STATE OF TEXAS §

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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 Gradient Group, LLC, (hereinafter "Consultant"), a company authorized to conduct business in the State of Texas.

# WITNESSETH

WHEREAS, County desires that Consultant provide professional engineering services for the re-evaluation and realignment for a portion of Segment C of the Grand Parkway's Record of Decision Alignment (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 dated January 13, 2022, 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 Consultant's fees shall be calculated at the rates set forth in the attached Exhibit A. The Maximum Compensation for the performance of Services within the Scope of Services described in Exhibit A is five hundred eight thousand six hundred ninety dollars and no/100 (\$508,690.00) 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 five hundred eight thousand six hundred ninety dollars and no/100 (\$508,690.00) 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 five hundred eight thousand six hundred ninety dollars and no/100 (\$508,690.00).

# **Section 5. Time of Performance**

Time for performance of the Scope of Services under this Agreement shall begin with receipt of the Notice to Proceed and end no later than December 31, 2025. 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.

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**

CONSULTANT 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 CONSULTANT'S LIABILITY, ARISING FROM ACTIVITIES OF CONSULTANT, ITS AGENTS, SERVANTS OR EMPLOYEES, PERFORMED UNDER THIS AGREEMENT THAT RESULT FROM THE NEGLIGENT ACT, INTENTIONAL TORT, ERROR, OR OMISSION OF CONSULTANT OR ANY OF CONSULTANT'S AGENTS, SERVANTS OR EMPLOYEES.

## Section 12. Confidential and Proprietary Information

- 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.
- at least the same degree of care that Consultant uses in maintaining the 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, 1<sup>st</sup> Floor Richmond, Texas 77469

Consultant: Gradient Group, LLC

2107 CityWest, Suite 450 Houston, Texas 77042

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

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

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

# **Section 15. Compliance with Laws**

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 Does not boycott energy companies and are 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.
- 25.2 Does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and are 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.
- 25.3 Does not boycott Israel and are 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.
- 25.4 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 2252.153 or section 2270.0201 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.

[THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK.]

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

FORT BEND COUNTY	GRADIENT GROUP, LLC							
	Attamil Andrean							
KP George, County Judge	Authorized Agent – Signature							
	Stephanie Anderson, PE							
Date	Authorized Agent – Printed Name							
ATTEST:	President Title							
	08 February 2022							
Laura Richard, County Clerk	Date							
APPROVED:								
J. Stacy Slawinski, P.E., County Engir	_ neer							
	AUDITOR'S CERTIFICATE							
I hereby certify that funds ar pay the obligation of Fort Bend Cou	e available in the amount of \$ to accomplish and not nty under this contract.							
	Robert Ed Sturdivant, County Auditor							
I:\Marcus\Agreements\Engineering\Road Construction\Grand Parkway	(SH 99)\Segment C\Agreement for Re-Eval - Seg C.Gradient.docx.2/4/2022. 22-Eng-100652							

# **EXHIBIT A**



January 13, 2022

Mr. Stacy Slawinski, PE County Engineer Fort Bend County 301 Jackson Street, Suite 401 Richmond, Texas 77469

Reference: Re-Evaluation and Realignment of a portion of Segment C of the Grand Parkway Record of Decision Alignment – Segment C

Dear Mr. Slawinski:

Gradient Group, LLC (Engineer), in professional association with Cobb Fendley Associates and Bio West, Inc, appreciates the opportunity to provide our proposal for professional services to Fort Bend County (County) for the re-evaluation and realignment for a portion of the Segment "C" on the Grand Parkway's Record of Decision Alignment for Segment "C" of the Grand Parkway in Fort Bend County, Texas (Project). Our proposal is based upon the following scope of services, compensation, schedule, and the terms and conditions in the County's Standard Professional Services Agreement.

## PROJECT UNDERSTANDING

This proposal includes providing data collection and environmental documents/studies in support of the schematic engineering for the proposed realignment of SH 99 Segment C associated with the Fort Bend Parkway intersection in Fort Bend County, Texas. The proposed project is approximately 5 miles in length (limits as shown in the attached exhibit) and includes the area within the Austin Point Development. The tasks include preparation of technical reports in support of an EIS Re-evaluation for review and approval by Fort Bend County and TxDOT Houston District to be prepared in accordance with TxDOT guidance. The project could require up to approximately 240 acres of additional right of way (ROW) (not evaluated in the previous EIS) and additional easements for proposed drainage improvements. The amount and location of additional proposed ROW and/or permanent and temporary easements for drainage has not yet been determined. The Re-evaluation shall meet the requirements set forth in the State's Environmental Compliance Toolkit guidance.

The Engineer shall prepare the re-alignment layout using the traffic count data count-provided alignment and proposed roadway schematic layout to include projected traffic volumes and existing and proposed typical sections as required by the Texas Department of Transportation (TxDOT) — Houston District. The Engineer shall furnish Microsoft Office and MicroStation V8i-Geopak computer generated media containing the roadway conceptual schematic realignment layout to the State. All supporting attachments and exhibits shall accompany the schematic layout. All MicroStation and Geopak computer generated files containing the roadway design schematic shall be compatible with the software used by TxDOT.

The Engineer shall produce, obtain, review, and evaluate existing and 20-year projected traffic data for use in the preparation of the schematic realignment layout and re-evaluation. The data shall be utilized in accordance with the requirements for schematic development and consistent with the policies of TxDOT.



The Engineer shall prepare preliminary drawings to identify any potential impacts within the project corridor, including impacts to the nature, cultural, and human environment. Identification should include, but not be limited to all existing and proposed utilities (public and private), structures, burial grounds, neighborhood communities, historical landmarks, and undeveloped areas is required. Any potential utility conflicts and structural impediments must be identified as such. The Engineer shall render assistance to the State for agency meetings as necessary during the development of the schematic design as requested by the State. The Engineer shall also render assistance to the County for meetings with the two affected property owners (MAPOs). It is our understanding based on pervious conversations with TxDOT and others, a public hearing may not be required therefore not included in this scope and service. If required, this would be authorized as an additional service.

An itemization of the schematic realignment and re-evaluation activities to be performed under this contract are detailed below. The conceptual schematic realignment layout shall be prepared in accordance with the latest version of: TxDOT Roadway Design Manual, TxDOT Project Development Process Manual, AASHTO Policy on Geometric Design of Highways and Streets, TxDOT Standard Specifications for Construction of Highways, Streets, and Bridges, TxDOT Traffic Operations Manual on Highway Operations, Texas Manual on Uniform Traffic Control (TMUTCD), Highway Capacity Manual - Transportation Research Board, TxDOT Hydraulic Design Manual, and TxDOT Access Management Manual.

The following are the anticipated basic services and optional additional services that will be required for this project.

## **SCOPE OF SERVICES**

#### **BASIC SERVICES**

#### Task 1: Proposed Scoping and TxDOT Coordination

- The Engineer shall prepare documentation for review and approval by the County and TxDOT that outlines the project description and anticipated resource documents and necessary agency coordination.
- Gather and review all existing related engineering and environmental data from TxDOT, Fort Bend County and Others.

#### Task 2: Agency Coordination

 The Engineer shall assist the County in conducting meetings with TxDOT and various agencies to discuss and review the re-evaluation and layout realignment. The Engineer shall document and respond to issues related to the conceptual schematic realignment.

## Task 3: Survey and Right of Entry

Perform new RIGHT-OF-WAY Mapping for the project, consisting of illustrating the proposed right-of-way of said Grand Parkway, for an approximate 2-mile stretch. Perform survey control verification, along with establishing or re-setting Primary Control Points within the project limits. Perform boundary reconnaissance throughout all parent tracts, along with necessary retracement of boundaries associates with the 2,232-acres mentioned above. Surveyor shall submit preliminary and final deliverables, along with PS&E survey control submittals.



## 3:1 Abstracting for all associated parcels only

- Obtain existing ownership documents for the parent tracts, along with associated subdivision plats and record documents defining easements.
- Prepare a new Abstract Map.

# 3:2 Right of Entry (ROE)

- Prepare right-of-entry mailer (letter to be approved by FBC) and mail via Certified USPS delivery
- Prepare spreadsheet of contact with property owners
- Make efforts on the ground, in the event of an unresponsive owner
- Submit copies of final spreadsheet and all correspondence
- Survey Control (TxDOT Standards).
- Perform GNSS observations, to District Standards.
- Recover/Establish Primary Control Points.
- Establish Secondary Control Points as needed for survey tasks.
- Prepare Survey Control Layout Sheet(s).
- Prepare PS&E Survey Control Submittal.
- Prepare 8.5x11 Control Sheets for all Primary Control Points.

## 3:3 Field Surveys

- Establish/recover existing horizontal control to locate/set property corners.
- Perform boundary reconnaissance, utilizing GNSS and or conventional surveying methods, to obtain necessary boundary corner information of the 2,232-acres.
- Set TxDOT Type II ROW monuments per Houston District Standards.
- Field data collection of any identified Wetlands (to be delineated by third party) supplied to Cobb Fendley,
   by a final report.

#### 3:4 Right-of-way Map and Exhibits

- Prepare right-of-way map for new parcels.
- Prepare exhibits, including Metes and Bounds descriptions and parcel plats. Three (3) parcels are estimated in this effort, located within Fort Bend CAD ID #'s R45543, R30463 and R30464.
- Surveyor to complete Preliminary and Final submittals for both.

## 3:5 GIS Deliverables

- Surveyor shall prepare the right-of-way ArcGIS database files.
- Surveyor shall upload GIS files into TxDOT Connect, per direction of the TxDOT Houston District, Survey Division.

#### 3:6 QA/QC

- The Surveyor shall perform a Quality Control Procedure for all tasks performed.
- Surveyor shall prepare checklists for each task.
- Surveyor shall prepare a Surveyor's Report for procedures, findings & decisions made.



#### **Task 4: Stakeholder Meeting**

• The Engineer shall schedule and facilitate a Meeting with Affected Property Owners (MAPO), Austin Point Development Company and the George Foundation.

## Task 5: Public Meetings / Public Hearing

• No public meetings, nor no public hearings, will be conducted during this realignment and re-evaluation study process.

## Task 6: Traffic Engineering

#### 6.1) Data & Projections Update

- The Engineer shall prepare and submit for approval to the County (and TxDOT), Traffic Projections Methodology memo, to update the previously approved traffic projections for the study segment. The Engineer shall coordinate with the County, TxDOT and the Houston-Galveston Area Council (H-GAC) to utilize the conformity regional travel demand model (TDM) in order to gather demand within the corridor during the projected years. The traffic projections will be conducted in accordance with State Transportation and Programming Division (TPP) Option B wherein District and TPP-T Jointly Responsible for Development of Traffic Data and TPP-T Signs/Seals Final Project.
- The Engineer shall develop traffic forecasts for the main lanes, ramps, cross streets, interchanges, intersections, and frontage roads for the recommended alternative. The Engineer shall develop the opening year, design-year (opening year +20) and pavement design year (opening year + 30) travel forecasts.
- A technical memorandum shall be prepared tabulating the projected corridor volumes with stick diagrams.

#### 6.2) Recommended Alternative Traffic Analysis

- The Engineer shall utilize the H-GAC's Regional TDM to determine travel demand for the recommended alternative during the projected years. Model runs shall be conducted that incorporate all planned network improvements expected in the study area.
- Using the projected data, the Engineer shall conduct capacity/level-of-service analysis for the recommended alternative using HCS (for main lanes and ramp junctions) and Synchro (for intersections).
- A technical memorandum shall be prepared tabulating the analysis results.

# Task 7: Conceptual Schematic Realignment Layout

 The Engineer shall prepare a revised alignment and proposed roadway conceptual schematic layout to include projected traffic volumes and proposed typical sections. Tasks involved in the development of the schematic design shall include:

## 7.1) Data Collection

 The Engineer shall obtain necessary and relevant files from the County, including but not limited to, previous design files, existing roadway design files, proposed and existing ROW files, property lines, existing and proposed utility files, drainage reports, proposed improvements/developments, etc.



## 7.2) Develop Base Maps

• The base maps to be used for the analysis and proposed conceptual schematic realignment layout shall be developed by the Engineer from existing construction, design and right of way (ROW) plans as available. The Engineer shall re-establish the existing centerline horizontal alignments for all roadways, identify existing ROW, existing easements, property owners and the approximate location of major utilities based on existing Subsurface Utility Engineering (SUE - Level D & E Only) information provided by the County in the preparation of base maps.

## 7.3) Planimetrics and Aerial Mapping

• Planimetrics, Digital Terrain Modeling (DTM), and aerial photographs shall be furnished to the Engineer by the County, if available.

#### 7.4) Analyze Existing Conditions

- Using collected data and base maps, the Engineer shall develop an overall analysis of the existing conditions to develop the schematic design. The analysis shall include, but not be limited to the following:
  - a. ROW and easement determination
  - b. Horizontal alignment
  - c. Vertical alignment
  - d. Pavement cross slopes and pavement type
  - e. Sight distance
  - f. Locations of critical constraints
  - g. Drainage

#### 7.5) Roadway Design Criteria

The Engineer shall utilize the Design Criteria established for Grand Parkway by the County. The design
criteria shall include the following roadway design elements: design speed, lane and shoulder widths,
pavement structure and slopes, horizontal curvatures, horizontal and vertical clearances, range of vertical
profile grades, and side slopes.

## 7.6) Alternatives Development

• No additional alternatives will be developed

## 7.7) Schematic Design Considerations

- The Engineer shall consider the following in the analysis to optimize the design:
  - a. Efficient use of the allocated ROW
  - **b.** Cross Sections
  - c. Drainage and Hydraulic design
  - d. Stopping Sight distance
  - e. Construction, ROW, easement, and utility costs
  - f. Roadside safety appurtenances
  - g. Environmental mitigation (For example: Noise Walls, Storm Water Best Management Practices (BMP's), etc.)
  - h. Bridge Layouts and Clearance



- i. Accommodation of future cross street expansion as described in local thoroughfare plan if applicable.
- ii. Avoidance of utility lines if feasible.
- iii. Impact of construction delays from utility relocations.

#### 7.8) Preliminary Drainage Design & Detention Requirements

• The Engineer shall determine the existing design flow and proposed conditions using Atlas-14 (10-year and 100-year). Identify potential detention locations in the schematic layout.

#### 7.9) Geometric Schematic Layout

- The Engineer shall assist with developing geometric schematic layout based on the conceptual schematic realignment layout after the basic layout, lane arrangement, and ROW and easements requirements depicted on the conceptual schematics are approved. The Engineer shall use Bentley OpenRoads Technology in performing this task.
- The geometric schematic plan view must contain the following design elements:
  - a. Bentley OpenRoads calculated roadway alignments for main lanes, ramps, bridges, frontage roads and cross streets at major intersections and grade separations.
  - b. Horizontal curve data shown in tabular format.
  - c. Pavement edges, curb lines, sidewalks for all roadway improvements.
  - d. Typical sections of existing and proposed roadways.
  - e. Proposed horizontal structure locations, bridge layouts including abutment, bent and rail locations.
  - f. Existing and proposed major utilities.
  - g. Existing property lines and respective property ownership information.
  - h. Existing ROW and easements.
  - i. ROW and easements requirements adequate for preparation of ROW maps.
  - j. Waters of the US (WOUS).
  - k. Control-of-access limits.
  - I. Existing and projected traffic volumes.
  - m. Location and text of the existing and proposed general purpose lanes guide signs and the preliminary locations for changeable message signs.
  - n. Lane lines, shoulder lines, and direction of traffic flow arrows indicating the number of lanes on all roadways.
  - o. Existing utilities.
- The conceptual geometric schematic profile realignment view shall contain the following design elements:
  - a. Calculated profile grade and vertical curve data including "K" values for the main lanes.
  - b. Existing ground line profiles along the main lanes.
  - c. Grade separations and overpasses including preliminary bent locations, girder type, and span lengths.
  - d. Calculated vertical clearances at grade separations and overpasses.



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• The calculated profile grade for frontage roads, connectors, ramps, and cross streets will be shown on separate Supplemental Profile rolls.

#### 7.10) Cross-Sections

 The Engineer shall use a Bentley 3D OpenRoads model to generate preliminary cross-sections every 50 feet and at culvert locations in conjunction with the Geometric Schematic. The Engineer shall assist with determining earthwork volumes for use in the cost estimate, and preparation of roll plots of the crosssections.

## **Task 8: Environmental Investigation**

#### 8:1 Prepare Environmental Constraints Map

• Prepare and compile appropriate environmental constraints map that document environmentally sensitive areas to be considered for avoidance during initial design.

## 8:2 Waters of the U.S. Delineation and Investigation

- Conduct a WOTUS delineation on the subject property. Surveys will include an identification and delineation of jurisdictional wetlands and waterbodies according to the 2010 Regional Supplement to the 1987 USACE Wetland Delineation Manual: Atlantic and Gulf Coast Plain Region Version 2.0 (Supplement), Regulatory Guidance Letter 05-05 Ordinary High Water Mark (OHWM) Identification, and other applicable industry guidance and standards which includes a vegetation characterization, observations of soils up to 20 inches below the surface, hydrology, and supporting photographic documentation. All coordinates and boundaries of jurisdictional waters of the U.S. within the property will be mapped using a Trimble® GeoXH™ 6000 or 7000 differentially corrected global positioning system (DGPS) receiver and post-processed to sub-meter accuracy. Provide these electronic data sets as frequently as needed to the client and/or engineer.
- The purpose of this wetland delineation study is to map and delineate the sizes and locations of potentially jurisdictional waters of the United States, which includes, but is not limited to, wetlands and other special aquatic sites. To classify an area as a wetland, specific technical criteria with regards to vegetation, soils and hydrology must be met. Study methods include the following: 1) review of U.S. Geological Survey topographic maps, Natural Resources Conservation Service maps and local county Soil Survey maps; 2) review of historical color, black and white, and infrared aerial photographs; 3) field wetland delineation of the project site for identification of wetlands and other water bodies; 4) use of a Trimble® Global Positioning System (GPS) device with sub-meter accuracy to mark each sampling location and the extent of any wetlands and waters of the U.S. within the proposed ROW boundaries per United States Army Corps of Engineers (USACE) Galveston District Standards. A waters of the U.S. delineation report will be prepared as well as appropriate TXDOT documentation will be compiled and submitted to Gradient.

## 8:3 Threatened and Endangered Species Investigation

Obtain current federal and state-listed threatened and endangered species lists for the proposed
project area. A field-based site visit will be conducted and during the visit, the site will be investigated
for its ability to contain listed species or their critical habitat. Agency records will also be reviewed for
any critical habitat that may occur within the project vicinity. A findings statement will be included in



the environmental overview report and appropriate TxDOT documentation will be compiled and submitted.

#### 8:4 Archeological investigation

- A Historic Resource Project Coordination Request (PCR) will be conducted. This PCR will be in compliance with Section 106 and Section 110 of the NHPA (36 CFR 800) and will comply with the TXDOT Environmental Compliance Toolkit.
- Archaeological investigation and reporting will follow rules and guidelines outlined in the Texas
  Administrative Code (Title 13, Part 2, Chapter 26), the Texas Historical Commission Archeological
  Survey Standards for Texas, and the Council of Texas Archeologists Guidelines for Cultural Resource
  Management Reports. An archival research review will be conducted via the Internet at the Texas
  Historical Commission's (THC) TASA to identify the presence of previously recorded archeological sites,
  cemeteries, or historic properties listed on the National Register of Historic Places (NRHP) or designated
  as State Archeological Landmarks (SAL) within a 1.0-mile radius of the proposed project area.
  Additionally, a review for previous cultural resource surveys within the proposed project area will be
  conducted.
- Pedestrian survey of the project area will also be conducted according to TxDOT and SHPO standards for linear transportation projects. At this time, no artifact curation or deep trenching survey is included in this scope of work.

## 8:5 Hazardous Materials Assessment (ISA)

Prepare an ISA for potential hazardous materials impacts for the limits of the study area in accordance
with the latest version of TxDOT's Hazardous Materials ISA located in the Hazardous Materials Toolkit.
The ISA shall determine the potential for encountering hazardous materials in the study area, including
possible environmental liability, increased handling requirements (e.g., soil or groundwater), and
potential construction worker health and safety issues.

## 8:6 Coordination for Community Impact Analysis, Air Quality Analysis, and Traffic Noise Analysis

 Coordinate and compile an appropriate Community Impact Analysis, Air Quality Analysis, and Traffic Noise Analysis. This task is specifically for additional project management and coordination for 3rd party consultant(s) and does not include fees associated with these specific tasks.

## 8:7 Prepare Documented Reevaluation Checklist

• Prepare a Documented Reevaluation Checklist (DRC) Form for review and approval by the State with all available data gathered over the course of the project.

## 8:8 General Project Management and Agency Coordination

• Attend meetings and make themselves available to the project engineer, developer, and landowner for various meetings, phone calls, and day to day project management over the course of the project.



#### Task 9: Contract Management and Project Management

The Engineer shall:

- Perform work in accordance with the County and TxDOT's latest practices, criteria, specifications, policies, procedures, and Environmental Compliance Toolkits. Documents shall be sufficient to satisfy the current Environmental Compliance Toolkits available from the State.
- Act as an agent for the County.
- Produce a complete and acceptable deliverable for each environmental service performed for environmental documentation.
- Incorporate environmental data into identification of alternatives.
- Notify the County of its schedule, in advance, for all field activities.
- When specified, seek right of entry from public or private landowners to perform environmental services. Right of entry permission shall be written and signed by the landowner. Develop letters or other materials for seeking right of entry. Letters or other materials seeking right of entry shall not be distributed without prior approval of the State. Letters or other materials seeking right of entry shall contain explicit reference to the kinds of activities for which right of entry is requested and an indication of the impacts (if any) that will result from performance of environmental services.
- Notify the client as soon as practical, by phone and in writing, if performance of environmental services
  discloses the presence or likely presence of significant impacts (in accord with 40 Code of Federal
  Regulations (CFR) 1500-1508). Inform the County of the basis for concluding there are significant impacts
  and the basis for concluding that the impacts may require mitigation.
- Notify the County as soon as practical, by phone and in writing, if performance of environmental services
  results in identification of impacts or a level of controversy that may elevate the Transportation Activity's
  status from a categorical exclusion or environmental assessment, and the State will reassess the
  appropriate level of documentation.
- Coordinate with the County for the duration of the project 9 months assumed.
- Attend regular coordination meetings with the project team 18 meetings assumed.
- The Engineer shall direct and coordinate the various elements and activities associated with developing the schematic realignment.
- The Engineer shall prepare the detailed graphic Project Work Schedule indicating tasks, critical dates, milestones, deliverables, and State review requirements. The Project Work Schedule will depict the order of the various tasks, milestones, and deliverables. The Engineer shall review and provide comments on its elements of the schedule to the State.
- The Engineer shall prepare subcontracts for subconsultants, direct and monitor subconsultants activities, and review subconsultant work and invoices.
- The Engineer shall provide ongoing quality assurance and quality control to ensure completeness of product and compliance with the County's and TxDOT's procedures.
- For each deliverable, the Engineer shall perform quality assurance quality control (QA/QC) reviews of
  environmental documents and on other supporting environmental documentation to determine whether
  documents conform with:
  - Current Environmental Compliance Toolkit guidance published by TxDOT's Environmental Affairs
     Division and in effect as of the date of receipt of the documents or documentation to be reviewed;
  - o Current local, state, and federal laws, regulations, policies, guidance, agreements, and memoranda of understanding between the County and state or federal agencies; and

- FHWA and American Association of State Highway and Transportation Officials (AASHTO) guidelines contained in "Improving the Quality of Environmental Documents, A Report of the Joint AASHTO and American Council of Engineering Companies (ACEC) Committee in Cooperation with the Federal Highway Administration" (May 2006) for:
- Readability, and use of evidence and data in documents to support conclusions.
- The Engineer shall prepare and submit invoices.

#### **ADDITIONAL SERVICES**

Because the effort required for some items of work varies considerably from project to project, and because some items of work are sometimes provided separately by the County, these items of work are not included in the basic services scope and fee, but can be provided by Huitt-Zollars, Inc. under additional authorization and compensation from the County. Such additional services may include:

- Final Design, Bidding and Construction Phase Services
- Geotechnical Investigations and Report
- Public Meetings
- Public Hearings
- Traffic Data & Projections Update & Traffic Analysis
- Work south of the Austin Point Development along the Grand Parkway Alignment
- Work associated with the Fort Bend Parkway
- MAPOS

## **COMPENSATION**

- <u>Professional Service Fee and Reimbursable Budget</u> Our estimated level of effort and lump sum fee estimate for the Basic Services is illustrated below.
- Invoicing Invoices will be submitted monthly. Lump Sum work shall be invoiced based upon percentage
  of work completed.

TASK	BUDGET			
Task 1: Proposed Scoping and TxDOT Coordination	\$6,256.00			
Task 2: Agency Coordination	\$5,355.00			
Task 3: Survey and Right of Entry	\$72,850.00			
Task 4: Stakeholder Meeting	\$3,128.00			
Task 5: Public Meetings / Public Hearing	\$0			
Task 6: Traffic Engineering	\$21,086.00			
Task 7: Conceptual Schematic Realignment Layout	\$186,664.00			
Task 8: Environmental Investigations	\$190,351.00			
Task 9: Project Management & Coordination	\$15,000.00			
Expense Reimbursables	\$8,000.00			
TOTAL	\$508,690.00			

## Fee Breakdown

Surveying \$72,850.00 Environmental \$190,351.00 Engineering \$245,489.00



## **SCHEDULE**

• Project Schedule – The 9-month project schedule is illustrated below.

Task	Duration (Month)										
	1	2	2	3	4	5	6	7 8	3	9 10	
Task 1: Proposed Scoping and TxDOT Coordination	*										
Task 2: Agency Coordination			*						*		
Task 3: Survey and Right of Entry											
Task 4: Stakeholder Meeting			*						*		
Task 5: Public Meetings / Public Hearing											
Task 6: Traffic Engineering											
Task 7: Conceptual Schematic Realignment Layout											
Task 8: Environmental Investigations											
Task 9: Project Management & Coordination	*	$\star$	*	*	*	*	*	*	*		
		Projec	ct Meeting							•	
	_	Final	Report & 0	Conceptual	Schematic						

We appreciate the opportunity to present this proposal to the Fort bend County. If you need additional information in support of this proposal, please contact me at 832-779-5700 or on my mobile at 979-574-5173.

Respectfully Submitted, **GRADIENT GROUP, LLC** 

/ Wy wind

President

Linc Wright, PE Project Manager