

4. **Compensation and Payment Terms.**

- (a) Consultant's fees for the Services shall be calculated at the rate(s) set forth in Exhibit "A" attached hereto. The Maximum Compensation to Consultant for the Services performed under this Agreement is One Hundred Twenty-Four Thousand Nine Hundred Ninety Six and 50/100 Dollars (\$124,996.50). In no event shall the amount paid by County to Consultant under this Agreement exceed said Maximum Compensation without an approved change order.
- (b) Consultant 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."
- (c) County will pay Consultant based on the following procedures: Upon completion of the tasks identified in the Scope of Services, Consultant shall submit to County staff person designated by the County Engineer, one (1) electronic (pdf) copy of the invoice showing the amounts due for services performed in a form acceptable to County. County shall review such invoices and approve them within 30 calendar days with such modifications as are consistent with this Agreement and forward same to the Auditor for processing. County shall pay each such approved invoice within thirty (30) calendar days. County reserves the right to withhold payment pending verification of satisfactory work performed.

5. **Limit of Appropriation.** Consultant understands and agrees that the Maximum Compensation for the performance of the Services within the Scope of Services described in Section 2 above is One Hundred Twenty-Four Thousand Nine Hundred Ninety Six and 50/100 Dollars (\$124,996.50). In no event shall the amount paid by County under this Agreement exceed the Maximum Compensation without a County approved change order. Consultant clearly understands and agrees, such understanding and agreement being of the absolute essence of this Agreement, that County shall have available the total maximum sum of One Hundred Twenty-Four Thousand Nine Hundred Ninety Six and 50/100 Dollars (\$124,996.50) specifically allocated to fully discharge any and all liabilities County may incur under this Agreement. Consultant does further understand and agree, said understanding and agreement also being of the absolute essence of this Agreement, that the total Maximum Compensation that Consultant may become entitled to and the total maximum sum that County may become liable to pay to Consultant under this Agreement shall not under any conditions, circumstances, or interpretations thereof exceed One Hundred Twenty-Four Thousand Nine Hundred Ninety Six and 50/100 Dollars (\$124,996.50).

6. **Non-appropriation.** Consultant understands and agrees that in the event no funds or insufficient funds are appropriated by the County under this Agreement, County shall immediately notify Consultant 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.** County is a body corporate and politic under the laws of the state of Texas and as such, is exempt from sales and use taxes. County shall furnish evidence of its tax-exempt status upon written request by Consultant.

8. **Insurance.** Prior to commencement of the Services, Consultant shall furnish County with properly executed certificates of insurance which shall evidence all insurance required and provide that such insurance shall not be canceled, except on 30 days' prior written notice to County. Consultant shall provide certified copies of insurance endorsements and/or policies if requested by County. Consultant shall maintain such insurance coverage from the time Services commence until Services are completed and provide replacement certificates, policies and/or endorsements for any such insurance expiring prior to completion of Services. Consultant shall obtain such insurance written on an Occurrence form 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 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 Consultant shall contain a waiver of subrogation in favor of County.

If required coverage is written on a claims-made basis, Consultant warrants that any retroactive date applicable to coverage under the policy precedes the effective date of

the Contract and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of 2 years beginning from the time the work under this Contract is completed.

Consultant shall not commence any portion of the work under this Contract 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 Consultant.

9. **Indemnity.** TO THE FULLEST EXTENT PROVIDED BY APPLICABLE LAW, CONSULTANT 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 CONSULTANT OR CONSULTANT'S AGENTS, EMPLOYEES, OR ANOTHER ENTITY OVER WHICH CONSULTANT EXERCISES CONTROL. CONSULTANT SHALL FURTHER PROCURE AND MAINTAIN GENERAL LIABILITY INSURANCE WITH COVERAGE AS PROVIDED IN SECTION 8 OF THIS AGREEMENT AND SHALL FURNISH A CERTIFICATE OF INSURANCE FOR THE SAME SHOWING FORT BEND COUNTY, TEXAS AS AN ADDITIONAL INSURED.
10. **Public Information Act.** Consultant 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 Consultant 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 Consultant expressly marked as proprietary or confidential. County shall not be liable to Consultant 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. Consultant further acknowledges and agrees that the terms and conditions of this Agreement are not proprietary or confidential information.
11. **Compliance with Laws.** Consultant 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. Consultant 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, Consultant shall be deemed an independent Contractor, and any of its agents, employees, officers, or volunteers performing work required hereunder shall be deemed solely as employees of Consultant. Consultant and its agents, employees, officers, or volunteers shall not, by performing work pursuant to this Agreement, be deemed to be employees, agents, or servants of County and shall not be entitled to any of the privileges or benefits of County employment.
13. **Use of Customer Name.** Consultant may use County's name without County's prior written consent only in Consultant's customer lists. Any other use of County's name by Consultant 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.** Consultant 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 Consultant 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 Consultant shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of Consultant or agent of Consultant who, in County's opinion, is incompetent or by his conduct become 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, Consultant shall comply with, and will require that all Consultant's Personnel comply with, all applicable rules, regulations and known policies of County that are communicated to Consultant 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.** Consultant acknowledges that it and its employees or agents may, in the course of performing their responsibilities under this Agreement, be exposed to or acquire information that is confidential to County. Any and all information of any form obtained by Consultant or its employees or agents from

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

Consultant agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Consultant uses in maintaining the confidentiality of its own confidential information, and not to copy, reproduce, sell, assign, license, market, transfer or otherwise dispose of, give, or disclose Confidential Information to third parties or use Confidential Information for any purposes whatsoever other than the provision of Services to County hereunder, and to advise each of its employees and agents of their obligations to keep Confidential Information confidential. Consultant shall use its best efforts to assist County in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limitation of the foregoing, Consultant shall advise County immediately in the event Consultant learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Agreement and Consultant will at its expense cooperate with County in seeking injunctive or other equitable relief in the name of County or Consultant against any such person. Consultant agrees that, except as directed by County, Consultant will not at any time during or after the term of this Agreement disclose, directly or indirectly, any Confidential Information to any person, and that upon termination of this Agreement or at County's request, Consultant will promptly turn over to County all documents, papers, and other matter in Consultant's possession which embody Confidential Information.

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

Consultant 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 documents, data, reports, research, graphic presentation materials, etc., developed by Consultant as a part of its work under this Agreement, shall become the property of County upon completion or termination of this Agreement. Consultant shall promptly furnish all such data and material to County on request.
18. **Inspection of Books and Records.** Consultant shall permit County, or any duly authorized agent of County, to inspect and examine the books and records of Consultant for the purpose of verifying the amount of work performed under the Scope of Services. County's right to inspect such books and records shall survive the termination of this Agreement for a period of four years. Notwithstanding the foregoing, Consultant shall bear no liability or responsibility for deliverables that have been modified post-delivery or used for a purpose other than that for which they were prepared under this Agreement.
19. **Termination.** County may terminate this Agreement at any time, with or without cause, upon thirty (30) days written notice to Consultant. Upon termination of this Agreement by County, Consultant shall be paid in accordance with Section 4, above, for those services which were provided under this Agreement prior to its termination and which have not been previously invoiced to County. Consultant's final invoice for said services will be presented to and paid by County in the same manner set forth in Section 4 above. No fees of any type, other than fees due and payable at the Termination Date, shall thereafter be paid to Consultant by County.
20. **Force Majeure.** Notwithstanding anything to the contrary contained herein, neither Party shall be liable to the other for any delay or inability to carry out its obligations under this Agreement if such delay or inability is the result of a Force Majeure Event. Within a reasonable time after the occurrence of such event, the Party whose obligations are 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, a Force Majeure Event includes, but is not limited to: strikes or other labor disputes, severe weather disruptions, natural disasters, fire or other acts of God; riots, war, or other emergencies; failure of any governmental agency to act in a timely manner; the discovery of any hazardous substance or differing and unforeseeable site conditions; and any other incapacities of any Party, similar to those enumerated, which are not within the control of the Party claiming such inability, which such Party could not have avoided by the reasonable exercise of due diligence and care.

21. **Assignment.** Consultant may not assign this Agreement to another party without the prior written consent of County.

22. **Successors and Assigns Bound.** County and Consultant 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 Consultant release any material or information developed or received during the performance of Services hereunder unless Consultant 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,
Richmond, Texas 77469

And

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

If to Consultant: HJ Consulting, Inc.
Attn: Harish Jajoo, P.E., President
4771 Sweetwater Blvd, Suite 254
Sugar Land, Texas 77479

25. **Performance Representation.** Consultant represents to County that Consultant has the skill and knowledge ordinarily possessed by well-informed members of its trade or profession (“Professionals”) practicing in the greater Houston metropolitan area. Consultant 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. **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.

27. **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.
28. **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.
29. **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.
30. **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.
31. **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, Consultant hereby verifies that Consultant 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, 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, Consultant does not boycott Israel and is authorized to agree in such contracts not to boycott Israel during the term of such contracts. "Boycott Israel" has the meaning provided in § 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, Consultant does not boycott energy companies and is authorized to agree in such contracts not to boycott energy companies during the

term of such contracts. "Boycott energy company" has the meaning provided in § 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, Consultant does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and is authorized to agree in such contracts not to discriminate against a firearm entity or firearm trade association during the term of such contracts. "Discriminate against a firearm entity or firearm trade association" has the meaning provided in § 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.

32. **Human Trafficking.** BY ACCEPTANCE OF THIS AGREEMENT, CONSULTANT 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.

33. **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.

34. **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.

35. **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.

{Execution Page Follows}

IN WITNESS WHEREOF, and intending to be legally bound, County and Consultant 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:

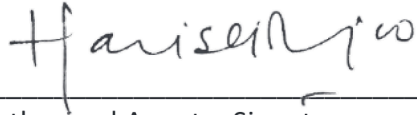
Laura Richard, County Clerk

APPROVED:



J. Stacy Slawinski, County Engineer

HJ CONSULTING, INC.



Authorized Agent – Signature

Harish Jajoo, PE

Authorized Agent- Printed Name

President

Title

03-20-24

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

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EXHIBIT A

(Follows Behind)



February 23, 2024

“EXHIBIT A” – Scope of Services

Boothill Bypass Road

Boothill Bypass to Hackamore Road, Precinct 1

FBC Project # 23117x

Fort Bend County has requested a proposal to provide professional engineering services (Preliminary Engineering and Design Phase services) for the design and construction of approximately 1450 LF of a new 2-lane asphalt roadway with roadside ditches and all necessary appurtenances from Boothill Bypass to Hackamore Road, utilizing the latest FBC standards.

PROJECT LIMITS AND DETAILS:

1. Develop a new 2 lane roadway with roadside ditches over existing land. Tie in to existing roadways at either end. The proposed ROW will be 60' to accommodate the project.
2. The flow from the ditches will be directed to existing ditches at either end of the proposed roadway.
3. No detention will be required for this project.

ROADWAY ALIGNMENT:

The proposed Boothill Bypass Road will run from East to West and connect to the existing roadways at either end. Right of way will be purchased to accommodate the proposed roadway. Sight triangles will be developed at both intersections.

We propose to perform the following services as per attached submittal schedule (Exhibit B), for a contract lump sum fee of **\$124,996.50** per attached fee proposal (Exhibit C).

Civil Engineers | Construction Managers

4771 Sweetwater Boulevard, Suite 254, Sugar Land, Texas 77479
832-338-3202 (C) | 832-553-3103 (F) | www.hjconsultinginc.com

Boothill Bypass Road, FBC Precinct 1

Proposal for Professional Engineering Services

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BASIC SERVICES:

PRELIMINARY DESIGN PHASE:

The Preliminary Engineering Phase Meeting shall serve as a summary document that incorporates the recommendations from the supporting investigative reports, results from 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. Positively determine right-of-way acquisition needs
3. Determine potential conflicts with existing facilities
4. Identify critical path items
5. Identify problem areas and potential resolution(s)
6. Determine permit and regulatory requirements
7. Prepare a reasonable construction cost estimate
8. 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.

The Preliminary Engineering Phase includes, but 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
- Exhibits and Drawings
- Construction Cost Estimate
- Coordination with sub-consultants

Boothill Bypass Road, FBC Precinct 1

Proposal for Professional Engineering Services

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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, but not limited to Geotechnical Investigations, and Drainage Impact Study including a drainage report.

Detention, Environmental Site Assessments, Wetlands Assessments, Delineation, Concurrence/Permitting and associated tasks are not in the scope of this project. 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 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 for the project. During this phase, Topographic Survey will be performed, and the existing conditions will be evaluated including roadway geometrics, soils, traffic, and environmental 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.

Proposed improvements will include Roadway Geometry, Pavement Structure, and Preliminary Phasing of Traffic Control Plans. 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 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.

Boothill Bypass Road, FBC Precinct 1

Proposal for Professional Engineering Services

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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.

- **Schematic Layout of Roadway**
 - Provide a plan view layout within proposed 60' ROW with sufficient detail to ensure that the final design can be constructed without any major issues. The schematic layout shall be as a KMZ file and identify ROW parcels to be taken. The schematic should show the pavement marking concept so that traffic movements can be considered and reviewed during the Preliminary Engineering Phase. Provide the proposed typical sections on the schematic. Typical Sections shall be drawn at 1"=20' horizontal and 1"=2' vertical scale on 11"x17" sheets.

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

- **Utility Tables**
 - The consultant shall coordinate with utility companies that have existing facilities in or adjacent to project limits. The coordination shall include:
 - Perform records research and field visits to determine the presence of underground or overhead private or public utilities during the preliminary design phase. A reasonable amount of research should be conducted, including but not limited to contact with companies identified on above-ground markers, railroad commission website research, and map requests from prominent 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.

Boothill Bypass Road, FBC Precinct 1

Proposal for Professional Engineering Services

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- 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 Boothill Bypass 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 Project is New Road Right of Way Project near the Brazos Valley Subdivision, located between W Boothill Rd and Hackamore Rd in Precinct 1, Fort Bend County, Texas.

Base Scope of Services

Phase I Activities

1. Right of Entry
 - a. Prepare a request for right-of-entry and notification to property owners of the proposed commencement of work.
 - b. Mail requests to the taxpayer's address, or grantor's address in deed when appropriate, and hand deliver if necessary.

Boothill Bypass Road, FBC Precinct 1

Proposal for Professional Engineering Services

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2. Project Control

- a. Horizontal and Vertical Control will be established at intervals prescribed in the Fort Bend County Design Manual for Mobility Projects, with intervisibility, not to exceed 1,000-foot spacing.
- b. Horizontal control will be established on site based upon GPS observation utilizing the Leica RTN and OPUS Static Confirmation reports from NGS.
- c. Horizontal Control will be based on the Texas Coordinate System of 1983, South Central Zone.
- d. Vertical Control will be established by GPS static observation & OPUS Solutions for NAVD 88 and verified with available NGS benchmarks.
- e. High-Order level loops will be utilized to refine vertical control.
- f. Prepare overall Survey Control Layout Sheet and Control Recovery Sheets.

3. Topographic Route Survey

- a. Topographic Cross-Sections will be taken at intervals not to exceed 100 feet, and at any grade breaks, along the proposed right-of-way.
- b. Topographic Cross-Sections will be taken at intervals not to exceed 50 feet along W Boothill Road and Hackamore Road, extending 100 feet north and south from the proposed right-of-way.
- c. Texas 811 (One-Call) will be notified 48 hours in advance of the commencement of topographic surveying for marking.
- d. Any utility markings provided by the One-Call Utility Locators will be collected and a reasonable interpretation reflected on finished deliverables.
- e. All visible and apparent utilities will be located.
- f. All manhole elevations, culverts, flowlines, and invert elevations will be located and detailed where accessible.
- g. Subsurface utility exploration to determine exact locations and depths of lines not otherwise accessible by manholes or inlets is specifically excluded from the Scope of Work.
- h. Any structures within 100 feet of the current proposed centerline of the road will be generally located.
- i. The project baseline shall be staked at its beginning, end, street intersections, angle points, even 1,000-foot stations, and at the beginning and end of curves, if any.
- j. Stake the location of the proposed bore locations using latitude and longitude coordinates provided by the geotechnical consultant.
- k. Record the location and elevation of the borings after drilling, if completed at the time of survey.

Boothill Bypass Road, FBC Precinct 1

Proposal for Professional Engineering Services

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4. Utility Research

- a. Submit a request for gas and electric maps to CenterPoint Energy.
- b. Submit a request for communication base maps to AT&T.
- c. Submit a request for municipal utility construction plans to the City of Simonton.

Phase II Activities

1. Prepare Right-of-Way Map

- a. Prepare an overall project map showing existing and proposed rights-of-way, based on the approved alignment.
- b. Stake the proposed right-of-way at all PC, PT, angle points, and 500-foot stations.

2. Deed Research and Limited Title Certificates

- a. Research ownership & subdivision plats along and adjacent to the project route.
- b. Acquire limited title certificates from a professional abstractor for ownership names, deeds, and easement recording information.
- c. Establish the Existing Right-of-Way of Boothill Road.
- d. Establish the Existing Right-of-Way of Hackamore Road.

Additional Scope of Services

Phase III Activities

1. Prepare Parcel Exhibits and Descriptions

- a. Prepare individual survey exhibits for three proposed right-of-way parcel acquisitions.
- b. Prepare individual metes and bounds descriptions for each proposed acquisition.
- c. Stake the right-of-way line at all intersecting property lines.

Phase IV Activities

1. Survey Control Update

- a. Stake project right-of-way for utility relocation control, as needed.
- b. Refresh the survey control for commencement of construction, as needed.

Boothill Bypass Road, FBC Precinct 1

Proposal for Professional Engineering Services

February 23, 2024

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Deliverables

Phase I

- Topographic Survey in CAD (AutoCAD Civil 3D 2018 format .dwg)
- 2D Planimetric (.dwg converted to Microstation .dgn)
- ASCII PNEZD Point File (.txt)
- 3D Surface File (LandXML .xml or TIN file)
- Survey Control Sheets (AutoCAD .dwg and signed .pdf)

Phase II

- Right-of-Way Map (AutoCAD Civil3D 2018 format .dwg and .pdf)

Phase III

- Signed and Sealed Survey Exhibit (Letter or Legal Size .pdf)
- Signed and Sealed Metes and Bounds Description (Letter Size .pdf)
- Unsigned Metes and Bounds Description in Word format (.docx)

Geotechnical Scope of Services:

Project Location

The proposed site encompasses approximately 1,450 linear feet of new road construction. It is located at the SE quadrant of Buckskin Road and W Boothill Road in Simonton, Texas (See Diagram No. 1 for the job site location).

Upon reviewing the available aerial imagery, the area is grassy with some trees. The terrain generally slopes down to the west. These characteristics of the site will be taken into consideration during the planning and development process for the project.

Proposed Construction Description

Vertex has considered the following assumptions during the preparation of the cost estimate:

- The site condition is expected to allow truck-mounted drilling equipment to access the designated boring locations. The estimated cost does not include any allowance for site access problems.
- Vertex will coordinate with the 811-call service to identify and locate any public underground utilities before commencing drilling work.
- Vertex may engage a 3rd-party private utility locator upon request to ensure the clearance of boring locations before initiating drilling work. This extra service will incur an additional fee of about \$1,600.00 per day.

Boothill Bypass Road, FBC Precinct 1

Proposal for Professional Engineering Services

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- Clearing for boring access will be provided by the client.

Site Exploration

The site exploration program consists of the following:

Boring ID's	Depth per Boring (feet)
BH-1 to BH-3 (3 Borings)	15
Total (feet):	45

Site Investigation Procedure

We will utilize a truck-mounted drill rig equipped with continuous solid stem flight augers to conduct soil borings. The ATV-mounted drill rig will be used only if needed and upon request. An additional fee of about \$1,400.00 may apply for transportation and extra costs associated with ATV drilling. During drilling, soil sampling will be conducted using open tubes and/or Standard Penetration Tests (ASTM D-1586). The collected soil samples will be placed in suitable containers and transported to our soil laboratory for testing and classification by a Geotechnical Engineer. Furthermore, we will diligently observe and document groundwater levels during drilling and sampling.

Our experienced exploration team will generate field boring logs for the standard drilling operations. These logs will include information like sampling depths, penetration distances, and other relevant data about the sampling process. They will also provide visual classifications of encountered materials during drilling and present our interpretation of subsurface conditions between the samples. The final boring logs, derived from the field logs, will represent the Geotechnical Engineer's comprehensive interpretation, incorporating observations and laboratory test results.

Please note that backfill material tends to settle below the surface over time. Therefore, we recommend periodic checks of the boreholes to assess if additional backfilling is necessary. We can provide this service or offer grouting of the boreholes for an additional fee upon your request.

Private Utilities

The owner/client is responsible for marking private utilities before the start of field exploration. Vertex will not be held accountable for any damage caused to undisclosed private utilities. If the owner/client cannot accurately locate private utilities, Vertex can help by coordinating or subcontracting with a private utility locating service. Please note that fees associated with these additional services are not included in our current Scope of Services but can be provided upon request.

Boothill Bypass Road, FBC Precinct 1

Proposal for Professional Engineering Services

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Site Exploration Safety

Vertex acknowledges that there may be unknown environmental concerns at the project site that would pose health or safety hazards related to our exploration program. As a result, our Scope of Services considers standard OSHA (Occupational Safety and Health Administration) Level D Personal Protective Equipment (PPE) appropriate.

Site Access

Vertex requires permission from the property owner to access the site. Upon acceptance of this document, unless otherwise informed, we interpret it as authorization to enter the property to conduct field exploration in accordance with the agreed-upon Scope of Services.

Laboratory Services

Laboratory testing is essential for classification purposes and determining strength characteristics. These tests will follow our standard procedures, including moisture content determination, soil identification and classification, Minus 200 Sieve, unconfined compression, and liquid limit (L.L.) & plastic limit (P.L.) assessments. The specific types and quantities of tests will be determined based on the soil conditions encountered in the borings.

Engineering Services

A licensed professional engineer in Texas will meticulously prepare the engineering report. It will include the presentation of field and laboratory data, our comprehensive analyses of the results, and corresponding recommendations. The final report will be provided in an electronic PDF format, ensuring its authenticity with a digital signature and seal. The report will address the preliminary recommendations for the following key aspects:

- Site Location and Exploration Plans
- Subsurface exploration procedures
- Description of subsurface conditions
- Groundwater control
- Boring logs with field and laboratory data
- Stratification based on visual soil (and rock) classification
- Groundwater levels observed during and after the completion of drilling
- Utility construction consideration
- Bedding and backfill
- Recommended paving design parameters

Boothill Bypass Road, FBC Precinct 1

Proposal for Professional Engineering Services

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Drainage (Hydraulic and Hydrologic Analysis):

Not included in the current scope of work. It is also understood that no detention analysis will be required for this project.

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:

- **95% 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 95 percent interim seal
 - Sheet Index

Boothill Bypass Road, FBC Precinct 1

Proposal for Professional Engineering Services

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- General Notes sheet
 - Typical and Non-standard Cross Sections
 - Project Layout Sheet
 - Survey Control
 - Horizontal Alignment Data
 - Plan and Profile Sheets
 - Drainage Area Map with Hydraulic Calculations
 - Traffic Control Plan
 - Storm Water Pollution Prevention Plan
 - Signage and Pavement Marking Plans
 - Cross Sections with earthwork quantities at 100-foot intervals
 - Standard Construction details per Fort Bend County construction details, and others to be used as per necessary depending on the jurisdiction
 - Specifications Table of Contents per Fort Bend County Specification Table of Contents Template (Harris County Specifications, TxDOT Specifications, and others to be used as necessary depending on the jurisdiction).
 - Special Specifications or Conditions, and Contract Documents Excluded
 - Construction Cost Estimate (PDF and Excel Format)
 - 95% Plans on 11"x17" Sheets with Electronic PDF files, and KMZ file of existing conditions and current design
 - Submit drawings for regulatory permit and utility reviews
 - 95% Review Checklist
 - All CAD Files
- **Final Submittal:**
 - A. A digital copy in PDF of the drawings (signed and sealed)
 - B. The 100 percent submittal should be considered ready for project advertisement and shall include the following:
 - Construction cost estimate
 - Recommended maximum number of calendar days for construction
 - 100% Review Checklist
 - Kmz file for the proposed improvements
 - Excel and pdf files for the bid tabulations
 - All CAD Files

Boothill Bypass Road, FBC Precinct 1

Proposal for Professional Engineering Services

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

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

Boothill Bypass Road, FBC Precinct 1

Proposal for Professional Engineering Services

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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.

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
Boothill Bypass Road
FBC Project #23117x

HJ Consulting, Inc.
"Exhibit B"

BOOTHILL BYPASS ROAD

Project Start: Mon, 4/1/2024
Display Week: 1

ID	TASK	PROGRESS	DURATION	START	END
Preliminary Design Phase					
1	Notice to Proceed	Cal Days	52	1-Apr-24	23-May-24
2	Project Coordination and Meetings		4	1-Apr-24	5-Apr-24
3	Data Collection/Meetings/NTP (Subconsultants)		5	2-Apr-24	9-Apr-24
4	Topographic Survey & Existing ROW Maps (Signed and Sealed)		15	2-Apr-24	23-Apr-24
5	FBC Review and Field Topo Survey Verification Site Visit		4	26-Apr-24	2-May-24
6	Key Maps, Vicinity Maps and Other Maps		5	3-May-24	10-May-24
7	Develop Proposed Alignment		4	26-Apr-24	2-May-24
8	Geotechnical Investigation		30	2-Apr-24	14-May-24
9	30% Roadway Plans		15	24-Apr-24	15-May-24
10	Preliminary Utility Information Table		15	24-Apr-24	15-May-24
11	Preliminary Utility Conflict List		15	24-Apr-24	15-May-24
12	Preliminary ROW Acquisition Table		5	15-May-24	22-May-24
13	Preliminary ROW Map		5	15-May-24	22-May-24
14	Preliminary Construction Cost Estimate		5	15-May-24	22-May-24
15	Identify Problem Areas and Potential Resolution		5	15-May-24	22-May-24
16	Identify Permit and Regulatory Requirements		5	15-May-24	22-May-24
17	Engineer QA/QC and Incorporate Comments		5	15-May-24	22-May-24
18	Client Presentation Meeting with Fort Bend County			23-May-24	23-May-24
19	Submit Preliminary Engineering Exhibits			23-May-24	23-May-24
20	Study Phase Duration	Work Days	39	1-Apr-24	23-May-24
21	Acceptance of Study Phase Report by Fort Bend County		1	23-May-24	24-May-24



BOOTHILL BYPASS ROAD

Project Start: Mon, 5/27/2024
Display Week: 1

ID	TASK	PROGRESS	DURATION	START	END
Final Design Phase					
1	Notice to Proceed	Cal Days	100	27-May-24	4-Sep-24
2	Project Coordination and Meetings		1	27-May-24	28-May-24
3	Address 30% Comments		2	28-May-24	30-May-24
4	Proposed ROW Maps (Metes and Bounds)		10	28-May-24	11-Jun-24
5	Traffic Control Schematics (Develop Phases and Steps)		5	28-May-24	4-Jun-24
6	Drainage Area Maps & Hydraulic Calculations		5	30-May-24	6-Jun-24
7	Horizontal Alignment Data Sheet		2	30-May-24	3-Jun-24
8	Plan and Profile Sheets		15	30-May-24	21-Jun-24
9	General Notes		2	21-Jun-24	25-Jun-24
10	Traffic Control Plans		5	21-Jun-24	28-Jun-24
11	Project Layout Sheet		5	21-Jun-24	28-Jun-24
12	Typical Sections		2	21-Jun-24	25-Jun-24
13	Cover Sheet		2	21-Jun-24	25-Jun-24
14	Index of Sheets		2	25-Jun-24	27-Jun-24
15	Fort Bend County Standard Sheets		2	21-Jun-24	25-Jun-24
16	Storm Water Pollution Prevention Plan		5	28-Jun-24	8-Jul-24
17	Signing and Pavement Marking Plans		5	28-Jun-24	8-Jul-24
18	Cross Sections and Earthwork Calculations		10	21-Jun-24	8-Jul-24
19	Specification Table of Contents		3	28-Jun-24	3-Jul-24
20	Bid Form with Estimated Unit and Total Costs		5	28-Jun-24	8-Jul-24
21	Engineer QA/QC and Incorporate Comments		5	8-Jul-24	15-Jul-24
22	1st submittal to Fort Bend County (95% Submittal)			16-Jul-24	16-Jul-24
23	Fort Bend County Review		15	17-Jul-24	7-Aug-24
24	Update Drawings for 2nd Submittal		10	8-Aug-24	22-Aug-24
25	Update Construction Cost Estimate		2	22-Aug-24	26-Aug-24
26	Assemble and Update Project Manual		2	26-Aug-24	28-Aug-24
27	Engineer QA/QC and Incorporate Comments		5	26-Aug-24	3-Sep-24
28	Final Signed and Sealed Submittal to Fort Bend County			4-Sep-24	4-Sep-24
29	Final Design Phase Duration	Work Days	69	27-May-24	4-Sep-24



"EXHIBIT C" - Compensation for Professional Services
Project Name: Boothill Bypass Road
Project Limits: Boothill Bypass to Hackamore Road
FBC Project # 23117x

BASIC SERVICES

1 Design Phase (Lumpsum)		\$ 93,837.50
	Preliminary Design Subtotal	\$ 30,615.00
	Final Design Subtotal	\$ 50,822.50
	Project Management Subtotal	\$ 12,000.00
	Other Expenses Subtotal	\$ 400.00
2 Survey (Subconsultant: Tejas Surveying)		\$ 16,175.00
	Topographic Surveying and Mapping	\$ 16,175.00
3 Geotechnical (Subconsultant: Vertex)		\$ 6,484.00
	Geotechnical Investigation for Road Alignment and Bridge	\$ 6,484.00
Sub-Total Basic Services (1-3):		\$ 116,496.50



"EXHIBIT C" - Compensation for Professional Services
Project Name: Boothill Bypass Road
Project Limits: Boothill Bypass to Hackamore Road
FBC Project # 23117x

OPTIONAL ADDITIONAL SERVICES

4 Right of Way Acquisition (Approximate) (Subconsultant: Tejas Surveying)	\$ 6,750.00
Parcel Meets & Bounds with Abstracting and Title Research (3 Parcels (Approx) @ \$2250/Parcel)	\$ 6,750.00

5 Survey Staking (Subconsultant: Tejas Surveying)	\$ 1,750.00
Refresh Survey Control	\$ 1,750.00

Sub-Total Optional Additional Services (4-5) \$ 8,500.00

TOTAL SERVICES (BASIC & OPTIONAL ADDITIONAL): \$ 124,996.50



BOOTHILL BYPASS ROAD
BOOTHILL BYPASS TO HACKAMORE ROAD
FBC PROJECT# 23117x
HJ CONSULTING, INC.

2/23/2024

LEVEL OF EFFORT FOR DESIGN SERVICES, FEBRUARY 2024

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								
DESIGN SERVICES										
PRELIMINARY DESIGN										
1	Maps									
1.1	Project Location Map	1				1	4		5	\$ 555.00
1.2	ROW & Alignment Exhibit with Aerial Map	1	1	1	2	6	12		22	\$ 2,920.00
1.3	Drainage Area Map	1	1	1	2	6	12		22	\$ 2,920.00
1.4	Sight Triangle Exhibit	2	1	1	2	6	12		22	\$ 2,920.00
2	Preliminary Exhibits Prep for Presentation		2	1	4	8			15	\$ 2,555.00
3	Right of Way Acquisition Needs		2	4	8	8			22	\$ 3,930.00
4	Preliminary Construction Cost Estimate		1	1	4	6			12	\$ 2,010.00
5	Preliminary Roadway & Drainage Design		1	2	8	8	16		36	\$ 5,210.00
6	30% Plans (11" x17" Sheets)									
6.1	Proposed Typical Section	1	1	1	2		4		8	\$ 1,270.00
6.2	Plan & Profile	3								
6.2.1	Existing Features in Plan & Profile		1	2	3	3	15		24	\$ 3,230.00
6.2.2	Minor Annotations		1	1	3	6	12		23	\$ 3,095.00
	PRELIMINARY DESIGN SUBTOTAL	9	12	15	38	58	87		211	\$ 30,615.00

BOOTHILL BYPASS ROAD
BOOTHILL BYPASS TO HACKAMORE ROAD
FBC PROJECT# 23117x
HJ CONSULTING, INC.

LEVEL OF EFFORT FOR DESIGN SERVICES, FEBRUARY 2024

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										
1	Cover Sheet	1	0.5	0.5	0.5		4		5.5	\$ 757.50
2	Sheet Index	1	0.5	0.5	0.5	1	2		4.5	\$ 682.50
3	General Notes	2	0.5	0.5	0.5	1	2		4.5	\$ 682.50
4	Typical Sections Update	1	0.5	0.5	1	1	4		7	\$ 980.00
5	Drainage Area Maps Update	1	0.5	0.5	1	2	4		8	\$ 1,115.00
6	Plan and Profile Sheets (Roadway)	3	1	2	3	6	15		27	\$ 3,635.00
6.1	Roadway Design Update		1	2	4	8	16		31	\$ 4,185.00
6.2	Drainage Design & Calculations	1	1	2	4	8	16		31	\$ 4,185.00
7	Traffic Control Plans & Details									
7.1	Project Approach Signing and Notes	1	1	1	1	2	4		9	\$ 1,365.00
7.2	Phasing Layout, Description and Typical Sections	1	2	2	2	4	8		18	\$ 2,730.00
7.3	TCP Construction Cost Estimate		0.5	0.5	1				2	\$ 425.00
7.4	TCP Details/Standards	8	2	2	2	4	8		18	\$ 2,730.00
8	Storm Water Pollution Prevention Plans & Details									
8.1	Storm Water Pollution Prevention Plans	1	2	2	2	4	8		18	\$ 2,730.00
8.2	SWPPP Construction Cost Estimate		0.5	0.5	1				2	\$ 425.00
8.3	SWPPP Details	1			1		2		3	\$ 385.00
9	Signing and Pavment Marking Plans & Details									
9.1	Signing and Striping Plans	1	2	2	2	4	8		18	\$ 2,730.00
9.2	Summary of Small Signs	1	1	1	1	2	4		9	\$ 1,365.00
9.3	SPM Construction Cost Estimate		0.5	0.5	1				2	\$ 425.00
9.4	SPM Details	2	1	1	1	2	4		9	\$ 1,365.00
10	Cross Sections & Earthwork Calculations	5	2	3	4	8	45		62	\$ 7,730.00
11	Engineers Estimate and Special Specs									
11.1	Engineers Estimate		2	1	2	4	6		15	\$ 2,295.00
11.2	Special Specifications or Conditions		1	1	1	2			5	\$ 945.00
12	Fort Bend County Standard Sheets	4	1	1	2	4	6		14	\$ 2,020.00
13	Incorporate review comments (95% to Final)		1	1	2	6	16	1	35	\$ 4,935.00
	FINAL DESIGN SUBTOTAL	35	1	25	29	44.5	182	1	357.5	\$ 50,822.50



BOOTHILL BYPASS ROAD
BOOTHILL BYPASS TO HACKAMORE ROAD
FBC PROJECT# 23117x
HJ CONSULTING, INC.

2/23/2024

LEVEL OF EFFORT FOR DESIGN SERVICES, FEBRUARY 2024

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 DESCRIPTION	ESTIMATED HOURS									
PROJECT MANAGEMENT										
1 Field Visit (Investigations and Findings)			4		4				8	\$ 1,800.00
2 Coordination for Topographic Survey			2		6				8	\$ 1,600.00
3 Coordination for Geotechnical			1		2				3	\$ 625.00
4 Coordination for Survey ROW acquisition			1		2				3	\$ 625.00
5 Coordination with Public, Centerpoint Energy, AT&T, Comcast and Other Private Utilities		2	4		4				10	\$ 2,450.00
6 Project Management and Meetings		4	8		8				20	\$ 4,900.00
		6	20		26				52	\$ 12,000.00
PROJECT MANAGEMENT SUBTOTAL										
OTHER EXPENSES										
1 Printing/Plotting/Copying										\$ 200.00
2 Mileage/Postage/Courier										\$ 200.00
										\$ 400.00
OTHER EXPENSES SUBTOTAL										
TOTAL HOURS		7	45	29	70.5	75	182	1	409.5	
TOTAL ESTIMATE		\$2,275	\$12,375	\$6,525	\$12,338	\$10,125	\$19,110	\$75		\$ 93,837.50



Pedraza Surveying, LLC dba Tejas Surveying
1810 First Oaks St, Suite 220, Richmond, TX 77406
Phone No. (281) 240-9099 | TBPELS Reg. No. 10194739

February 15, 2024

Harish Jajoo, P.E., CFM
HJ Consulting, Inc.
4471 Sweetwater Blvd., #254
Sugar Land, TX 77479

Via email: harish@hjconsultinginc.com

RE: Surveying Services in Support of New Road Right of Way near the Brazos Valley Subdivision, Simonton, Fort Bend County, Texas

Mr. Harish,

Pedraza Surveying, LLC dba Tejas Surveying (Surveyor) is pleased to submit this proposal to provide the following services for HJ Consulting, Inc. in support of the New Road Right of Way Project near the Brazos Valley Subdivision, located between W Boothill Rd and Hackamore Rd in Precinct 1, Fort Bend County, Texas. Tejas Surveying proposes to conduct its services in accordance with the specifications set forth for an amount not to exceed TWENTY-FOUR THOUSAND SIX HUNDRED SEVENTY-FIVE DOLLARS AND NO/100 DOLLARS (\$ 24,675.00):

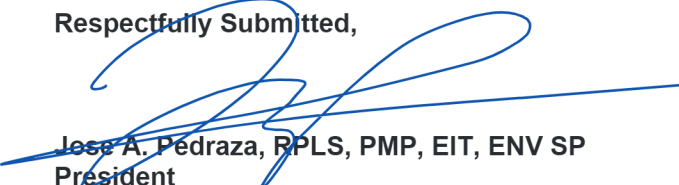
The Surveying shall include both overall project control and specific surveying tasks described more specifically in Exhibit A: Scope of Services To Be Performed by Tejas Surveying. The locations of the surveying to be performed at the project site are more clearly shown on Exhibit C: Limits of Survey – Overall Project Limits for New Road Right of Way. The fees for the surveying to be performed at the project site are further explain on Exhibit B: Compensation for Surveying Services.

The project will be drafted in AutoCAD and delivered in NAD '83 surface position/feet & NAVD88 elevations, at a scale specified by the engineer. In addition, deliverables would include the topographic points file, field book sketches, and relevant photos of any uncommon structures or utility facilities.

Please allow up to 15 business days for the collection of data and preparation of initial deliverables once we have received notice to proceed. Additionally, please anticipate providing notice three business days in advance of any follow-up surveying after the initial phase and allow up to three business days for the preparation of those subsequent deliverables once the field work has been completed.

The work will be billed monthly on a percentage complete basis. Any requests not covered under the Scope of Services will be billed on a time and material basis, also billed monthly, in accordance with our current rates as shown on Exhibit D: Tejas Surveying 2024 Schedule of Rates. All payments shall be due and payable on a net 30 basis, unless otherwise specified under Owner/Prime Contract. Tejas Surveying would like to be apprised of the billing to Fort Bend County when these surveying expenses are included.

Respectfully Submitted,



Jose A. Pedraza, RPLS, PMP, EIT, ENV SP
President
Pedraza Surveying, LLC
dba Tejas Surveying

Exhibit "A"
**Scope of Services To Be
Performed by Tejas Surveying**

Base Scope of Services

Phase I Activities

1. Right of Entry
 - a. Prepare a request for right-of-entry and notification to property owners of the proposed commencement of work.
 - b. Mail requests to the taxpayer's address, or grantor's address in deed when appropriate, and hand deliver if necessary.

2. Project Control
 - a. Horizontal and Vertical Control will be established at intervals prescribed in the Fort Bend County Design Manual for Mobility Projects, with intervisibility, not to exceed 1,000-foot spacing.
 - b. Horizontal control will be established on site based upon GPS observation utilizing the Leica RTN and OPUS Static Confirmation reports from NGS.
 - c. Horizontal Control will be based on the Texas Coordinate System of 1983, South Central Zone.
 - d. Vertical Control will be established by GPS static observation & OPUS Solutions for NAVD 88 and verified with available NGS benchmarks.
 - e. High-Order level loops will be utilized to refine vertical control.
 - f. Prepare overall Survey Control Layout Sheet and Control Recovery Sheets.

3. Topographic Route Survey
 - a. Topographic Cross-Sections will be taken at intervals not to exceed 100 feet, and at any grade breaks, along the proposed right-of-way.
 - b. Topographic Cross-Sections will be taken at intervals not to exceed 50 feet along W Boothill Road and Hackamore Road, extending 100 feet north and south from the proposed right-of-way.
 - c. Texas 811 (One-Call) will be notified 48 hours in advance of the commencement of topographic surveying for marking.
 - d. Any utility markings provided by the One-Call Utility Locators will be collected and a reasonable interpretation reflected on finished deliverables.
 - e. All visible and apparent utilities will be located.
 - f. All manhole elevations, culverts, flowlines, and invert elevations will be located and detailed where accessible.
 - g. Subsurface utility exploration to determine exact locations and depths of lines not otherwise accessible by manholes or inlets is specifically excluded from the Scope of Work.
 - h. Any structures within 100 feet of the current proposed centerline of the road will be generally located.
 - i. The project baseline shall be staked at its beginning, end, street intersections, angle points, even 1,000-foot stations, and at the beginning and end of curves, if any.
 - j. Stake the location of the proposed bore locations using latitude and longitude coordinates provided by the geotechnical consultant.
 - k. Record the location and elevation of the borings after drilling, if completed at the time of survey.

4. Utility Research
 - a. Submit a request for gas and electric maps to CenterPoint Energy.

- b. Submit a request for communication base maps to AT&T.
- c. Submit a request for municipal utility construction plans to the City of Simonton.

Phase II Activities

1. Prepare Right-of-Way Map
 - d. Prepare an overall project map showing existing and proposed rights-of-way, based on the approved alignment.
 - e. Stake the proposed right-of-way at all PC, PT, angle points, and 500-foot stations.
2. Deed Research and Limited Title Certificates
 - a. Research ownership & subdivision plats along and adjacent to the project route.
 - b. Acquire limited title certificates from a professional abstractor for ownership names, deeds, and easement recording information.
 - c. Establish the Existing Right-of-Way of W Boothill Road.
 - d. Establish the Existing Right-of-Way of Hackamore Road.

Additional Scope of Services

Phase III Activities

1. Prepare Parcel Exhibits and Descriptions
 - a. Prepare individual survey exhibits for three proposed right-of-way parcel acquisitions.
 - b. Prepare individual metes and bounds descriptions for each proposed acquisition.
 - c. Stake the right-of-way line at all intersecting property lines.

Phase IV Activities

1. Survey Control Update
 - a. Stake project right-of-way for utility relocation control, as needed.
 - b. Refresh the survey control for commencement of construction, as needed.

Deliverables

Phase I

- Topographic Survey in CAD (AutoCAD Civil 3D 2018 format .dwg)
- 2D Planimetric (.dwg converted to Microstation .dgn)
- ASCII PNEZD Point File (.txt)
- 3D Surface File (LandXML .xml or TIN file)
- Survey Control Sheets (AutoCAD .dwg and signed .pdf)

Phase II

- Right-of-Way Map (AutoCAD Civil 3D 2018 format .dwg and .pdf)

Phase III

- Signed and Sealed Survey Exhibit (Letter or Legal Size .pdf)
- Signed and Sealed Metes and Bounds Description (Letter Size .pdf)
- Unsigned Metes and Bounds Description in Word format (.docx)

**Exhibit “B”
 Compensation for
 Surveying Services**

The total of all fees for Base Scope of Services performed by the Surveyor under this agreement shall not exceed the total amount of Sixteen Thousand One-Hundred Seventy-Five and 00/100 (\$ 16,175.00). It is agreed and understood that this amount will constitute full compensation to the Surveyor.

Base Scope of Services	
Right-of-Entry	\$ 425
Control Map	\$ 2,750
Topographic Route Survey	\$ 6,250
Utility Research	\$ 500
<i>Subtotal Phase I Activities</i>	\$ 9,925
Right-of-Way Map	\$ 6,250
<i>Subtotal Phase II Activities</i>	\$ 6,250
Base Scope of Services Total (Lump Sum)	\$ 16,175

The total of all fees for Additional Scope of Services performed by the Surveyor under this agreement, when authorized, shall not exceed the total amount of Eight Thousand Five-Hundred and 00/100 (\$ 8,500.00).

Additional Scope of Services – As Authorized	
Parcel Exhibits and Descriptions (Up to 3 Parcels - \$ 2,250 each)	\$ 6,750
<i>Subtotal Phase III Activities</i>	\$ 6,750
Refresh Survey Control	\$ 1,750
<i>Subtotal Phase IV Activities</i>	\$ 1,750
Additional Scope of Services (Lump Sum, Not-to-Exceed)	\$ 8,500

Deliverable Schedule

All Phase I activities will be completed within 15 business days from notice-to-proceed. Phase II and Phase III activities will be completed within 20 days from authorization to proceed with those tasks.

**Exhibit "C"
Project Area**

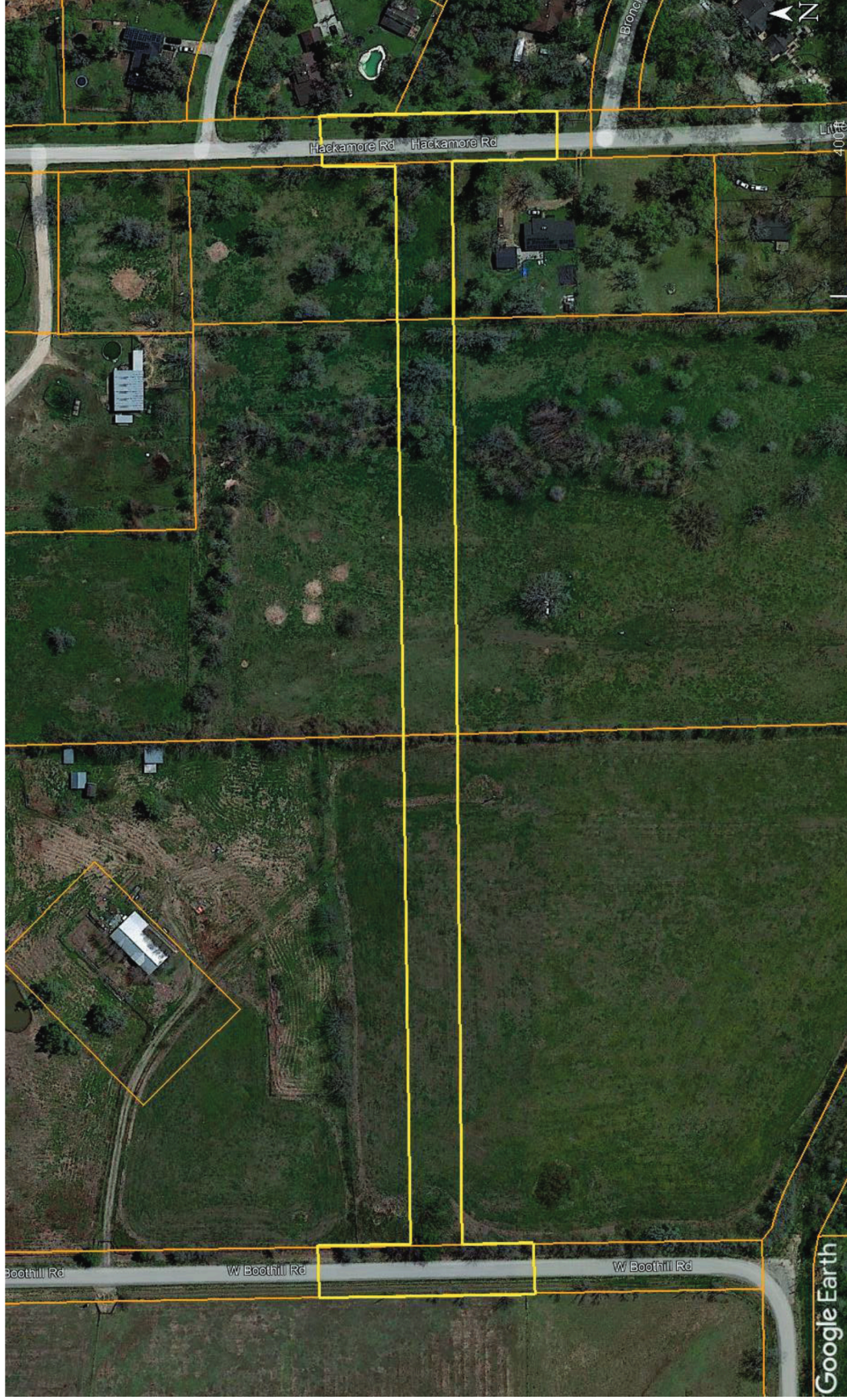


Exhibit "D"
Tejas Surveying
2024 Schedule of Rates
Effective December 1st, 2023

Professional Services

Principal, Consulting, & Professional Witness	\$ 300/hour
Registered Professional Land Surveyor	\$ 225/hour
Metes & Bounds Description	\$ 350/description

Survey Project Management

Senior Project Manager	\$ 175/hour
Project Manager	\$ 145/hour
Assistant Project Manager/Surveyor-In-Training	\$ 125/hour

Land Surveying (Field Crew)

3-man Crew	\$ 225/hour
2-man Crew	\$ 195/hour
1-man Crew	\$ 135/hour

Drafting & Research Services

Survey Technician	\$ 115/hour
CAD Technician/Drafter	\$ 105/hour
Abstractor	\$ 95/hour

Aerial Mapping

sUAS Drone Operator	\$ 300/hour
sUAS Drone Technician (Processing)	\$ 135/hour

Administrative Services

Administrative Assistant	\$ 85/hour
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Reimbursable Charges

Professional Services, Fees, Subconsultants, Etc.	Cost + 15%
Utility Vehicle	\$200/day
Boat w/Motor	\$600/day
Mileage	Current IRS Rate
Authorized Overtime Rates	Standard Rate x 1.5

Notes

- All field crew time is subject to a 4-hour minimum.
- A mileage charge will be calculated based on the current IRS Standard Mileage Rate. Mileage will be computed to and from site.
- Per diem will be charged at the standard government rate for required overnight stays.
- Rates are subject to change at any time.



February 16, 2024

HJ Consulting, Inc.
4471 Sweetwater Blvd., Suite 254
Sugar Land, TX 77479

Attn: Mr. Harish Jajoo, P.E., CFM / President
Email: harish@hjconsultinginc.com

Re: Cost Estimate for Geotechnical Engineering Services
New Road Construction in Brazos Valley Subdivision
Simonton, TX
Vertex Document No. PRO USA-24-011 Rev.1

Dear Mr. Jajoo:

Vertex is grateful for the chance to present this cost estimate for HJ Consulting to provide Geotechnical Engineering Services for the above-referenced project. We understand that we have been selected for this project based on our qualifications. We sincerely appreciate the opportunity and recognize our expertise in carrying out this service. The following sections are included with this cost estimate.

Project Information

Project Location

The proposed site encompasses approximately 1,450 linear feet of new road construction. It is located at the SE quadrant of Buckskin Road and W Boothill Road in Simonton, Texas (See Diagram No. 1 for the job site location).

Upon reviewing the available aerial imagery, the area is grassy with some trees. The terrain generally slopes down to the west. These characteristics of the site will be taken into consideration during the planning and development process for the project.

Proposed Construction Description

On February 14, 2024, Mr. Harish Jajoo, P.E. with HJ Consulting, emailed a project description which was reviewed while preparing the scope of work and cost estimate.

Vertex has considered the following assumptions during the preparation of the cost estimate:

- The site condition is expected to allow truck-mounted drilling equipment to access the designated boring locations. The estimated cost does not include any allowance for site access problems.
- Vertex will coordinate with the 811-call service to identify and locate any public underground utilities before commencing drilling work.
- Vertex may engage a 3rd-party private utility locator upon request to ensure the clearance of boring locations before initiating drilling work. This extra service will incur an additional fee of about **\$1,600.00** per day.
- Clearing for boring access will be provided by the client.

Scope of Service

Site Exploration

The site exploration program consists of the following:

Boring ID's	Depth* per Boring (feet)
BH-1 to BH-3 [3 Borings]	15
Total (feet):	45

* The depth is below the ground surface.

** Please refer to Diagram No.2 for the locations of the proposed borings.

Site Investigation Procedure

We will utilize a truck-mounted drill rig equipped with continuous solid stem flight augers to conduct soil borings. The ATV-mounted drill rig will be used only if needed and upon request. An additional fee of about **\$1,400.00** may apply for transportation and extra costs associated with ATV drilling. During drilling, soil sampling will be conducted using open tubes and/or Standard Penetration Tests (ASTM D-1586). The collected soil samples will be placed in suitable containers and transported to our soil laboratory for testing and classification by a Geotechnical Engineer. Furthermore, we will diligently observe and document groundwater levels during drilling and sampling.

Our experienced exploration team will generate field boring logs for the standard drilling operations. These logs will include information like sampling depths, penetration distances, and other relevant data about the sampling process. They will also provide visual classifications of encountered materials during drilling and present our interpretation of subsurface conditions between the samples. The final boring logs, derived from the field logs, will represent the Geotechnical Engineer's comprehensive interpretation, incorporating observations and laboratory test results.

Please note that backfill material tends to settle below the surface over time. Therefore, we recommend periodic checks of the boreholes to assess if additional backfilling is necessary. We can provide this service or offer grouting of the boreholes for an additional fee upon your request.

Private Utilities

The owner/client is responsible for marking private utilities before the start of field exploration. Vertex will not be held accountable for any damage caused to undisclosed private utilities. If the owner/client cannot accurately locate private utilities, Vertex can help by coordinating or subcontracting with a private utility locating service. Please note that fees associated with these additional services are not included in our current Scope of Services but can be provided upon request.

Site Exploration Safety

Vertex acknowledges that there may be unknown environmental concerns at the project site that would pose health or safety hazards related to our exploration program. As a result, our Scope of Services considers standard OSHA (Occupational Safety and Health Administration) Level D Personal Protective Equipment (PPE) appropriate.



Site Access

Vertex requires permission from the property owner to access the site. Upon acceptance of this document, unless otherwise informed, we interpret it as authorization to enter the property to conduct field exploration in accordance with the agreed-upon Scope of Services.

Laboratory Services

Laboratory testing is essential for classification purposes and determining strength characteristics. These tests will follow our standard procedures, including moisture content determination, soil identification and classification, Minus 200 Sieve, unconfined compression, and liquid limit (L.L.) & plastic limit (P.L.) assessments. The specific types and quantities of tests will be determined based on the soil conditions encountered in the borings.

Engineering Services

A licensed professional engineer in Texas will meticulously prepare the engineering report. It will include the presentation of field and laboratory data, our comprehensive analyses of the results, and corresponding recommendations. The final report will be provided in an electronic PDF format, ensuring its authenticity with a digital signature and seal. The report will address the preliminary recommendations for the following key aspects:

- Site Location and Exploration Plans
- Subsurface exploration procedures
- Description of subsurface conditions
- Groundwater control
- Boring logs with field and laboratory data
- Stratification based on visual soil (and rock) classification
- Groundwater levels observed during and after the completion of drilling
- Utility construction consideration
- Bedding and backfill
- Recommended paving design parameters

Cost Estimate

A breakdown of the cost estimate is provided in the table below.

Table 1. Cost Estimate

Project Scope and Activity	Fees
Planning	\$215
Field Work (Site Visit, Drilling Supervision & Sampling)	\$2,765
Laboratory Testing Services	\$774
Boring Log Preparation, Analysis & Report	\$210
Engineering Analysis & Report Preparation	\$1,660
Project Total	\$5,624

NOTE 1: If using an ATV drilling rig due to the site condition, the total cost will be **\$6,484.00**.



NOTE 2: The estimate is valid 90 days from the above cost estimate date.

Schedule

Upon receipt of the notice-to-proceed, you can expect to receive the geotechnical draft report within 4 to 6 weeks (about 1 and a half months), subject to weather conditions. If you require a different delivery period, please inform us when completing the Agreement so we can adjust our schedule to accommodate your needs.

As the client, you are responsible for providing certain items, including the right-of-entry for conducting the exploration and information regarding the location of utilities on the subject site. If there are any restrictions or special project requirements, please bring them to our attention before we commence fieldwork. If weather or other factors cause unforeseen changes in site accessibility, Vertex will contact you to discuss alternative options and any associated fees.

Kindly sign and return one copy of this cost estimate indicating your authorization to proceed. By executing this document, you acknowledge and agree that the document entitled "Terms and Conditions" has been provided or made available to you, and you accept that these Terms and Conditions shall apply to this cost estimate, fully binding upon you. The Terms and Conditions are incorporated into this document by reference as outlined in detail.

We appreciate the opportunity to present this cost estimate. Please contact us if you have any questions or suggestions about changes to the Agreement or the proposed work scope. We are excited to work with you on this project.

Closure

We trust that this cost estimate meets your expectations and requirements. Should you require further information or clarification, please do not hesitate to contact Barmak Biroun by phone at 832-616-9294 or email at barmak.biroun@vertex.ca.

Sincerely,

Barmak Biroun

Barmak Biroun, P.E., MBA
Director of Engineering

CLIENT ACCEPTANCE

HJ Consulting, Inc.
4471 Sweetwater Blvd, Suite 254
Sugar Land, TX 77479

Mr. Harish Jajoo, P.E., CFM / President



VERTEX RESOURCE SERVICES INC.

2418 N. Frazier St., Suite 107B

Conroe, TX 77303

P: 832.535.1585

www.vertex.ca



Attachments:

APPENDIX A: JOB SITE & PROPOSED BORING LOCATIONS

- (1) Diagram 1. Proposed Project Location
- (2) Diagram 2. Proposed Boring Locations

APPENDIX B: TERMS & CONDITIONS

- (3) Terms & Conditions



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APPENDIX A

Job Site & Proposed Boring Locations



Diagram No. 1 serves as a general reference for the Job location. The map used in the diagram is sourced from Google Earth Pro.



Diagram No. 2 serves as a general reference for the location of the proposed borings and is not intended for construction purposes. The map used in the diagram is sourced from Google Earth Pro.



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APPENDIX B

Terms & Conditions



SECTION 1: PARTIES AND SCOPE OF WORK: Vertex Resource Services, Inc. (hereinafter referred to as "VERTEX") shall include said company or its particular division, assigns, successors, subsidiaries, or affiliates performing the work. "Work" (whether such term is capitalized or not) means the specific geotechnical, analytical, testing, or another service to be performed by VERTEX as set forth in VERTEX's proposal and these Terms and Conditions. Additional work ordered by client shall also be subject to these Terms and Conditions. "Client" refers to the person or business entity ordering the work to be done by VERTEX. If client is ordering the work on behalf of another, client represents and warrants that it is the duly authorized agent of said party for the purpose of ordering and directing said work. Unless otherwise stated in writing, client assumes sole responsibility for determining whether the quantity and the nature of the work ordered by the client is adequate and sufficient for client's intended purpose. Client shall communicate these Terms and Conditions to each and every third party to whom client transmits any part of VERTEX's work. VERTEX shall have no duty or obligation to any third party greater than that set forth in VERTEX's proposal, client's acceptance thereof, and these Terms and Conditions. The ordering of work from VERTEX, or the reliance on any of VERTEX's work, shall constitute acceptance of the terms of VERTEX's proposal and these Terms and Conditions, regardless of the terms of any subsequently issued document. If unexpected site conditions are discovered, the scope of work may require additional services even as the work is in progress. VERTEX will provide these additional services at its normal schedule rate. Initiation of services by VERTEX for Client will automatically invoke and be performed subject to these Terms and Conditions. VERTEX's duties and obligations for any Work performed is to client only. If client chooses to charge any third party for any work performed hereunder, client is solely responsible for assessing such charges against said third parties. VERTEX assumes no duty or obligation to pursue such charges against any third party other than Client and Client remains solely responsible to VERTEX, regardless of the reimbursable or non-reimbursable status of the charges.

SECTION 2: ACCESS TO SITE: Client will arrange and provide such access to the site as is necessary for VERTEX to perform the work. VERTEX shall take reasonable measures and precautions to minimize damage to the site and any improvements located thereon as the result of its work or the use of its equipment; however, VERTEX has not included in its fee the cost of restoration of damage which may occur and shall have no obligation to perform any such restoration work. If client desires or requires VERTEX to restore the site to its former condition, upon written request VERTEX will perform such additional work as is necessary to do so and client agrees to pay to VERTEX for the cost.

SECTION 3: TEST AND INSPECTIONS: Client shall cause all tests and inspections of the site, materials, and work performed others to be timely and properly performed in accordance with the plans, specifications, and contract documents and VERTEX's recommendations. Any re-testing, if deemed necessary by VERTEX, or testing due to cancellation of scheduled tests, not due to the fault of VERTEX, are outside the scope of work hereunder and will be provided to client for an additional charge at VERTEX's normal rates. No claims for loss, damage, or injury shall be brought against VERTEX by Client or any third party unless all tests and inspections have been so performed and unless VERTEX's recommendations have been exactly followed. client agrees to indemnify, defend, and hold VERTEX, its officers, employees, and agents harmless from any and all claims, suits, losses, costs, and expenses, including, but not limited to, court costs and reasonable attorney's fees in the event that all such tests and inspections are not so performed or VERTEX's recommendations are not so followed.

SECTION 4: CLIENT'S DUTY TO NOTIFY ENGINEER: Client represents and warrants that it has advised VERTEX of any known or suspected hazardous materials, utility lines and pollutants at any site at which VERTEX is to do work hereunder, and unless VERTEX has specifically assumed in writing the responsibility of locating subsurface objects, structures, lines or conduits, client agrees to defend, indemnify and save VERTEX harmless from all claims, suits, losses, costs, and expenses, including reasonable attorney's fees, incurred as a

result of personal injury, death or property damage resulting to or caused by contact with subsurface or latent objects, structures, lines or conduits where the actual or potential presence and location thereof were not specifically revealed to VERTEX by Client.

SECTION 5: RESPONSIBILITY: VERTEX's work shall not include determining, supervising, or implementing the means, methods, techniques, sequences, or procedures of construction. VERTEX shall not be responsible for evaluating, reporting, or affecting job conditions concerning health, safety, or welfare. VERTEX's work or failure to perform same shall not in any way excuse any contractor, subcontractor, laborer, or supplier from the performance of its work in accordance with the contract documents. VERTEX has no right or duty to stop any contractor's work.

SECTION 6: SAMPLE DISPOSAL: Unless otherwise agreed in writing, test specimens or samples will be disposed of immediately upon completion of the test. All drilling samples or specimens will be disposed sixty (60) days after submission of VERTEX's report to client.

SECTION 7: PAYMENT: Client shall be invoiced once every month or at the conclusion of the project, whichever comes first, for work performed during the preceding period. Client agrees to pay each invoice within thirty (30) days of its receipt. Client further agrees to pay interest on all amounts invoiced and not paid or objected to for valid cause in writing within said thirty (30) day period at the rate of eighteen (18) percent per annum (or the maximum interest rate permitted under applicable law), until paid. Client agrees to pay VERTEX's cost of collection of all amounts due and unpaid after sixty (60) days, including court costs and attorney's fees. VERTEX shall not be bound by any provision or Agreement requiring or providing for arbitration of disputes or controversies arising out of this Agreement, any provision wherein VERTEX waives any rights to a mechanics' lien, or any provision conditioning VERTEX's right to receive payment for its work upon payment to client by any third party. These Terms and Conditions are notice, where required, that VERTEX intends to file a lien to collect past due amounts. Client agrees to provide VERTEX, upon request, all information necessary for VERTEX to file its lien, including, but not limited to, a legal description of the property upon which the work was performed. Failure to make payment within 30 days of invoice shall constitute an irrevocable final release of VERTEX from any and all claims which client may have, whether in tort, contract, or otherwise, and whether known or unknown at the time.

SECTION 8: WARRANTY: VERTEX'S SERVICES WILL BE PERFORMED, ITS FINDINGS OBTAINED AND ITS REPORTS PREPARED IN ACCORDANCE WITH ITS PROPOSAL AND THESE TERMS AND CONDITIONS, AND WITH GENERALLY ACCEPTED PRINCIPLES AND PRACTICES. IN PERFORMING ITS SERVICES, VERTEX WILL USE THAT DEGREE OF CARE AND SKILL ORDINARILY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY MEMBERS OF ITS PROFESSION. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES OR REPRESENTATIONS, EITHER EXPRESS OR IMPLIED. STATEMENTS MADE IN VERTEX REPORTS ARE OPINIONS BASED UPON ENGINEERING JUDGMENT AND ARE NOT TO BE CONSTRUED AS REPRESENTATIONS OF FACT.

SHOULD VERTEX OR ANY OF ITS EMPLOYEES BE FOUND TO HAVE BEEN GROSSLY NEGLIGENT IN THE PERFORMANCE OF ITS WORK, OR TO HAVE INTENTIONALLY MADE AND BREACHED ANY EXPRESS OR IMPLIED WARRANTY, REPRESENTATION OR CONTRACT, CLIENT, ALL PARTIES CLAIMING THROUGH CLIENT, AND ALL PARTIES CLAIMING TO HAVE IN ANY WAY RELIED UPON VERTEX'S WORK, AGREE THAT THE MAXIMUM AGGREGATE AMOUNT OF THE LIABILITY OF VERTEX, IT'S OFFICERS, EMPLOYEES, AND AGENTS SHALL BE LIMITED TO NO GREATER THAN \$25,000.00 OR THE TOTAL AMOUNT OF THE FEE PAID FOR THE SPECIFIC JOB ORDER (WHICHEVER IS LESS) TO VERTEX FOR ITS WORK PERFORMED WITH RESPECT TO THE PROJECT, WHICHEVER AMOUNT IS GREATER.

IN THE EVENT CLIENT IS UNWILLING OR UNABLE TO LIMIT VERTEX'S LIABILITY IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN THIS PARAGRAPH, CLIENT MAY, UPON WRITTEN REQUEST FROM CLIENT RECEIVED WITHIN FIVE DAYS OF CLIENT'S ACCEPTANCE HEREOF, INCREASE THE LIMIT OF VERTEX'S LIABILITY TO \$100,000.00 BY AGREEING TO PAY VERTEX A SUM EQUIVALENT TO AN ADDITIONAL AMOUNT OF 10% OF THE TOTAL FEE TO BE CHARGED FOR VERTEX'S



SERVICES. THIS CHARGE IS NOT TO BE CONSTRUED AS BEING A CHARGE FOR INSURANCE OF ANY TYPE BUT IS INCREASED CONSIDERATION FOR THE GREATER LIABILITY ACCEPTED BY VERTEX. IN ANY EVENT, ATTORNEY'S FEES EXPENDED BY VERTEX IN CONNECTION WITH ANY CLAIM SHALL REDUCE THE AMOUNT AVAILABLE, AND ONLY ONE SUCH AMOUNT WILL APPLY TO ANY PROJECT REGARDLESS OF THE NUMBER OF CLAIMS OR CAUSES OF ACTION ARISING OUT OF THE WORK. CLIENT EXPRESSLY WAIVES ANY AND ALL CLAIMS FOR CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES AGAINST VERTEX ARISING OUT OF OR RELATING TO THE WORK. NO ACTION OR CLAIM, WHETHER IN TORT, CONTRACT, OR OTHERWISE, MAY BE BROUGHT AGAINST VERTEX, ARISING FROM OR RELATED TO VERTEX'S WORK, MORE THAN TWO YEARS AND ONE DAY AFTER THE CESSATION OF VERTEX'S WORK HEREUNDER. LIMITATIONS ON LIABILITY AND INDEMNITIES IN THIS AGREEMENT ARE BUSINESS UNDERSTANDINGS BETWEEN THE PARTIES VOLUNTARILY AND KNOWINGLY ENTERED INTO, AND SHALL APPLY TO ALL THEORIES OF RECOVERY INCLUDING, BUT NOT LIMITED TO BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), STRICT OR STATUTORY LIABILITY, OR ANY OTHER CAUSE OF ACTION, EXCEPT FOR WILLFUL MISCONDUCT OR GROSS NEGLIGENCE. THE PARTIES ALSO AGREE THAT CLIENT WILL NOT SEEK DAMAGES IN EXCESS OF THE LIMITATIONS INDIRECTLY THROUGH SUITS WITH OTHER PARTIES WHO MAY JOIN VERTEX AS A THIRD-PARTY DEFENDANT. PARTIES MEANS CLIENT AND GEOTECHNICAL ENGINEER AND THEIR OFFICERS, EMPLOYEES, AGENTS, AFFILIATES, AND SUBCONTRACTOR

SECTION 9: HAZARDOUS MATERIALS: Nothing contained within this Agreement shall be construed or interpreted as requiring VERTEX to assume the status of an owner, operator, generator, storer, transporter, creator, or disposal facility as those terms appear within RCRA or within any Federal or State statute or regulation governing the generation, transportation, treatment, storage, and disposal of pollutants. Client assumes full responsibility for compliance with the provisions of RCRA and any other Federal or State statute or regulation governing the handling, treatment, storage, and disposal of pollutants. It shall be the duty of the owner, the client, or their representative to advise VERTEX of any known or suspected hazardous substances which are or may be related to the services provided; such hazardous substances include but are not limited to products, materials, by-products, wastes or samples of the foregoing which VERTEX may be provided or obtain performing its Work or which hazardous substances exist or may exist on or near any premises upon which work is to be performed by VERTEX employees, agents or subcontractors. If VERTEX observes or suspects the existence of unanticipated hazardous materials during the course of its Work, VERTEX may at its option terminate further work on the project and notify client of the condition. Work will be resumed only after a renegotiation of the scope of services and fees. VERTEX does not create, generate or at any time own or take possession or ownership of or arrange for transport, disposal, or treatment of hazardous materials as a result of its Work.

SECTION 10: HAZARDOUS MATERIALS INDEMNITY: The Client acknowledges that VERTEX has neither created nor contributed to the creation or existence of any hazardous, radioactive, toxic, irritant, pollutant, or otherwise dangerous substance or condition at the site. Accordingly, except as expressly provided in this contract, the client waives any claim against VERTEX and agrees to indemnify and save VERTEX, its agents, and employees harmless from any claim, liability or defense cost, including but not limited to attorney fees and other incidental costs, for injury or loss sustained by any party from such exposures, regardless of whether such exposure was allegedly arising out of or related to VERTEX's performance of services hereunder.

SECTION 11: TERMINATION: This Agreement may be terminated by either party upon seven (7) days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof. Such termination shall not be effective if that substantial failure has been remedied before expiration of the period specified in the written notice. In the event of termination, VERTEX shall be paid for services performed to the termination notice date plus reasonable termination expenses. Expenses of termination or suspension shall include all direct costs of VERTEX required to complete analyses and records

necessary to complete its files and may also include a report on the services performed to the date of notice of termination or suspension.

SECTION 12: PROVISIONS SEVERABLE: The parties have entered into this Agreement in good faith, and it is the specific intent of the parties that the terms of these Terms and Conditions be enforced as written. In the event any of the provisions of these Terms and Conditions should be found to be unenforceable, it shall be stricken, and the remaining provisions shall be enforceable.

SECTION 13: ENTIRE AGREEMENT: These Terms and Conditions and VERTEX's proposal constitute the entire understanding of the parties, and there are no representations, warranties or undertakings made other than as set forth herein. This Agreement may be amended, modified, or terminated only in writing, signed by each of the parties hereto.

SECTION 14: OWNERSHIP OF DOCUMENTS: All reports, boring logs, field data, field notes, laboratory test data, calculations, estimates, and other documents prepared by VERTEX as instruments of service, shall remain the property of VERTEX unless there are other written agreements to the contrary.

SECTION 15: ASSIGNS: Client may not delegate, assign, subcontract, or transfer its duties (including payment) or interest in this Agreement without the written consent of VERTEX.

SECTION 16: INDEMNIFICATION: To the fullest extent permitted by applicable law, client expressly agrees to defend (at client's expense and with counsel acceptable to VERTEX), indemnify, and save and hold harmless VERTEX and all of its officers, directors, shareholders, employees, agents, successors, predecessors and assigns, from and against any and all claims, suits, losses, causes of action, damages, liabilities, and expenses of any kind whatsoever, including without limitation, all expenses of litigation and arbitration, court costs, and attorney's fees, arising on account of or in connection with injuries to or the death of any person whomsoever, claims for damages from any third party, or any and all damages to property (including the loss of use thereof), regardless of possession or ownership, which injuries, death or damages arise from, or are in any manner connected with, or alleged to be connected with, the client's property or work being performed on client's property by VERTEX or by persons or entities other than VERTEX, or are caused in whole or part by reason of the acts or omissions or presence of the person or property of the client or any of its employees, agents, representatives, subcontractors, or suppliers, INCLUDING, WITHOUT LIMITATION, INJURIES, DEATH, OR DAMAGES WHICH ARISE FROM OR IN CONNECTION WITH, OR ARE CAUSED BY, ANY ACT, ERROR, OMISSION, OR NEGLIGENCE OF VERTEX AND ITS OFFICERS, DIRECTORS, SHAREHOLDERS, EMPLOYEES, AGENTS, CLIENTS, OR SUPPLIERS; BUT EXCLUDING INJURIES, DEATH, OR DAMAGES CAUSED BY THE SOLE NEGLIGENCE, GROSS NEGLIGENCE OR WANTON AND WILLFUL MISCONDUCT OF VERTEX. The indemnification obligations shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the client under worker's or workman's compensation acts, disability benefit acts or other employee benefits acts, and shall extend to and include any actions brought by or in the name of any employee of the client or of any third party to whom client may subcontract any work.

SECTION 17: COSTS AND TENDERING OF INDEMNIFICATION DEFENSE: The indemnities agreed to by client herein expressly include all costs of litigation, attorney's fees, settlement costs and reasonable expenses in connection with the litigation or arbitration whether or not the claims made for loss, injury, damage or property damage are valid or groundless, and regardless of whether the defense of VERTEX is maintained by VERTEX or assumed by client. VERTEX, in its sole discretion and at its sole option, may defend any or all of the indemnified claims or tender to client the defense of any or all of the indemnified claims. Upon such tender by VERTEX to Client, Client shall be bound and obligated to assume the defense of VERTEX in the indemnified claims, including the settlement negotiations, and shall pay, liquidate, discharge, and satisfy any and all settlements, judgments, awards, or expenses resulting from or arising out of the indemnified claims without reimbursement from VERTEX. It is understood and agreed by client that if VERTEX tenders the defense of an indemnified claim to Client and Client fails or neglects to assume the defense



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thereof, VERTEX may compromise and settle or defend any such suit or action, and client shall be bound and obligated to reimburse VERTEX for the amount expended by it in settling or compromising any such claim, or in the amount expended by VERTEX in paying any judgment rendered therein, together with all reasonable attorneys' fees and cost of litigation incurred by VERTEX by reason of its defense, settlement or compromise of such indemnified claims.

SECTION 18: COLLECTION OF AMOUNTS OWED TO VERTEX: In the event that client owes any amount to VERTEX, whether under this Agreement or otherwise, client agrees to VERTEX's employment of whatever collection methods it deems reasonable and expedient, including but not limited to garnishment (pre and post-judgment), sequestration, attachment, or any other legal method. Client

agrees to waive any and all bond requirements associated therewith. Client agrees to pay all costs of collection, including attorney's fees.

SECTION 19: NOTICE: All notices required under this Agreement shall be sent via certified mail return receipt requested to the address set forth in the proposal, via facsimile number listed on the proposal or via hand delivery to the office set forth on the proposal. Verbal notification to VERTEX will not satisfy the notice requirements herein. To the extent any notice provision of these Terms and Conditions violates applicable law in that it is too strict or restrictive, the provision shall be automatically modified to the standards mandated by the applicable law and shall not be void.