

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 Huitt-Zollars, 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 construction of a three-lane concrete road with curb and gutter, and sidewalks on both sides, to replace the existing two-lane asphalt roadway from Sugarland-Howell Road to Belknap Road for the Old Richmond Road Project, Number 17208, under 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 preliminary engineering, final engineering, geotechnical, surveying, bidding and construction phase services for the project as described Contractor's proposal dated April 23, 2018 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 three hundred sixty thousand seven hundred sixty-three dollars and 00/100 (\$360,763.00) 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 three hundred sixty thousand seven hundred sixty-three dollars and 00/100 (\$360,763.00) 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 three hundred sixty thousand seven hundred sixty-three dollars and 00/100 (\$360,763.00).

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, HOLD HARMLESS, AND DEFEND COUNTY AGAINST ALL LOSSES, LIABILITIES, CLAIMS, CAUSES OF ACTION, AND OTHER EXPENSES, INCLUDING REASONABLE ATTORNEYS FEES, ARISING FROM ACTIVITIES OF CONTRACTOR, ITS AGENTS, SERVANTS OR EMPLOYEES, PERFORMED UNDER THIS AGREEMENT THAT RESULT FROM THE NEGLIGENT ACT, 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, 1st Floor
Richmond, Texas 77469

Contractor: Huitt-Zollars, Inc.
Attn: Chaitanya Gampa, P.E.
10350 Richmond Avenue, Suite 300
Houston, Texas 77042-4248

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

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

HUITT-ZOLLARS, INC

Robert E. Hebert, County Judge



Gregory R. Wine, P.E., LEED AP
Senior Vice President

Date

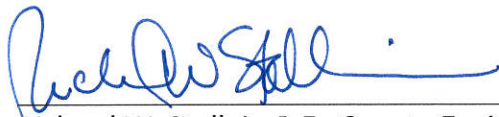


Date

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

April 25, 2018

Raul Fung
C/O Fort Bend County Engineering
Senior Project Engineer
RPS | Infrastructure
1160 N Dairy Ashford, Suite 500,
Houston, Texas 77079

Reference: Old Richmond Road from Belknap Rd to Sugarland Howell Rd
Fort Bend County 2017 Mobility Bond Program

Subject: Proposal – Preliminary Engineering, Final Engineering, Bid & Construction phase

Dear Mr. Fung,

Enclosed are Huitt-Zollars, Inc.'s proposed budget, manpower and direct expense breakdown and scope of services for completing the Preliminary Engineering, Final Engineering, Geotechnical, Surveying, Bidding & Construction phase Services for the above referenced project based on the scope exhibits provided to Huitt-Zollars by RPS | Infrastructure on April 10th, 2018.

Huitt-Zollars, Inc.'s proposed budgets for referenced project follow:

Phase 1 – Preliminary Design Services (Lump sum)	\$ 70,000.00
Phase 2 – Final Design Services (Lump sum)	\$ 190,000.00
Phase 3 – Construction Phase Services (Hourly)	\$ 25,000.00
Total Basic Services Fee	\$ 285,000.00

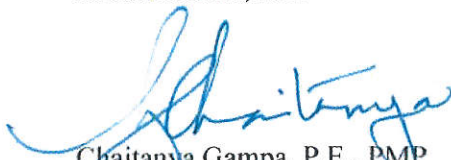
Additional Services

1) Route Topographic Survey (Lump sum)	\$ 40,430.00
2) Proposed ROW Maps, Metes & Bounds (1 parcel) (Lump sum)	\$ 5,060.00
3) Geotechnical Investigation (Lump sum)	\$ 26,203.00
4) Baseline Staking / Re-establish Control points (Lump sum)	\$ 4,070.00
Total Additional Services Fee	\$ 75,763.00

Our total proposed budget for the above services is estimated to be **\$ 360,763.00**. Should you have any questions, or require additional information, please call. Thank you.

Upon receipt of a written notice to proceed, we will commence work. Thank you.

Sincerely,
Huitt-Zollars, Inc.


Chaitanya Gampa, P.E., PMP
Vice President


Daniel Menendez, P.E., PWLF
Vice President

EXHIBIT A

Scope of Engineering Services

Old Richmond Rd from Sugarland-Howell Road to Belknap Road

The following Engineering services will be provided in connection with this project:

PROJECT DESCRIPTION: The work to be performed by the Engineer shall consist of the development of Preliminary engineering report, detailed plans, specifications and estimates (PS&E) for the re-construction of Old Richmond Rd from Sugarland-Howell Road to Belknap Road. The scope includes reconstructing Old Richmond Rd as a 3-lane concrete road with curb and gutter to replace the existing 2-lane asphalt road for the project limits. Sidewalk will be built on both sides of the road. Additional pavement/lane will be needed in front of the school (for access, drop off, etc..). Traffic control will be required to maintain 2-way traffic along Old Richmond Rd.

As far as the paving/roadway limits, the intersection of Old Richmond Rd & Sugarland Howell is included in the adjacent project (Burney-Old Richmond); however, depending on the required drainage from this project (detention pond, channel, storm sewer, etc..); drainage work, if any, may need to extend beyond the actual limits. Coordination with the adjacent projects will be done during all phases of the design.

The project includes improvements to the intersection of Old Richmond Rd & Belknap Rd. The intersection of Old Richmond Rd and Belknap Rd will be upgraded to a signed intersection from a stop controlled intersection.

A storm sewer system with curb inlets will be constructed. Detention requirements will be addressed in the PER and may include a coordinated pond location with adjacent projects that will be discussed with the FBC MUD 2. The project will be designed to meet county design criteria per the 2017 mobility standards

The engineer will coordinate throughout the design and construction phases with the following agencies:

- Fort Bend M.U.D No. 02
- Renn Road M.U.D
- Fort Bend County Drainage District
- Townewest Elementary School
- Adjacent Project Consultants
 - Frank Olshefski at HR Green
 - Max Bhatti at EJES

The environmental consultant that reports directly to the county will be responsible for the identification and assessment of any environmental problems associated with the project. Huitt-Zollars Inc. will coordinate with the environmental consultants.

I. PRELIMINARY ENGINEERING REPORT

A Preliminary Engineering Report will be prepared for preliminary design, and the purpose of the report is to document the goals as stated. (1) establish a typical cross section and cross sections in non-standard areas, (2) determine drainage system needs (drainage report and/or preliminary roadway drainage design), (3) positively determine right-of-way acquisition needs, (4) determine potential conflicts with existing facilities, (5) identify critical path items, (6) identify problem areas and potential resolution(s), (7) determine permit and regulatory requirements, and (8) prepare a reasonable construction cost estimate.

A "30 percent" plan set will be prepared, consisting of all existing features (seen and unseen) shown in plan and profile, and proposed improvements in plan only with minor annotation. These plans, along with a typical section sheet, are the only drawings that will be prepared as part of the PER.

The report shall include a narrative, applicable plans, a drainage report, a construction cost estimate, a geotechnical report, and an environmental report, if applicable. Any further requirements can be discussed in a scoping meeting.

Geotechnical investigations and reporting will be completed during preliminary design, in accordance with Harris County criteria. Standard TxDOT criteria with boring depths based on the depth of the outfall channel. The geotechnical engineer should calculate the equivalent single axle load (ESAL) for the County's standard pavement design (8-inches of concrete with 8-inches of lime stabilized subgrade).

Preliminary wetlands investigations and project notification to the Texas Historical Commission will be performed by the County on a program-wide basis, so these efforts should not be needed on a project level. The Design Consultant will be notified in a scoping meeting if further efforts are needed for a particular project. The Design Consultant will also be notified if a Phase 1 Environmental Site Assessment is needed for the project, which can be performed by the geotechnical consultant.

An appropriate attempt shall be made to depict underground utilities accurately in the plan and profile drawings, and potential conflicts between existing utilities and proposed features shall be identified. Any subsurface utility investigation (SUI) shall be at the expense of the utility company. 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.

The Design Consultant will:

- Perform records research and field visits to determine the presence of underground or overhead private or public utilities during the Preliminary Design phase
- Send records requests to utility companies and obtain I.D. numbers (CenterPoint and AT&T)
- Depict utilities to a reasonable degree of accuracy on the plan and profile drawings

- 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
- Submit milestone-level drawings to applicable utility companies for their review

The Project Manager from the client will:

- Assist the Design Consultant in identifying major utilities, and providing contact information for various utilities as needed
- Coordinate directly with utility companies to facilitate utility adjustments required by the proposed improvements
- Coordinate with utility companies during the Construction phase as required

The completion period for the Preliminary Design is 90 days from NTP.

II. FINAL DESIGN

The goal is to prepare construction drawings and specifications accurately and efficiently. Interim submittals will be made at 70 percent and 95 percent completion, and includes drawings, a specification table of contents (and/or special specifications, as applicable), and a construction cost estimate.

Applicable design criteria include, in order of priority, (1) Any Fort Bend County Engineering or Drainage District criteria/standards, including the Fort Bend County Drainage Criteria Manual (Fort Bend County Drainage District, November 1987, revised April 1999), (2) municipal design criteria if the project is located within the limits of a municipality and/or ETJ that has design criteria, (3) Guidelines for Engineers Having Contracts with Harris County, Texas (Harris County Public Infrastructure Department, 1987), (4) applicable Texas Department of Transportation design criteria (all County-maintained traffic signals, other items as applicable), and (5) the Infrastructure Design Manual (City of Houston Department of Public Works and Engineering, current version, used for infrastructure for which design criteria do not exist in the preceding criteria documents). Municipalities contributing funds to the project may review the submittals

A. PLANS

Revise Horizontal/Vertical Alignment

Roadway horizontal alignments, vertical alignments, cross-slopes, crossovers, and other related geometric design features established for the PER will be finalized.

- Prepare 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)
- Index of sheets
- Typical and non-standard cross 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)

- d. Overall project layout (scale as appropriate with sheet references left blank since they are subject to change in subsequent submittals)
- e. Survey control map
- f. Develop plan and plan/profile sheets, which depict the proposed improvements. These sheets will contain topographic information, existing utilities, demolition items, roadway baselines, proposed pavement curb elevations, and roadway pavement contours where necessary for construction, drainage structures, limits of barriers and other information necessary for construction. Profile sheets will show existing ground lines at the right of way line, existing ditch lines, and existing paving elevations, and other elevations necessary to describe the profile elevations.
- g. 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%)
- h. The plan package will be complete and suitable for bidding and award of a construction contract.
- i. Show existing utilities in plan and profiles. Prepare plans to minimize utility adjustment where practical.
- j. Provide to the County information and/or exhibits on driveways for the purpose of preparing temporary construction easements where practical.
- k. Develop cut and fill quantities for the proposed sections.
- l. Earthwork quantities with cross sections at 100-foot intervals (only non-standard sections should be included in plans)

B. HYDROLOGY AND HYDRAULICS

- 1. Design storm sewer/ditch systems for 2 year storm. Design using WinStorm drainage software.
- 2. Detail the following:
 - a) Drainage Area maps with Hydraulic calculations
 - b) Hydraulic data
 - c) Drainage structure plan view layout sheet.

- d) Storm sewer/ditch systems. Information to include elevation view and details for inlets, manholes, etc.
- e) Miscellaneous details
- f) Determination of standards
- g) Identification of bid items and quantities
- h) Develop summaries

3. Review utility information to determine potential utility conflicts.

C. TRAFFIC CONTROL PLAN (TCP)

Upon approval of Preliminary TCP submittal, Develop TCP sheets by phase/stage/step. Avoid detours unless approved by the County; use of construction zone standards is encouraged

Details to include:

- a) The sequence of construction and method of handling traffic during each phase.
- b) The existing and proposed traffic control devices that will be used to handle traffic during each construction sequence. Include regulatory signs, warning signs, construction warning signs, guide signs, route markers, construction pavement markings, channelizing devices, portable changeable message signs, flashing arrow boards, barricades and barriers.
- c) The proposed traffic control devices (stop signs, no temporary signals are anticipated, flag person, etc.) at grade intersections during each construction sequence.
- d) Where detours are approved by the County, typical and design cross sections shall be shown and/or provided.
- e) Road construction work hours shall be directed by the County and specified for all phases of the TCP.
- f) Temporary drainage structures
- g) Miscellaneous details
- h) Narrative
- i) Determination of standards
- j) Identification of bid items and quantities
- k) Develop summaries by phase with overall total

D. TRAFFIC SIGNAL PLANS

Upon approval of Preliminary report develop traffic signal plans identifying the modifications to the existing school zone flashing beacon per the FBC criteria will be developed. Proposed Traffic signal plans will be developed for the intersection of Old Richmond Rd & Belknap Rd per FBC criteria.

E. STORM WATER POLLUTION PREVENTION PLANS (SWPPP)

SW3P will be developed utilizing and consistent with the TCP plan. Plan sheets will be developed on 11" x 17" plan sheets, double stacked as applicable. Project will consist of two phases. Harris County and Texas Department of Transportation standards will be used where applicable. Details to include:

1. Develop SW3P Plans for each phase of construction. SW3P controls may include but are not limited to:
 - a) Temporary sediment fence
 - b) Rock Berms
 - c) Construction entrance/exits
2. Determination of standards
3. Identification of bid items and quantities
4. The project manual to contain a narrative describing the SWPPP and provide the information for Section 4 of the TCEQ Notice of Intent (NOI) Along with a statement designating the contractor as the Primary Operator and the County as the Secondary Operator.

F. SIGNING AND PAVEMENT MARKING DESIGN

Permanent small signing and markings will be designed in accordance with the County and the Texas Manual on Uniform Traffic Control Devices (TMUTCD) for Streets and Highways (latest revision). Inventory of all existing signage will be performed throughout the Project. This inventory shall be used as a basis for determining all required proposed signing. After a full review of the final proposed roadway plans, the location and type of all necessary proposed warning and regulatory signs shall be determined. All required specifications, general notes and estimates would be included.

1. Prepare drawings depicting all proposed pavement markings, and all proposed small signing for the Project. Plan layouts shall be prepared at 1"=100' scale, on 11"x17" drawings. Permanent signing and marking design shall consist of the following drawings for the entire Project:
 - a) Existing Small Sign Inventory (to identify all existing signs).
 - b) Signing and Marking Layouts (to identify all existing signs to remain, signs to be removed or relocated, all proposed small signs and all proposed marking).
 - c) Signing and Marking Details (for all special signs and marking as required for the Project).
 - d) Small Sign Summary (to identify all proposed small signs and mounting materials).
 - e) Pavement Marking Summary (to identify all proposed pavement markings and delineators).
 - f) Standard Detail Drawings (to provide guidance to the contractor during construction of all small and large signing).

G. GENERAL NOTES, SPECIFICATIONS, AND STANDARD DRAWINGS

1. Develop required general notes and assemble specifications and special provisions that may be required.
2. Prepare additional special provisions or specifications as may be required.
3. Prepare general notes, specification data and project estimate on a CD disk for submission to the County.
4. Select the Standard County drawings applicable to the project, modify as required, and fill in the title blocks.

H. QUANTITIES AND COST ESTIMATES

1. Prepare list of construction bid items & Develop basis of estimate
2. Compute estimated quantities for all bid items.
3. Compute estimated cost of construction work based on current unit prices and estimated quantities. Fort Bend County/PMC to provide current unit prices if needed.

I. PROVIDE TO THE COUNTY FOR REVIEW THE PS&E PACKAGE AT THE FOLLOWING STAGES OF COMPLETION:

- | | |
|----------------|--|
| a. Stage 70% | Cover Sheet, typical sections, overall layout sheet, survey control map, drainage area map with hydraulic calculations, plan & profile sheets, Traffic control plan sheets, traffic signal plans, SWPPP sheets, details, quantities, cost estimates, technical specifications and perform QA/QC. Review plan sets to be provided on 11"x17" paper. |
| b. Stage 95% | Cover Sheet, General Notes, Specifications, Typical Section Sheets, Layout Sheets, Drainage Area Maps, Plan & Profiles, Traffic Control Plans, Traffic signal plans , Cross Sections, SWPPP, Signing & Pavement Markings, Details, Quantities, Cost Estimates, Prepare project manual (bid form, specification table of contents, any special specifications or conditions; contract documents excluded) and perform QA/QC. Responses to 70 percent comments |
| c. Final Stage | Cover sheet, General Notes, Typical Sections, Layout sheet, Drainage Area Map, Plan & Profiles, Traffic Control plans, Cross Sections, SWPPP, Signing & Pavement Marking, Details, Quantities, Cost Estimates, Prepare complete project manual and perform QA/QC. Final plan sheets to be provided on 11"x17" mylars. |

J. TOPOGRAPHIC SURVEY AND PROPOSED ROW ACQUISITION

Topographic survey shall be completed during preliminary design, right-of-way acquisition will be required for road expansions, and part of preliminary design includes determining where to expand. To cover all options, topographic survey shall be performed within existing right-of-way and then at least 20 feet beyond the right-of-way on each side, or as determined in a scoping meeting. Temporary benchmarks and baseline control shall be set, both with 1,000-foot maximum spacing between points. Abstracting shall be performed to gain a preliminary determination of property ownership and existing right-of-way widths. During topographic survey, found property corners shall be documented so that the approximate location of the right-of-way can be determined. Structures in clear view and within 100 feet of the existing right-of-way shall be surveyed.

The lateral drainage ditches on the south side of the project corridor, on both ends of the project, will be detailed beginning at the south right-of-way line and extending southward for 300-feet on both channels, including drainage structure details at their outfalls.

Static GPS observations will be performed on the project to establish semi-permanent control points for use in Geo-Referencing the project and tying into both NAD83(2011) Horizontal Datum and NAVD88(2001) Vertical Datum. Survey control points will consist of 5/8-inch diameter iron rods with plastic caps, and or other suitable material. Survey control points will be established with 500-foot maximum spacing between points, throughout the project corridor.

Once right-of-way needs have been determined and approved by the County, a Category 1A survey will be performed to produce a parcel map and metes-and-bounds description for each parcel to be acquired in the project. These documents will be submitted separately from other design documents, and will be paid for as a lump sum, based upon the number of parcels determined by the consultant and their sub-consultants to accurately determine the parcels that are affected as an additional service

K. GEOTECHNICAL INVESTIGATION

The existing 2-lane asphalt road will be replaced with 3-lane concrete road with curb and gutter. Sidewalk will be built on both sides of the road. The project also includes installation of storm sewers along the proposed project alignment. The actual invert depth of the storm sewers is not available to us at the time of writing this report, and we have assumed that the invert depth will not exceed 15 feet below the existing grade.

The project may include construction of a detention pond. The actual size and depth of the detention pond are not available to us at the time of writing this scope. The purpose of our investigation is to provide geotechnical recommendations for the installation of storm sewers, and pavement reconstruction. Detention pond recommendations are optional and will be performed if authorized.

We propose to drill seven 20-foot borings for the pavement and storm sewers, and two 20-foot borings for the detention pond. The borings will be drilled continuously to the boring termination depths. The spacing between the pavement borings will be approximately 500 feet. The borings will be used to determine site stratigraphy and to obtain samples for laboratory testing. Two 20-foot borings (one on the project alignment and one at the detention pond location) will be converted into piezometers to record long term water level readings. Groundwater levels will be obtained after 24 hours and 30 days of installation. The piezometers will be abandoned after taking the final water readings. When necessary, the pavement will be cored at the borehole

locations prior to drilling and pavement thickness information obtained from the cores will be included in the report. We have made our best estimate for the number of required pavement cores in the cost estimate. Traffic control will be used during the field operations when needed. All boreholes will be backfilled with cement grout by tremie method to the full depth and the pavement will be patched. All the field and laboratory tests will be performed according to ASTM standards, where applicable, or with other well-established procedures.. The Surveyor shall survey the station, offset, and elevations of each soil boring and provide them to Geotech for their use.

Results of the field and laboratory data will be used to provide recommendations for the proposed pavement, utilities and detention pond. In general, the following items will be included in the report:

- Boring logs and test data,
- Groundwater conditions,
- Generalized subsurface conditions,
- Existing asphalt pavement thickness,
- Concrete Pavement design recommendations,
- Recommendations for utilities installation by open-cut techniques,
- Bedding and backfill recommendations for utilities under concrete and under natural ground,
- Recommendations for groundwater control and trench safety requirements,
- Slope stability analysis for the detention pond,
- Erosion protection recommendations,
- Structural fill requirements and general earthwork recommendations.

A report of our study will be prepared by an engineer specializing in soil mechanics and foundation engineering after reviewing available structural, geological, boring, and laboratory data.

L. QA/QC

The Engineer will provide quality assurance and quality control throughout the process and will include:

1. Routine checking of PS&E documents by the PM.
2. Close collaboration between the task leader and PM to make sure all County procedures for the project are met and to ensure that final documents are complete and accurate.
3. Regular internal review of projects deliverables by the QA/QC leader.
4. Maintain documentation of the QA/QC process.

III. 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. Huitt-Zollars shall prepare a single project manual file in Adobe Acrobat format, consisting of (1) administrative documents, (2) the bid form (prepared by the design consultant),

(3) a sealed specification table of contents, and (4) applicable specifications and documents. 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.

- Prepare 27 compact discs, each with one project manual file and one drawing file. Of these, 25 compact discs will be delivered to the County Purchasing Agent for advertising, and two discs will be provided to the County's project management consultant. Hard copy documents are not required.
- 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 HZ 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.
- 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 and project manual sets are required, and the design consultant will provide these documents at the pre-construction meeting.
- Review contractor submittals and respond to Requests for Information.
- Re-establish the control points / alignment for the contractor.
- Field visits and progress meetings will not be conducted unless requested by the County.
- Participate in a substantial completion walkthrough.
- 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 Manager 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.

EXCLUSIONS FROM THE SCOPE OF SERVICES

1. Any other services not specifically included within the description of the Services as described above
2. Illumination design and plans preparation.
3. Landscaping and Irrigation plans
4. Construction Management

HUITT-ZOLLARS

Houston

2018

HOURLY RATE SHEET

Engineering/Architecture

Principal-In-Charge	\$ 245.00
Design Principal	\$ 210.00
Sr. Project Manager	\$ 210.00
QA Manager	\$ 190.00
Project Manager	\$ 185.00
Sr. Civil Engineer	\$ 180.00
Sr. Structural Engineer	\$ 190.00
Sr. Mechanical Engineer	\$ 180.00
Sr. Electrical Engineer	\$ 185.00
Civil Engineer	\$ 175.00
Structural Engineer	\$ 170.00
Mechanical Engineer	\$ 150.00
Electrical Engineer	\$ 160.00
Plumbing Engineer	\$ 150.00
Engineer Intern	\$ 120.00
Sr. Architect	\$ 185.00
Architect	\$ 150.00
Architect Intern 1	\$ 90.00
Architect Intern 2	\$ 110.00
Architect Intern 3	\$ 140.00
Sr. Landscape Architect	\$ 165.00
Landscape Architect	\$ 130.00
Landscape Architect Intern	\$ 95.00
Sr. Planner	\$ 205.00
Planner	\$ 120.00
Planner Intern	\$ 80.00
Sr. Designer	\$ 150.00
Designer	\$ 125.00
Sr. CADD Technician	\$ 130.00
CADD Technician	\$ 90.00

Interior Design

Sr. Interior Designer	\$ 110.00
Interior Designer	\$ 95.00
Interior Designer Intern	\$ 75.00

Survey

Survey Manager	\$ 160.00
Sr. Project Surveyor	\$ 150.00
Project Surveyor	\$ 125.00
Surveyor Intern	\$ 120.00
Survey Technician	\$ 105.00

Survey Crews

1-Person Survey Crew	\$ 95.00
2-Person Survey Crew	\$ 140.00
3-Person Survey Crew	\$ 170.00

Construction

Construction Manager	\$ 175.00
Resident Engineer	\$ 165.00
Sr. Project Representative	\$ 125.00
Resident Project Representative	\$ 95.00

Administrative

Sr. Project Support	\$ 95.00
Project Support	\$ 70.00

Reimbursable Expenses

Consultants	Cost + 10%
Other Direct Costs	Cost + 10%
Mileage	IRS Standard Business Mileage Rate

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

Section 16. Standard of Care

Contractor represents to County that Contractor has the skill and knowledge ordinarily possessed by well-informed members of its trade or profession practicing in the greater Houston metropolitan area and Contractor will apply that skill and knowledge with care and diligence to ensure that the Services provided hereunder will be performed and delivered in accordance with the highest professional standards.

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.