

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 TEDSI Infrastructure Group, Inc., (hereinafter "Contractor"), a company authorized to conduct business in the State of Texas.

WITNESSETH

WHEREAS, County desires that Contractor provide professional engineering services for the realignment of Sims Road at Texas Spur 10 under the Sims Road Project, Number 17119x of the 2017 Mobility Bond Program (hereinafter "Services") pursuant to SOQ 14-025; and

WHEREAS, County has determined Contractor is the most highly qualified provider of the desired Services on the basis of demonstrated competence and qualifications, and County and Contractor 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, Contractor 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

Contractor shall render the professional engineering services, including the surveying, right-of-way mapping, geotechnical investigations, roadway design, drainage design, traffic control design and utility coordination for the project as described Scope of Services attached hereto as Exhibit A, and incorporated herein for all purposes.

Section 2. Personnel

2.1 Contractor 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 Contractor 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 Contractor shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of Contractor 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 Contractor'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 one hundred twelve thousand eight hundred dollars and no/100 (\$112,800.00) 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 Contractor 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 Contractor based on the following procedures: Upon completion of the tasks identified in the Scope of Services, Contractor 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 Contractor clearly understands and agrees, such understanding and agreement being of the absolute essence of this Agreement, that County shall have available the total maximum sum of one hundred twelve thousand eight hundred dollars and no/100 (\$112,800.00) specifically allocated to fully discharge any and all liabilities County may incur.

4.2 Contractor does further understand and agree, said understanding and agreement also being of the absolute essence of this Agreement, that the total maximum compensation that Contractor may become entitled to and the total maximum sum that County may become liable to pay to Contractor shall not under any conditions, circumstances, or interpretations thereof exceed one hundred twelve thousand eight hundred dollars and no/100 (\$112,800.00).

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, 2022. Contractor 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 Contractor 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 Contractor 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 Contractor 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 Contractor 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. Contractor'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 Contractor.

Section 8. Ownership and Reuse of Documents

All documents, data, reports, research, graphic presentation materials, etc., developed by Contractor 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. Contractor shall promptly furnish all such data and material to County on request.

Section 9. Inspection of Books and Records

Contractor will permit County, or any duly authorized agent of County, to inspect and examine the books and records of Contractor 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, Contractor 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. Contractor shall provide certified copies of insurance endorsements and/or policies if requested by County. Contractor 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. Contractor 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. 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.

10.1.2 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.

10.1.3 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.

10.1.4 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 Contractor 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, Contractor 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 Contractor 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 Contractor 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 Contractor 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 Contractor) publicly known or is contained in a publicly available document; (b) is rightfully in Contractor'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 Contractor who can be shown to have had no access to the Confidential Information.

12.2 Contractor agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Contractor 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. Contractor 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, Contractor shall advise County

immediately in the event Contractor 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 Contractor will at its expense cooperate with County in seeking injunctive or other equitable relief in the name of County or Contractor against any such person. Contractor agrees that, except as directed by County, Contractor 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, Contractor will promptly turn over to County all documents, papers, and other matter in Contractor's possession which embody Confidential Information.

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

12.5 Contractor 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 Contractor

13.1 In the performance of work or services hereunder, Contractor 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 Contractor 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 st Floor Richmond, Texas 77469
Contractor:	TEDSI Infrastructure Group, Inc. Attn: Mark W. Lupher, P.E., RPLS, Executive Vice President 738 Highway 6 South, Suite 430 Houston, Texas 77079

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

Contractor 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, Contractor shall furnish County with certification of compliance with said laws, statutes, ordinances, rules, regulations, orders, and decrees above specified.

Section 16. Standard of Care

Contractor 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, Contractor 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 Contractor 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 Contractor 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

25.1 Agreement to Not Boycott Israel Chapter 2270 Texas Government Code: By signature below, Contractor verifies Contractor does not boycott Israel and will not boycott Israel during the term of this Agreement.

25.2 Texas Government Code Section 2251.152 Acknowledgment: By signature below, Contractor represents pursuant to Section 2252.152 of the Texas Government Code, that Contractor is not listed on the website of the Comptroller of the State of Texas concerning the listing of companies that are identified under Section 806.051, Section 807.051 or Section 2253.153.

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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

TEDSI INFRASTRUCTURE GROUP, INC

Robert E. Hebert, County Judge

Jesus Salinas, President/CEO

Date


8-14-2018

Date

ATTEST:

Laura Richard, County Clerk

APPROVED:



Richard W. Stolleis, P.E., County Engineer

APPROVED AS TO LEGAL FORM:

Marcus D. Spencer, First Assistant County Attorney

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

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EXHIBIT A



TEDSI INFRASTRUCTURE GROUP

Consulting Engineers

738 Highway 6 South ♦ Suite 430 ♦ Houston, Texas 77079

July 3, 2018

Revised July 19, 2018

Mr. Stacy Slawinski, P.E.
Assistant County Engineer
Ft. Bend County Engineering Department
301 Jackson Street, 4th Floor
Houston, Texas

Attention: Mr. Kevin A. Mineo, PE, MBA

Re: *Proposal for Design of the Realignment of Sims Road at Tx Spur 10, approximately 220 feet North, Ft. Bend County Precinct 1*
UPIN:

Gentlemen:

TEDSI Infrastructure Group (TEDSI) appreciates the opportunity to submit this proposal to perform civil engineering services to provide Transportation Design Services for the realignment of Sims Road at Tx Spur 10 Project

Project Scope of Work

A scoping meeting was held on June 14th, 2018 between Binkley & Barfield and TEDSI. The following is in accordance with the resulting discussions and decisions.

Hydrologic & Hydraulics. Provide H&H analysis services, they will be provided in a PER Phase. Drainage for the proposed realignment of Sims Road will be conveyed by roadside open ditches.

Roadway Design. Prepare full detailed PS&E for the New Realignment of Sims Road, At Tx Spur 10 and Cottonwood School Road including compliance with AASHTO and Americans with Disabilities Act Accessibility Guidelines (ADAAG) as adopted by Ft. Bend County. Proposed new roadway alignment shall be 2-12-foot lanes with 6 foot shoulders and open ditch drainage. A proposed cul-de-sac will be constructed on the Existing Sims Road west of Tx Spur 10.

Signing and Marking Design. Prepare full detailed PS&E for necessary and customary signing and striping associated with the new realigned roadway design along Sims Road.

Asphalt Paving Design. The new asphalt pavement design shall be in compliance with the Americans with Disabilities Act Accessibility Guidelines (ADAAG) as adopted by Ft. Bend County. The pavement will utilize Ft. Bend or Harris County Pavement Specification.

General. Ft. Bend County / Harris County / TxDOT standard traffic control plans will be required for the project.

Utility Research and Relocation Conflicts. Provide Utility conflict tables and plans

Surveying & ROW: Provide a topographic survey and Right Of Way documents for New Alignment of Sims Road *(Provided by KM Surveying, LLC)*

Geotechnical Investigation: Provide an investigative study and report and Pavement Design Recommendations. *(Provided by QC Laboratories, Inc)*

Basic Engineering Services

Plan layouts shall be prepared per Ft. Bend County's Design Guidelines and shall be designed as to be constructed by a construction contractor. A Project Manual is required for bidding and contract process. Plan layouts shall be prepared in English units at 1" = 40' on half-sized, 11"x17" media. Interim submittals shall be first one PER at 30% complete level, Second one at 75% level of completion, third one at 95% level of completion and the final signed and sealed PS&E at 100% level of completion all on 11"x17" PDF bond media, together with all signatures from Utility Agencies and Engineer.


All design drawings shall be prepared with CADD using MicroStation V8 software and shall be consistent with the level structure as provided by Ft. Bend County/Harris County/TxDOT. The project Basis of Estimate will be provided in Ft. Bend County format.

Schedule

The PER work defined above can be completed within 90 calendar days after receiving Notice to Proceed. Detailed design & ROW parcel maps and Metes & Bounds is estimated at 180 calendar days. It is anticipated that Right of Way acquisition could be 365 days If for some reason the schedule needs to be revised, it shall be done at the discretion of Ft. Bend County. This schedule includes a reasonable time necessary for agency review and for performing the topographic survey and geotechnical analysis and reports. The time required for topographic survey and geotechnical reports is estimated at 45 calendar days.

Sincerely,

TEDSI INFRASTRUCTURE GROUP


Mark W. Lupher, P.E., RPLS
Executive Vice President

**SIMS ROAD REALIGNMENT
at TX SPUR 10**

**ATTACHMENT A
Rev. 7/19/2018**

WORK ELEMENT	Engineering Fees July-18
30% Completion/Preliminary Engineering/Cost Estimate	\$20,670.00
Prop. Alignment	
Drainage Impact Report	
70% Completion PS&E Engineering	\$27,560.00
Roadway Design	
Drainage Design	
SW3P/TCP	
95% Completion PS&E Engineering	\$17,225.00
Traffic - Signing and Pavement Markings	
TCP	
100% Completion PS&E Project Manual	\$3,445.00
Sub-Total Lump Sum Basic Engineering Services	\$68,900.00
Extras	
Topo Survey (KM Surveying, LLC)	\$18,475.00
Geotechnical (QC Labs, Inc.)	\$5,800.00
ROW Parcel Mapping (KM Surveying, LLC.) (Hourly Reimbursable)	\$14,625.00
Sub-Total Additional Subconsultants Lump Sum Services	\$38,900.00
Bid/Construction Phase Services	
Post Design Services (Hourly Reimbursable)	\$5,000.00
Sub-Total Additional Services	\$5,000.00
Total Engineering Fees & Extra Additional Services	\$112,800.00

ATTACHMENT "B"

UPIN: TBD Sims Road Realignment at Tx Spur 10 Scope of Services

SERVICES TO BE PROVIDED BY THE ENGINEER

The Scope of Services to be provided by the engineer shall be in accordance with the items outlined in the Engineering Project Scope and Additional Services Project Scope shown herein.

EXISTING CONDITIONS

Currently Sims Road is a 2-lane asphalt roadway with open roadside ditches in a West direction from Tx Spur 10. Additional proposed Right-of-Way along the corridor will be acquired for a total of 100 feet. There are no existing traffic signals within this project. There are no Drainage Channels within the proximity of this project.

BASIC FEE SERVICES - SCOPE OF WORK

The Engineer shall provide Preliminary Engineering (Study), Design and Contract Phase Engineering Services for the construction of Sims Road Realignment (Project).

The new Sims Road alignment will tie into west of the Cottonwood School Road @Tx Spur 10

Existing roadside drainage along existing Sims Road and the proposed realigned Sims Road will be routed and conveyed as needed.

All design submittals shall be electronic PDF. There will be 4 complete design submittals. First is the PER at a 30% complete, second is 70% complete, third will be a 95% submittal and the 4th and final submittal with all signatures ready for bidding. All submittals shall have report file (SWQMP/SWPPP), Utility conflict table, Cost Estimate, Bid Form & Project Plans.

The Engineer shall coordinate with County Survey consultant (KM Surveying, LLC) on Topographic Survey & ROW acquisition and limits of them.

The Engineer shall set stationing for the proposed Sims Road Realignment.

The design of the Sims Road realignment shall be a typical Ft. Bend County road consisting of asphalt roadway with open ditch drainage conveyance. The project will begin approximately 1000 feet west of TxDOT Spur 10 intersection, It will be necessary to coordinate with TxDOT to assure that vertical and horizontal alignments match, and to assure that any potential drainage from one project to the other is accounted for.

The project will end approximately 1000 feet west of the intersection of TxSpur 10 And Sims Road,

Engineering Services are to be performed in accordance with Ft. Bend County Guidelines for Engineers Having Engineering Contracts with Ft. Bend County, Texas for the Design of Roads and Bridges and the Preparation of Plans and Specifications. (Guidelines).

The following design parameters are clarifications and/or additional parameters supplementing the Guidelines and shall be followed by the Engineer in the development of the various design documents:

- The pavement elevation shall be set in accordance with the Guidelines, or from coordination with Ft. Bend Drainage District and Ft. Bend PID if there are any special circumstances.
- The pavement section for 2-12feet travel lanes and 6 foot shoulders with Open roadside ditches shall be designed in accordance with the "Guidelines".
- Shallow drainage roadside swales behind the curbs may be needed if there are large sheet flows from adjacent properties or if top of curb is above natural ground. A modified Type B inlet with a sloped Type "A" grate to pick up the swale is preferred. A detail will be necessary.
- Turning radii at intersecting streets shall be a minimum of 30 feet (more if warranted by a particular use or situation).
- Investigate sight distance restrictions and general operating conditions of all intersections.
- Median nose setbacks at intersections shall be 12 feet from the face of the curb of the intersecting street.
- All permanent striping shall be thermoplastic (Type I).
- A PER report will be completed at the end of the PER phase. This report will include all final study reports for geotechnical, drainage, alignment alternative exhibits, cost estimate and utility conflict table.

UTILITY CONFLICTS TABLE AND RELOCATION PLANS:

- The consultant shall address the utility maps provided by the utility companies together with field data provided by the surveyor's topo to determine utility conflicts and planned relocation of such

GEOTECHNICAL:

- This investigation will be performed in general accordance with the Ft. Bend County Engineering Department (Ft. Bend ED) design guidelines.
- We propose to drill 3 borings along the proposed Sims Road realignment and 1 boring along the existing Sims Road corridor to a depth of 15 feet below the existing grade.
- The borings along Sims Road will be spaced approximately 500 feet. We have assumed that open cut construction techniques will be utilized during the construction.
- Pavement coring and traffic control will be required for the field operations. The project site is accessible to a truck mounted drilling equipment. We will convert one boring into a piezometer to record long term water level readings.
- Water level readings in the piezometer will be recorded after 24 hours and 30 days. The piezometer will be abandoned after obtaining the 30-day water level readings.

DRAINAGE ANALYSIS & DESIGN

A. Study Phase

The goal of the Drainage Study Phase is to support the initial drainage meeting and inform the selection of drainage alternatives based on identified drainage requirements and constraints. Preliminary hydrologic and hydraulic analyses will be performed based on available information, and initial sizing of drainage infrastructure will be developed for inclusion in the roadway design by the Prime. Additionally, a preliminary Impact Analysis Report will be developed and submitted to Ft. Bend Drainage District for acceptance/ concurrence. The preliminary Impact Analysis Report will identify mitigation features which are necessary to ensure no adverse impacts for local events up to and including the 100-year event as a result of the proposed roadway and Precinct 3 developments.

B. Design Phase

The goal of the Drainage Design Phase is to refine initially identified drainage infrastructure in coordination, and support the detailed design and incorporation of drainage features including trunklines, inlets, leaders, ditches, swales, and backslope interceptors. We will perform detailed hydraulic modeling to ensure adequate sizing and optimization of roadway drainage and mitigating detention systems. We will resubmit a supplemental drainage Impact Analysis which will be updated with the Drainage Overflow modeling results, as well as any pertinent changes to the roadway drainage system or mitigation.

TRAFFIC:

- Traffic control plan in accordance with the attached Harris County "Traffic Control Guidelines", November 2001. Traffic Control Drawings shall be double banked and drawn to a scale as specified in the Harris County Guidelines.

The Design Phase of the project will consist of the following components:

Construction Plans at a 95% level of completion, Drainage Design Phase, Probable Construction Cost Estimate, Bid Form, Plans for SWPPP / SWQMP and all documents needed for Project Manual for Bidding.

OPTIONAL ADDITIONAL TASKS

GENERAL:

1. Please use the following tracking number on all correspondence:
APIN: TBD; Sims Road Realignment
2. Review drawings shall be 11x17 (half size) and all drawing submittals shall be to scale as specified in the guidelines.
3. The final approved construction drawings, with all required sign-offs, shall be a 22x34 PDF (full size),
4. Acquire approval and/or sign-off from all jurisdictional agencies including, but not limited to, the Ft. Bend ED project manager, Ft. Bend ED Permits as flood plain administrator and for SWQMP, HCFCD, USACE, and utility/pipeline companies.

SCHEDULE OF MILESTONE SUBMITTALS

NTP Preliminary Engineering Report	August, 2018
Drainage Study Submittal	August, 2018
ROW Mapping Submittal	September, 2018
Complete Surveying and Geotechnical	September, 2018
30% design Submittal: PER	October, 2018
70% design Submittal: PS&E	December, 2018
95% design Submittal: PS&E	April, 2019
100% Final Submittal: PS&E	May, 2019

**** Note that all submittals are to be routed through TxDOT***