STATE OF TEXAS §
§
COUNTY OF FORT BEND §

AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

(Old Richmond Road, Segment 1 – Project No. 23305)

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 H J Consulting, Inc. ("Engineer"), a Texas corporation. County and Engineer may be referred to individually as a "Party" or collectively as the "Parties."

WHEREAS, Engineer is a professional engineering firm which provides design, consulting and engineering services in the Greater Houston Area; and

WHEREAS, County desires for Engineer to provide professional engineering services for design, consulting, and construction services for Old Richmond Road, Segment 1 under Mobility Bond Project No. 23305; 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 One Million One Hundred Thirty Five Thousand Five Hundred Seventy Five and 61/100 Dollars ($1,135,575.61). 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 $1,135,575.61. 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 $1,135,575.61 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 $1,135,575.61.

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 EXCERCISES CONTROL. ENGINEER SHALL 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 inabilities 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.

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:
H J Consulting, Inc.
Attn: _____
4771 Sweetwater Blvd
Suite 254
Sugar Land, Texas 77479

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 ACKNOWLEDEDGED 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

APPROVED:

_____
J. Stacy Slawinski, County Engineer

H J CONSULTING, INC

_____
Authorized Agent – Signature

Harish Jajoo, PE
Authorized Agent- Printed Name

President
Title

08-26-2025
Date

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

(Follows Behind)

February 17, 2025

"EXHIBIT A" – Scope of Services
Old Richmond Road Segment 1
1500' East of FM 1464 to Rippling Mill Dr, Precinct 3 (Roadway & Associated Design)
1500' East of FM 1464 to Voss Road, Precinct 3 (Drainage H&H Analysis)
FBC Project # 23305

Fort Bend County has requested a proposal to provide professional engineering services (Preliminary Engineering Phase and Design Phase Services) for the design and reconstruction of the existing 2-lane asphalt roadway with roadside ditches to proposed 3-lane concrete curb & gutter section, storm sewers, detention, drainage outfalls, and all necessary appurtenances from 1500' East of FM 1464 to Rippling Mill Drive, utilizing the latest FBC standards.

PROJECT LIMITS AND DETAILS:

1. Develop existing 2 lane roadway with roadside ditches into 3 lane curb and gutter section with storm sewers.

2. Connect to the existing bridge inside the project on either side.

3. Tie into the proposed roadway improvements along Old Richmond Road Segment 2.

4. The flow from the storm sewers will be directed to proposed detention pond(s), with ultimate outfall to Red Gully.

5. Traffic signal warrant analysis for the intersection of Old Richmond Road at Pecan Acres Drive.

6. Temporary pedestrian (hybrid beacon) signal and Permanent traffic signal at the intersection of Old Richmond Road at Pecan Acres Drive.

ROADWAY ALIGNMENT:

The proposed Old Richmond Road Segment 1 will generally run from approximately 1500' east of FM 1464 via existing bridge to Rippling Mill Drive. The alignment is generally straight with slight curve before the bridge. Right-of-way restrictions posed by any structures will be considered for the design. Sight triangles will be developed at all

the existing intersections. The proposed improvements along Old Richmond Road Segment 1 will be tied to the proposed improvements along Old Richmond Road Segment 2.

We propose to perform the following services as per attached submittal schedule (Exhibit B), for a contract lump sum fee of **$1,135,575.61** per attached fee proposal (Exhibit C).

BASIC SERVICES:

PRELIMINARY DESIGN PHASE:

The Preliminary Engineering Phase Report shall serve as a summary document that incorporates the recommendations from supporting investigative reports, results from the working meeting 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 primary goals of Preliminary Engineering Phase are:

1. Establish a typical cross section and cross sections in non-standard areas.
2. Determine drainage system needs (Drainage Impact Study)
3. Positively determine right-of-way acquisition needs.
4. Determine potential conflicts with existing facilities.
5. Identify critical path items.
6. Identify problem areas and potential resolution(s).
7. Determine permit and regulatory requirements.
8. Prepare a reasonable construction cost estimate.
9. Prepare a “30 percent” plan set, consisting of all existing features (seen and unseen) shown in plan and profile, and proposed improvements in plan only with minor annotations.
10. Prepare preliminary design review checklist.

The Preliminary Engineering Phase includes, but is not limited to the following major tasks:

- Review and Research existing conditions from the field visits and existing record drawings (to be confirmed with the topographic survey)

- Send Utility requests to the Utility companies and prepare Preliminary Utility Conflict Table
- Obtain Record Drawings from other entities as required for the project
- Creating existing Base maps
- Initiate Roadway Geometry
- Approved Geotechnical Reports
- Signed and Sealed Topographic Survey
- Signed and Sealed Signal Warrant Analysis
- Exhibits and Drawings
- Construction Cost Estimate
- Coordination with sub-consultants
- Coordination with adjacent projects
- Drainage Impact Study (Detention Requirements)

We will follow the latest Fort Bend County Design Guidelines and Standards for this project.

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, along with Geotechnical Investigations, and Drainage Impact Study including a drainage report.

Environmental Site Assessments, Wetlands Assessments, Delineation, Concurrence/Permitting and associated tasks are not in the scope of this project. The FBC will be responsible for these tasks, if deemed necessary.

HJ will coordinate with sub-consultants as necessary throughout the project. HJ will coordinate with adjoining project consultants for proper transitions.

The 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, a Topographic Survey will be performed, and the existing conditions will be evaluated including roadway geometrics, soils, and traffic conditions. 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.

The existing water line and sanitary sewer line along the project (if any) may need to be relocated to accommodate the project. Coordination will be made with Fort Bend County MUD #25, and Fort Bend County Water Authority for relocation and approval process and recommendations/options will be provided in PER.

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

At the Client Presentation meeting, the Consultant shall present the working draft of the Preliminary Engineering Phase Letter Report including exhibits, supporting reports, and final recommendations. Any issues identified during the Consultant's work effort to get to this project stage that require a decision from Fort Bend County should be presented at this meeting for confirmation prior to finalizing the Preliminary Engineering Report such that approval can be granted upon report submittal.

Exhibits/Attachments shall include:

- **Aerial Exhibit**
  - Provide an exhibit that shows the project limits and surrounding features. Identify notable features of interest, including drainage channels, floodplains, pipelines, roadways, future roadway alignments shown on the Fort Bend County's Major Thoroughfare Plan, latest available aerial photographs, and developments.

- **Design Drawings/Exhibits**
  - Provide a plan view layout (30 percent plan set) with sufficient detail to ensure that the final design can be constructed without any major issues. The profile shall show existing features and utilities. The sheets shall also have the proposed marking concept so the traffic movements can be considered and reviewed during the Preliminary design phase.
  - Provide a schematic layout for the proposed ROW parcels to be taken.
  - Provide a schematic layout in KMZ showing the proposed improvements and the ROW parcels to be taken.
  - Provide a schematic Traffic Control Plan showing the Phases and Steps with any Alternatives.

- Typical Sections shall be drawn at 1"=20' horizontal and 1"=2' vertical scale on 11"x17" sheets.

- **Cost Estimates**
  - Provide a preliminary construction cost estimate for the final recommendation provided in the 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 research of records 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 utilities.

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

  - Identify major utilities that will potentially require relocation. Major utilities are defined pipelines, concrete incased conduits, or other utilities of this nature. Overhead power lines, small gas service lines and other lines of this nature as not a concern. Provide a table of the existing utilities. The table shall include ID number for the potential conflicts, stations at the left right-of-way, the centerline, and right-of-way, the owner of the utility, contact name, address, phone number, and email address, any notes such as it may be in possible conflict. The table shall also include clearances from overhead or underground utilities to the proposed roadway features noting utility diameters and clearances from the utility to proposed feature (depth top utility to proposed finished grade elevation).

  - Identify any utilities that are within dedicated easements that will be within the proposed right-of-way.

- **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.

Survey Scope of Services:

The Surveyor shall evaluate the existing ROW envelope and make recommendations for the acquisition of ROW necessary for the Project including but not limited to roadway, corner cuts, sight distance triangles, detention, and outfalls, if necessary. The Surveyor shall establish a project baseline based on the centerline of the right-of-way, or the existing baseline if available. The Surveyor shall create an existing utility list (Excel Format) including owner and contact information for available existing utilities within the project limits to be supplied to the Engineering Consultant to complete the identification of potential utility conflicts. The Surveyor shall sign and seal all survey documents.

The linear topographic and right-of-way survey will begin on Old Richmond Road approximately 1,500 feet east of FM 1464 and proceed east to Rippling Mill Drive for a distance of 4,000 linear feet

1. **Survey Control:**
   a. Horizontal and Vertical Survey Control for each site shall be referenced to the nearest Fort Bend County Survey Control Monument, or NGS if no County Monuments are established.
   b. Survey Control Points will be established at 1,000-foot maximum intervals and tied to the Calculated Alignment for each site.
   c. Deliverables will be Signed and Sealed Survey Control Maps per Fort Bend County standards with Detail Sketches in PDF format and CAD files.

2. **Existing Right of Way Mapping (Cat. 1B, Cond. 3):**
   a. Perform abstract survey; obtain deeds of record, and plats for the right-of-way, streets intersecting and tracts of land adjoining the project limits.
   b. Establish the existing right-of-way and boundary lines adjoining the project limits.

c. Deliverable will be Signed and Sealed existing Right-of-Way Map Sheets in PDF format per Fort Bend County standards and CAD Files.
d. Prepare, deliver and coordinate Right-of-Entry for the Project.

3. Topographic Surveying (Cat. 6, Cond. 1):

The Surveyor will provide the following within the surveying limits described above:

a. For the roadway and ditches, obtain cross-sections at 100-foot intervals with grade breaks. Cross-sections shall extend 20 feet beyond the right-of-way lines unless there is a fence at the right-of-way line. Topographic Survey will begin at the south line of the development north of the Proposed Roadway and extend south a minimum of 125 feet and will include the following: Identify locations and elevations of physical features to include edges or curbs and gutters of pavement, parking lanes, center of the median, fences, walls, tree-lines, trees (type, size, and drip line), sidewalks, driveways and driveway curbs, power poles, light poles, water meters, water wells, ponds, sprinklers, off-site drain pipe, elevations at ditch banks, toe, flow line, and side slope, etc. Horizontally and vertically locate available existing utilities within, crossing, and adjoining project limits. Utilities will be located and tied based on visual evidence and marked by “One Call” within the project limits. The rim (top) and flow line elevations will be obtained on inlets, manholes (sanitary and storm), and drainage structures, including culverts, SETs, etc. The rise, width, flowlines, etc. of the drainage elements will be obtained where accessible.
b. The Surveyor will coordinate with SUE consultant (if applicable), pipeline companies, municipal utility districts (MUDs), homeowner’s associations (HOA’s), the County, and private utility agencies to obtain locations of available existing utilities and depths of existing pipelines. These will be shown with the rest of the survey.
c. Topographic Limits will also include 100 feet upstream and downstream along channels at bridge crossings.
d. Prepare existing Topographic Survey Map of the Project to be delivered in PDF per Fort Bend County standards and CAD Files.

4. Soil Boring Locations:

a. Field Locate Soil Borings performed by others.
b. Soil Borings will be added into existing CAD files.

Optional Additional Services:

1. **Project Control for Construction:**
   a. Recover or re-establish project control referenced to the project baseline for construction.
   b. Recover or re-establish project baseline at the beginning, end, street intersections, angle points, beginning of curves, end of curves and at 1,000-foot intervals in between.

2. **Parcel Surveys:**
   a. Prepare metes and bounds descriptions and parcel plats in accordance with Fort Bend County guidelines for property acquisition and add parcels to the existing right-of-way maps.

3. **Interim Right-Of-Way Staking:**
   a. Staking of the Proposed Right-of-way at 100-200-foot intervals with wooden stakes. Estimate 2,000 linear feet of staking per day.

Geotechnical Scope of Services:

This project, located about 1500 feet East of FM-1464 to Rippling Mill Drive along Old Richmond Road in Fort Bend County, Texas. HTS understands that the project includes:

- Adding a new lane to Old Richmond Road, converting the existing two lane road into a three-lane road with a curb and gutter system.
- Reconstruction of storm sewer (assumed maximum trench depth 10 feet)
- Reconstruction of the outfall structures near the bridge crossing.

We understand that Old Richmond Road will be reconstructed in two segments, and this proposal pertains solely to Segment 1. Additionally, we understand that no recommendations are currently required for replacing the existing bridge. Slope stability analyses of the channel/ outfall are not part of this scope

The purpose of this geotechnical investigation is to provide:

- Recommendations for roadway re-construction.
- Recommendations for re-construction of underground storm sewer and outfall structure.
- Subgrade preparation recommendations for roadway, underground storm sewer and outfall structure

HTS proposes that the scope for the geotechnical investigation be as follows:

1. Core/ drill and sample a total of 9 geotechnical borings within the area of the proposed development. The depth and number of borings are selected based on Fort Bend County Geotechnical Investigation guidelines.
2. Seven (7) roadway borings to depth of 15 ft, and Two (2) proposed outfall borings to depth of 25 ft each.
3. Obtain both disturbed and undisturbed samples continuously to a depth of 15 feet and at 5- foot intervals below that depth.
4. Obtain utilities clearance for all the boring locations by calling TX 811.
5. Provide traffic control as per Fort Bend County guidelines before drilling.
6. Measure groundwater levels in the borings during drilling and within approximately 24 hours after the completion of drilling.
7. Backfill the borings with grout after drilling. Mark the borings with spray marking after drilling completion. After the completion of our field activities, the client will be notified for surveying of the boring locations.
8. Perform laboratory tests to classify and determine the engineering properties of the subsurface Soil classifications will be performed in strict accordance with ASTM D 2487. The laboratory program may include the tests:
    - Moisture content
    - Atterberg Limits
    - Material Finer than No. 200 Sieve
    - Unconfined Compression Strength
    - California Bearing Ratio
    - Crumb Test
    - Double Hydrometer Test

9. Characterize the site subsoil and groundwater conditions and provide the results on the “gINT” boring logs.
10. Perform engineering analyses to develop geotechnical recommendations including final asphalt/ concrete pavement recommendations (which will include pavement layer thickness) including subgrade stabilization requirements.
11. Complete engineering analyses as necessary to develop recommendations pertaining to lateral earth pressures on underground structures, dewatering requirements for storm sewer excavations, storm sewer trench shoring and bracing requirements, OSHA soil type classifications pertinent to trench shoring and bracing design, storm sewer excavation/backfill requirements, and storm sewer bedding requirements.
12. Analyze the erosion potential of the soil strata near the outfall and provide erosion control recommendations as needed.
13. Provide active, passive, and at-rest earth pressure coefficients and equivalent fluid unit weights to be used for the design of outfall structures.

14. Conduct a desktop geological fault study, which may include reviewing existing fault maps along the project alignment or at the specific project site that could impact the project design.
15. Submit a pdf file of a report which presents the results of the geotechnical investigation

We anticipate that the total project duration will be 4 weeks from the notice to proceed to the submittal of the final geotechnical report.

Traffic Scope of Services:

Old Richmond Road is aligned east-west in the vicinity of Pecan Acres Drive. It is a two-lane asphalt roadway with roadside ditches on both sides. Pecan Acres Drive is aligned north-south in the vicinity of the intersection. It is a four-lane divided concrete roadway with curb-and-gutter on both sides and a grass median in the middle. Pecan Acres Drive serves as access to subdivisions both to the north and to the south of the intersection. A stop sign control exists at both northbound and southbound approaches to the intersection. A hybrid beacon pedestrian signal with mast arms faces the eastbound and westbound approaches to the intersection along Old Richmond Road. Macario Garcia Middle School exists approximately 500 feet west of the intersection on the north side of Old Richmond Road. A school zone speed limit of 20 miles per hour (mph) exists near the intersection.

Fort Bend County has plans to widen the existing roadway of Old Richmond Road from 1,500 feet east of FM 1464 to Rippling Mill Drive for approximately 4,000 feet. The widening will consist of improving the existing two-lane pavement to a three-lane pavement that includes a continuous left turn lane in the center of the roadway. As part of this improvement, the County would like to investigate if a permanent traffic signal would be installed (if warranted) at the intersection of Old Richmond Road and Pecan Acres Drive.

The design task for the temporary pedestrian (Hybrid Beacon) signal will include hybrid beacons mounted on span wires attached to wood poles. The proposed permanent traffic signal design will include mast arm traffic signal at the intersection with Video Imaging Vehicle Detection System (VIVDS) and wheelchair ramps that are compliant to Americans with Disabilities Act (ADA). This proposal and fee does not include striping, pavement marking and special traffic signal foundation design services.

The scope of services and associated fees are based on the following: 1) TEDSI Infrastructure Group (TEDSI) will coordinate all of its work with Fort Bend County Engineering Department, 2) TEDSI will obtain service outlet location and data

statement from the power company for the required electrical service, and 3) Traffic Signal Warrant Analysis Study and Traffic signal design will be in accordance with the Texas Manual on Uniform Traffic Control Devices (TMUTCD), TxDOT and Fort Bend County Criteria. Of note – this scope of services does not include a special drilled shaft foundation design.

TASK A – TRAFFIC SIGNAL WARRANT ANALYSIS STUDY

TEDSI shall prepare a traffic signal warrant study to support their recommendation for the continuous activation of an existing traffic signal or a proposed traffic signal based on projected volumes. The warrant study must include addressing pedestrian signals along with obtaining both traffic and pedestrian counts. The Engineer shall implement each proposed traffic signal improvement within existing County ROW unless otherwise approved by the County.

TEDSI shall perform the following for the Traffic Signal Warrant Study:

- Conduct site inspection, obtain photographs and prepare existing condition diagram of the study intersection. Record pedestrian and vehicular traffic characteristics, grades and sight distances as observed while in the field.
- Manually record turning movement counts and pedestrian counts at the study intersection during a typical weekday (Tuesday, Wednesday or Thursday) for a continuous 12-hour period. Counts will be non-classified and recorded at 15 minute and hourly intervals. Also record minor street delay.
- Obtain accident records for the study location during the most recent 36-month period, analyze and prepare collision diagram.
- Conduct a signal warrant study following the guidelines published in the Texas Manual On Uniform Traffic Control Devices (latest revision) and evaluate the need for conventional traffic signal at the study intersection.
- Obtain projected traffic data conducted for the surrounding area from Houston Galveston Area Council (H-GAC) and Fort Bend County.
- Prepare and submit reports in PDF format. The report shall include existing conditions diagram, field photographs, current traffic counts, signal warrant analysis, and recommendations. Revisions to the report shall be made due to any comments received.

TASK B – TEMPORARY PEDESTRIAN (HYBRID BEACON) SIGNAL AND TRAFFIC SIGNAL DESIGN SERVICES

A. Obtain all required information relative to the design of this project from state, county, city, municipalities and utility companies (water districts, telephone, gas, electric, pipelines, etc.)

B. Make field surveys and verify proposed locations of all proposed signal poles, controller, pull boxes, and other traffic control devices to avoid any conflicts during construction.
C. Obtain electrical service locations for each intersection from applicable power company.
D. Provide traffic signal design drawings for the intersections utilizing TxDOT standard details and specifications.
E. TxDOT signal standards will be used to design traffic signal foundations.
F. Provide final construction drawings, details, specifications, and bid items.

Task 1: Base Plan Preparation

a. Develop traffic signal preliminary layouts with locations of traffic signal poles and controller.
b. Coordinate pole locations with Fort Bend County.
   Deliverables: Base Plans
   i. One 11”x17” PDF.

Task 2: Utility Documentation

a. Show existing utility information on existing and proposed signal plans.
b. Identify utility conflicts and coordinate with Fort Bend County for utility information.
c. Coordinate pole locations with utility provider.

Task 3: Preliminary (30%) Plan Preparation

a. Develop traffic signal layouts including wiring, notes, quantities, utility information, ROW and any applicable additional ROW requirements.
b. Coordinate pole locations with Fort Bend County.
c. Prepare Draft bid proposal document.
   Deliverables: Preliminary (30%) Plans
   i. One 11”x17” PDF.
   ii. One electronic bid quantities proposal form (PDF).
   iii. Draft project proposal including special specifications, special Provisions and Notice to Bidders.
   iv. List of standard detail Drawings

Task 4: Utility Coordination

a. Coordinate with Fort Bend County to resolve utility conflict issues.
b. Plan revisions to avoid utility conflicts.
c. Documenting additional utility information.

Task 5: (70%) Plan Preparation

a. Incorporate 30% review comments and provide 70% design.
b. Provide 70% estimate of quantities, construction cost estimate, notes, special provisions and special specifications.
c. Coordinate with Fort Bend County as necessary and provide traffic signal documents.

Deliverables: Final Plan and Proposal Preparation

i. 11”x17” PDF of 70% signal plans.
ii. List of standard detail Drawings.

Task 5: Pre-Final (95%) Plan Preparation

d. Incorporate 70% review comments and provide pre-final (95%) design.
e. Provide pre-final (95%) estimate of quantities, construction cost estimate, notes, special provisions and special specifications.
f. Finalize project bid package. Coordinate with Fort Bend County as necessary and provide traffic signal documents.

Deliverables: Pre-Final (95%) Plan and Proposal Preparation

iii. 11”x17” PDF of pre-final signal plans.
iv. Pre-Final (95%) electronic bid proposal document including supporting documents (PDF).
v. List of standard detail Drawings.

Task 6: Final Plan and Proposal Preparation

a. Incorporate 95% review comments and finalize design.
b. Finalize estimate of quantities, construction cost estimate, notes, special provisions and special specifications.
c. Finalize project bid package. Coordinate with Fort Bend County as necessary and provide traffic signal documents.
d. Coordinate pole locations with Fort Bend County.

Deliverables: Final Plan and Proposal Preparation

i. 11”x17” PDF of final signal plans signed and sealed.
ii. One (1) Electronic CADD files for signal plans (CD).
iii. Final electronic bid proposal document including supporting documents (PDF) and editable electronic files of the same.
iv. List of standard detail Drawings

Drainage (Hydraulic and Hydrologic Analysis):

The consultant shall 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 limits. Confirm limits of the analysis with 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 5-year and 100-year events using Atlas 14 rainfall data.
    - Perform drainage area delineations for the proposed conditions and develop onsite 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 proposed detention pond, floodplain excavation, etc.
    - Provide options for detention pond(s) size and location.
    - Update calculations and hydrologic modeling data to reflect required mitigation measures and features.

2. **Preparation of Drainage Report:**
    - Prepare a written report detailing the assumptions 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.

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

FINAL DESIGN PHASE:

The design phase of the project shall consist of the preparation of completely approved construction documents that reflect the approved Preliminary Engineering Report recommendation accepted by Fort Bend County.

The Design shall build upon the framework identified in the Preliminary Engineering Report and include roadway design, profiles, drainage system and appurtenances, details, and the bid documents necessary for a complete design review. The submittal shall be considered final and ready for construction, barring minor comments from Fort Bend County.

The Design Submittal shall address all comments from the Preliminary Engineering Phase of the project. The Design Submittal shall include the submittal of the construction ready Plans on 11”x17”, Specifications, and a Cost Estimate (PS&E) in accordance with FBCED requirements.

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.
- 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.

The design submittal includes the following milestones:

- **70% Submittal (1st Submittal):**

A. A digital copy (PDF) of the drawings, specifications, and estimate shall be submitted to the Program Manager.

B. The submittal shall consist of:
    - Coversheet with a 70 percent interim seal
    - Sheet Index
    - General Notes
    - Existing and Proposed Typical Sections
    - Project Layout Sheet
    - Survey Control

- ROW (Existing and Proposed) Sheet
- Horizontal Alignment Data
- Roadway Plan and Profile Sheets
- Drainage Area Map with Hydraulic Calculations
- Detention Plan
- Traffic Control Plan
- Traffic Signals & Details
- Signing and Striping Plan
- Storm Water Pollution Prevention Plan
- Cross Sections (100-foot intervals w/earthwork calcs)
- Specifications Table of Contents per Fort Bend County Specification Table of Contents Template (Harris County Specifications, and others to be used as necessary depending on the jurisdiction).
- Construction Cost Estimate (PDF and Excel Format)
- Bid Form (PDF and Excel Format)
- 70% Plans on 11”x17” Sheets with Electronic PDF files, CAD and KMZ file of existing conditions and current design
- Submit drawings for regulatory permit and utility reviews
- 70% Review Checklist

- **95% Submittal (2nd Submittal):**

A. A digital copy (PDF) of the drawings, specifications, and estimate along with CAD & KMZ files of the existing conditions and current shall be submitted to the Program Manager.

B. The 95 percent submittal should be considered complete with 95 percent interim seal, and shall include all of the 70 percent requirements plus the following:
   - Responses to 70 percent comments
   - Standard Construction details per Fort Bend County construction details, and others to be used as per necessary depending on the jurisdiction.
   - Construction cost Estimate (PDF and Excel Format)
   - Project Manual with Bid Form (PDF and Excel Format), Specifications Table of Contents, Special Specifications or Conditions, and Contract Documents Excluded
   - 95% Review Checklist

- **Final Submittal:**

A. A digital copy in PDF of the drawings (signed and sealed) along with CAD & KMZ files of the existing conditions and final design shall be submitted to the Program Manager.

B. The 100 percent submittal should be considered ready for project advertisement and shall include the following:
    - Responses to 95 percent comments
    - Construction cost estimate (PDF and Excel Format)
    - Project Manual with Bid Form (PDF and Excel Format), Specifications Table of Contents, Special Specifications or Conditions, and Contract Documents Excluded
    - 100% Review Checklist

The design phase shall also include the design (if needed) of any water line or sanitary sewer relocation (Optional additional services), and the coordination of private utilities. The coordination shall include, but not limited to:

- Perform research of records 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 the above-ground markers, Railroad Commission website research, and map requests from prominent companies (i.e. CenterPoint Energy, AT&T, etc.)
- Send records requests to utility companies and obtain I.D. numbers (CenterPoint and AT&T)
- Depict utilities to a reasonable degree of accuracy on the plan and profile drawing
- Prepare a conflict table during the Preliminary Design phase to highlight conflicts between existing utilities and proposed improvements, 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 review
- Meet with the utility companies and provide information and plans, as necessary.
- Provide any documentation as necessary and assist Fort Bend County in entering into an agreement with the utility companies for the relocation of the facility.

- Obtain approval from the Fort Bend County for all requests made by utility companies prior to implementing changes.

Additional Considerations for the Design Phase are:

1. These services shall be performed in accordance with the latest Fort Bend County Design Guidelines.

2. The pavement elevation shall be set in accordance with the Fort Bend County Guidelines, or from coordination with FBCED if there are any special circumstances.

3. The pavement section shall be designed in accordance with the Guidelines. The results of the coring tests will be utilized to verify that the existing concrete pavement meets the Fort Bend County guidelines.

4. The drainage design shall be designed in accordance with FBCDD Drainage Criteria Design Manual and TxDOT (if required).

5. All the CAD work will follow Fort Bend County design standards.

6. 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" x 17".

7. Standard Sheets per Fort Bend County as provided on the website.

8. Driveway width and location should match existing when feasible. Also, driveways should meet Fort Bend County Regulations for Subdivisions, Section 7 requirements. The centerline station and percent grade shall be indicated on the drawings for all driveways.

9. Any public utilities in conflict with the road construction will be adjusted/relocated in this phase.

Traffic Control Plans (TCP):

The Traffic Control Plans will be prepared per Fort Bend County Standards and per the latest Texas Manual on Uniform Traffic Control Devices.

As the project anticipates for construction of a new concrete pavement over existing pavement, the Traffic control plan can be phased to use the existing pavement for one-way traffic.

Signing and Pavement Marking Plans (SPM):

The Signing and Pavement Marking Plans will be prepared per Fort Bend County Engineering Department Standards and per the TxDOT Standards, if applicable.

Storm Water Pollution Prevention Plans (SWPPP):

The Storm Water Pollution Prevention Plans will be prepared per Fort Bend County Standards and will follow TPDES General Permit # TXR150000 requirements. The drawings will be prepared based on Fort Bend County Criteria.

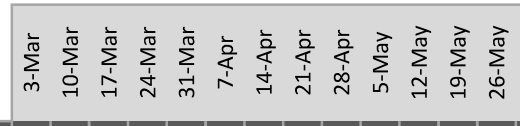
Preliminary Design Schedule
Old Richmond Road Segment 1
FBC Project #23305

OLD RICHMOND ROAD SEGMENT 1

Project Start: Mon, 3/3/2025

Display Week: 1

ID	TASK	PROGRESS	DURATION	START	END
	Preliminary Design Phase	Cal Days	140	3-Mar-25	21-Jul-25
1	Notice to Proceed			3-Mar-25	3-Mar-25
2	Project Coordination and Meetings		4	3-Mar-25	7-Mar-25
3	Data Collection/Meetings/NTP (Subconsultants)		5	4-Mar-25	11-Mar-25
4	Topographic Survey & Existing ROW Maps (Signed and Sealed)		45	4-Mar-25	7-May-25
5	**FBC Review and Field Topo Survey Verification Site Visit**		**4**	**12-May-25**	**16-May-25**
6	Key Maps, Vicinity Maps and Other Maps		5	19-May-25	27-May-25
7	Develop Proposed Alignment		4	12-May-25	16-May-25
8	Geotechnical Investigation		60	4-Mar-25	29-May-25
9	Evaluate Existing Pavement		5	7-May-25	14-May-25
10	Evaluate Existing Conditions/Geometry		10	7-May-25	21-May-25
11	**30% Roadway Plans**		30	8-May-25	23-Jun-25
12	**Drainage Study**		50	11-Mar-25	21-May-25
13	Preliminary Utility Information Table		30	8-May-25	23-Jun-25
14	**Preliminary Utility Conflict List**		30	8-May-25	23-Jun-25
15	Preliminary ROW Acquisition Table		5	23-Jun-25	30-Jun-25
16	**Preliminary ROW Map**		5	23-Jun-25	30-Jun-25
17	**Traffic Control Shematics (Develop Phases and Steps)**		5	23-Jun-25	30-Jun-25
18	**Preliminary Construction Cost Estimate**		5	23-Jun-25	30-Jun-25
19	Identify Problem Areas and Potential Resolution		5	23-Jun-25	30-Jun-25
20	Identify Permit and Regulatory Requirements		5	23-Jun-25	30-Jun-25
21	Engineer QA/QC and Incorporate Comments		5	23-Jun-25	30-Jun-25
22	**Submit Draft Preliminary Engineering Report**			**1-Jul-25**	**1-Jul-25**
23	**Client Presentation Meeting with Fort Bend County**			**16-Jul-25**	**16-Jul-25**
24	Fort Bend County Review (Review of Exhibits Presented)			16-Jul-25	16-Jul-25
25	Incorporate Fort Bend County Comments		4	17-Jul-25	23-Jul-25
26	Finalize Pending Items/Issues		2	17-Jul-25	21-Jul-25
27	**Submit Final Preliminary Engineering Report**			**21-Jul-25**	**21-Jul-25**
28	**Study Phase Duration**	Work Days	97	3-Mar-25	21-Jul-25
29	**Acceptance of Study Phase Report by Fort Bend County**		10	21-Jul-25	4-Aug-25



Final Design Schedule
Old Richmond Road Segment 1
FBC Project #23305

OLD RICHMOND ROAD SEGMENT 1

Project Start: Mon, 8/4/2025

Display Week: 1

ID	TASK	PROGRESS	DURATION	START	END
	Final Design Phase	Cal Days	200	4-Aug-25	20-Feb-26
1	Notice to Proceed			4-Aug-25	4-Aug-25
2	Project Coordination and Meetings		2	4-Aug-25	6-Aug-25
3	Address 30% Comments		9	6-Aug-25	19-Aug-25
4	Proposed ROW Maps (Metes and Bounds)		20	6-Aug-25	4-Sep-25
5	Drainage Area Maps & Hydraulic Calculations		5	19-Aug-25	26-Aug-25
6	Detention Plans and Calculations		5	26-Aug-25	3-Sep-25
7	Horizontal Alignment Data Sheet		2	19-Aug-25	21-Aug-25
8	Plan and Profile Sheets		25	19-Aug-25	24-Sep-25
9	Demolition Plans		25	19-Aug-25	24-Sep-25
10	Traffic Control Plans		15	19-Aug-25	10-Sep-25
11	Project Layout Sheet		5	24-Sep-25	2-Oct-25
12	Typical Sections		10	24-Sep-25	9-Oct-25
13	Cover Sheet		2	24-Sep-25	29-Sep-25
14	Index of Sheets		2	29-Sep-25	1-Oct-25
15	Fort Bend County Standard Sheets		2	24-Sep-25	29-Sep-25
16	Storm Water Pollution Prevention Plan		5	2-Oct-25	9-Oct-25
17	Signing and Pavement Marking Plans		10	2-Oct-25	16-Oct-25
18	General Notes		2	2-Oct-25	6-Oct-25
19	Cross Sections and Earthwork Calculations		10	24-Sep-25	9-Oct-25
20	Specification Table of Contents		3	2-Oct-25	7-Oct-25
21	Bid Form with Estimated Unit and Total Costs		5	2-Oct-25	9-Oct-25
22	Engineer QA/QC and Incorporate Comments		5	9-Oct-25	16-Oct-25
23	**1st submittal to Fort Bend County (70% Submittal)**			**17-Oct-25**	**17-Oct-25**
24	Fort Bend County Review		15	20-Oct-25	10-Nov-25
25	Update Drawings for 2nd Submittal		20	12-Nov-25	12-Dec-25
26	Update Construction Cost Estimate		2	12-Dec-25	16-Dec-25
27	Assemble and Update Project Manual		2	16-Dec-25	18-Dec-25
28	Engineer QA/QC and Incorporate Comments		5	16-Dec-25	23-Dec-25
29	**2nd submittal to Fort Bend County (95% Submittal)**			**26-Dec-25**	**26-Dec-25**
30	Fort Bend County Review		15	29-Dec-25	21-Jan-26
31	Update Drawings and Project Manual for Final Submittal		20	22-Jan-26	19-Feb-26

"EXHIBIT C" - Compensation for Professional Services
Project Name: *Old Richmond Road*
Project Limits: 1500' East of FM 1464 to Rippling Mill Dr
FBC Project # *23305*

BASIC SERVICES

1	**Preliminary Design Phase (Lumpsum)**		**$**	**280,890.00**
		Preliminary Design Subtotal	$	213,145.00
		Project Management Subtotal	$	66,745.00
		Other Expenses Subtotal	$	1,000.00
2	**Final Design Phase (Lumpsum)**		**$**	**450,065.00**
		Drawings & Documents Subtotal	$	389,825.00
		Project Management Subtotal	$	58,490.00
		Other Expenses Subtotal	$	1,750.00
3	**Drainage Impact Study (Lumpsum)**		**$**	**188,120.00**
4	**Construction Phase Services**		**$**	**50,000.00**
	Construction Phase Services (T&M)	$ 50,000.00		
5	**Traffic (Subconsultant: TEDSI)**		**$**	**59,535.61**
	Traffic Signal Warrant Analysis	$ 7,968.84		
	Temporary Pedestrian Signal Design	$ 12,151.30		
	Permanent Traffic Signal Design	$ 39,326.09		
	Direct Expenses	$ 89.38		
6	**Survey (Subconsultant: Weisser)**		**$**	**65,335.00**
	Survey Control	$ 12,160.00		
	Existing ROW Mapping	$ 20,045.00		
	Topographic Surveying	$ 30,600.00		
	Soil Boring Locations	$ 2,530.00		
7	**Geotechnical (Subconsultant: HTS)**		**$**	**19,755.00**
	Geotechnical Investigation for Road Alignment	$ 19,755.00		
		Sub-Total Basic Services (1-7):	**$**	**1,113,700.61**

"EXHIBIT C" - Compensation for Professional Services
Project Name: *Old Richmond Road*
Project Limits: 1500' East of FM 1464 to Rippling Mill Dr
FBC Project # *23305*

OPTIONAL ADDITIONAL SERVICES			
8 Right of Way Acquisition (Approximate) (Subconsultant: Weisser)			**$ 12,350.00**
Parcel Meets & Bounds with Abstracting and Title Research (5 Parcels (Approx) @ $2470/Parcel)	$	12,350.00	
9 Construction Staking (Subconsultant: Weisser)			**$ 9,525.00**
Construction Staking	$	5,295.00	
Interim ROW Staking	$	4,230.00	
Sub-Total Optional Additional Services (8-9)			**$ 21,875.00**

TOTAL SERVICES (BASIC & OPTIONAL ADDITIONAL):	**$ 1,135,575.61**

OLD RICHMOND ROAD
1500' EAST OF FM 1464 TO RIPPLING MILL DR
FBC PROJECT# 23305
HJ CONSULTING, INC.
LEVEL OF EFFORT FOR PRELIMINARY DESIGN, FEBRUARY 2025

Employee Classification		No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Subtotal Hours	**Total**
Labor Rate Per Hour			$325.00	$275.00	$225.00	$175.00	$135.00	$105.00	$75.00		
TASK	TASK DESCRIPTION	**ESTIMATED HOURS**									
PRELIMINARY DESIGN											
1	**Maps**										
1.1	*Project Location Map*	1					1	4		5	$ 555.00
1.2	*Alignment Exhibit with Aerial Map*	2		1	1	4	8	12		26	$ 3,540.00
1.3	*Drainage Area Map*	2		1	1	4	8	12		26	$ 3,540.00
1.4	*Sight Triangle Exhibit*	2		1	1	4	8	12		26	$ 3,540.00
1.5	*Right of Way Exhibit*	2		1	1	4	8	12		26	$ 3,540.00
1.6	*FEMA FIRM Map*	1		1	1		2	4		8	$ 1,190.00
2	**Narrative**										$ -
2.1	*Introduction, Limits, Purpose and Scope*			1	1	8	8		4	22	$ 3,280.00
2.2	*Existing Conditions*			2	1	12	12		4	31	$ 4,795.00
2.3	*Proposed Improvements*			4	2	16	24		4	50	$ 7,890.00
3	**Right of Way Acquisition Needs**			4	2	16	24			46	$ 7,590.00
4	**Identify Potential Conflicts with Facilities and Utilities**			4	1	8	16			29	$ 4,885.00
5	**Utility Conflicts**										
5.1	*Utility Conflicts List*			4	1	8	16			29	$ 4,885.00
5.2	*Public water and sewer* *Private utilities and pipelines*				2		16			18	$ 2,610.00
6	**Identify Critical Path Items**										
6.1	*Level 1 schedule with Design, ROW, Bidding, and Construction*			2	1	4	4			11	$ 2,015.00

OLD RICHMOND ROAD
1500' EAST OF FM 1464 TO RIPPLING MILL DR
FBC PROJECT# 23305
HJ CONSULTING, INC.
LEVEL OF EFFORT FOR PRELIMINARY DESIGN, FEBRUARY 2025

Employee Classification		No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Subtotal Hours	**Total**
Labor Rate Per Hour			$325.00	$275.00	$225.00	$175.00	$135.00	$105.00	$75.00		
TASK	TASK DESCRIPTION	**ESTIMATED HOURS**									
7	**Identify Problem Areas and Potential Resolution**			4	2	8	16			30	$ 5,110.00
8	**Identify Permit and Regulatory Requirements**			4	1	8	16			29	$ 4,885.00
9	**Preliminary Construction Cost Estimate**			4	2	6	8	16		36	$ 5,360.00
10	**Preliminary Drainage Design**		2	8	4	48	80			142	$ 22,950.00
11	**Preliminary Detention Pond Design**		2	8	4	16	24	32		86	$ 13,150.00
12	**Preliminary Traffic Control Plan**		2	4	4	16	24	24		74	$ 11,210.00
13	**Preliminary Roadway Design**		4	24	6	96	60			190	$ 34,150.00
14	**30% Plans (11"x17" Sheets)**										
14.1	*Existing Typical Section*	1		1	1	8		16		26	$ 3,580.00
14.2	*Proposed Typical Section*	1		2	1	16		16		35	$ 5,255.00
14.3	*Plan & Profile*	13									
12.3.1	*Existing Features in Plan & Profile*			2	2	13	39	78		134	$ 16,730.00
12.3.2	*Minor Annotations*			6	2	26	39	65		138	$ 18,740.00
15	**Incorporate review comments (Draft to Final)**		4	8	6	24	32	40	8	122	$ 18,170.00
	PRELIMINARY DESIGN SUBTOTAL	**25**	14	101	51	373	493	343	20	1395	**$ 213,145.00**

OLD RICHMOND ROAD
1500' EAST OF FM 1464 TO RIPPLING MILL DR
FBC PROJECT# 23305
HJ CONSULTING, INC.
LEVEL OF EFFORT FOR PRELIMINARY DESIGN, FEBRUARY 2025

Employee Classification		No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Subtotal Hours	Total
Labor Rate Per Hour			$325.00	$275.00	$225.00	$175.00	$135.00	$105.00	$75.00		
TASK	TASK DESCRIPTION	ESTIMATED HOURS									
PROJECT MANAGEMENT											
16	Field Visit (Investigations and Findings)			8		16	16			40	$ 7,160.00
17	Coordination for Survey		4	12		8	8			32	$ 7,080.00
18	Coordination for Geotechnical		2	4		4	6			16	$ 3,260.00
19	Coordination with Segment 2 Engineer		8	24		24	16	24		96	$ 18,080.00
20	Coordination with Public Utilities		2	24		12	8			46	$ 10,430.00
21	Coordination with Centerpoint Energy, AT&T, Comcast and Other (Private Utilities)		1	8		12	16		8	45	$ 7,385.00
22	Project Management and Meetings (Includes Study Phase Meetings)		4	32		16			6	58	$ 13,350.00
	PROJECT MANAGEMENT SUBTOTAL		21	112		92	70	24	14	333	**$ 66,745.00**
OTHER EXPENSES											
23	Printing/Plotting/Copying										$ 400.00
24	Mileage/Postage/Courier										$ 600.00
	OTHER EXPENSES SUBTOTAL										**$ 1,000.00**
	TOTAL HOURS		35	213	51	465	563	367	34	1728	
	TOTAL ESTIMATE		$11,375	$58,575	$11,475	$81,375	$76,005	$38,535	$2,550		**$ 280,890.00**

OLD RICHMOND ROAD
1500' EAST OF FM 1464 TO RIPPLING MILL DR
FBC PROJECT# 23305
HJ CONSULTING, INC.
LEVEL OF EFFORT FOR FINAL DESIGN, FEBRUARY 2025

Employee Classification		No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Subtotal Hours	Total
Labor Rate Per Hour			$325.00	$275.00	$225.00	$175.00	$135.00	$105.00	$75.00		
TASK	TASK DESCRIPTION	ESTIMATED HOURS									
FINAL DESIGN											
DRAWINGS & DOCUMENTS											
1	**Cover Sheet**	1		1	1	1		4		7	$ 1,095.00
2	**Sheet Index**	1		1	1	2	2	8		14	$ 1,960.00
3	**General Notes**	2		1	1	2	2	8		14	$ 1,960.00
4	**Typical Sections**	2		2	1	2	4	8		17	$ 2,505.00
5	**Drainage Area Maps**	4		6	2	12	20	40		80	$ 11,100.00
6	**Plan and Profile Sheets (Roadway)**										
6.1	*Finalize P&Ps*	13		8	4	30	52	78		172	$ 23,560.00
6.2	*Finalize Roadway Design*			6	3	30	80	64		183	$ 25,095.00
6.3	*Intersection Details/Layouts*	2		6	3	12	36	80		137	$ 17,685.00
6.3	*Street/Driveway Connection Details and Calculations*	1		4	2	12	24	24		66	$ 9,410.00
6.4	*Drainage Design & Calculations*	4		8	6	40	80	64		198	$ 28,070.00
7	**Traffic Control Plans & Details**										
7.1	*Project Approach Signing and Notes*	1		1	1	4	4	8		18	$ 2,580.00
7.2	*Phasing Layout*	3		3	3	6	18	36		66	$ 8,760.00
7.3	*Phasing Description and Typical Sections*	3		3	3	9	18	36		69	$ 9,285.00
7.4	*TCP Phase I*	4		4	4	16	32	48		104	$ 14,160.00
7.5	*TCP Phase II*	4		4	4	16	32	48		104	$ 14,160.00
7.6	*TCP Pecan Acres Intersection*	4		4	4	16	32	48		104	$ 14,160.00
7.7	*TCP Tranquil Intersection*	2		2	2	8	16	24		52	$ 7,080.00
7.8	*TCP Rippling Mill Intersection*	2		2	2	8	16	24		52	$ 7,080.00
7.9	*TCP Quantities/Construction Cost Estimate*			1	1	4	4			10	$ 1,740.00
7.10	*TCP Details/Standards*	8		2	2		8	16		28	$ 3,760.00
7.11	*TCP Project Management and Meetings*		2	16		8				26	$ 6,450.00

OLD RICHMOND ROAD
1500' EAST OF FM 1464 TO RIPPLING MILL DR
FBC PROJECT# 23305
HJ CONSULTING, INC.
LEVEL OF EFFORT FOR FINAL DESIGN, FEBRUARY 2025

Employee Classification		No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Subtotal Hours	Total
Labor Rate Per Hour			$325.00	$275.00	$225.00	$175.00	$135.00	$105.00	$75.00		
TASK	TASK DESCRIPTION	ESTIMATED HOURS									
8	**Storm Water Pollution Prevention Plans & Details**										
8.1	*Storm Water Pollution Prevention Plans*	6		3	2	8	32	64		109	$ 13,715.00
8.2	*SWPPP Specifications and Quantities/Construction Cost Estimate*			1	1	3	6			11	$ 1,835.00
8.3	*SWPPP Details*	1				1		2		3	$ 385.00
9	**Signing and Pavment Marking Plans & Details**										
9.1	*Signing and Striping Plans*	6		3	2	8	32	64		109	$ 13,715.00
9.2	*SPM Quantities/Construction Cost Estimate*			1	1	5	10			17	$ 2,725.00
9.3	*SPM Details*	2		1	1	2	4	8		16	$ 2,230.00
10	**Cross Sections & Earthwork Calculations**	20		6	6	40	60	200		312	$ 39,100.00
11	**Engineers Estimate and Special Specs**										
11.1	*Engineers Estimate*			4	2	12	40	16		74	$ 10,730.00
11.2	*Special Specifications or Conditions*			2	2	4	8			16	$ 2,780.00
12	**Fort Bend County Standard Sheets**	4		2	1	2	4	6		15	$ 2,295.00
13	**Incorporate review comments (70% to 95%)**		2	24	18	60	88	100	2	294	$ 44,330.00
14	**Incorporate review comments (95% to Final)**		2	24	18	60	88	100	2	294	$ 44,330.00
	DRAWINGS & DOCUMENTS SUBTOTAL	**100**	6	156	104	443	852	1226	4	2791	**$ 389,825.00**
PROJECT MANAGEMENT											
1	Field Visit (Investigations and Findings)			8		24	24		8	64	$ 10,240.00
2	Coordination for Survey ROW acquisition		2	6		8	8		6	30	$ 5,230.00
3	Coordination with Traffic		2	6		8	8		6	30	$ 5,230.00
4	Coordination with Other Consultants		8	16		32	24		6	86	$ 16,290.00
5	Coordination with Centerpoint Energy, AT&T, Comcast and Other Private Utilities			8		16			4	28	$ 5,300.00
6	Project Management and Meetings		8	32		24			8	72	$ 16,200.00
	PROJECT MANAGEMENT SUBTOTAL		20	76		112	64		38	310	**$ 58,490.00**
OTHER EXPENSES											
1	Printing/Plotting/Copying										$ 750.00
2	Mileage/Postage/Courier										$ 1,000.00
	OTHER EXPENSES SUBTOTAL										**$ 1,750.00**
	TOTAL HOURS		26	232	104	555	916	1226	42	3101	
	TOTAL ESTIMATE		$8,450	$63,800	$23,400	$97,125	$123,660	$128,730	$3,150		**$ 450,065.00**

OLD RICHMOND ROAD
1500' EAST OF FM 1464 TO VOSS RD
FBC PROJECT# 23305
HJ CONSULTING, INC.
LEVEL OF EFFORT FOR DRAINAGE IMPACT STUDY, FEBRUARY 2025

Employee Classification		No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Subtotal Hours	**Total**
Labor Rate Per Hour			$325.00	$275.00	$225.00	$175.00	$135.00	$105.00	$75.00		
TASK	TASK DESCRIPTION	**ESTIMATED HOURS**									
DRAINAGE IMPACT STUDY											
1	Review of data including survey, record drawings, site visits, reports, and other information			6	6	18	36			66	$ 11,010.00
2	Coordination with the Fort Bend County Engineering/Drainage District/MUDs/City of Fulshear/Adjoining Consultants		6	24		24				54	$ 12,750.00
3	Delineate all sub-drainage areas contributing to project limits			3	2	24	48	36		113	$ 15,735.00
4	Perform Hydrologic calculations for Existing Conditions based on Atlas 14 data			3	3	18	48			72	$ 11,130.00
5	Develop Hydraulic model for Existing Conditions based on Atlas 14 data			2	6	24	48			80	$ 12,580.00
6	Determine Change in 5-yr and 100-yr flows for change in Tc and New Imperviousness Outside Existing ROW, Validate Drainage Boundaries and hydrologic calculations			3	6	24	60	12		105	$ 15,735.00
7	Determine Detention Volume based on ROW, hydrographs and physical constraints			2	3	12	24			41	$ 6,565.00
8	Develop Preliminary Proposed Alternatives and Hydraulic models			3	12	24	72			111	$ 17,445.00
9	Perform Mitigation Analysis and Finalize models			2	6	24	72			104	$ 15,820.00
10	Prepare and Present Preliminary Findings to Fort Bend County Engineering Department/Drainage District		3	12	12	12	24			63	$ 12,315.00
11	Prepare Exhibits and Appendices required for the Drainage Report			3	6	9	24	48		90	$ 12,030.00
12	Prepare Drainage Impact and Mitigation Analysis Report for Fort Bend County Engineering Department/Drainage District Submittal			6	12	36	108		24	186	$ 27,030.00
13	Submit the Drainage Report with Roadway to Fort Bend County Engineering Department and Fort Bend County Drainage District		2	3						5	$ 1,475.00
14	Finalize Drainage Report after review from FBC & FBDD			6	12	18	48	24		108	$ 16,500.00
TOTAL HOURS			11	78	86	267	612	120	24	1198	
TOTAL ESTIMATE			$3,575	$21,450	$19,350	$46,725	$82,620	$12,600	$1,800	$0	**$ 188,120.00**

PROPOSAL AGREEMENT FOR PROFESSIONAL SERVICES
Effective Date: February 14, 2025

Harish Jajoo
HJ Consulting
4471 Sweetwater Blvd, Suite 254
Sugar Land, TX 77479

Proposal for Professional Services in Connection With: Old Richmond Road, Segment 1 (as shown on the attached aerial images), Fort Bend County, Texas

Weisser Engineering & Surveying is pleased to submit this proposal and terms of service (together, the "Agreement") to HJ Consulting (the "Client").

I. BASE SCOPE OF SERVICES

Surveying and Mapping
The Surveyor shall evaluate the existing ROW envelope and make recommendations for the acquisition of ROW necessary for the Project including but not limited to roadway, corner cuts, sight distance triangles, detention, and outfalls, if necessary. The Surveyor shall establish a project baseline based on the centerline of the right-of-way, or the existing baseline if available. The Surveyor shall create an existing utility list (Excel Format) including owner and contact information for available existing utilities within the project limits to be supplied to the Engineering Consultant to complete the identification of potential utility conflicts. The Surveyor shall sign and seal all survey documents.

The specific survey limits are as follows and shown on the attached Aerial Images:
The linear topographic and right-of-way survey will begin on Old Richmond Road approximately 1,500 feet east of FM 1464 and proceed east to Rippling Mill Drive for a distance of 4,000 linear feet.

1. **Survey Control**
    a. Horizontal and Vertical Survey Control for each site shall be referenced to the nearest Fort Bend County Survey Control Monument, or NGS if no County Monuments are established.
    b. Survey Control Points will be established at 1,000-foot maximum intervals and tied to the Calculated Alignment for each site.
    c. Deliverable will be Signed and Sealed Survey Control Maps per Fort Bend County standards with Detail Sketches in PDF format and CAD Files.

COST: $12,160.00

2-Person Survey Crew	20 hrs @ $145/hr	$2,900.00
Survey Technician	32 hrs @ $110/hr	$3,520.00
CADD Technician	40 hrs @ $95/hr	$3,800.00
Clerical	2 hrs @ $65/hr	$ 130.00
Field Coordinator	2 hrs @ $105/hr	$ 210.00
RPLS	10 hrs @ $160/hr	$1,600.00

2. **Existing Right of Way Mapping (Cat. 1B, Cond. 3)**
    a. Perform abstract survey; obtain deeds of record, and plats for the right-of-way, streets intersecting and tracts of land adjoining the project limits.
    b. Establish the existing right-of-way and boundary lines adjoining the project limits.
    c. Deliverable will be Signed and Sealed existing Right-of-Way Map Sheets in PDF format per Fort Bend County standards and CAD Files.
    d. Prepare, deliver and coordinate Right-of-Entry for the Project.

COST: $20,045.00

2-Person Survey Crew	40 hrs @ $145/hr	$5,800.00
Survey Technician	60 hrs @ $110/hr	$6,600.00
CADD Technician	32 hrs @ $95/hr	$3,040.00
Clerical	25 hrs @ $65/hr	$1,625.00
Field Coordinator	4 hrs @ $105/hr	$ 420.00
RPLS	16 hrs @ $160/hr	$2,560.00

3. **Topographic Surveying (Cat. 6, Cond. 1)**

The Surveyor will provide the following within the surveying limits described above:

    a. For the roadway and ditches, obtain cross-sections at 100-foot intervals with grade breaks. Cross-sections shall extend 20 feet beyond the right-of-way lines unless there is a fence at the right-of-way line. Topographic Survey will begin at the south line of the development north of the Proposed Roadway and extend south a minimum of 125 feet and will include the following: Identify locations and elevations of physical features to include edges or curbs and gutters of pavement, parking lanes, center of the median, fences, walls, tree-lines, trees (type, size, and drip line), sidewalks, driveways and driveway curbs, power poles, light poles, water meters, water wells, ponds, sprinklers, off-site drain pipe, elevations at ditch banks, toe, flow line, and side slope, etc. Horizontally and vertically locate available existing utilities within, crossing, and adjoining project limits. Utilities will be located and tied based on visual evidence and marked by "One Call" within the project limits. The rim (top) and flow line elevations will be obtained on inlets, manholes (sanitary and storm), and drainage structures, including culverts, SETs, etc. The rise, width, flowlines, etc. of the drainage elements will be obtained where accessible.
    b. The Surveyor will coordinate with SUE consultant (if applicable), pipeline companies, municipal utility districts (MUDs), homeowner's associations (HOA's), the County, and private utility agencies to obtain locations of available existing utilities and depths of existing pipelines. These will be shown with the rest of the survey.
    c. Topographic Limits will also include 100 feet upstream and downstream along channels at bridge crossings.
    d. Prepare existing Topographic Survey Map of the Project to be delivered in PDF per Fort Bend County standards and CAD Files.

COST: $30,600.00.00

2-Person Survey Crew	100 hrs @ $145/hr	$14,500.00
Survey Technician	20 hrs @ $110/hr	$ 2,200.00
CADD Technician	80 hrs @ $95/hr	$ 7,600.00
Clerical	2 hrs @ $65/hr	$ 130.00
Field Coordinator	10 hrs @ $105/hr	$ 1,050.00
RPLS	32 hrs @ $160/hr	$ 5,120.00

TOTAL COST FOR BASE SERVICES: $62,805.00

II. OPTIONAL ADDITIONAL SERVICES

1. **Project Control for Construction**
   a. Recover or re-establish project control referenced to the project baseline for construction.
   b. Recover or re-establish project baseline at the beginning, end, street intersections, angle points, beginning of curves, end of curves and at 1,000-foot intervals in between.

COST: $5,295.00

2. **Parcel Surveys**
   a. Prepare metes and bounds descriptions and parcel plats in accordance with Fort Bend County guidelines for property acquisition and add parcels to the existing right-of-way maps.

COST: $2,470.00 per parcel (estimated 5 parcels)

Total Cost for Parcel Surveys: $12,350.00

3. **Soil Boring Locations**
   a. Field Locate Soil Borings performed by others.
   b. Soil Borings will be added into existing CAD files.

COST: $2,530.00
(assumes one trip to locate all Soil Borings)

3. **Interim Right-Of-Way Staking**
   a. Staking of the Proposed Right-of-way at 100-200-foot intervals with wooden stakes. Estimate 2,000 linear feet of staking per day.

COST: $2,115.00 per day
(estimated 2 days to complete)

Total Cost for Interim ROW Staking: $4,230.00

We appreciate the opportunity to provide this proposal. If you have any questions or comments, please do not hesitate to contact John Harvill, RPLS (jharvill@weissereng.com).

The Client, by signing below, represents that he or she has the authority to enter into this Agreement, agrees to the terms and conditions in this Agreement, is willing to be the Responsible Party, promises to pay the invoiced amount within thirty (30) days of invoicing, and authorizes Weisser Engineering & Surveying to proceed with the Services as described above.

CLIENT	**WEISSER ENGINEERING & SURVEYING**
HJ Consulting	
By: _____	By: Taylor R. Sass
Printed Name: _____	Printed Name: Taylor R. Sass
Title: _____	Title: President & CEO
Date of Acceptance: _____	Date of Acceptance: 02/14/2025

Please provide an email address for Accounts Payable contact for invoicing purposes:

_____

Old Richmond Approx. Limits

TEDSI INFRASTRUCTURE GROUP
Consulting Engineers
738 Highway 6 South ♦ Suite 430 ♦ Houston, Texas 77079
Tel: (832) 619-1000
Fax: (832) 619-1018
TBPE F-1640

December 11, 2024 **(Revised 2/13/2025)**

Mr. Harish Jajoo, P.E., CFM
President
HJ Consulting, Inc.
Civil Engineers – Construction Managers
4471 Sweetwater Blvd. #254
Sugar Land, Tx 77479

Re: Proposal for Traffic Signal Warrant Analysis, Temporary Ped (Hybrid Beacon) Signal and Permanent Traffic Signal Design Services – Old Richmond Road at Pecan Acres Drive

Dear Mr. Jajoo:

TEDSI INFRASTRUCTURE GROUP (TEDSI) appreciates the opportunity to submit this proposal to HJ Consulting, Inc. (HJ) to perform professional engineering services for Traffic Signal Warrant Analysis, Temporary Ped (Hybrid Beacon) Signal and Permanent Traffic Signal Design services at the intersection of Old Richmond Road and Pecan Acres Drive.

The Scope of Services is found in **Attachment A**. Summary of the Level of Efforts is included in **Attachment B**.

PROJECT UNDERSTANDING

Old Richmond Road is aligned east-west in the vicinity of Pecan Acres Drive. It is a two-lane asphalt roadway with roadside ditches on both sides. Pecan Acres Drive is aligned north-south in the vicinity of the intersection. It is a four-lane divided concrete roadway with curb-and-gutter on both sides and a grass median in the middle. Pecan Acres Drive serves as access to subdivisions both to the north and to the south of the intersection. A stop sign control exists at both northbound and southbound approaches to the intersection. A hybrid beacon pedestrian signal with mast arms faces the eastbound and westbound approaches to the intersection along Old Richmond Road. Macario Garcia Middle School exists approximately 500 feet west of the intersection on the north side of Old Richmond Road. A school zone speed limit of 20 miles per hour (mph) exists near the intersection.

Fort Bend County has plans to widen the existing roadway of Old Richmond Road from 1,500 feet east of FM 1464 to Rippling Mill Drive for approximately 4,000 feet. The widening will consist of improving the existing two-lane pavement to a three-lane pavement that includes a continuous left turn lane in the center of the roadway. As part of this improvement, the County would like to investigate if a permanent traffic signal would be installed (if warranted) at the intersection of Old Richmond Road and Pecan Acres Drive.

The design task for the temporary pedestrian (Hybrid Beacon) signal will include hybrid beacons mounted on span wires attached to wood poles. The proposed permanent traffic signal design will include mast arm traffic signal at the intersection with Video Imaging Vehicle Detection System (VIVDS) and wheelchair ramps that are compliant to Americans with Disabilities Act (ADA). This proposal and fee does not include striping, pavement marking and special traffic signal foundation design services.

SCHEDULE

The work defined in the Scope of Services can be completed within 90 calendar days for the Design Phase after receiving authorization to proceed from HJ. Although this schedule does not include the time required for HJ's and agency's review, we are prepared to help expedite all necessary reviews to ensure a timely completion of the project.

COMPENSATION

The work as defined in the Scope of Services will be performed at a lump sum fee as follows:

1. Task A – Traffic Signal Warrant Analysis is **$7,968.84**.
2. Task B – Temporary Pedestrian (Hybrid Beacon) Signal Design **$12,151.30**.
3. Task C – Permanent Traffic Signal Design - **$39,326.09**.
4. Direct Expenses - **$89.38**.

The total lump sum fee for the above items is **$59,535.61**. The associated fee break down for the services to be provided is shown in **Attachment B**.

This proposal is valid for ninety (90) calendar days and does not constitute a binding contract. We trust that the information provided is sufficient for you to complete your evaluation of this proposal. However, should you have any questions, please advise.

Thank you for considering TEDSI INFRASTRUCTURE GROUP for this project. We look forward to working with you on this project.

Sincerely,

TEDSI INFRASTRUCTURE GROUP

Yohannes Tadesse, P.E.
Project Manager
Enclosures: As Noted

ATTACHMENT A
SCOPE OF ENGINEERING SERVICES

GENERAL:

A traffic signal warrant analysis study will be conducted for the intersection of Old Richmond Road at Pecan Acres Drive. Following up with the study, a permanent traffic signal design will be provided for the intersection. Also, a temporary pedestrian (Hybrid Beacon) signal design will be provided for the intersection during construction.

The scope of services and associated fees are based on the following: 1) TEDSI Infrastructure Group (TEDSI) will coordinate all of its work with Fort Bend County Engineering Department, 2) TEDSI will obtain service outlet location and data statement from the power company for the required electrical service, and 3) Traffic Signal Warrant Analysis Study and Traffic signal design will be in accordance with the Texas Manual on Uniform Traffic Control Devices (TMUTCD), TxDOT and Fort Bend County Criteria. Of note – this scope of services does not include a special drilled shaft foundation design.

TASK A – TRAFFIC SIGNAL WARRANT ANALYSIS STUDY

TEDSI shall prepare a traffic signal warrant study to support their recommendation for the continuous activation of an existing traffic signal or a proposed traffic signal based on projected volumes. The warrant study must include addressing pedestrian signals along with obtaining both traffic and pedestrian counts. The Engineer shall implement each proposed traffic signal improvement within existing County ROW unless otherwise approved by the County.

TEDSI shall perform the following for the Traffic Signal Warrant Study:

- Conduct site inspection, obtain photographs and prepare existing condition diagram of the study intersection. Record pedestrian and vehicular traffic characteristics, grades and sight distances as observed while in the field.

- Manually record turning movement counts and pedestrian counts at the study intersection during a typical weekday (Tuesday, Wednesday or Thursday) for a continuous 12-hour period. Counts will be non-classified and recorded at 15 minute and hourly intervals. Also record minor street delay.

- Obtain accident records for the study location during the most recent 36-month period, analyze and prepare collision diagram.

- Conduct a signal warrant study following the guidelines published in the Texas Manual On Uniform Traffic Control Devices (latest revision) and evaluate the need for conventional traffic signal at the study intersection.

- Obtain projected traffic data conducted for the surrounding area from Houston Galveston Area Council (H-GAC) and Fort Bend County.

- Prepare and submit reports in PDF format. The report shall include existing conditions diagram, field photographs, current traffic counts, signal warrant analysis, and recommendations. Revisions to the report shall be made due to any comments received.

TASK B – TEMPORARY PEDESTRIAN (HYBRID BEACON) SIGNAL AND TRAFFIC SIGNAL DESIGN SERVICES

A. Obtain all required information relative to the design of this project from state, county, city, municipalities and utility companies (water districts, telephone, gas, electric, pipelines, etc.)

B. Make field surveys and verify proposed locations of all proposed signal poles, controller, pull boxes, and other traffic control devices to avoid any conflicts during construction.

C. Obtain electrical service locations for each intersection from applicable power company.

D. Provide traffic signal design drawings for the intersections utilizing TxDOT standard details and specifications.

E. TxDOT signal standards will be used to design traffic signal foundations.

F. Provide final construction drawings, details, specifications, and bid items.

Task 1: Base Plan Preparation

a. Develop traffic signal preliminary layouts with locations of traffic signal poles and controller.

b. Coordinate pole locations with Fort Bend County.

Deliverables: Base Plans

i. One 11”x17” PDF.

Task 2: Utility Documentation

a. Show existing utility information on existing and proposed signal plans.

b. Identify utility conflicts and coordinate with Fort Bend County for utility information.

c. Coordinate pole locations with utility provider.

Task 3: Preliminary (30%) Plan Preparation

a. Develop traffic signal layouts including wiring, notes, quantities, utility information, ROW and any applicable additional ROW requirements.
b. Coordinate pole locations with Fort Bend County.
c. Prepare Draft bid proposal document.

Deliverables: Preliminary (30%) Plans

i. One 11”x17” PDF.
ii. One electronic bid quantities proposal form (PDF).
iii. Draft project proposal including special specifications, special Provisions and Notice to Bidders.
iv. List of standard detail Drawings

Task 4: Utility Coordination

a. Coordinate with Fort Bend County to resolve utility conflict issues.
b. Plan revisions to avoid utility conflicts.
c. Documenting additional utility information.

Task 5: (70%) Plan Preparation

a. Incorporate 30% review comments and provide 70% design.
b. Provide 70% estimate of quantities, construction cost estimate, notes special provisions and special specifications.
c. Coordinate with Fort Bend County as necessary and provide traffic signal documents.

Deliverables: 70% Plan and Proposal Preparation

i. 11”x17” PDF of 70% signal plans.
ii. List of standard detail Drawings.

Task 6: Pre-Final (95%) Plan Preparation

a. Incorporate 70% review comments and provide pre-final (95%) design.
b. Provide pre-final (95%) estimate of quantities, construction cost estimate, notes special provisions and special specifications.
c. Finalize project bid package. Coordinate with Fort Bend County as necessary and provide traffic signal documents.

Deliverables: Pre-Final (95%) Plan and Proposal Preparation

iii. 11”x17” PDF of pre-final signal plans.
iv. Pre-Final (95%) electronic bid proposal document including supporting documents (PDF).
v. List of standard detail Drawings.

Task 7: Final Plan and Proposal Preparation

a. Incorporate 95% review comments and finalize design.
b. Finalize estimate of quantities, construction cost estimate, notes special provisions and special specifications.
c. Finalize project bid package. Coordinate with Fort Bend County as necessary and provide traffic signal documents.
d. Coordinate pole locations with Fort Bend County.

Deliverables: Final Plan and Proposal Preparation

i. 11”x17” PDF of final signal plans signed and sealed.
ii. One (1) Electronic CADD files for signal plans (CD).
iii. Final electronic bid proposal document including supporting documents (PDF) and editable electronic files of the same.
iv. List of standard detail Drawings.

ATTACHMENT B - LEVEL OF EFFORTS

Project Name	**Old Richmond Road at Pecan Acres Drive**
Consultant	**TEDSI Infrastructure Group, Inc.**

TASK DESCRIPTION	Project Manager	Senior Engineer	Project Engineer	Design Engineer	Engineer In Training	Senior Engineering Tech	Cadd Designer	Project Administrator	Total Labor Hours & Costs	# of Dwgs	Labor Hrs per Sheet
Traffic Signal Warrant Analysis Study											
Data Collection and 12-Hour Intersection Traffic Counts	1		2		8			2	13		
Site Inspection			2		4				6		
Traffic Signal Warrant Analysis	1		3		5				9		
Report	1		4		5				10		
Submittal					2			2	4		
Subtotal	**3**	**0**	**11**	**0**	**24**	**0**	**0**	**4**	**42**		
Hours Subtotals	3	0	11	0	24	0	0	4	42		
Billing Rates	$ 324.92	$ 291.59	$ 237.44	$ 199.96	$ 162.46	$ 170.79	$ 143.72	$ 120.80			
Total Labor Costs	$ 974.76	$ -	$ 2,611.84	$ -	$ 3,899.04	$ -	$ -	$ 483.20	**$ 7,968.84**		

Temporary Pedestrian (Hybrid Beacon) Signal											
Temporary Hybrid Beacon Signal	2		6		12		20		40	2	20
Temporary Signal Summary of Quantities	2		2		4		4		12	1	12
Notes			1		2		2		5	1	5
Standards			1		1		2		4	8	1
Submittal	1		2		2			2	7	n/a	#VALUE!
Subtotal	**5**	**0**	**12**	**0**	**21**	**0**	**28**	**2**	**68**		
Hours Subtotals	5	0	12	0	21	0	28	2	**68**		
Billing Rates	$ 324.92	$ 291.59	$ 237.44	$ 199.96	$ 162.46	$ 170.79	$ 143.72	$ 120.80			
Total Labor Costs	$ 1,624.60	$ -	$ 2,849.28	$ -	$ 3,411.66	$ -	$ 4,024.16	$ 241.60	**$ 12,151.30**		

Permanent Traffic Signal Design											
Field Inventory			3		6			2	11	0	#DIV/0!
Utility Coordination			4		8				12	1	12
Traffic Signal Existing Conditions	1		2		5		8		16	1	16
Traffic Signal Proposed Conditions	4		15		40		50		109	3	36
Wheel Chair Ramps	1		2		5		10		18	3	6
Summary of Quantities	1		4		8		8		21	1	21
Notes			1		2		2		5	1	5
Traffic Signal Standards			1		2		3		6	8	1
Bid Document	1	1	6		3			1	12	n/a	#VALUE!
Submittal	2		4		6				12	0	#DIV/0!
Subtotal	**10**	**1**	**42**	**0**	**85**	**0**	**81**	**3**	**222**		
Hours Subtotals	10	1	42	0	85	0	81	3	222		
Billing Rates	$ 324.92	$ 291.59	$ 237.44	$ 199.96	$ 162.46	$ 170.79	$ 143.72	$ 120.80			
Total Labor Costs	$ 3,249.20	$ 291.59	$ 9,972.48	$ -	$ 13,809.10	$ -	$ 11,641.32	$ 362.40	**$ 39,326.09**		

OTHER DIRECT EXPENSES	QTY	UNIT	RATE	COST
Mileage (# of miles billed at Current IRS approved rate)	95	each	$ 0.625	$ 59.38
Photocopies 8.5x11		each	$ 0.10	$ -
Photocopies 11x17	120	each	$ 0.25	$ 30.00
Total=				**$ 89.38**

SUMMARY	
TOTAL BASIC SERVICES	$ 59,446.23
TOTAL OTHER DIRECT EXPENSES	$ 89.38
TOTAL	**$ 59,535.61**

HTS, Inc. Consultants
416 Pickering Street, Houston, TX 77091
www.htshouston.com

Phone: 713-692-8373
Fax: 713-692-8502
Toll Free: 1-800-692-TEST

Excellence in Engineering, Consulting, Testing and Inspection

December 4, 2024

HJ Consulting, Inc.
Civil Engineers-Construction Managers
4471 Sweetwater Blvd. #254
Sugar Land, TX 77479

Attn: Mr. Harish Jajoo, P.E., CFM
President

Re: Proposal
Geotechnical Investigation
Proposed Old Richmond Road – Segment 1
East of FM-1464 to Rippling Mill Drive
Fort Bend County, Texas

HTS Proposal No.: 24-00322 Revision 1

Dear Mr. Jajoo:

1.0 INTRODUCTION

In response to your request, HTS, Inc. Consultants (HTS) is pleased to submit this proposal to HJ Consulting, Inc. for Fort Bend County to provide a geotechnical investigation pertaining to the proposed development of the Old Richmond Road – Segment 1, Fort Bend County, Texas. HTS thanks you for the opportunity to propose these geotechnical services and looks forward to being part of the design team.

Project information was provided to HTS by Mr. Harish Jajoo with HJ Consulting, Inc. through an email dated November 21, 2024. Based on HTS's review of the information provided, a summary of our understanding of the proposed project is provided in Table below.

TABLE: PROJECT DESCRIPTION AND DOCUMENT BASIS

Site Location	This project, located about 1500 feet East of FM-1464 to Rippling Mill Drive along Old Richmond Road in Fort Bend County, Texas.

Project Items	HTS understands that the project includes: - adding a new lane to Old Richmond Road, converting the existing two-lane road into a three-lane road with a curb and gutter system. - reconstruction of storm sewer (assumed maximum trench depth 10 feet) - reconstruction of the outfall structures near the bridge crossing. We understand that Old Richmond Road will be reconstructed in two segments, and this proposal pertains solely to Segment 1. Additionally, we understand that no recommendations are currently required for replacing the existing bridge. Slope stability analyses of the channel/ outfall are not part of this scope.
Site History	Based on historical Google Earth imagery, the site is developed with the existing Old Richmond Road.
Site Access	Stiff ground conditions are anticipated and should be accessible by a truck mounted drill rig. Traffic control will be required for drilling.

The purpose of this geotechnical investigation is to provide:

- recommendations for roadway re-construction.
- recommendations for re-construction of underground storm sewer and outfall structure.
- subgrade preparation recommendations for roadway, underground storm sewer and outfall structure.

The remaining portions of this proposal present the proposed work scope, estimated costs, and an estimated schedule to provide geotechnical engineering services.

2.0 SCOPE OF WORK

HTS proposes that the scope of work for the geotechnical investigation be as follows:

- Core/ drill and sample a total of 9 geotechnical borings within the area of the proposed development. The depth and number of borings are selected based on Fort Bend County Geotechnical Investigation guidelines. The depth and number of borings is provided in the table below and also shown in the attachment with this proposal.

Table: Summary of Proposed Soil Borings/Coring

Location	Coring/Boring Number	Number of Borings	Boring Depth (ft)	Total Footage (ft)
Old Richmond Road – Proposed Segment 1	B-1 through B-3 and B-6 through B-9	7	15	105
Proposed Outfall	B-4 and B-5	2	25	50
Total		**9**	**-**	**155**

- Obtain both disturbed and undisturbed samples continuously to a depth of 15 feet and at 5-foot intervals below that depth.

- Obtain utilities clearance for all the boring locations by calling TX 811.

- Provide traffic control as per Fort Bend County guidelines before drilling.

- Measure groundwater levels in the borings during drilling and within approximately 24 hours after the completion of drilling.

- Backfill the borings with grout after drilling. Mark the borings with spray marking after drilling completion. After the completion of our field activities, the client will be notified for surveying of the boring locations.

- Perform laboratory tests to classify and determine the engineering properties of the subsurface Soil classifications will be performed in strict accordance with ASTM D 2487. The laboratory program may include the tests described in the Table below.

TABLE: LABORATORY TESTING GENERAL PROCEDURES

Laboratory Test	Applicable ASTM/Standard Procedures
Moisture Content	ASTM D2216
Atterberg Limits	ASTM D4318
Material Finer than No. 200 Sieve	ASTM D1140
Unconfined Compression Strength	ASTM D2166
California Bearing Ratio	ASTM D1883
Crumb Test	ASTM D 6572
Double Hydrometer Test	ASTM D 4221

- Characterize the site subsoil and groundwater conditions and provide the results on the "gINT" boring logs.

- Perform engineering analyses to develop geotechnical recommendations including final asphalt/ concrete pavement recommendations (which will include pavement layer thickness) including subgrade stabilization requirements.

- Complete engineering analyses as necessary to develop recommendations pertaining to lateral earth pressures on underground structures, dewatering requirements for storm sewer excavations, storm sewer trench shoring and bracing requirements, OSHA soil type classifications pertinent to trench shoring and bracing design, storm sewer excavation/backfill requirements, and storm sewer bedding requirements.

- Analyze the erosion potential of the soil strata near the outfall and provide erosion control recommendations as needed.

- Provide active, passive, and at-rest earth pressure coefficients and equivalent fluid unit weights to be used for the design of outfall structures.

- Conduct a desktop geological fault study, which may include reviewing existing fault maps along the project alignment or at the specific project site that could impact the project design.

- Submit a pdf file of a report which presents the results of the geotechnical investigation.

Note: Hard copies of the report will be provided upon request at an additional cost of $30.00 per report.

3.0 COST AND SCHEDULE

HTS' proposed cost to complete the scope of work as designed in Section 2.0 above is $19,775.00. The estimated costs are provided in the attached Cost Estimate.

We estimate that about 4 weeks after receipt of the notice to proceed will be required to complete the geotechnical investigation if no delays are encountered with respect to weather conditions and/or site access. The table below summarizes the proposed project schedule.

TABLE: APPROXIMATE SCHEDULE FOR THIS PROJECT

Description of Work	Schedule
Beginning of field exploration	Anticipated to be within a week after the authorization to perform the work is received
Duration of field exploration	Anticipated to be completed within 2 working days.
Laboratory testing	Anticipated to be completed within 2 weeks after the completion of the field exploration
Final Report	Anticipated to be 1 week from the completion date of the laboratory testing
Project Duration	Anticipated to be 4 weeks from the notice to proceed to the submittal of the final geotechnical report.

4.0 CLOSING REMARKS

We appreciate the opportunity to present this proposal to you and would be pleased to discuss the contents of this proposal with you at your convenience. Your approval of this proposal may be indicated by your signing/dating this proposal as provided below.

We request that a copy of the signed/dated proposal be provided to HTS. We look forward to being of service to you.

Respectfully submitted,

HTS, Inc. Consultants

Imran Hossain, P.E.
Geotechnical Services Manager

Jubair Hossain, Ph.D., P.E.
President

Attachment: **Cost Estimate**
Proposed Boring Locations

AGREED TO THIS _____ DAY OF _____, 2024

PRINTED NAME: _____ TITLE: _____

SIGNATUERE: _____

FIRM: _____

IH/JH:rg
H:\Proposals All\Proposals-24\HJCI-24-00322 Revision 1.docx

HTS CONSULTANTS
416 Pickering Street
Houston, Texas 77091

COST ESTIMATE

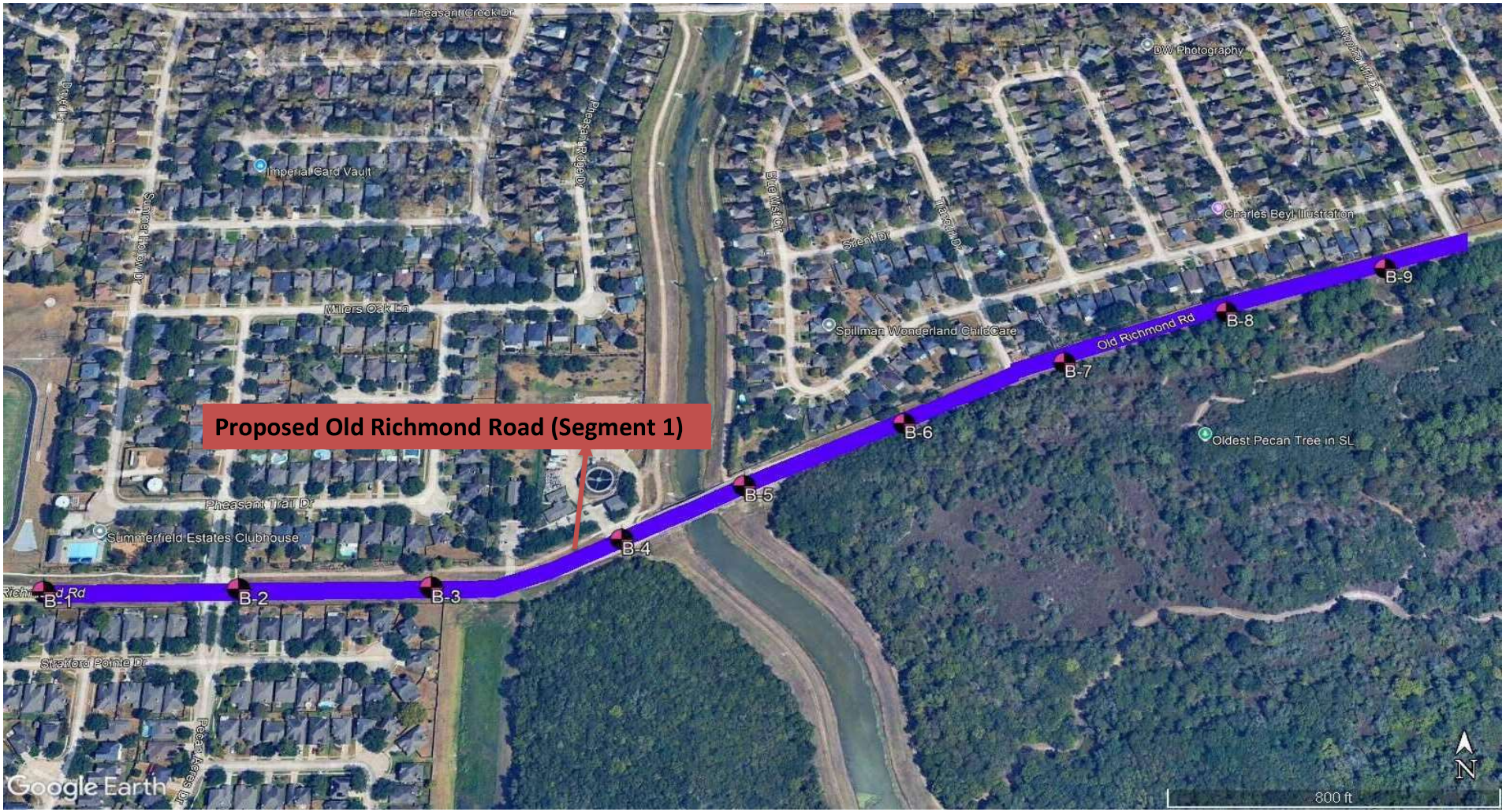
Proposal No.: 24-00322 Rev. 1

Prepared By:	Date:	Checked By:	Date:	Page No.:
IH	12/04/24	JH	12/04/24	1 OF 1

GEOTECHNICAL INVESTIGATION

ITEM	EST. QUANTITY		UNIT PRICE	EST. COST
A) Drill/Sample 7 @ 15' and 2 @ 25' Deep Borings				
Mobe/demobe	Lump Sum		$ 750.00	$ 750.00
3" diameter (0' to 30')	155	feet	$ 20.00	$ 3,100.00
Pavement Coring (upto base)	9	each	$ 150.00	$ 1,350.00
Traffic control (including signage & cones)	2	day	$ 600.00	$ 1,200.00
Grouting the borings	155	feet	$ 10.00	$ 1,550.00
Locate/identify borings	8	hours	$ 55.00	$ 440.00
			SUBTOTAL =	$ 8,390.00
B) Laboratory Analyses				
Atterberg limits(ASTM D 4318)	22	tests	$ 71.00	$ 1,562.00
Unconfined compression test (ASTM D 2166)	11	tests	$ 55.00	$ 605.00
Moisture content (ASTM D 2216)	22	tests	$ 11.00	$ 242.00
Percent material passing No. 200 sieve (ASTM D 1140)	22	tests	$ 55.00	$ 1,210.00
Crumb tests (ASTM D-6572)	2	tests	$ 43.00	$ 86.00
Double hydrometer tests (ASTM D-4221)	2	tests	$ 250.00	$ 500.00
California Bearing Ratio (ASTM D-1883)	1	tests	$ 750.00	$ 750.00
			SUBTOTAL =	$ 4,955.00
C) Engineering Analysis and Report Preparation				
Senior engineer, P.E.	2	hours	$ 205.00	$ 410.00
Project engineer, P.E.	4	hours	$ 165.00	$ 660.00
Stafft engineer, E.I.T.	40	hours	$ 120.00	$ 4,800.00
Support personnel (CAD/clerical)	8	hours	$ 70.00	$ 560.00
			SUBTOTAL =	$ 6,430.00
			TOTAL COST =	**$ 19,775.00**

HTS CONSULTANTS



HTS CONSULTANTS

LEGEND

Proposed Boreholes

Boring Locations are Approximate

Proposed Old Richmond Road – Segment 1

East of FM-1464 to Rippling Mill Drive
Fort Bend County, Texas

HTS Proposal No.: 24-00322 Revision1

Proposed Boring Locations