team Sub-Consultants for Additional Services

Project Name: Pool Hill Road – Segment 3
Project Limits: From 6400' North of FM 1093 to FM 1093
FBC Precinct: 1

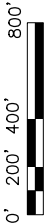
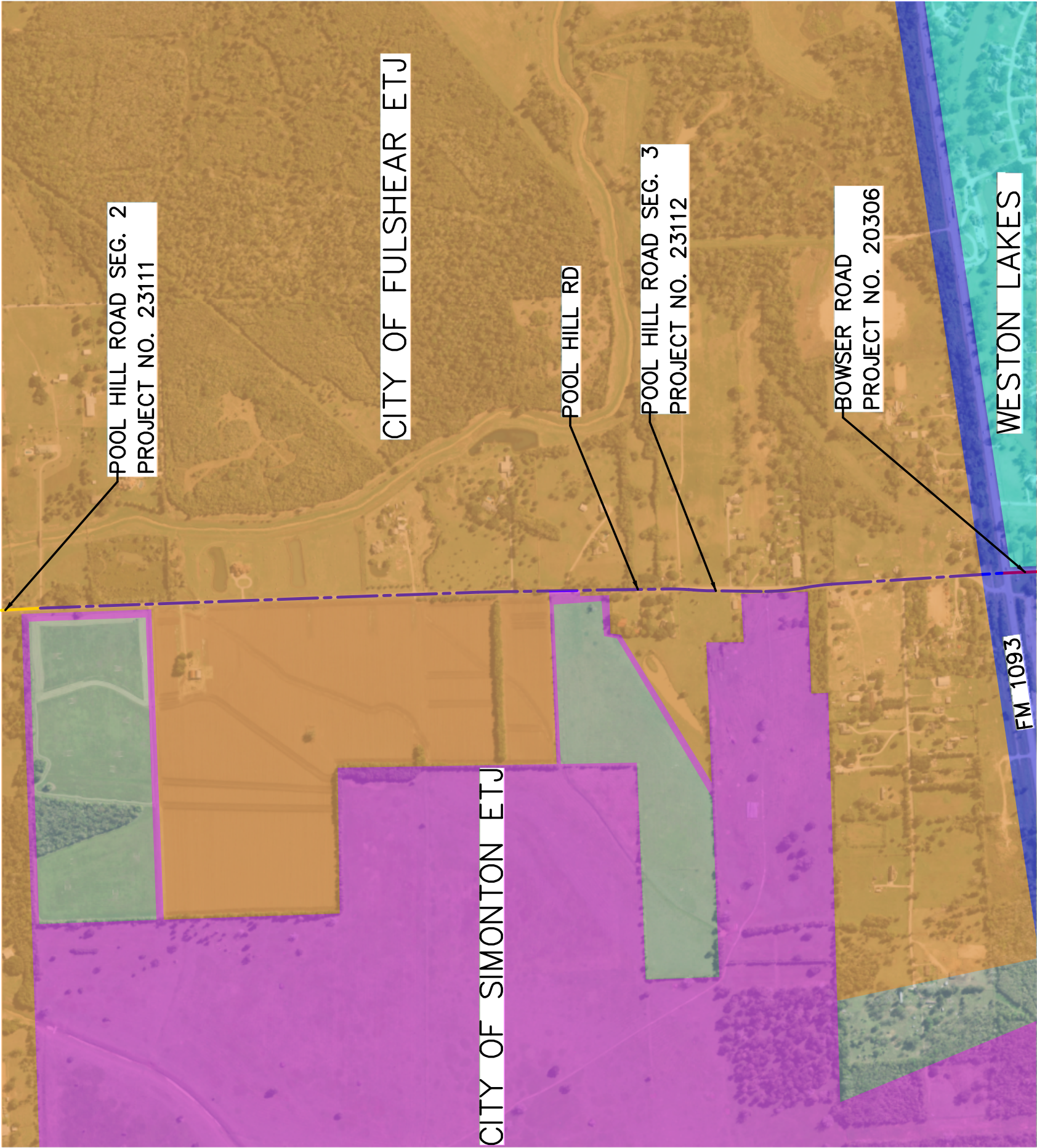
Surveying: Civil Corp, LLC


Geotechnical: Earth Engineering, Inc.

BILLABLE HOURLY RATES (2024)

Title	Hourly Rate
Principal	\$300.00
Senior Project Manager	\$255.00
Project Manager	\$205.00
Senior Project Engineer	\$190.00
Project Engineer	\$160.00
QA/QC Engineer	\$180.00
Senior Civil Engineer	\$190.00
Civil Engineer	\$150.00
Engineer-In-Training (EIT)	\$140.00
Junior Engineer	\$125.00
Senior Designer	\$155.00
Designer	\$140.00
Project Coordinator	\$120.00
CAD Technician	\$120.00
GIS Technician	\$120.00
Document Control	\$120.00
Administrative Assistant	\$95.00
Senior Environmental Planner	\$255.00
Environmental Planner IV	\$210.00
Environmental Planner III	\$180.00
Environmental Planner I/II	\$150.00
Senior Public Involvement Specialist	\$210.00
Public Involvement Specialist	\$150.00
Junior Public Involvement Specialist	\$115.00

EXHIBIT - F



PROJECT: POOL HILL ROAD SEG. 3 PROJECT No. 23112 FROM: 6400' NORTH OF FM 1093 TO: FM 1093 LENGTH: 6,500 FT	DESCRIPTION: UPGRADE EXISTING 2-LANE ASPHALT ROAD TO 2-LANE CONCRETE HALF BOULEVARD WITH STORM SEWER AND 100' ROW.	DESIGN, ROW, AND UTILITIES ONLY	COORDINATION: CITY OF SIMONTON ETJ CITY OF FULSHEAR ETJ 23111-POOL HILL ROAD SEG. 2 20306-BOWSER ROAD FBCDD	FIELD NOTES:	FORT BEND COUNTY 2023 MOBILITY BOND PROGRAM 
----------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------	---------------------------------	-----------------------------------------------------------------------------------------------------------------------------------	---------------------	---------------------------------------------------------------------------------------------------------------------------------------

September 19 2024

Isani Consultants.

Attn: Murthy Made, PE, PMP, ENV, SP

Re: Fee Proposal for Surveying Services – Pool Hill Road (Seg 3) from 6400 feet north of FM 1093 to FM 1093

Project No. 23112

CivilCorp, LLC is pleased to submit this fee proposal for surveying services for the above referenced project. Survey shall conform to Fort Bend County Engineering Design Manual, March 2022 edition.

I. SCOPE OF WORK

Specific survey limits for Pool Hill Road, Segment 3 area are as follows:

Beginning 6,400 feet north of FM 1093 and proceeding South along Pool Hill Road to the intersection of FM 1093 Road a distance of 6,400 feet. The Intersections shall be tied a distance of 300 feet in each direction for a total approximate length of 7,900 linear feet

1. Existing Right of Way Mapping

- a. Project abstracting; without the benefit of a title company, obtain deeds of records and plats relating to Pool Hill Road, adjoining tracts, and intersecting roadways.
- b. Establish the existing right-of-way of the Pool hill Road and intersecting roadways.
- c. Prepare existing right-of-way map of the project, meeting TSPS Category 2 Route survey in PDF format.
- d. Prepare Survey Control Sheets to be delivered in PDF format
- e. Prepare .kml or .shp files as needed for GIS submission of the existing and proposed right-of-way.

ESTIMATED LUMP SUM FEE: \$54,616.60

2. Topographic Surveying for Pool Hill Road

- a. Establish horizontal and vertical control (baseline and Temporary Bench Mark) at intervals not to exceed 1,000 feet. CivilCorp shall coordinate with adjoining project surveyors and design consultants to confirm a single datum is utilized for control.
- b. CivilCorp shall prepare right of entry agreements to allow for field work outside of the right-of-way, short of litigation. Letters will be sent via regular mail or certified mail to landowners as listed by the Fort Bend County Central Appraisal District.
- c. Cross sections shall be taken at 100 foot intervals and extend 20 feet beyond the proposed right-of-way line where accessible. The topographic survey is to include edge of pavements, driveways, signs, mailboxes, traffic signals,

sidewalks, pavement markings, etc. Structures in clear view and within 100 feet of the existing right-of-way should be surveyed. Crossing drainage channels will be profiled and cross sectioned up and down stream. Existing underground utilities will be collected as marked by other as well as visible surface features. Overhead utilities will be indicated. Gravity sanitary and storm sewers will be located as to top of manholes and inlets, flow line elevations, type, size, and direction of pipes. Water lines will be located by tops of valves, fire hydrants (flush valves) and visible surface features.

- d. CivilCorp shall perform a Texas 811 One Call for the project limits. All public utility, private utility and pipeline providers will be contacted via the current utility coordination process and all on-site utility markings and other information provided to CivilCorp by these utility and pipeline providers will be collected by standard survey methods and incorporated into the topographic survey base map.
- e. CivilCorp shall prepare a TSPS Category 6, Condition 2 Topographic Survey delivered in PDF format.
- f. A 2D and 3D survey base map including a digital terrain model or surface will be created and delivered utilizing Microstation Open Roads Designer, release 10.12 or other agreed to version.

ESTIMATED LUMP SUM FEE: \$47,509.60

3. Subsurface Utility Engineering (Quality Level B) Utility/Pipeline Investigations

- a. The survey will conform to the requirements set forth in the manuals titled, "CI/ASCE 38-22, Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data," established by the American Society of Civil Engineers (ASCE). The Survey shall perform such investigations, research, and other activities necessary to identify any potential utility/pipeline conflicts within the project, including but not limited to: Locating and identifying all existing utilities/pipelines including casings and vent pipes within the existing and proposed rights-of-way, including obtaining information from utility owners record drawings and site reconnaissance, as well as shooting elevations marked or uncovered by others, and providing Subsurface Utility Engineering Quality Level B effort to locate all subsurface utilities within the existing and proposed project limits.
- b. CivilCorp will undertake research to obtain the most current available record information concerning the location of underground utilities within the project limits.
- c. CivilCorp will perform a review of the data collected and correlate the record information by utility type and location. CivilCorp will create digital copies of plans provided in hard-copy format and provide them.
- d. CivilCorp will prepare an updated plan that will depict the results and findings of the SUE Investigation. The SUE investigative tasks will be QA/QCed by the operations and/or project manager.

ESTIMATED LUMP SUM FEE: \$12,384.14

4. Construction Services

- a. Check and/or re-set project control referenced to the project baseline and stake the proposed right-of-way limits, miscellaneous staking as required for construction, clearing, or utility relocation.

ESTIMATED SPECIFIED RATE FEE: \$8,811.80

5. Additional Services

- a. Prepare TSPS Category 1A, Condition 3 Land Title Survey- Prepare survey drawing and metes and bounds description in accordance with Fort Bend county Guidelines for property acquisition and add parcels to the existing right-of-way maps.

**ESTIMATED FEE: \$2,250.00 per parcel
(Approximately 36 Tracts= \$81,000.00)**

If you have any questions or require additional information, please don't hesitate to call me. We are looking forward to working with you on this project.

CivilCorp, LLC



Brandon Absher, RPLS
Survey Manager

ISANI

By: _____

Title: _____

Date: _____



EARTH ENGINEERING, INC.

Geotechnical, Materials Testing & Environmental Consultants
4877 Langfield Road • Houston, TX 77040 • T: (713) 681-5311 • F: (713) 681-5411 • www.eartheng.com

September 17, 2024

Mr. Murthy Made, PE, PMP, ENV SP
Project Manager
Isani
10448 Westoffice Dr.
Houston, TX 77042

Proposal No.: P-EE2420106-G
Sent Via E-Mail: Murthy@isaniconsultants.com

M: 209 851 6184
O: 713 747 2399

GEOTECHNICAL EXPLORATION FOR A CONCRETE PAVEMENT AT POOL HILL ROAD SEGMENT (III) IN FORT BEND COUNTY, TX

Dear Mr. Made,

Earth Engineering, Inc. is pleased to present this proposal to perform geotechnical investigation for the above project in Fort Bend County, Texas.

Furnished information indicated that the exiting two lane asphalt road will be converted to a Four-Lane Concrete Road. The total length of the project is about 6,500 feet.

Fort Bend County Engineering Design Manual (March 2022) will be adopted for this project:

1. Drilling and sampling (14) boring at a depth of 15 feet every 500 feet along the road alignment.

SCOPE OF WORK

The scope of our services was specified based on Fort Bend County and Harris County standards and specifications:

1. Drilling and sampling (14) borings to a depth of 15-feet at proposed road alignment.
2. Obtaining continuous soil samples to a depth of 15 feet, then at five (5) foot intervals thereafter to the borings' termination depths.

3. **Earth 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).
4. 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, Unconsolidated-Undrained Triaxial test, California Bearing Ratio (CBR), and OMD Standard Compaction as deemed appropriate.
5. Utilizing the results of observations both in the field and in limited laboratory tests, **Earth Engineering** will author a report that will include the following subjects:
 - soil stratigraphy: soil encountered up to 15 feet
 - groundwater conditions and groundwater control during construction
 - develop design recommendations for the proposed bayou bridge foundations including bearing piles capacity curves.
 - Provide scour analysis and recommendations.
 - develop design recommendations for the underground utilities. The recommendations will include buried structures such as manhole etc.
 - classify the soil types in accordance to FBC requirements based on the characteristics of the soils along the alignment
 - recommend the utilities bedding in accordance with FBC standards and specifications
 - present subgrade stabilization option such as lime/fly-ash for cohesion-less soils and lime for cohesive soils
 - recommend construction considerations, as deemed necessary
 - recommend back-fill material specifications
- Incorporating all of the above into a geotechnical engineering report which is performed under the direction of, and signed by, a professional engineer registered in the State of Texas.



SCHEDULING

We anticipate that the total project duration will be 60 working days.

ESTIMATED FEES

- (14) borings @15' each along the road alignment.

The total cost for the geotechnical study is estimated to be **\$ 26,524.00.**

<i>SERVICE DESCRIPTION</i>	<i>UNIT FEE</i>	<i>AMOUNT</i>	<i>UNIT</i>	<i>ESTIMATED COST</i>
Field Exploration				
Mobilization/Demobilization	\$746	1	Mob	\$746.00
Drilling and sampling (0-50) feet - 14 borings to 15 feet each	\$22	210	feet	\$4,620.00
Boring grout	\$10	210	feet	\$2,100.00
Field Engineer supervision and layout	\$100.00	18	hours	\$1,800.00
Vehicle Charge (two trips, 100 miles-return trip each)	\$0.70	200	miles	\$140.00
		Subtotal:		\$9,406.00
Laboratory Testing				
Atterberg Limits (LL, Pi's)	\$76.00	38	tests	\$2,888.00
Moisture Contents	\$12.00	45	tests	\$540.00
Percent Finer than No. 200 Sieve	\$59.00	4	tests	\$236.00
California Bearing Ratio (CBR)	\$150.00	3	tests	\$450.00
Unconsolidated Undrained Strength Test	\$77.00	14	tests	\$1,078.00
PH of Soil	\$21.00	6	tests	\$126.00
		Subtotal:		\$5,318.00
Engineering and Report Writing				
Principal Engineer, P.E.	\$240.00	8	hours	\$1,920.00
Senior Geotechnical Engineer	\$200.00	45	hours	\$9,000.00
Support Personnel	\$40.00	22	hours	\$880.00
		Subtotal		\$11,800.00
TOTAL				\$26,524.00

INSURANCE

Earth Engineering inc. maintains the following insurance:

- Professional Liability (errors and omissions): one **million.**
- General Liability: **two million.**
- Workman's Compensation: **one million.**

