

STATE OF TEXAS §
 §
COUNTY OF FORT BEND §

AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

THIS AGREEMENT is made and entered into by and between Fort Bend County, (hereinafter "County"), a body corporate and politic under the laws of the State of Texas, and Bowman Consulting Group, Ltd., (hereinafter "Consultant"), a company authorized to conduct business in the State of Texas.

WITNESSETH

WHEREAS, County desires that Consultant provide professional engineering services for improvements to Watts Plantation from Knight Road to Shipmans Cove Boulevard under Project No. 17210 of the Fort Bend County Mobility Program (hereinafter "Services") pursuant to SOQ 14-025; and

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

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

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

AGREEMENT

Section 1. Scope of Services

Consultant shall render the professional engineering services as described in Consultant's Proposal attached hereto as Exhibit A, and incorporated herein for all purposes.

Section 2. Personnel

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

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

Section 3. Compensation and Payment

3.1 The Maximum Compensation for the performance of Services within the Scope of Services described in Exhibit A is four hundred sixty-eight thousand nine hundred seventy dollars and no/100 (\$468,970.00) as set forth in Exhibit A. In no case shall the amount paid by County under this Agreement exceed the Maximum Compensation without a written agreement executed by the parties.

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

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

Section 4. Limit of Appropriation

4.1 Consultant clearly understands and agrees, such understanding and agreement being of the absolute essence of this Agreement, that County shall have available the total maximum sum of four hundred sixty-eight thousand nine hundred seventy dollars and no/100 (\$468,970.00) specifically allocated to fully discharge any and all liabilities County may incur.

4.2 Consultant does further understand and agree, said understanding and agreement also being of the absolute essence of this Agreement, that the total maximum compensation that Consultant may become entitled to and the total maximum sum that County may become liable to pay to Consultant shall not under any conditions, circumstances, or interpretations thereof exceed four hundred sixty-eight thousand nine hundred seventy dollars and no/100 (\$468,970.00).

Section 5. Time of Performance

Time for performance of the Scope of Services under this Agreement shall begin with receipt of the Notice to Proceed and end no later than December 31, 2026. Consultant shall complete the tasks described in the Scope of Services, within this time or within such additional time as may be extended by the County.

Section 6. Modifications and Waivers

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

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

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

Section 7. Termination

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

7.2 Termination for Default

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

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

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

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

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

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

Section 8. Ownership and Reuse of Documents

All documents, data, reports, research, graphic presentation materials, etc., developed by Consultant as a part of its work under this Agreement, shall become the property of County upon completion of this Agreement, or in the event of termination or cancellation thereof, at the time

of payment under Section 3 for work performed. Consultant shall promptly furnish all such data and material to County on request.

Section 9. Inspection of Books and Records

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

Section 10. Insurance

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

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

10.1.2 Employers' Liability insurance with limits of not less than \$1,000,000 per injury by accident, \$1,000,000 per injury by disease, and \$1,000,000 per bodily injury by disease.

10.1.3 Commercial general liability insurance with a limit of not less than \$1,000,000 each occurrence and \$2,000,000 in the annual aggregate. Policy shall cover liability for bodily injury, personal injury, and property damage and products/completed operations arising out of the business operations of the policyholder.

10.1.4 Business Automobile Liability insurance with a combined Bodily Injury/Property Damage limit of not less than \$1,000,000 each accident. The policy shall cover liability arising from the operation of licensed vehicles by policyholder.

10.1.5 Professional Liability insurance may be made on a Claims Made form with limits not less than \$1,000,000.

10.2 County and the members of Commissioners Court shall be named as additional insured to all required coverage except for Workers' Compensation and Professional Liability. All Liability policies including Workers' Compensation written on behalf of Consultant shall contain a waiver of subrogation in favor of County and members of Commissioners Court. For Commercial General Liability, the County shall be named as an Additional Insured on a Primary & Non-Contributory basis.

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

Section 11. Indemnity

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

Section 12. Confidential and Proprietary Information

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

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

or after the term of this Agreement disclose, directly or indirectly, any Confidential Information to any person, and that upon termination of this Agreement or at County's request, Consultant will promptly turn over to County all documents, papers, and other matter in Consultant's possession which embody Confidential Information.

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

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

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

Section 13. Independent Consultant

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

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

Section 14. Notices

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

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

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

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

Consultant: Bowman Consulting Group, Ltd.
1445 North Loop West, Suite 450
Houston, Texas 77008

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

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

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

Section 15. Compliance with Laws

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

Section 16. Standard of Care

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

Section 17. Assignment

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

17.2 Neither party may delegate any performance under this Agreement.

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

Section 18. Applicable Law

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

Section 19. Successors and Assigns

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

Section 20. Third Party Beneficiaries

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

Section 21. Severability

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

Section 22. Publicity

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

Section 23. Captions

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

Section 24. Conflict

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

Section 25. Certain State Law Requirements for Contracts

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

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

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

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

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

Section 26. Human Trafficking

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

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

FORT BEND COUNTY

BOWMAN CONSULTING GROUP, LTD

KP George, County Judge



Authorized Agent – Signature

Date

David Sepulveda, P.E.

Authorized Agent – Printed Name

ATTEST:

Principal

Title

Laura Richard, County Clerk

12-13-22

Date

APPROVED:



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

AUDITOR'S CERTIFICATE

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

Robert Ed Sturdivant, County Auditor

EXHIBIT A



September 14, 2022

Mr. Stacy Slawinski, P.E.
Fort Bend County Engineering
301 Jackson Street
Richmond, Texas 77469

Re: **Watts Plantation Extension**
Knight Road to Shipmans Cove Blvd
Fort Bend County, Texas

TBPE Registration # F-14309
TAI Project Number: 0522-2103

Mr. Slawinski,

Bowman appreciates this opportunity to submit this proposal for surveying, preliminary design services, final design services, geotechnical investigation/report, and construction phase services as required for the aforementioned project. The project will include the design and construction of 3,000 LF of new roadway extending Watts Plantation from Knight Road to Shipmans Cove Blvd. The roadway will consist of a 4-lane boulevard section with divided median in a 100' ROW. The first 900 LF east of Knight Road will be a half-boulevard section. The remaining 2,100 LF will be a full boulevard constructed by the County. Drainage will be open ditch adjacent to the ROW or underground storm sewer to be determined during the PER phase. The roadway is located in an area predominantly within the 100-year floodplain so detention and floodplain mitigation will be required. It is anticipated that the detention and mitigation will need to be located outside the public ROW in a location to be determined. The proposed ROW will cross a CenterPoint easement and approval from CenterPoint will be required. There is the potential that wetlands exist within the alignment of the proposed ROW. A bridge design to cross the wetlands and minimize environmental impacts may be required. Our understanding of the scope of services is as follows:

1. Preliminary Design

The primary goals of preliminary design are to:

- A. Complete the required survey necessary for design
- B. Complete the geotechnical investigation necessary for design
- C. Establish a typical cross section and cross sections in non-standard areas
- D. Provide an alignment exhibit for the overall roadway
- E. Determine drainage system needs through a HEC-RAS analysis
- F. Determine a proposed detention pond location along with sizing

- G. Determine right-of-way acquisition needs
- H. Determine potential conflicts with existing facilities & utilities
- I. Provide site distance triangle exhibits
- J. Identify critical path items
- K. Identify problem areas and potential resolutions
- L. Determine permit and regulatory requirements
- M. Prepare a reasonable construction cost estimate
- N. Prepare 30% plans

Preliminary Design Report

A Preliminary Engineering Report will be prepared for preliminary design, and the purpose of the report is to document the goals stated above. The report should also include as applicable: a narrative, applicable plans, survey, drainage report, a geotechnical report, preliminary cost estimate, and an environmental report. Three copies of the report will be submitted for review. Prior to completion of the PER, we will schedule an alignment meeting with Fort Bend County. We will provide a roll plot exhibit to the meeting for County review and discussion. At completion of the PER, a PER review meeting will be conducted by the design engineer and program manager. Copies of the PER will be distributed at the meeting.

Hydrologic and Hydraulic Design and Drainage Impact Study

We will prepare a HEC-RAS analysis for the drainage impact associated with the roadway design. The analysis will determine the impacts for the 10, 50 and 100-year storm events and will be used to determine the amount of detention volume required. Based on the results of the analysis, we will provide mitigation recommendations and rerun the analysis to confirm there is no impact to the drainage system and coordinate with Fort Bend County Drainage District.

Applicable design criteria to be reviewed based on Fort Bend County Drainage Criteria Manual most recent addition to include ATLAS 14.

30% Plans

30% plan sets will be prepared, consisting of all existing features (seen and unseen) shown in plan and profile, and proposed improvements in plan view only with minor annotation. These plans, along with a typical section sheet, are the only drawings that are necessary at this point. 30% plans will be provided via digital PDF files. The plans will include the preliminary design for the extension of Watts Plantation and schematic design of the drainage improvements along with the schematic recommendations for the bridge requirements and preliminary bridge design.

Utility Coordination

Research to determine the presence and location of underground utilities (pipelines, duct banks, etc.) is the design consultant's responsibility. 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 (CenterPoint, AT&T, etc.). We will depict utilities to a reasonable degree of accuracy on the plan and profile drawings.

We will 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. We will submit milestone-level drawings to applicable utility companies for their review. An appropriate attempt will be made to depict underground utilities accurately in the plan and profile drawings, and potential conflicts between existing utilities and proposed features should be identified. Contact with utility companies (both overhead and underground) to coordinate the adjustment of existing utilities will be made by the County and/or its project management consultant.

Topographic Survey

A topographic survey meeting the requirements of a Category 6, Condition II topo survey will be completed during preliminary design, unless the project includes a completely new roadway alignment that needs to be approved. The topographic survey will determine ROW acquisition needs during the Preliminary Design Phase.

The survey along the proposed alignment of Watts Plantation will be 200 feet wide (100-foot left & right of the project baseline).

Surveys along Right-of-Ways of intersecting side streets and alleys will not be extended outward past the 200-foot-wide topographic survey limits but will include the full intersection.

The survey will establish the horizontal control along the routes main alignment utilizing GPS VRS/RTK methods and/or conventional survey methods. We will set a TBM at each end of the project limits and we will set additional TBM's to meet the requirement for the maximum distance between two TBM's shall not exceed 1,000-foot separation. The horizontal control points may be used for TBM control points. The control will be based on current County datums. Prior to construction, we will re-establish control of any previously surveyed markers. The geotechnical bore hole locations will be surveyed, and the proposed ROW will be staked.

Parcel maps to include legal descriptions and exhibits for County ROW acquisition will be provided. ROW maps will be in conformance with a Category IA, Condition II survey. Abstracting for existing ROW/Parcels will be per Category IB, Condition II.

Geotechnical Investigation

Geotechnical investigations and reporting should be completed during preliminary design, in accordance with Ft. Bend County criteria. The scope of services will include 7 bore holes at 15' depth along the proposed ROW alignment and 2 bore holes at 20' depth. The 20' deep bore holes are for the detention/mitigation pond requirements at a location to be determined. We will provide laboratory testing of the soil samples and provide formal recommendations in a geotechnical report. The proposed paving section will be based on an 8-inch-thick concrete pavement section.

The geotechnical investigation includes partial clearing of the ROW as needed for the geotechnical

to have access with their equipment to provide borings, as necessary.

Environmental Investigations

The County will perform all environmental investigations. We will coordinate with the County and its Environmental Consultant as needed on the project.

Compensation & Schedule

Except as noted, all preliminary design efforts will be paid in on a fixed fee basis, to be billed monthly on a percent complete basis by task. Major tasks of preliminary design (design, survey, geotechnical, etc.) will be itemized in invoices. **Total engineering fee for these services is \$254,730** and will be completed 120 calendar days after Notice to Proceed.

2. Final Design

Based on comments received from the 30% plan submittal, we will prepare final design plans for permitting and construction. We will make interim submittals at 70 percent and 95 percent completion, and it will include drawings, a specification table of contents (and/or special specifications, as applicable), and a final construction cost estimate. The plans will include the final design of the Watts Plantation extension including final drainage design and the final design plans for the structural bridge, if applicable (see additional services for more information on bridge design).

The 70 percent submittal will include the following:

- Cover sheet (Fort Bend County name and seal, project name with limits, vicinity and location maps, names of County Judge and Commissioners, signature line for County Engineer, design firm name and registration number)
- General Notes in conformance with standard Fort Bend County requirements
- Typical sections (not-to-scale proposed sections with station limits for each section; show pavement/subgrade material and thickness, right-of-way and roadway width, applicable dimensions, profile grade line, and general location of existing and proposed utilities)
- Overall project layout (scale as appropriate with sheet references left blank since they are subject to change in subsequent submittals)
- Survey control map
- Drainage area map with hydraulic calculations (display calculations clearly for future use by area developers)
- Detention pond layout sheets and calculations
- Plan and profile sheets (1" = 20' plan scale but printed half-size for a 1" = 40' scale; all existing and proposed facilities correctly shown in plan and profile; separate drawings for roadway and storm sewer are not necessary; detailed callouts not required at 70%)
- Traffic control plan (phasing and traffic control; avoid detours unless approved by the

County; use of construction zone standards is encouraged)

- Striping and signage plans
- Cross-sections at 100' intervals
- Storm Water Pollution Prevention Plan (drawings and text; drawings may consist of a layout and details)
- Bridge layout and details (if applicable)
- Specification table of contents
- Bid form with estimated unit and total costs (spreadsheet based)
- KMZ file with current design and proposed ROW

The 70 percent submittal will be required for County review, and drawings will be submitted electronically via PDF format. The 70% plan submittal will be completed 90 days after the submittal of the 30% design plans.

The 95 percent submittal will include the following:

The plans will be considered bid-ready but not sealed, and shall include all of the 70 percent requirements plus the following:

- Cross section verification and updated from 70% submittal (100-foot intervals with earthwork calculations)
- Standard construction details
- Project manual (bid form, specification table of contents, any special specifications, or conditions; contract documents excluded)
- Responses to 70 percent comments

Plans for the 95% submittal will be made electronically via PDF format.

The 100 percent design submittal shall consist of one sealed and signed set of drawings delivered to the Program Manager, along with a PDF submittal of the drawings, specifications and estimate sent. For bidding purposes, the cost estimate will be provided in excel format with unit cost items left blank. The bid form will be provided to bidders to fill in and submit with their bids. Final design efforts will be considered complete when the County has approved the documents as evidenced by the County Engineer's signature on the drawings.

Final design efforts will be considered complete when comments to the 95 percent submittal have been addressed.

Compensation & Schedule

All final design efforts will be paid on a fixed fee basis, to be billed monthly on a percent complete basis. **Total engineering fee for 100% submittal phase is \$140,260** and will be completed 60 calendar days after submittal of the 70% design plans and 150 calendar days after submittal of the 30% design plans.

3. Additional Services

If requested or required by the County, we will provide additional services to include the following:

Bridge Design

If necessary, design a bridge structure to cross potential wetlands along the proposed ROW alignment will be designed for HL-93 loading or greater. The design will include all supporting calculations for the structure including geometry, structural design, layout sheets and details. The bridge will be 4 lanes (two lane in each direction).

We will also provide two (2) borings 80' in depth for the bridge design. The fee for this item is included in the base geotechnical fee.

Compensation & Schedule.

All Additional Services efforts will be paid on a fixed fee basis, to be billed monthly on a percent complete basis.

Total engineering fee for the additional services is \$45,600 and will be completed on the same schedule as the Preliminary and Final Design Services described above.

4. Bid and Construction Phase Services

Upon completion of final design services, the County will determine an advertisement and bid opening schedule. All administrative project manual documents (cover page, Notice to Bidders, etc.) will be prepared by the County and provided to the design consultant in Adobe Acrobat (pdf) format. The design consultant will prepare a single project manual file in Adobe Acrobat format, consisting of:

- Administrative documents
- The bid form (prepared by the design consultant)
- A sealed specification table of contents
- Applicable specifications and documents

The design consultant will prepare a single file in Adobe Acrobat format for the entire drawing set. Except for the cover sheet, which contains approval signature(s), all drawings may be printed directly to Adobe Acrobat format with electronic seal and signature.

The design consultant will prepare the bid form in Excel format. The file should have all cells locked except for the unit pricing. The design consultant is to ensure that the formulas are provided so that the spreadsheet will calculate the totals for the vendors.

The single project file in PDF format, the bid form in Excel format and one drawing plan set (including signed cover sheet) will be sent to the Program Manager. Printed documents are not required. Purchasing will draft and include the front-end documents in the bid set and upload all

documents to the County's website.

The design consultant will attend a pre-bid meeting at the County Purchasing Office. It is not necessary to prepare for the meeting, other than to be able to briefly describe the project.

The Purchasing Agent will forward bidder questions to the design consultant. Answers to questions, as well as any other required changes, will be included in an addendum, prepared by the design consultant if necessary. The Purchasing Agent will distribute the addendum.

After the bid, the County's project management consultant will prepare a bid tabulation and provide a copy to the design consultant for filing.

The design consultant will attend a pre-construction meeting with the County, project management consultant, general contractor, and construction materials testing contractor. Prior to the meeting, the project management consultant will inform the design consultant of how many drawing sets and project manual sets are required, and the design consultant will provide these documents at the pre-construction meeting.

The design consultant will re-establish control of the previously surveyed markers.

The design consultant will be responsible for reviewing contractor submittals and responding to Requests for Information.

Field visits and progress meetings will not be required unless requested by the County.

The design consultant will participate in a substantial completion walkthrough.

After project completion, the design consultant will prepare record drawings based on contractor as-built markups. The record drawings may be printed on paper and delivered to the County.

All bid and construction phase services will be paid on a time-and-materials basis. The not-to-exceed fee for these services will be determined by the County and/or its project management consultant and the design consultant. Monthly billing will include a breakdown of hours spent by personnel in the various employee categories, at billing rates agreed to by the County and the design consultant. Reimbursable expenses, such as scanning and reproduction, will be billed at actual cost (no markup). The County is tax-exempt and will not reimburse tax expenses. The project management consultant can provide a tax exemption form to the design consultant to ensure that tax is not charged.

Compensation & Schedule.

All Bid & Construction Phase efforts will be paid on a time and materials basis for a fee Not-To-Exceed \$28,380 (including reimbursable expenses). All work associated with this task will be

completed in a timely manner such that the bidding and construction phase schedule is not impacted.

A summary of the compensation schedule is as follows:

Preliminary Design –	\$254,730
Final Design –	\$140,260
Additional Services –	\$45,600
Bid and Construction Phase Services –	<u>\$28,380</u>
Total Compensation -	\$468,970

Best regards,



David A. Sepulveda, P.E.
Principal

Attachments



BOWMAN CONSULTING GROUP LTD.

SCHEDULE A - FEES FOR REPROGRAPHIC, DELIVERY, TRAVEL AND OTHER SERVICES

January 2022

Reprographic Services

B&W Photo Copies	\$0.35/sf, or \$0.23 for 8-1/2" x11" sheet
Color Photo Copies	\$0.50/sf, or \$0.32 for 8-1/2" x11" sheet
Printing (bond)	\$0.35/sf, or \$2.10 for 24" x 36" sheet
Printing (mylar)	\$3.00/sf, or \$18.00 for 24" x 36" sheet

Binding, Mounting and Folding of plan sets, reports, or drawings will be invoiced at our standard hourly rates. Copying of Plans that have been archived in storage is subject to a minimum archive retrieval fee of \$50 plus applicable reprographic fees above.

Delivery Services

In-house delivery services are invoiced at \$2.00 per mile (one way) and subject to a minimum \$20.00 charge for standard delivery during normal business hours. Rush services and times outside normal business hours are subject to a minimum \$20.00 surcharge.

Outsourced courier services (i.e. Federal Express, DHL, etc.) are invoiced at cost.

Travel

Mileage for employee travel by car to facilitate the project, including travel to the project site and for meetings with the client, project team, contractors, or governmental agencies, will be invoiced at the current IRS standard mileage rate.

Airfare and/or lodging to facilitate the project will be coordinated with the client in advance and will be invoiced at cost.

Miscellaneous

Other costs associated with sub-consultants, specialty equipment, laboratory testing, field testing, tolls, parking or other miscellaneous items will be invoiced at cost.

Initials: Bowman

/ Client

Fort Bend County Fee Estimate Worksheet
Watts Plantation - Knight Road to Shipmans Cove Blvd
TERRA ASSOCIATES, A Bowman Company

TASK DESCRIPTION		PRINCIPAL	DEPARTMENT MANAGER	SR. PROJECT MANAGER	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	ASSOCIATE ENGINEER	GIS SPECIALIST	CAD MANAGER	SENIOR DESIGNER	DESIGNER	SENIOR CAD TECH	CAD TECH	SR. ENVIRONMENTAL PLANNER	ENVIRONMENTAL PLANNER	CLERICAL	TOTAL HOURS	Task Total	NO OF DWGS	LABOR HOURS PER SHEET	
1. Preliminary Design (LS)																						
	Establish a Typical Cross Section	1		1	0		1						0	8					11	\$ 254,730.00	1	11.00
	Determine ROW Acquisition Needs	2		2	0		2						0	0					6	\$ 1,380.00	0	#DWG/0
	Determine Potential Conflicts with existing facilities & utilities	2		3	0		4						2	2					11	\$ 2,100.00	0	#DWG/0
	Identify Critical Path Items	4		4	0		4						0	0					20	\$ 2,760.00	0	#DWG/0
	Identify Problem Areas and Potential Resolutions	4		8	0		8						0	0					4,320.00	0	#DWG/0	
	PER	40		12	0		12						12	0					76	\$ 17,760.00	0	#DWG/0
	Prepare a Construction Cost Estimate	4		6	0		6						16	0					32	\$ 4,980.00	0	#DWG/0
	Prepare 30% Plans	39		24	0		24						112	0					199	\$ 31,140.00	30	6.63
	H&H Analysis	10		150	0		10						0	0					47,700.00	0	#DWG/0	
	Utility Coordination	4		12	0		12						12	0					40	\$ 6,960.00	0	#DWG/0
	Topographic Survey	0		0	0		0						0	0					38,590.00	3	0.00	
	Control & Monumentation - Prepare Survey Control Map	0		0	0		0						0	0					29,890.00	2	0.00	
	Geotechnical Investigation	0		0	0		0						0	0					41,000.00	0	#DWG/0	
	Project Management & Meetings (3 Months Typical)	48		20	0		20						0	0					88	\$ 22,200.00	0	#DWG/0
	Preliminary Phase Expenses																		2,540.00	\$ 2,540.00	0	#DWG/0
		158	0	242	0	0	103	0	0	0	0	0	242	0	0	0	0		745	\$ 140,260.00	36	20.69
2. Final Design (LS)																						
	Cover Sheet & Index	1		1	0		1						0	2					5	\$ 870.00	2	2.50
	General Notes	1		1	0		1						0	2					5	\$ 870.00	1	5.00
	Quantities Summary Sheets - Optional	0		0	0		0						0	0					0	\$ -	0	#DWG/0
	Typical Sections (70% Final)	2		2	0		2						20	0					26	\$ 3,160.00	4	6.50
	Project Layout	2		2	0		2						0	20					26	\$ 3,160.00	2	13.00
	Drainage Area Maps	2		4	0		4						16	0					26	\$ 3,600.00	2	13.00
	Drainage Calculations	4		24	0		4						0	0					32	\$ 7,560.00	0	#DWG/0
	Plan and Profile Sheets (Roadway, Drainage, Public Utilities)	60		20	0		20						120	0					220	\$ 36,600.00	8	27.50
	Intersection Layouts of Cross Street Details	2		4	0		4						12	0					22	\$ 3,640.00	2	11.00
	TCP Advance Warning Signs	0		0	0		0						0	0					0	\$ -	0	#DWG/0
	TCP Overrun & Medians	0		0	0		0						0	0					0	\$ -	0	#DWG/0
	Detour Plans (with County Approval only)	0		0	0		0						0	0					0	\$ -	0	#DWG/0
	Traffic Control Plan	2		4	0		8						16	0					30	\$ 4,200.00	3	10.00
	Temporary Traffic Signal Plans	0		0	0		0						0	0					0	\$ -	0	#DWG/0
	SWPPP Sheets	2		2	0		2						6	0					12	\$ 1,920.00	2	6.00
	Detention Pond and Floodplain Mitigation Design	12		12	0		6						40	0					70	\$ 10,980.00	3	23.33
		0		0	0		0						0	0					0	\$ -	0	#DWG/0
		0		0	0		0						0	0					0	\$ -	0	#DWG/0
																			-	\$ -	0	#DWG/0
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PROPOSAL FOR LAND SURVEYING SERVICES

November 18, 2021

David Sepulveda, P.E.
Vice President
Terra Associates, Inc.
1445 North Loop West, Suite 450
Houston, TX 77008

Ref: Watt Plantation Drive Boundary and limited topographic survey

Dear Mr. Sepulveda,

MBCO Engineering, LLC (MBCO) is pleased to submit this proposal for professional surveying services for the scope provided in an email by Terra Associates on November 12, 2021 and as shown on the attached Exhibit "A".

CONTROL SURVEY: \$16,740.00

- MBCO will establish horizontal control based on the Texas Coordinate System of 1983, South Central Zone No. 4204, and utilize the vertical datum NAVD88 (2001 Adjustment), Geoid 18, and will be referenced to the nearest Fort Bend County Benchmark, and as defined in the Texas Society of Professional Surveyors (TSPS) Standards and Manual of Practice for Land Surveying in the State of Texas.
- MBCO will prepare control maps for the four (4) primary control points that will be set outside of the construction limits.

CATEGORY 1A, CONDITION II LAND TITLE SURVEY: \$13,150.00

- MBCO will perform a boundary survey meeting the requirements of a Category 1A, Condition II Land Title Survey of an approximate 4.61 acres out of a 62.3 acre parcel as shown on the attached Exhibit "A".
- MBCO will research the boundary of the subject and necessary surrounding tracts and adjoining rights-of-way (ROW).
- MBCO will locate all permanent improvements within the site and within 5 feet of the parcel boundary lines including but not limited to all paving, distinguishable dirt or gravel paths or driveways, fences, culverts, driveways, non-portable structures, power poles, and any other above ground utility appurtenances.
- MBCO will recover and locate the boundary corners of the subject tract in the field



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- and set the proposed north and south ROW line of Watts Plantation Dr. at all P.I., P.T., and P.C. points.
- MBCO will prepare one exhibit with accompanying metes and bounds description for county ROW acquisition.
 - MBCO will acquire a current title report, through an abstractor of the subject parcel.
 - MBCO will prepare an exhibit for the CenterPoint easement crossing.

LIMITED TOPOGRAPHIC SURVEY : \$38,590.00

MBCO will perform topographic survey services in limited areas and limited scope to include:

- Collect topographic data at 100 foot intervals and 200 feet wide cross-sections along the approximate 3000 foot future ROW between Knight Rd. and Shipmans Cove Blvd.
- Collect topographic data to the opposite returns of the intersections of Knight Rd. and Watts Plantation Dr. and Shipmans Cove Blvd. and Watts Plantation Dr.
- Locate the high water markings designated by others.
- Locate geotech boring locations after drilling.
- Stake with lath and flagging the clearing limits of the ROW.
- Stake the ROW for construction with lath and flagging.

ASSUMPTIONS AND EXCLUSIONS:

- MBCO is under the assumption that NewQuest will be dedicating the east 900 feet of right-of-way by plat out of a 21.89 acre parcel referenced by FBCAD No. R484346; therefore MBCO will not be completing a Category 1A Condition II boundary survey for the above-referenced tract of land.
- MBCO must be provided with the recorded plat for the 21.89 acre parcel dedicating the east 900 feet of the proposed Watts Plantation ROW.
- MBCO under this proposal will not be monumenting the east 900 feet of the proposed Watts Plantation Dr. ROW as this should be monumented by the platting surveyor.
- MBCO will be given sub meter locations of the geotech boring locations and boreholes will be marked with lath and flagging in the field prior to surveying.
- MBCO will be given right of entry and access to the areas needed to perform our services per this proposal in a timely manner.
- MBCO will not be responsible for obtaining right of entry per this proposal.



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TOTAL FEES FOR SURVEYING SERVICES: \$ 68,480.00

DELIVERABLES:

- 2020 AutoCAD Civil 3D (.dwg) file of the topographic survey.
- Signed and sealed topographic drawing.
- Signed and sealed boundary drawing.
- Exhibit for Centerpoint easement crossing.
- Signed and sealed .pdf of metes and bounds description.
- Signed and sealed ROW exhibit to accompany metes and bounds description.
- Word document of the metes and bounds description for title purposes.

SCHEDULE:

MBCO will complete the above-described Survey Services within Sixty (60) calendar days (weather permitting) starting from the immediate following work calendar day from the date when we receive the Notice to Proceed.

COMPENSATION:

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

This cost proposal is valid for 30 days and may be re-evaluated after such time to account for any changes with the project scope, environmental factors and/or the general rate schedule. If this proposal is acceptable, please sign and return a copy. If you have any questions you may reach me at Marion.Clark@mbcoengineering.com.

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

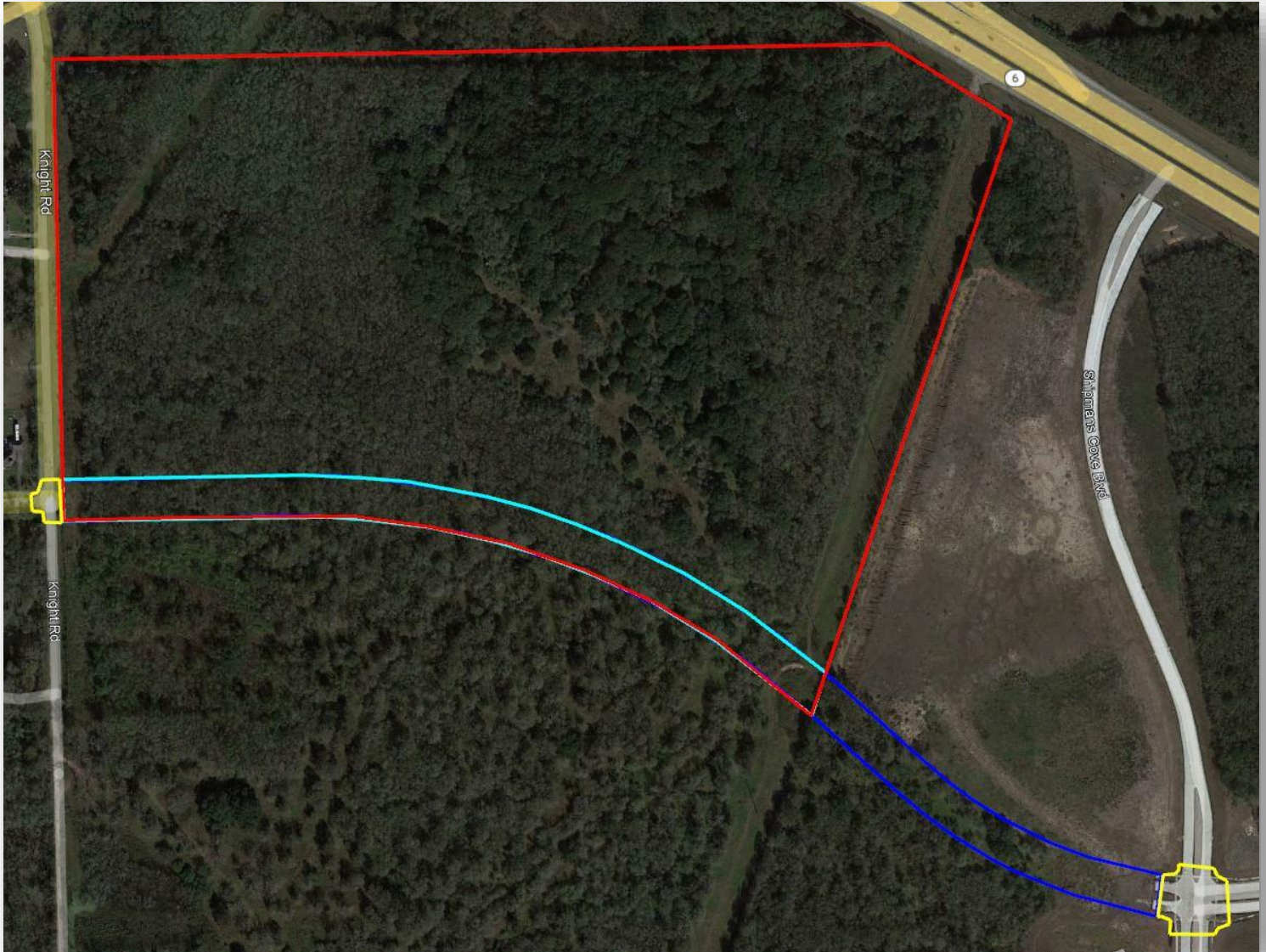
Sincerely,

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

Marion Clark, RPLS

Vice President, Surveying

Exhibit "A"
Red = Overall Tract
Aqua= 4.61 Acre ROW parcel
Blue= ROW by Plat
Yellow= Intersection Topo



GENERAL TERMS AND CONDITIONS

1. **Access To Site** - Unless otherwise stated, MBCO will have access to the site for activities necessary for the performance of the services. MBCO will take all commercially reasonable precautions to minimize damage due to these activities but has not included in the fee the cost of restoration of any resulting damage.

2. **Ownership Of Documents** - Client acknowledges that all original papers, documents, maps, surveys, digital data and other work product and copies thereof, whether produced by MBCO (collectively, the "MBCO IP") shall remain the property of MBCO,



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except documents which are to be filed with public agencies. MBCO grants to Client a non-exclusive license to use the MBCO IP solely for the business relationship between MBCO and Client. Client further acknowledges that Client's right to utilize the MBCO IP pursuant to this agreement will continue only so long as Client is not in default pursuant to the terms and conditions of this Agreement and Client has performed all obligations under this Agreement.

3. **Copyright** - The parties agree that all protections of the United States and Texas copyright laws shall be applicable to the MBCO IP to the benefit of MBCO, including common law and statutory law, whether or not any copyright for such work product actually is registered, and without regard to whether or not such copyright actually applies to such work product.

4. **Invoices** - Invoices for fees and all other charges will be submitted monthly for all services rendered as the work progresses, and the net amount shall be due and payable as of the date of the invoice (the "Due Date") at MBCO's office in Houston, Harris County, Texas. Any sums not paid by the Due Date shall bear interest at the highest rate allowed by law (measured on a per diem basis) until paid in full. In the event Client pays by check and such check is returned for non-sufficient funds, Client shall be liable for all costs and expenses related therefrom incurred by MBCO. In addition to the foregoing, in the event MBCO engages legal counsel to collect any sums due and owing by Client, Client shall be liable for all reasonable attorney's fees and all other costs and expenses incurred by MBCO in relation to such collection efforts.

5. **Default** - Should Client (i) fail to perform, observe or keep any of its obligations under this Agreement, any agreed upon proposal(s) or any other document or instrument entered into by and between the Client and MBCO; (ii) fail to pay when due the full amount of any sums owed to MBCO; (iii) become insolvent, have a petition in bankruptcy filed by or against it prior to full payment to MBCO or (iv) violate any of the terms of this Agreement, any agreed upon proposal(s) or any other document or instrument entered into by and between the Client and MBCO, MBCO may at its option do any one or more of the following: (i) terminate this Agreement and retain all sums paid to MBCO, not as a penalty, but as the agreed upon liquidated damages for such default; (ii) declare all unpaid amounts owed immediately due and payable without further notice or demand and will thereafter bear interest at the highest rate allowed by law (measured on a per diem basis) until paid; and/or (iii) pursue any other remedies available at law or equity. Client hereby expressly agrees that Client shall be responsible for all costs incurred or sums advanced (including, without limitation, reasonable attorney's fees and associated costs) in relation to any remedy utilized.

6. **Client's obligation to pay** - Client's obligation to pay is solely that of Client, and the acts or omissions of any third party shall not affect that obligation. All sums due and not received by the Due Date shall be construed as past due. To cover the costs of collection, all past-due amounts will bear interest at one and one half percent (1.5%) or the highest rate allowed by law (measured on a per diem basis) or until paid in full. The Client shall pay any attorney's fees or court costs incurred in collecting any past-due amount. In the event that Client fails to pay MBCO within thirty (30) days after invoices are rendered, then Client agrees that MBCO shall have the right to stop or suspend work and consider the non-payment as grounds for a total breach of this Agreement.

7. **Termination Of Services** - This Agreement may be terminated by either party upon five (5) days' written notice, by mutual consent or in the event of persistent failures of performance of material terms and conditions of this Agreement by the other party through no fault of the terminating party. MBCO shall then be paid for the services completed up to the time of the termination date based upon the attached Rate Schedule.

8. **Dispute Resolution** - Claims or disputes in connection with the services provided under this agreement between Client and MBCO shall be submitted to non-binding mediation. Client and MBCO agree to include a similar mediation agreement with all contractors, subcontractors, subconsultants, suppliers and fabricators, thereby providing for mediation as the primary method for dispute resolution between all parties.

9. **Governing Law** - This Agreement shall be construed and enforced in accordance with the laws of Texas.

10. **Indemnification** - EACH PARTY (THE "INDEMNIFYING PARTY") HEREBY AGREES TO INDEMNIFY AND HOLD HARMLESS THE OTHER PARTY, WHICH SHALL INCLUDE, WITHOUT LIMITATION, SUCH PARTY'S OWNERS, OFFICERS, EMPLOYEES, CONTRACTORS, REPRESENTATIVES, AGENTS AND AFFILIATES (THE "INDEMNIFIED PARTY") FROM ANY AND ALL CLAIMS, DEMANDS, ACTIONS, LIABILITIES, COSTS, EXPENSES, AND/OR DAMAGES TO PERSON OR PROPERTY ASSERTED AGAINST, IMPOSED UPON OR INCURRED BY THE INDEMNIFIED PARTY TO



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THE EXTENT ARISING FROM, IN CONNECTION WITH OR ON ACCOUNT OF ANY ACT OR OMISSION OF THE INDEMNIFYING PARTY IN RELATION TO THE PERFORMANCE OR LACK OF PERFORMANCE OF THE INDEMNIFYING PARTY OR ANY PARTY UNDER THE INDEMNIFYING PARTY'S REASONABLE CONTROL. THE INDEMNIFYING PARTY FURTHER AGREES TO PAY THE INDEMNIFIED PARTY'S COURT COSTS, REASONABLE ATTORNEYS' FEES INCURRED AND ALL OTHER ASSOCIATED COSTS ARISING FROM ANY SUCH CLAIMS, INCLUDING, BUT NOT LIMITED TO, ALL COSTS INCURRED IN ESTABLISHING THE APPLICABILITY OF THIS PARAGRAPH. THIS INDEMNITY SHALL APPLY WITHOUT REGARD TO WHETHER THE CLAIM, DEMAND, ACTION, LIABILITY, COST, EXPENSE, OR DAMAGE IS BASED ON BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE, STRICT LIABILITY OR OTHER TORT. THIS SECTION SHALL SURVIVE THE EXPIRATION OR TERMINATION OF THE AGREEMENT.

11. **Limitation Of Liability** - Client acknowledges and agrees that under no circumstances shall MBCO be liable in any manner for delay or deficiency in any performance on any matter caused in whole or in part by acts or omissions of third parties, delays, failures to perform, or any delays due to fire, flood, water, the elements, labor disputes, shortages of labor or materials, explosions, civil disturbances, governmental actions, unavailability of transportation, or any other cause beyond MBCO's reasonable control. BECAUSE IT IS EXTREMELY DIFFICULT TO FIX THE ACTUAL DAMAGES, IF ANY, WHICH MAY RESULT FROM ANY FAILURE ON THE PART OF MBCO TO PERFORM ANY OF ITS OBLIGATIONS HEREUNDER AND BECAUSE CLIENT DOES NOT DESIRE THE AGREEMENT OR THESE TERMS AND CONDITIONS TO PROVIDE FOR FULL LIABILITY OF MBCO, CLIENT AGREES THAT MBCO SHALL BE EXEMPT FROM ANY AND ALL LIABILITY FOR ANY LOSS, DAMAGE AND/OR INJURY DUE TO A FAILURE OF THE WORK AND/OR MATERIALS IN ANY RESPECT THAT IS NOT WITHIN THE REASONABLE CONTROL OF MBCO. CLIENT FURTHER ACKNOWLEDGES AND AGREES THAT MBCO SHALL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES RESULTING FROM, ARISING OUT OF OR IN CONNECTION WITH THE WORK, THE MATERIALS OR ANY MATTER RELATED THERETO. IN ANY EVENT MBCO IS FOUND LIABLE FOR LOSS, DAMAGE, AND/OR INJURY DUE TO A FAILURE OF THE SERVICES IN ANY RESPECT, MBCO'S LIABILITY SHALL BE NO GREATER THAN A SUM EQUAL TO THE AMOUNT PAID BY CLIENT TO MBCO, AS THE AGREED UPON DAMAGES, NOT AS A PENALTY, BUT AS THE EXCLUSIVE REMEDY, AND THAT THE PROVISIONS OF THIS SECTION SHALL APPLY REGARDLESS OF WHETHER SUCH DAMAGE, INJURY AND/OR LOSS WAS DUE DIRECTLY OR INDIRECTLY FROM THE NEGLIGENCE, GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF MBCO OR ANY PARTY UNDER ITS REASONABLE CONTROL OR ARISING OUT OF STRICT LIABILITY IN TORT, BREACH OF CONTRACT, BREACH OF WARRANTY OR OTHERWISE. CLIENT FURTHER ACKNOWLEDGES AND AGREES THAT THE INCLUSION OF THIS PARAGRAPH WAS A MATERIAL CONSIDERATION FOR MBCO TO ENTER INTO THE AGREEMENT.

12. **No Warranties** - AS TO THE SERVICES PROVIDED, MBCO SHALL USE ALL COMMERCIALY REASONABLE EFFORTS TO ENSURE THE SERVICES ARE SUBSTANTIALLY CORRECT. HOWEVER, MBCO MAKES NO EXPRESS REPRESENTATIONS OR WARRANTIES AND DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF TITLE, WARRANTIES OF MERCHANTABILITY, WARRANTIES OF QUALITY AND/OR WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE. MBCO DOES NOT AUTHORIZE ANYONE TO MAKE A WARRANTY OF ANY KIND ON ITS BEHALF AND CLIENT MAY NOT RELY ON ANY STATEMENT OF WARRANTY. CLIENT HEREBY EXPRESSLY ACKNOWLEDGES THAT CLIENT IS NOT RELYING ON THE STATEMENTS, REPRESENTATIONS OR ACTIONS OF ANY EMPLOYEE, REPRESENTATIVE, AGENT OR CONTRACTOR OF MBCO IN ANY WAY. THIS SECTION SHALL SURVIVE THE COMPLETION, EXPIRATION OR TERMINATION OF THIS AGREEMENT.

13. **Authority** - Client affirmatively represents and states that he/she is authorized to enter into this Agreement, either as the owner or an officer of (Company Name), or as Company's duly authorized agent, trustee, or receiver for the purpose of entering into this Agreement.

14. **Professional Services** - All surveying services are regulated under the Texas Board of Professional Engineers and Land Surveyors. The Board can be contacted at 1917 S. Interstate 35, Austin, Texas 78741.

15. **Use of Work Product** - MBCO acknowledges that Client is requesting services to be performed under the applicable agreed upon proposal(s) for the purpose of providing such information to other parties including, but not limited to, clients, customers, governmental entities and other interested parties. Client agrees that the work product prepared by MBCO may not be altered in any way except for the addition of page numbers or exhibit captions necessary to incorporate that work product into other documents. MBCO agrees to provide copies of the work product mutually agreed upon by both parties described in the proposal hereof.

16. **No Accord and Satisfaction** - The parties hereto expressly agree that no payment made by Client or on behalf of Client of a lesser amount than the required amount shall be deemed an accord and satisfaction, regardless of any statement on any check or accompanying letter to the contrary, and MBCO is hereby authorized to accept such payment(s) without prejudice to its rights to recover any balance due

17. **Entire Agreement; Amendments and Waivers; Successors and Assigns** - The Agreement (and the proposal to which this is attached) constitutes the entire agreement between the parties hereto pertaining to the subject matter hereof and supersedes all prior



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agreements, understandings, negotiations and discussions, whether oral or written, of the parties. No amendment, supplement, modification or waiver of this Agreement shall be binding unless executed in writing by the Party to be bound thereby. The failure of either Party to this Agreement to enforce any of its terms, provisions or covenants shall not be construed as a waiver of the same or of the right of such Party to enforce the same. Waiver by either Party hereto of any breach or default by any other Party of any term or provision of this Agreement shall not operate as a waiver of any other breach or default. The provisions of this Agreement shall be binding upon and inure to the benefit of the heirs, personal representatives, successors, and assigns of the parties. Notwithstanding the foregoing, the Client may not assign any part of this Agreement without the express written consent of MBCO.

18. **Severability; Survival** - Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision (or any section of any provision) of this Agreement is held to be prohibited by or invalid under applicable law, such provision (or any section of any provision) shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of the Agreement. The parties expressly agree that the indemnities, covenants and agreements contained in this Agreement shall survive the completion, expiration or termination of this Agreement.

19. **Contract Negotiation** - Client shall bear all MBCO's costs and expenses (including legal costs) in the event Client wishes to negotiate any proposal(s), this Agreement or any other document or instrument entered into by and between the Client and MBCO, or any part thereof.

20. **Conflicting Terms** - In the event of any conflict between the terms and conditions set forth in this Agreement and any other terms and conditions set forth in any proposal(s) or any other document or instrument entered into by and between the Client and MBCO, the terms and conditions set forth in this Agreement shall control for all intent and purposes.

MBCO Engineering, LLC (MBCO)

Signature _____

Date _____

Printed Name _____

Title _____

Terra Associates, Inc.

Signature _____

Date _____

Printed Name _____

Title _____

October 20, 2022



TERRA Associates, Inc.
1445 North Loop West, Suite 450
Houston, Texas 77008

Attn: Mr. David Sepulveda, P.E. – Vice President

Re: Cost Estimate for Geotechnical Engineering Services
Watts Plantation Road Extension
Fort Bend County, Texas
Terracon Document No. P92215589.Revision2

Dear Mr. Sepulveda:

Terracon Consultants, Inc. (Terracon) understands that we have been selected based on qualifications to provide geotechnical services for the above referenced project. This document outlines our understanding of the scope of services to be performed by Terracon for this project and provides an estimate of the cost of our services. The following are exhibits to the attached Agreement for Services.

Exhibit A	Project Understanding
Exhibit B	Scope of Services
Exhibit C	Compensation and Project Schedule
Exhibit D	Site Location
Exhibit E	Anticipated Exploration Plan

Our base fee to perform the Scope of Services described in this document for the proposed roadway and the bridge is **\$24,600**, and the proposed detention pond is **\$16,400**. See **Exhibit C** for more details of our fees and consideration of additional services.

Your authorization for Terracon to proceed in accordance with this cost estimate can be issued by signing and returning a copy of the attached Agreement for Services to our office. If you have any questions, please do not hesitate to contact us.



Cost Estimate for Geotechnical Engineering Services

Watts Plantation Road Extension ■ Fort Bend County, Texas

October 20, 2022 ■ Terracon Document No. P92215589.Revision2



Sincerely,

Terracon Consultants, Inc.

(Texas Firm Registration No.: F-3272)

A handwritten signature in blue ink, appearing to read "Ammar Ali".

Ammar Ali, Ph.D.

Staff Geotechnical Professional

A handwritten signature in blue ink, appearing to read "Rebecca L. Cummins".

Rebecca L. Cummins, P.E.

Project Engineer

Patrick M. Beecher

Patrick M. Beecher, P.E.

Office Manager

AGREEMENT FOR SERVICES

This **AGREEMENT** is between Terra Associates, Inc. ("Client") and Terracon Consultants, Inc. ("Consultant") for Services to be provided by Consultant for Client on the Watts Plantation Road Extension project ("Project"), as described in Consultant's Proposal dated 10/20/2022 ("Proposal"), including but not limited to the Project Information section, unless the Project is otherwise described in Exhibit A to this Agreement (which section or Exhibit is incorporated into this Agreement).

- 1. Scope of Services.** The scope of Consultant's services is described in the Proposal, including but not limited to the Scope of Services section ("Services"), unless Services are otherwise described in Exhibit B to this Agreement (which section or exhibit is incorporated into this Agreement). Portions of the Services may be subcontracted. When Consultant subcontracts to other individuals or companies, then consultant will collect from Client on the Subcontractors' behalf. Consultant's Services do not include the investigation or detection of, nor do recommendations in Consultant's reports address the presence or prevention of biological pollutants (e.g., mold, fungi, bacteria, viruses, or their byproducts) or occupant safety issues, such as vulnerability to natural disasters, terrorism, or violence. If Services include purchase of software, Client will execute a separate software license agreement. Consultant's findings, opinions, and recommendations are based solely upon data and information obtained by and furnished to Consultant at the time of the Services.
- 2. Acceptance/ Termination.** Client agrees that execution of this Agreement is a material element of the consideration Consultant requires to execute the Services, and if Services are initiated by Consultant prior to execution of this Agreement as an accommodation for Client at Client's request, both parties shall consider that commencement of Services constitutes formal acceptance of all terms and conditions of this Agreement. Additional terms and conditions may be added or changed only by written amendment to this Agreement signed by both parties. In the event Client uses a purchase order or other form to administer this Agreement, the use of such form shall be for convenience purposes only and any additional or conflicting terms it contains are stricken. This Agreement shall not be assigned by either party without prior written consent of the other party. Either party may terminate this Agreement or the Services upon written notice to the other. In such case, Consultant shall be paid costs incurred and fees earned to the date of termination plus reasonable costs of closing the Project.
- 3. Change Orders.** Client may request changes to the scope of Services by altering or adding to the Services to be performed. If Client so requests, Consultant will return to Client a statement (or supplemental proposal) of the change setting forth an adjustment to the Services and fees for the requested changes. Following Client's review, Client shall provide written acceptance. If Client does not follow these procedures, but instead directs, authorizes, or permits Consultant to perform changed or additional work, the Services are changed accordingly and Consultant will be paid for this work according to the fees stated or its current fee schedule. If project conditions change materially from those observed at the site or described to Consultant at the time of proposal, Consultant is entitled to a change order equitably adjusting its Services and fee.
- 4. Compensation and Terms of Payment.** Client shall pay compensation for the Services performed at the fees stated in the Proposal, including but not limited to the Compensation section, unless fees are otherwise stated in Exhibit C to this Agreement (which section or Exhibit is incorporated into this Agreement). If not stated in either, fees will be according to Consultant's current fee schedule. Fee schedules are valid for the calendar year in which they are issued. Fees do not include sales tax. Client will pay applicable sales tax as required by law. Consultant may invoice Client at least monthly and payment is due upon receipt of invoice. Client shall notify Consultant in writing, at the address below, within 15 days of the date of the invoice if Client objects to any portion of the charges on the invoice, and shall promptly pay the undisputed portion. Client shall pay a finance fee of 1.5% per month, but not exceeding the maximum rate allowed by law, for all unpaid amounts 30 days or older. Client agrees to pay all collection-related costs that Consultant incurs, including attorney fees. Consultant may suspend Services for lack of timely payment. It is the responsibility of Client to determine whether federal, state, or local prevailing wage requirements apply and to notify Consultant if prevailing wages apply. If it is later determined that prevailing wages apply, and Consultant was not previously notified by Client, Client agrees to pay the prevailing wage from that point forward, as well as a retroactive payment adjustment to bring previously paid amounts in line with prevailing wages. Client also agrees to defend, indemnify, and hold harmless Consultant from any alleged violations made by any governmental agency regulating prevailing wage activity for failing to pay prevailing wages, including the payment of any fines or penalties.
- 5. Third Party Reliance.** This Agreement and the Services provided are for Consultant and Client's sole benefit and exclusive use with no third party beneficiaries intended. Reliance upon the Services and any work product is limited to Client, and is not intended for third parties other than those who have executed Consultant's reliance agreement, subject to the prior approval of Consultant and Client.
- 6. LIMITATION OF LIABILITY. CLIENT AND CONSULTANT HAVE EVALUATED THE RISKS AND REWARDS ASSOCIATED WITH THIS PROJECT, INCLUDING CONSULTANT'S FEE RELATIVE TO THE RISKS ASSUMED, AND AGREE TO ALLOCATE CERTAIN OF THE ASSOCIATED RISKS. TO THE FULLEST EXTENT PERMITTED BY LAW, THE TOTAL AGGREGATE LIABILITY OF CONSULTANT (AND ITS RELATED CORPORATIONS AND EMPLOYEES) TO CLIENT AND THIRD PARTIES GRANTED RELIANCE IS LIMITED TO THE GREATER OF \$50,000 OR CONSULTANT'S FEE, FOR ANY AND ALL INJURIES, DAMAGES, CLAIMS, LOSSES, OR EXPENSES (INCLUDING ATTORNEY AND EXPERT FEES) ARISING OUT OF CONSULTANT'S SERVICES OR THIS AGREEMENT. PRIOR TO ACCEPTANCE OF THIS AGREEMENT AND UPON WRITTEN REQUEST FROM CLIENT, CONSULTANT MAY NEGOTIATE A HIGHER LIMITATION FOR ADDITIONAL CONSIDERATION IN THE FORM OF A SURCHARGE TO BE ADDED TO THE AMOUNT STATED IN THE COMPENSATION SECTION OF THE PROPOSAL. THIS LIMITATION SHALL APPLY REGARDLESS OF AVAILABLE PROFESSIONAL LIABILITY INSURANCE COVERAGE, CAUSE(S), OR THE THEORY OF LIABILITY, INCLUDING NEGLIGENCE, INDEMNITY, OR OTHER RECOVERY. THIS LIMITATION SHALL NOT APPLY TO THE EXTENT THE DAMAGE IS PAID UNDER CONSULTANT'S COMMERCIAL GENERAL LIABILITY POLICY.**
- 7. Indemnity/Statute of Limitations.** Consultant and Client shall indemnify and hold harmless the other and their respective employees from and against legal liability for claims, losses, damages, and expenses to the extent such claims, losses, damages, or expenses are legally determined to be caused by their negligent acts, errors, or omissions. In the event such claims, losses, damages, or expenses are legally determined to be caused by the joint or concurrent negligence of Consultant and Client, they shall be borne by each party in proportion to its own negligence under comparative fault principles. Neither party shall have a duty to defend the other party, and no duty to defend is hereby created by this indemnity provision and such duty is explicitly waived under this Agreement. Causes of action arising out of Consultant's Services or this Agreement regardless of cause(s) or the theory of liability, including negligence, indemnity or other recovery shall be deemed to have accrued and the applicable statute of limitations shall commence to run not later than the date of Consultant's substantial completion of Services on the project.
- 8. Warranty.** Consultant will perform the Services in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. **EXCEPT FOR THE STANDARD OF CARE PREVIOUSLY STATED, CONSULTANT MAKES NO WARRANTIES OR GUARANTEES, EXPRESS OR IMPLIED, RELATING TO CONSULTANT'S SERVICES AND CONSULTANT DISCLAIMS ANY IMPLIED WARRANTIES OR WARRANTIES IMPOSED BY LAW, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**
- 9. Insurance.** Consultant represents that it now carries, and will continue to carry: (i) workers' compensation insurance in accordance with the laws of the states having jurisdiction over Consultant's employees who are engaged in the Services, and employer's liability insurance (\$1,000,000); (ii) commercial general liability insurance (\$2,000,000 occ / \$4,000,000 agg); (iii) automobile liability insurance (\$2,000,000 B.I. and P.D. combined single

limit); and (iv) professional liability insurance (\$1,000,000 claim / agg). Certificates of insurance will be provided upon request. Client and Consultant shall waive subrogation against the other party on all general liability and property coverage.

- 10. CONSEQUENTIAL DAMAGES. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR LOSS OF PROFITS OR REVENUE; LOSS OF USE OR OPPORTUNITY; LOSS OF GOOD WILL; COST OF SUBSTITUTE FACILITIES, GOODS, OR SERVICES; COST OF CAPITAL; OR FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT, PUNITIVE, OR EXEMPLARY DAMAGES.**
- 11. Dispute Resolution.** Client shall not be entitled to assert a Claim against Consultant based on any theory of professional negligence unless and until Client has obtained the written opinion from a registered, independent, and reputable engineer, architect, or geologist that Consultant has violated the standard of care applicable to Consultant's performance of the Services. Client shall provide this opinion to Consultant and the parties shall endeavor to resolve the dispute within 30 days, after which Client may pursue its remedies at law. This Agreement shall be governed by and construed according to Texas law.
- 12. Subsurface Explorations.** Subsurface conditions throughout the site may vary from those depicted on logs of discrete borings, test pits, or other exploratory services. Client understands Consultant's layout of boring and test locations is approximate and that Consultant may deviate a reasonable distance from those locations. Consultant will take reasonable precautions to reduce damage to the site when performing Services; however, Client accepts that invasive services such as drilling or sampling may damage or alter the site. Site restoration is not provided unless specifically included in the Services.
- 13. Testing and Observations.** Client understands that testing and observation are discrete sampling procedures, and that such procedures indicate conditions only at the depths, locations, and times the procedures were performed. Consultant will provide test results and opinions based on tests and field observations only for the work tested. Client understands that testing and observation are not continuous or exhaustive, and are conducted to reduce - not eliminate - project risk. Client shall cause all tests and inspections of the site, materials, and Services performed by Consultant to be timely and properly scheduled in order for the Services to be performed in accordance with the plans, specifications, contract documents, and Consultant's recommendations. No claims for loss or damage or injury shall be brought against Consultant by Client or any third party unless all tests and inspections have been so performed and Consultant's recommendations have been followed. Unless otherwise stated in the Proposal, Client assumes sole responsibility for determining whether the quantity and the nature of Services ordered by Client is adequate and sufficient for Client's intended purpose. Client is responsible (even if delegated to contractor) for requesting services, and notifying and scheduling Consultant so Consultant can perform these Services. Consultant is not responsible for damages caused by Services not performed due to a failure to request or schedule Consultant's Services. Consultant shall not be responsible for the quality and completeness of Client's contractor's work or their adherence to the project documents, and Consultant's performance of testing and observation services shall not relieve Client's contractor in any way from its responsibility for defects discovered in its work, or create a warranty or guarantee. Consultant will not supervise or direct the work performed by Client's contractor or its subcontractors and is not responsible for their means and methods. The extension of unit prices with quantities to establish a total estimated cost does not guarantee a maximum cost to complete the Services. The quantities, when given, are estimates based on contract documents and schedules made available at the time of the Proposal. Since schedule, performance, production, and charges are directed and/or controlled by others, any quantity extensions must be considered as estimated and not a guarantee of maximum cost.
- 14. Sample Disposition, Affected Materials, and Indemnity.** Samples are consumed in testing or disposed of upon completion of the testing procedures (unless stated otherwise in the Services). Client shall furnish or cause to be furnished to Consultant all documents and information known or available to Client that relate to the identity, location, quantity, nature, or characteristic of any hazardous waste, toxic, radioactive, or contaminated materials ("Affected Materials") at or near the site, and shall immediately transmit new, updated, or revised information as it becomes available. Client agrees that Consultant is not responsible for the disposition of Affected Materials unless specifically provided in the Services, and that Client is responsible for directing such disposition. In no event shall Consultant be required to sign a hazardous waste manifest or take title to any Affected Materials. Client shall have the obligation to make all spill or release notifications to appropriate governmental agencies. The Client agrees that Consultant neither created nor contributed to the creation or existence of any Affected Materials conditions at the site and Consultant shall not be responsible for any claims, losses, or damages allegedly arising out of Consultant's performance of Services hereunder, or for any claims against Consultant as a generator, disposer, or arranger of Affected Materials under federal, state, or local law or ordinance.
- 15. Ownership of Documents.** Work product, such as reports, logs, data, notes, or calculations, prepared by Consultant shall remain Consultant's property. Proprietary concepts, systems, and ideas developed during performance of the Services shall remain the sole property of Consultant. Files shall be maintained in general accordance with Consultant's document retention policies and practices.
- 16. Utilities.** Unless otherwise stated in the Proposal, Client shall provide the location and/or arrange for the marking of private utilities and subterranean structures. Consultant shall take reasonable precautions to avoid damage or injury to subterranean structures or utilities. Consultant shall not be responsible for damage to subterranean structures or utilities that are not called to Consultant's attention, are not correctly marked, including by a utility locate service, or are incorrectly shown on the plans furnished to Consultant.
- 17. Site Access and Safety.** Client shall secure all necessary site related approvals, permits, licenses, and consents necessary to commence and complete the Services and will execute any necessary site access agreement. Consultant will be responsible for supervision and site safety measures for its own employees, but shall not be responsible for the supervision or health and safety precautions for any other parties, including Client, Client's contractors, subcontractors, or other parties present at the site. In addition, Consultant retains the right to stop work without penalty at any time Consultant believes it is in the best interests of Consultant's employees or subcontractors to do so in order to reduce the risk of exposure to the coronavirus. Client agrees it will respond quickly to all requests for information made by Consultant related to Consultant's pre-task planning and risk assessment processes. Client acknowledges its responsibility for notifying Consultant of any circumstances that present a risk of exposure to the coronavirus or individuals who have tested positive for COVID-19 or are self-quarantining due to exhibiting symptoms associated with the coronavirus.

Consultant: **Terracon Consultants, Inc.**By: Patrick M. Beecher Date: **10/20/2022**Name/Title: **Patrick M. Beecher, P.E. / Senior Principal / Office Manager**Address: **11555 Clay Rd, Ste 100
Houston, TX 77043-1239**Phone: **(713) 690-8989** Fax: **(713) 690-8787**Email: **Patrick.Beecher@terracon.com**Client: **Terra Associates, Inc.**

By: _____ Date: _____

Name/Title: _____

Address: _____

Phone: _____ Fax: _____

Email: _____

EXHIBIT A - PROJECT UNDERSTANDING

Our Scope of Services is based on our understanding of the project as described by TERRA Associates, Inc. (TERRA Associates). We have not visited the project site to confirm the information provided. Aspects of the project, undefined or assumed, are highlighted as shown below. We request the design team verify all information prior to our initiation of field exploration activities.

Site Location

Item	Description
Project location	The project site begins at the intersection of Watts Plantation Road and Knight Road and extends approximately 3,000 feet southeast toward Shipmans Cove Boulevard in Fort Bend County, Texas.
Existing improvements	Based on the aerial images, the site appears to be heavily wooded at the time of this cost estimate. The existing Watt Plantation Road pavement section consists of reinforced concrete. Based on the information provided by the client, the pavement right of way is 100 feet and a small creek runs through the site. We assumed the creek is a maximum of 6 feet deep.
Current ground cover	Heavily wooded.
Existing topography	Relatively level.
Site access	We expect the site and exploration locations are accessible with our all-terrain vehicle (ATV) mounted drilling equipment during normal business hours once pathways have been cleared.

Planned Construction

Item	Description
Project description	The project includes the extension of Watts Plantation Road from its intersection with Knight Road to the Shipmans Cove Boulevard. We understand storm sewer lines are planned to be installed along the proposed roadway. Also, we understand a bridge across the creek along the proposed Watts Plantation Roadway alignment is planned to be constructed. In addition, we understand a new detention pond is also planned to be constructed for this project.

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Item	Description
Proposed improvements ¹	<u>Roadway and Storm Sewer</u> <ul style="list-style-type: none">■ Based on the information obtained from TERRA Associates, we understand that the current scope includes approximately 900 linear feet of one-lane and approximately 2,100 linear feet of two-lane rigid pavement section. We understand that minor grade changes (less than 2 feet) are planned along the roadways to facilitate positive drainage.■ We understand that storm sewer lines are planned to be installed along the roadway alignment. The exact size of the storm sewer lines has not been determined at the time of this cost estimate. We understand that the storm sewer lines are planned to be installed using open-cut construction methods with a maximum embedment depth of 10 feet below the final grade.
	<u>Bridge</u> <ul style="list-style-type: none">■ We understand that a new bridge across the creek is planned along the proposed roadway alignment. The bridge's exact location was not determined at the time of this cost estimate. We assume the bridge will be supported on drilled straight shaft foundations. We assume the creek is not planned to be modified as part of the proposed improvements.
	<u>Detention Pond</u> <ul style="list-style-type: none">■ We understand that a new detention pond is planned near the proposed roadway. The exact location and size of the detention pond has not been determined at the time of this cost estimate. The size of the proposed detention pond is assumed to be 2 acres with a maximum depth of 10 feet and sideslopes no steeper than 3(Horizontal):1(Vertical). Once the location of the pond is determined by the County, we request the location be provided to us. We request the opportunity to review and revise the number and depth of the borings based on the actual size of the detention pond, once available. We understand the proposed detention pond should be designed and constructed in accordance with Fort Bend County and Fort Bend County Drainage District guidelines.
Anticipated traffic loads (assumed)	Local roadways with residential traffic consisting of passenger vehicles, delivery and garbage trucks, and school buses.

¹. Based on the information provided by TERRA Associates.

EXHIBIT B - SCOPE OF SERVICES

Our proposed Scope of Services consists of field exploration, laboratory testing, and engineering/project delivery. These services are described in the following sections.

Field Exploration

The field exploration program consists of the following:

Planned Location	Number of Borings	Planned Boring Depth ¹ (feet)
Watts Plantation Road Alignment	7	15
Bridge	2	80
Total		265

1. Below grade at the time of our field program.

In addition, we understand the detention pond has been requested to be included as an additional item. The field exploration for the detention pond is planned to consist of the following:

Planned Location	Number of Borings	Planned Boring Depth ¹ (feet)
Detention Pond ^{2,3}	2	20
Total		40

1. Below grade at the time of our field program.

2. Location to be determined by the County prior to our field exploration. We request the opportunity to review and revise the number and depth of the borings based on the actual size of the detention pond, once available.

3. We understand that the boring depths for the proposed detention pond should be based on HCFCD guidelines.

Boring Layout and Elevations: We will use handheld GPS equipment to locate borings with an estimated horizontal accuracy of +/-25 feet. Field measurements from existing site features may be utilized. If available, approximate elevations will be obtained by interpolation from a site specific, surveyed topographic map.

Subsurface Exploration Procedures: We will advance soil borings with an ATV mounted drill rig using solid stem continuous flight augers. Samples will be obtained continuously in the bridge and detention pond borings in the upper 20 feet and the roadway borings in the upper 15 feet and at intervals of 5 feet thereafter. Borings will be extended to a minimum of 5 feet beyond the termination depth, if any water-producing sand layer is encountered at the termination depth. Soil sampling is performed using open-tube and/or split-barrel sampling procedures. The split-barrel samplers are driven in accordance with the standard penetration test (SPT). The samples will be

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placed in appropriate containers, taken to our soil laboratory for testing, and classified by a Geotechnical Engineer.

Terracon will observe and record groundwater levels during drilling and sampling. One day groundwater readings will also be obtained for the detention pond borings. In addition, we plan to install a piezometer at one detention pond boring to observe groundwater levels in the installed piezometer at about one day, 7 days, and 30 days. The piezometer will generally consist of 2-inch PVC pipe with a 10-foot screen surrounded by clean quartz sand (No. 20 to No. 40 sieve material). The piezometer will be installed by a licensed well driller that is registered with the State of Texas. Piezometer is planned to be removed and backfilled by Terracon after all piezometer readings have been taken.

Our exploration team will prepare field boring logs as part of standard drilling operations including sampling depths, penetration distances, and other relevant sampling information. Field logs include visual classifications of materials observed during drilling, and our interpretation of subsurface conditions between samples. Final boring logs, prepared from field logs, represent the Geotechnical Engineer's interpretation, and include modifications based on observations and laboratory tests.

Property Disturbance: We will backfill borings with auger cuttings upon completion. Our services do not include repair of the site beyond backfilling our boreholes. Excess auger cuttings will be dispersed in the general vicinity of the borehole. Because backfill material often settles below the surface after a period, we recommend boreholes to be periodically checked and backfilled, if necessary. We can provide this service, or grout the boreholes for additional fees, at your request.

Site Access: Terracon must be granted access by site owners and Fort Bend County. By acceptance of this cost estimate, without information to the contrary, we consider this as authorization to access the area of the proposed road alignment for conducting field exploration in accordance with the Scope of Services.

Clearing of Pathways: We understand that the boring locations along the proposed Watts Plantation Road alignment are heavily wooded and clearing of pathways will be required to access the boring locations. The cost to provide this service is included as a line item in the cost estimate. We also understand that the proposed detention pond location is unknown at the time of this cost estimate, and that the site chosen by the County may not be accessible to our drilling equipment and that clearing of pathways may be required. The cost to provide this service is also included as an additional item in our cost estimate. The tree/shrub debris would only be moved away from the cleared pathways but not moved from the site.

Safety

Terracon is not aware of environmental concerns at this project site that would create health or safety hazards associated with our exploration program; thus, our Scope considers standard

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OSHA Level D Personal Protection Equipment (PPE) appropriate. If additional safety requirements, training, etc. are required to access this site to perform our services, Terracon should be notified to so that we may adjust our Scope of Services and estimated fees, if necessary. Our Scope of Services does not include environmental site assessment services, but identification of unusual or unnatural materials encountered while drilling will be noted on our logs and discussed in our report.

Exploration efforts require borings (and possibly excavations) into the subsurface, therefore Terracon will comply with Texas 811, a free utility locating service, to help locate public utilities within dedicated public easements. We will consult with the owner/client regarding potential utilities, or other unmarked underground hazards. Based upon the results of this consultation, we will consider the need for alternative subsurface exploration methods, as the safety of our field crew is a priority.

Consultant will be responsible for supervision and site safety measures for its own employees, but shall not be responsible for the supervision or health and safety precautions for any third parties, including Client's contractors, subcontractors, or other parties present at the site. In addition, Consultant retains the right to stop work without penalty at any time Consultant believes it is in the best interests of Consultant's employees or subcontractors to do so in order to reduce the risk of exposure to COVID-19. Client agrees it will respond quickly to all requests for information made by Consultant related to Consultant's pre-task planning and risk assessment processes. Client acknowledges its responsibility for notifying Consultant of any circumstances that present a risk of exposure to the coronavirus or individuals who have tested positive for COVID-19 or are self-quarantining due to exhibiting symptoms associated with COVID-19.

Laboratory Testing

The project engineer will review field data and assign laboratory tests to understand the engineering properties of various soil strata. The anticipated laboratory testing may include the following:

- Moisture content
- Dry unit weight
- Atterberg Limits
- Percent finer than No. 200 sieve
- Unconfined compressive strength
- Unconsolidated Undrained Triaxial
- Consolidated undrained triaxial test
- Specific gravity
- Grain size distribution: sieve and hydrometer
- Crumb test
- Double hydrometer

Our laboratory testing program includes examination of soil samples by an engineer. Based on the results of our field and laboratory programs, we will describe and classify soil samples in accordance with the Unified Soil Classification System (USCS).

Engineering and Project Delivery

Results of our field and laboratory programs will be evaluated by a professional engineer. The engineer will develop a geotechnical site characterization, perform the engineering calculations necessary to develop appropriate geotechnical engineering design criteria for earth-related phases of the project.

Your project will be delivered using our **GeoReport®** system. Upon initiation, we provide you and your design team the necessary link and password to access the website (if not previously registered). Each project includes a calendar to track the schedule, an interactive site map, a listing of team members, access to the project documents as they are uploaded to the site, and a collaboration portal. The typical delivery process includes the following:

- Project Planning – Cost estimate information, schedule and anticipated exploration plan will be posted for review and verification
- Site Characterization – Findings of the site exploration
- Geotechnical Engineering – Recommendations and geotechnical engineering report

When utilized, our collaboration portal documents communication, eliminating the need for long email threads. This collaborative effort allows prompt evaluation and discussion of options related to the design and associated benefits and risks of each option. With the ability to inform all parties as the work progresses, decisions and consensus can be reached faster. In some cases, only minimal uploads and collaboration will be required, because options for design and construction are limited or unnecessary. This is typically the case for uncomplicated projects with no anomalies found at the site.

When services are complete, we upload a printable version of our completed geotechnical engineering report, including the professional engineer's seal and signature, which documents our services. Previous submittals, collaboration and the report are maintained in our system. This allows future reference and integration into subsequent aspects of our services as the project goes through final design and construction.

The geotechnical engineering report will provide the following:

- Boring logs with field and laboratory data
- Stratification based on visual soil classification
- Groundwater levels observed during drilling and sampling
- Groundwater levels observed in the piezometers

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- Site and boring location plans
- Subsurface exploration procedures
- Description of subsurface conditions
- Temporary groundwater control and excavation considerations
- Utility bedding and backfill
- Subgrade preparation/earthwork recommendations
- Foundation design and construction recommendations for drilled straight shafts
- LPILE design parameters and analysis (If requested)
- D_{50} and D_{90} values for scour analysis to be performed by others
- Design guidelines for rigid pavements

If the location of the detention pond is not determined prior to issuance of our geotechnical engineering report, Terracon plans to issue a supplemental report with the following recommendations:

- Detention pond construction considerations
- Global stability analysis for pond slopes (one cross-section) under short-term, long-term, and rapid drawdown conditions
- General discussion on slope protection and erosion control for the detention pond

EXHIBIT C - COMPENSATION AND PROJECT SCHEDULE

Compensation

Based upon our understanding of the site, the project as summarized in **Exhibit A**, and our planned Scope of Services outlined in **Exhibit B**, our base fee is shown in the following table:

Task	Lump Sum Fee
Watts Plantation Road Alignment: Subsurface Exploration, Laboratory Testing, Geotechnical Consulting and Reporting	\$9,100
Bridge: Subsurface Exploration, Laboratory Testing, and Geotechnical Engineering Recommendations ¹	\$8,500
LPILE Analysis (\$2,000 per case. We estimate two cases.)	\$4,000
Clearing of Pathways (1 day)	\$3,000
Total	\$24,600

1. We assume the mobilization for the bridge borings will be done simultaneously with the roadway and storm sewer borings and an additional day for clearing of pathways to access the boring locations will not be required.

The detention pond cost estimate that is not included in the base fee is provided below:

Task	Lump Sum Fee
Subsurface Exploration, Laboratory Testing, Geotechnical Consulting and Reporting for the Detention Pond ^{1,2}	\$13,400
Clearing of Pathways (1 day) ³	\$3,000

1. This cost assumes that our scope associated with roadway and detention pond will be completed concurrently, and that two geotechnical engineering reports (one main report for the roadway and storm sewer recommendations and a supplemental letter report for the detention pond recommendations) will be submitted. As stated previously, we request the opportunity to review and revise our scope based on the actual size and depth of the detention pond, if needed.
2. Based on the discussion with TERRA Associates, we understand that the pond will be designed and constructed in accordance with Fort Bend County and Fort Bend County Drainage District guidelines in the current scope of work. If there is any change in the current scope, Terracon should be contacted to revise our scope of services.
3. If the detention pond site is heavily wooded at the time of our field program.

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Additional services not part of the base fee include the following:

Additional Services	Fee	Initial for Authorization
Additional Footage Fee (per boring) ¹	\$75	
LPILE Analysis (per case)	\$2,000	
<p>1. Borings with water bearing sand layers observed at the termination depth, the boring will be extended 5 feet beyond the termination depth based on Fort Bend County guidelines. An additional fee of \$75 per boring (includes drilling for additional footage) will be added to the current base fee for each boring with a water bearing sand layer at the termination depth.</p>		

Our Scope of Services does not include services associated with survey of boring locations, special equipment for wet/soft ground conditions, or repair of/damage to the existing landscape. If such services are desired by the owner/client, we should be notified so we can adjust our Scope of Services.

Unless instructed otherwise, we will submit our invoice(s) to the address shown at the beginning of this cost estimate. If conditions are encountered that require Scope of Services revisions and/or result in higher fees, we will contact you for approval, prior to initiating services. A supplemental cost estimate stating the modified Scope of Services as well as its effect on our fee will be prepared. We will not proceed without your authorization.

Project Schedule

We developed a schedule to complete the Scope of Services based upon our existing availability and understanding of your project schedule. However, this does not account for delays in field exploration beyond our control, such as weather conditions, permit delays, or lack of permission to access the boring locations. In the event the schedule provided is inconsistent with your needs, please contact us so we may consider alternatives.

GeoReport® Delivery	Posting Schedule ^{1, 2}
Roadway, Storm Sewer, and Bridge	
Project Planning	5 working days from notice to proceed
Field Work Mobilization	10 to 15 working days from notice to proceed
Site Characterization	20 working days from completion of field program
Geotechnical Engineering Report	30 working days from completion of field program
Detention Pond	
Field Work Mobilization	10 working days from finalizing the proposed pond location
Site Characterization	20 working days from completion of field program
Geotechnical Engineering Report	30 working days from completion of field program

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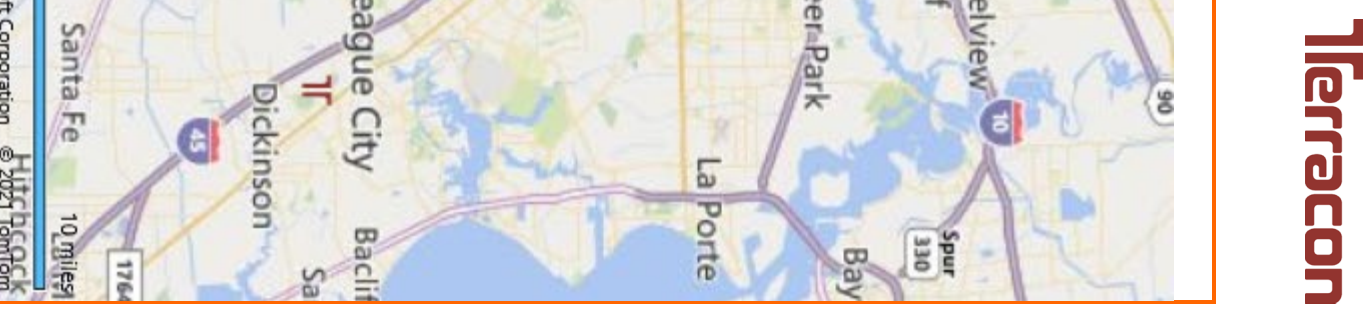
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GeoReport® Delivery	Posting Schedule ^{1, 2}
<ol style="list-style-type: none">1. Upon receipt of your notice to proceed we will activate the schedule component of our GeoReport® website with specific, anticipated calendar days for the three delivery points noted above as well as other pertinent events such as field exploration crews on-site, etc.2. We will maintain a current calendar of activities within our GeoReport® website. In the event of a need to modify the schedule, the schedule will be updated to maintain a current awareness of our plans for delivery.	

Terracon

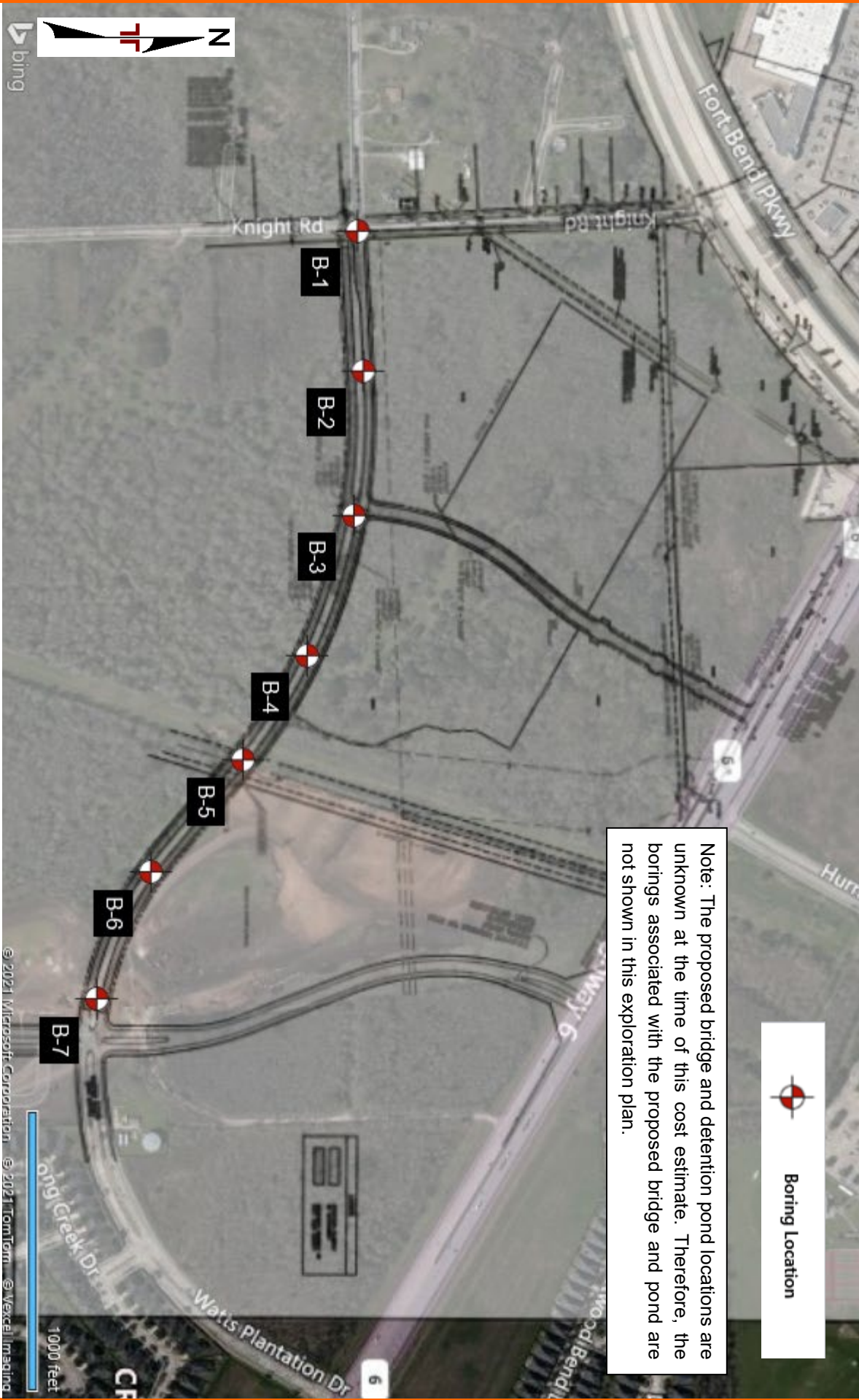
Terracon



PROVIDED BY MICROSOFT BING MAPS

EXHIBIT E – ANTICIPATED EXPLORATION PLAN

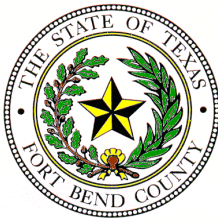
Watts Plantation Road Extension ■ Fort Bend County, Texas
October 20, 2022 ■ Terracon Document No. P92215589.Revision2



Note: The proposed bridge and detention pond locations are unknown at the time of this cost estimate. Therefore, the borings associated with the proposed bridge and pond are not shown in this exploration plan.

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS



Fort Bend County Engineering
FORT BEND COUNTY, TEXAS

J. Stacy Slawinski, P.E.
County Engineer

MEMORANDUM

May 18, 2022

TO: Members of the Commissioners Court

**RE: Agreement with Bowman
Agreement with Berg-Oliver
Watts Plantation, 17210**

The amount of \$500,000 will be transferred from the following project in order to fund these Agreements:

No.	Project	Amount
13207	Lake Olympia Seg. 2	\$500,000
Total		\$500,000