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 Isani Consultants, LP, (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 West Sycamore Road, Segment 3 Project No. 17123x under the Fort Bend County Mobility Program (hereinafter "Services") pursuant to SOQ 14-025; and

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

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

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

### **AGREEMENT**

### Section 1. Scope of Services

Consultant shall render the professional engineering services as described in Consultant's Proposal of Services dated September 18, 2020, 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 seven hundred eighty-one thousand five hundred fourteen dollars and 12/100 (\$781,514.12) 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 seven hundred eighty-one thousand five hundred fourteen dollars and 12/100 (\$781,514.12) 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 seven hundred eighty-one thousand five hundred fourteen dollars and 12/100 (\$781,514.12).

### Section 5. <u>Time of Performance</u>

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. 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

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

### Section 12. Confidential and Proprietary Information

- 12.1 Consultant acknowledges that it and its employees or agents may, in the course of performing their responsibilities under this Agreement, be exposed to or acquire information that is confidential to County. Any and all information of any form obtained by Consultant or its employees or agents from County in the performance of this Agreement shall be deemed to be confidential information of County ("Confidential Information"). Any reports or other documents or items (including software) that result from the use of the Confidential Information by Consultant shall be treated with respect to confidentiality in the same manner as the Confidential Information. Confidential Information shall be deemed not to include information that (a) is or becomes (other than by disclosure by Consultant) publicly known or is contained in a publicly available document; (b) is rightfully in Consultant's possession without the obligation of nondisclosure prior to the time of its disclosure under this Agreement; or (c) is independently developed by employees or agents of Consultant who can be shown to have had no access to the Confidential Information.
- 12.2 Consultant agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Consultant uses in maintaining the confidentiality of its own confidential information, and not to copy, reproduce, sell, assign, license, market, transfer or otherwise dispose of, give, or disclose Confidential Information to third parties or use Confidential Information for any purposes whatsoever other than the provision of Services to County hereunder, and to advise each of its employees and agents of their obligations to keep Confidential Information confidential. Consultant shall use its best efforts to assist County in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limitation of the foregoing, Consultant shall advise County

immediately in the event Consultant learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Agreement and Consultant will at its expense cooperate with County in seeking injunctive or other equitable relief in the name of County or Consultant against any such person. Consultant agrees that, except as directed by County, Consultant will not at any time during or after the term of this Agreement disclose, directly or indirectly, any Confidential Information to any person, and that upon termination of this Agreement or at County's request, Consultant will promptly turn over to County all documents, papers, and other matter in Consultant's possession which embody Confidential Information.

- 12.3 Consultant acknowledges that a breach of this Section, including disclosure of any Confidential Information, or disclosure of other information that, at law or in equity, ought to remain confidential, will give rise to irreparable injury to County that is inadequately compensable in damages. Accordingly, County may seek and obtain injunctive relief against the breach or threatened breach of the foregoing undertakings, in addition to any other legal remedies that may be available. Consultant acknowledges and agrees that the covenants contained herein are necessary for the protection of the legitimate business interest of County and are reasonable in scope and content.
- 12.4 Consultant in providing all services hereunder agrees to abide by the provisions of any applicable Federal or State Data Privacy Act.
- 12.5 Consultant expressly acknowledges that County is subject to the Texas Public Information Act, TEX. GOV'T CODE ANN. §§ 552.001 et seq., as amended, and notwithstanding any provision in the Agreement to the contrary, County will make any information related to the Agreement, or otherwise, available to third parties in accordance with the Texas Public Information Act. Any proprietary or confidential information marked as such provided to County by Consultant shall not be disclosed to any third party, except as directed by the Texas Attorney General in response to a request for such under the Texas Public Information Act, which provides for notice to the owner of such marked information and the opportunity for the owner of such information to notify the Attorney General of the reasons why such information should not be disclosed.

### **Section 13. Independent Consultant**

- 13.1 In the performance of work or services hereunder, Consultant shall be deemed an independent contractor, and any of its agents, employees, officers, or volunteers performing work required hereunder shall be deemed solely as employees of contractor or, where permitted, of its subcontractors.
- 13.2 Consultant and its agents, employees, officers, or volunteers shall not, by performing work pursuant to this Agreement, be deemed to be employees, agents, or servants of County and shall not be entitled to any of the privileges or benefits of County employment.

### **Section 14. Notices**

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

County: Fort Bend County Engineering Department

Attn: County Engineer 301 Jackson Street Richmond, Texas 77469

With a copy to: Fort Bend County

Attn: County Judge

401 Jackson Street, 1st Floor Richmond, Texas 77469

Consultant: Isani Consultants, LP

3143 Yellowstone Boulevard

Houston, Texas 77054

- 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

- 25.1 Agreement to Not Boycott Israel Chapter 2271 Texas Government Code: By signature below, Consultant verifies that if Consultant employs ten (10) or more full-time employees and this Agreement has a value of \$100,000 or more, Consultant 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, Consultant represents pursuant to Section 2252.152 of the Texas Government Code, that Consultant 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.

### 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	ISANI CONSULTANTS, LP
	Ranludioni"
KP George, County Judge	Authorized Agent – Signature
	Ram Guliani, P.E.
Date	Authorized Agent – Printed Name
ATTEST:	Project Manager
	Title
	09/28/2020
Laura Richard, County Clerk	Date
J. Stacy Slawinski, P.E., County Engineer APPROVED AS TO LEGAL FORM:	
Marcus D. Spencer, First Assistant Count	y Attorney
AUDI	ITOR'S CERTIFICATE
I hereby certify that funds are ava pay the obligation of Fort Bend County u	nilable in the amount of \$ to accomplish and nder this contract.
	Robert Ed Sturdivant, County Auditor
I:\Marcus\Agreements\Engineering\Road Construction\West Sycamore\17123x\	Agreement - Pro Eng Svcs.W Sycamore.Seg 3.IC.docx.9/23/2020. 20-Eng-101152

### **EXHIBIT A**



September 18, 2020

Mr. Kevin Mineo Sr. Project Manager Binkley & Barfield 1710 Seamist Drive Houston, TX 77008

**Attention:** Mr. Kevin Mineo

West Sycamore Road - Segment 3 from South Post Oak Boulevard to Subject:

FM 521, Fort Bend County, Precinct 1 **Proposal for Professional Services** 

Mr. Mineo.

Isani Consultants, LP is pleased to submit the proposal for Preliminary Design, Final Design Phase and Bid Phase services for the above referenced project. The following documents are attached herewith:

- Exhibit A: Scope of Services (Preliminary and Final Design)
- Exhibit B: Compensation for Professional Services
- Exhibit C: Project Schedule (Preliminary and Final Design)
- Exhibit D: Project Team Sub-Consultants
- 2020 Billing Rate Schedule

Please review and let us know if you have any comments or clarifications regarding the scope of services submitted.

Please contact me if you have any questions or need additional supporting information regarding this request.

Sincerely,

Ram Guliani, P.E. **Project Manager** Isani Consultants, LP



September 18, 2020

"EXHIBIT A" - Scope of Services West Sycamore Road - South Post Oak Boulevard to FM 521 UPIN, Precinct 1

Fort Bend County has requested a proposal for Preliminary Engineering Phase, Final Design Phase, Bid and Construction Phase Services to improve the existing 2-lane asphalt undivided roadway (with roadside ditches) to a 4-lane concrete curb & gutter boulevard section with raised median, storm sewers, detention, drainage outfalls, 5feet sidewalk, modification to the existing traffic signal and all necessary appurtenances.

### PROJECT LIMITS AND DETAILS:

- 1. The West Sycamore Road project will begin at the intersection of West Sycamore Road and South Post Oak Boulevard and end at the intersection of West Sycamore Road and FM 521. The Existing ROW for the project limits varies from 40-feet to 100-feet. Propose ROW is to be acquired to be 100feet within the project limits and evaluated based on the drainage needs.
- 2. The road will be widened to accommodate 4-lane concrete curb & gutter boulevard section, with left turn lanes as necessary and 33-feet raised median. There will be 5- feet sidewalk located on the north side of West Sycamore for the limits shown above. The existing ditches north and south of the existing roadway will be replaced with a storm sewer system.
- 3. The project area consists of Union Pacific Railroad crossing between Kansas Street and FM 521.
- 4. The project has an existing signalized intersection at West Sycamore Road and FM 521 which will be modified per the new geometry of the intersection and to current standards.

### PROJECT SCOPE

### **GENERAL:**

- 1. Coordination with Geotechnical, Survey, and Traffic consultants for the project will be performed during the Preliminary Engineering and Design Phase.
- 2. Coordination with Union Pacific Railroad (UPRR) for road crossing and for their portion of work on Railroad mat and control arm installation. All permitting fees (not known at this time) shall be reimbursable to Isani.

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3. TxDOT Coordination and permitting for the project at the intersection of West Sycamore and FM 521 will be performed during the Preliminary Engineering and Design Phase.

### PRELIMINARY ENGINEERING PHASE

A Preliminary Engineering Report (PER) shall serve as a summary document that incorporates the recommendations from the supporting investigative reports, results from working meetings with Fort Bend County, necessary approvals and final recommendations from the Consultant's efforts. The document will serve as the framework for the design phase, having addressed the major issues that affect the roadway design and supporting infrastructure.

The Preliminary Engineering Phase shall include the preparation and approval of reports necessary to support the recommendations and design of the roadway and all appurtenances included, but not limited to, Geotechnical Investigations, Hydrology and Hydraulic Analysis, including a drainage report. Environmental Site Assessments, Wetlands Assessment, Delineation, Concurrence/Permitting and associated tasks will be performed by others. A schematic layout showing the proposed improvements for the Roadway will be prepared for the preliminary meeting followed by the Preliminary Construction Plans. The Preliminary Engineering Report will be in accordance with the requirements stated in the Mobility Design Manual.

Proposed Roadway geometry will be evaluated and the preliminary alternatives for the alignment and Proposed Right-of-Way (ROW) Acquisition will be presented to Fort Bend County during the preliminary stages of the PER.

The Preliminary Engineering Phase shall include working meetings with Fort Bend County and other consultants/sub-consultants and a drainage meeting with Fort Bend County Drainage District prior to submitting the draft Drainage Report for the project. During this phase Topographic Survey will be performed and the existing conditions will be evaluated including roadway geometrics, soils, traffic and environmental conditions. In addition, during this phase parcels should be defined.

Utility companies within the project limits will be contacted and coordinated for obtaining the facility maps and record drawings available and a contact list for the utility companies and a Utility Conflict Table will be prepared. Roadway Schematics and Aerial Exhibits will be prepared for review.

There is an existing 8-inch water line appears to be located along north ROW of W. Sycamore between S. Post Oak and Kansas Street. Also, it appears that there is an existing 8-inch sanitary sewer located along north ROW of W. Sycamore between Halliburton facility and Kansas Street. Coordination will be made with Fort Bend County Fresh Water Supply Distt. #1 (FBCFWS #1) for relocation and approval process and recommendations/options will be provided in PER.

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Proposed improvements will include, Roadway Geometry, Pavement Structure, Storm Sewer System, Detention, Preliminary Phasing of Traffic Control Plans and Traffic Signals. A Preliminary Construction Cost Estimate will be prepared and included in the Preliminary Engineering Report.

A Draft Preliminary Engineering Report will be submitted, after initial review of the existing conditions, that include, but not limited to, Exhibits, Preliminary Construction Drawings, Survey/Right-of-Way Acquisition Maps, Roadway Alignment, Geotechnical, Environmental Site Assessment, Drainage Report, and Utility Conflicts. Consultant shall provide preliminary schematics and exhibits to support discussions to solicit input from Fort Bend County on decision items. The draft PER is expected to be submitted 5 months from Notice to Proceed.

### Exhibits/Attachments shall include:

### Schematic Layout of Roadway

o Provide a Plan View Layout with proposed roadway improvements. Include the location of the proposed trunk storm sewer and detention facilities as necessary. The schematic layout shall be at a scale of 1" = 40' on 11"x17" sheets. Include a Cover Sheet with a Vicinity Map with the project limit. The schematic will show the pavement marking concept so that traffic movements can be considered and reviewed during the study phase. Provide the proposed typical sections on the schematic. Typical Sections shall be drawn at 1"=20' horizontal and 1"=2' vertical scale on 11"x17" sheets. Location of soil borings will be identified.

### Cost Estimates

o Provide a preliminary construction cost estimate for the final recommendation provided in the Abbreviated Preliminary Engineering Report.

### Utility Tables

- The consultant shall coordinate with utility companies that have existing facilities in or adjacent to project limits. The coordination shall include:
  - Perform records research and field visits to determine the presence of underground or overhead private or public utilities during the Preliminary Design phase. A reasonable amount of research should be conducted, including but not limited to contact with companies identified on aboveground markers, Railroad Commission website research, and map requests from prominent companies (i.e. CenterPoint Energy, AT&T, etc.).

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### Level B SUE:

Identify all existing utilities within the existing and proposed rights-of-way. Provide list of existing utilities with owner and contact information. Coordinate with the utility companies and provide information and schematics as necessary.

- Send records requests to utility companies and obtain I.D. numbers (CenterPoint and AT&T).
- o Identify any utilities that are within dedicated easements that will be within the proposed right-of-way.
- O Prepare a conflict table during the Preliminary Design phase to highlight conflicts. The table shall include given ID number for the potential conflicts, stations along the centerline for the utilities and for crossings, the owner of the utility, contact name, address, phone number, and email address, any notes such as it may be in possible conflict.

### Sight Distance

- The consultant shall investigate sight distance restrictions and general operating conditions of all existing and proposed intersections along West Sycamore Road within the project limits.
- Sight distance restrictions will be investigated, and Approach and Departure Site Triangles will be developed for the intersections for determining the safe passing distance and stopping sight distance for the traffic.

### SCOPE OF ADDITIONAL SERVICES FOR THE PROJECT:

### **SURVEYING (by Landtech Inc.):**

### 1. Topographic Survey:

Topographic Survey of West Sycamore Road from South Post Oak Boulevard to FM 521. Cross section at 100 feet interval extending 20 feet pass the proposed right of way. Provide Level B SUE and notify 811. Survey intersecting side streets 100 feet pass the existing or proposed right of way. Locate soil boring by others. Provide data in Microstation, DTM, TIN file and point file. Prepare survey control sheet with recovery sheet for control points. Location of pipeline and local utilities uncovered by others. Tie to NGS monument for horizontal and vertical control.

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### 2. Right of Way Survey

Prepare Right of Way map to determine the existing ownership and existing right of way. Prepare a KMZ file with ownership information, proposed takings and a preliminary roadway layout

### 3. <u>Detention Pond:</u>

Provide topographic survey of the proposed detention pond, location to be determined.

### 4. Railroad

Locate mile post marker and prepare Union Pacific Railroad Company franchise crossing exhibit and metes and bounds.

### 5. Optional Services

- a. Prepare parcel plate and metes and bounds for acquisitions. Stake line with iron pins
- b. Prepare parcel plate and metes and bounds for Unrestricted Visibility Easement (UVE)
- c. Existing sanitary sewer relocation plan and profile drawings.

### GEOTECHNICAL SCOPE OF SERVICES (by Associated Testing Laboratories, Inc. (ATL):

### 1. Field Exploration

ATL performed site reconnaissance. Project alignment will be accessible with their truck-mounted drill rig, and Peace officer and flag man with control signs and cones will be at site during drilling operation for work personnel safety.

Based on the Boring Depth and Frequency Requirements provided, ATL proposes the following borings to investigate the subsurface soils and groundwater conditions along the site boring location plan as presented in Figure 2: Proposed Boring Location.

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Boring	Total No	Depth (ft)	Total Depth (ft)
Borings B-1 through B-8	8	15	120
Detention Pond Borings: B-9 & B-10	2	20	40
Piezometers: PZ-1	1	20	40

Soil samples will be obtained continuously to a depth of 20-ft. Standard Penetration Tests (SPT)will be performed in sands, if encountered, and clays will be sampled by Shelby tube. Shear strengths of the clays will be measured in the field with a hand penetrometer and correlations between this data and laboratory shear strength data will be made during analysis.

Depth to ground water will be important for the design and construction of this project. For this reason, the borings will be drilled dry and the depth at which groundwater is encountered will be recorded. The boreholes will be grouted with cement-bentonite slurry after the completion of drilling and sampling.

### 2. <u>Laboratory Testing</u>

Laboratory tests will be assigned corresponding to the types of soils encountered, with the objective of classifying the soils physical and index properties, moisture contents, unconfined compressive strength, undrained unconsolidated compressive strength, Atterberg limits, percent finer than No. 200 sieve, and total unit weight tests. For detention pond, ATL require advanced testing for slope stability analysis such as Consolidated-undrained Triaxial test, and soil dispersiveness tests (double hydrometer Test, Crumb Tests).

All laboratory tests will be performed in accordance with appropriate ASTM standards. ATL will keep the samples for 30 days after the final report is presented. ATL will discard the samples after that time, unless instructed otherwise.

### 3. Engineering Analyses and Reporting

Analyses of these data will be presented, and recommendations made in accordance with the Fort Bend County Engineering Guidelines. The following geotechnical information and recommendations will be provided:

The field and laboratory data will be presented in a geotechnical report. Geotechnical analyses will be conducted using the field and laboratory test data to provide

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geotechnical data for the design and construction of the proposed improvements, including (but not limited to) the following:

- Generalized soils stratigraphy
- Piezometer installation and groundwater measurements
- Preliminary fault review based on the review of the available fault maps
- Excavation and trench construction and safety requirements
- Recommendations regarding bedding and backfill for utilities construction
- Loads on buried pipes including dead and live loads (vehicle loads)
- Recommendations regarding paving including thickness and reinforcement design, subgrade preparation and stabilization, pavement construction
- Storm sewer installations
- Construction consideration
- Detention Pond Slope stability analyses for short term, rapid drawdown and long-term conditions
- Soil dispersiveness

One (1) electronic PDF copy of the draft geotechnical report will be submitted. Once ATL has received the review comments, a final report addressing the review comments will be issued. One (1) copies of final report and an electronic copy (PDF) of the final report will also be issued.

### DRAINAGE (HYDROLOGY & HYDRAULIC ANALYSIS):

We will perform the following Hydraulic and Hydrologic support services during the preliminary design phase.

The scope of services includes the following tasks:

- 1. <u>Preparation of Drainage Impact and Mitigation Analysis Report for submission and approval of Fort Bend County Drainage District:</u>
- Determine existing and proposed condition discharge rates from the proposed roadway alignment and limits. Confirm limits of the analysis with preliminary layout for the proposed roadway. Discharge rates for proposed conditions will reflect the change in Tc and change of the drainage system from open ditch to storm sewers. Additionally, all new areas of Proposed Right-of-Way (ROW) will be accounted for in the drainage calculations.
- Develop hydrographs for existing and proposed conditions for design storms and determine required detention volume requirements to offset the increase in peak runoff rates for storms up to the 100-year events. Storms to be evaluated for the analysis will include the 2-year and 100-year events using Atlas 14 rainfall data.

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- Perform drainage area delineations for the proposed conditions and develop onsite and offsite flow calculations for proposed conditions. Perform extreme event sheet flow analysis.
- Identify all mitigation requirements, including measures needed to eliminate impacts on flow rates and floodplain storage. Such measures may include proposed detention pond, floodplain excavation, etc.
- Provide options for detention pond(s) size and location.
- Update calculations and hydrologic modeling data to reflect required mitigation measures and features.

### 2. Preparation of Drainage Report:

 Prepare a written report detailing the assumptions made in the drainage study and hydraulic analysis, the obtained results and proposed mitigation recommendations. The report will summarize background information, methodology, and results regarding the existing conditions and proposed improvements. Figures, tables, appendices, etc. will be provided to convey relevant information.

### TRAFFIC SIGNALS (KBH Traffic Engineering, LLC):

We will develop the preliminary schematic for modifying the existing signalized intersection at West Sycamore Road and FM 521 as per the Proposed Geometry for the intersection.

Modifications may include proposed locations for traffic signal poles, pedestrian signals and push buttons, vehicular detection, etc.

### FINAL DESIGN PHASE

The Design Phase of the project shall consist of the preparation of completely approved construction documents that reflect the Preliminary Engineering Report recommendations accepted by Fort Bend County. The Design shall build upon the framework identified in the Preliminary Engineering Phase and include roadway design, profiles, drainage system and appurtenances, details and bid documents necessary for a complete design review. The submittal milestones for Fort Bend County shall follow the project schedule as shown in the "Exhibit C".

A Meeting will be held in order to discuss the traffic control and provide the following preliminary documents for communicating the significant construction traffic control concepts and to enable review and discussion at the meeting: phasing overview drawing (roll plots), typical cross-section(s) for each major phase and preliminary

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traffic control detail plans showing the temporary transitions at the ends of the project. Also provide preliminary traffic control detail plans for intersections with existing traffic signal control and, if off-site detours are anticipated, a detour concept sketch.

The Design Submittal shall address all comments from the Preliminary Engineering phase of the project, design phase milestone submittals, and the construction review meetings. The Design Submittal shall include the submittal of the 11"x17" construction ready Plans, Specifications and Cost Estimate (PS&E). The submittal milestones will be 70%, 95%, 100%.

The design phase shall also include preparation of Exhibits and Utility Conflict list and coordinate with utility companies.

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

- Depict utilities to a reasonable degree of accuracy on the plan and profile drawings.
- Utility Conflict Table to be updated during the Final Design phase as required. Refer to Appendix C, Fort Bend County Utility Conflict Table template.
- Submit milestone-level drawings to applicable utility companies for their review.
- TxDOT Coordination and permitting for the project at the intersection of West Sycamore and FM 521.
- Union Pacific RailRoad Coordination for design and construction budget of planking and signal for the widened road.

### Additional Considerations for the Design Phase are:

### Roadway and Drainage Design:

- 1. The Design Phase services will be performed in accordance with the DESIGN STANDARDS AND DETAILS, Fort Bend County Engineering Department, Latest Edition.
- 2. The Roadway design and construction of West Sycamore Road shall comply with requirement of Fort Bend County regulations and follow MOBILITY DESIGN MANUAL, Latest Edition.
- The design and construction of West Sycamore Road drainage systems shall comply with requirement of Fort Bend County regulations and Fort Bend County Drainage District (FBCDD) DRAINAGE CRITERIA MANUAL and TxDOT (if required).

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- 4. The pavement elevation shall be set in accordance with the Fort Bend County Guidelines.
- 5. The pavement section shall be evaluated by the Geotechnical Investigations and Report; if not adequately designed in accordance with the recommendations.
- 6. Provide coordination with Fort Bend County for any adjacent developments within the project area limits.
- 7. Plan and Profile sheets will be created for a scale of 1" = 40' for horizontal and 1"=4' for vertical with all the references attached and shown as per the Fort Bend County design requirements for all submittals and the Final Submittal will be a standard 11"x17". All the CAD work will follow Fort Bend County design standards.
- 8. Driveway width and location should match existing when feasible. Also, driveways should meet Fort Bend County Regulations of Subdivisions, Section 7 requirements. The centerline station and percent grade shall be indicated on the drawings for all driveways.
- 9. All the intersections or where the sidewalks exist shall include pedestrian ramps in accordance with the current ADA requirements

### Traffic Control Plans (TCP) and Signing and Pavement Marking Plans:

- 1. A construction traffic control meeting shall be held prior to the 70% submittal and will be scheduled by the Fort Bend County Project Manager with Traffic Engineer and the Construction Programs Division. Provide the following preliminary documents for communicating the significant construction traffic control concepts and to enable review and discussion at the meeting: phasing overview drawing (roll plots), a typical cross-section(s) for each major phase and preliminary traffic control detail plans showing the temporary transitions at the ends of the project.
- Provide preliminary traffic control detail plans for intersections with existing traffic signal control and, if off-site detours are anticipated, a detour concept sketch.
- 3. Traffic Control Plans and Permanent Signing and Pavement Marking Plans will be provided as per the MUTCD and Fort Bend County Engineering Department Standards.

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### **Traffic Signal Plans:**

- 1. Proposed Traffic Signal Plans will be provided as per the Fort Bend County Engineering Department Standards at West Sycamore Road and FM 521
- 2. Temporary Traffic Signal Design (Plans and Layouts, including Loop Detectors and Electrical Schedules) will be provided at West Sycamore Road and FM 521 during the construction of the project if required.

### **Utilities:**

### Water:

If it is determined in PER that the existing 8-inch water line (approx. 2600 LF) requires to be relocated, we will include the plan and profile sheets for water line to be relocated. Any additional water line which is not existing will be an additional service.

### Storm Water Pollution Prevention Plans (SWPPP):

- 1. Prepare the drawings based on Fort Bend County Design Criteria.
- 2. As the roadway will disturb more than 1 acre of land, the following will be provided as part of SWPP Plans. Prepare the SWPPP written plan including two Notices of Intent (NOI), two Notices on Termination (NOT), and two Construction Site Notices as/if required in accordance with the current Texas Commission on Environmental Quality, TPDES General Permit for storm water discharges associated with construction activities.

### Storm Water Quality Management Plans (SWOMP):

- Prepare a Storm Water Quality Management Plan (SWQMP) for implementation of Best Management Practices necessary for treatment of storm water runoff in accordance with the regulations of Fort Bend County, Texas for Storm Water Quality Management, and/or as required by the appropriate local jurisdictional agency regulations, ordinances, or guidelines. Review and sign off by Fort Bend County Engineering Department (FBCED) – Permit section will be required.
- 2. If it is determined that it will not be feasible to address SWQMP in accordance with the regulations noted above, alternate minimum acceptable options to address Best Management Practices (BMPs) are provided in the Harris County Public Infrastructure Department engineering Division-Permit Office's "Storm Water Quality Guidance Document for New

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Development/Redevelopment Projects". Use of these options will require approval of Fort Bend County Engineering Department (FBCED).

3. Once the pond location is decided, SWQMP measures will be implemented in the proposed detention pond.

### **BID PHASE AND CONSTRUCTION PHASE**

The following services will be performed during the Bid Phase and Construction Phase of the project:

### Bid Phase:

- The Design Consultant will prepare a single project manual file in PDF format consisting of:
  - Administrative documents
  - The bid form (prepared by the Design Consultant)
  - A sealed and signed specification table of contents (prepared by the Design Consultant)
  - Applicable specifications and documents (prepared by the Design Consultant)
- The Design consultant will submit 27 compact discs containing one project manual file and one drawing plan set (including signed cover sheet). Of these, 25 compact discs will be delivered to the Fort Bend County Purchasing Agent for advertising, and two discs will be provided to the Program Manager. Printed documents are not required. All compact discs must be labeled with project number, bid number (assigned by the Purchasing Agent) and project name with limits.
- The Design Consultant will attend a pre-bid meeting at the Fort Bend County Purchasing Office. It is not necessary to prepare for the meeting, other than to be able to briefly describe the project and answer questions.
- The Purchasing Agent will forward bidder questions to the Design Consultant. Answers to questions, as well as any other required changes, will be included in an addendum, prepared by the Design Consultant if necessary. The Purchasing Agent will distribute the addendum.
- o After the bid, the Program Manager will prepare a bid tabulation and provide a copy to the Design Consultant for filing.

### Construction Phase:

The Design Consultant will attend a pre-construction meeting with Fort Bend County staff, Program Manager, Construction Manager, general contractor, and construction materials testing contractor. Prior to the meeting, the Program Manager will inform the Design Consultant of how many drawing plans sets and project manuals are required, and

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> the Design Consultant will provide these documents at the preconstruction meeting.

- o Temporary benchmarks and baseline control should be set, both with 1,000-foot maximum spacing between points. Baseline control shall be recovered or reestablished immediately prior to construction.
- The Design Consultant will be responsible for reviewing contractor submittals and responding to Requests for Information.
- o Field visits and progress meetings will not be required unless requested by Fort Bend County.
- o The Design Consultant will participate in a substantial completion walkthrough.
- o After project completion, the Design Consultant will prepare record drawings based on contractor as-built markups. Design Consultant is to deliver to Fort Bend County one set of the record drawings in pdf format on a CD/DVD with each sheet stamped "Record Drawings." The CD/DVD shall also include electronic files (AutoCAD or Microstation) as well as a KMZ file showing the existing/proposed right-of-way and proposed improvements.



### "EXHIBIT B" - Compensation for Professional Services Project Name: West Sycamore Road Segment 3 Project Limits: From South Post Oak Boulevard to FM 521 FBC Project Number: 17123x | Isani Project Number: 20PVxx

	BASIC SERVICES			
1	Preliminary Engineering Design (Lump Sum) (includes coordinaton with Surveyor and Geotechnical)		\$	155,129.00
2	<b>Final Design (Lump Sum)</b> (includes coordinaton with Surveyor and Traffic)		\$	229,673.00
3	Bid Phase (Lump Sum)		\$	7,000.00
4	Construction Phase (T & M) (includes \$10,000 allocated for surveyor to re-establish control monument)		\$	37,000.00
<b>5</b> 5.1 5.2 5.3 5.4	Proposed Condition Analysis Drainage Report (Approx. 50 pages)	\$ 22,296.00 \$ 21,686.00 \$ 20,444.00 \$ 23,627.00	- - -	
6	Geotechnical Investigations		\$	88,053.00
6.1 6.2	Geotechnical Report for Roadway, Drainage	\$ 18,544.00 \$ 13,578.00	- <u>.</u>	
7 7.1 7.2 7.3 7.4	ROW Maps (Lump Sum) Detention Pond Prepare UPRR franchise crossing exhibit and metes and bounds	\$ 68,640.00 \$ 46,220.00 \$ 7,000.00 \$ 4,000.00	<b>\$</b>	32,122.00
8 8.1 8.2	1 7 8 8	\$ 5,799.48 \$ 22,807.64	\$	28,607.12
	SUB-TOTAL FOR BASIC	SERVICES (1-8)	\$	703,444.12
	OPTIONAL ADDITIONAL SERVICES	}		
9.2 9.3	Survey  Level A SUE  Prepare parcel plate and metes and bounds for acquisition (17  parcels @ \$3,200/parcel)  Prepare parcel plate and metes and bounds for UVE (1 parcel @ \$2,750/parcel)	\$ 10,000.00 \$ 54,400.00 \$ 2,750.00	\$	67,150.00
<b>10</b> 10.1	Utilities Sanitary Sewer Relocation	\$ 10,920.00	\$	10,920.00
	SUB-TOTAL FOR OPTIONAL S	ERVICES (9-10)	\$	78,070.00
	TOTAL SERVICES (BASIC &	OPTIONAL	\$	791 514 19
	TOTAL SERVICES (BASIC &	Of HONAL)	n)	781,514.12





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Employ	Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD	Admin	Total Labor Hrs & Costs	To	Total
Contrac	Contract Rate Per Hour		\$225.00	\$177.00	\$156.00	\$145.00	\$114.00	\$100.00	\$78.00			
NO.	LEVEL OF EFFORT: SUMMARY				LEV	/EL OF EFFO	RT (ESTIMA	LEVEL OF EFFORT (ESTIMATED HOURS)	(9			
PRELIN	PRELIMINARY DESIGN (TASK A)											
A1	PRELIMINARY ENGINEERING/DESIGN		0	55	62	254	300	222	4	914	\$ 1	115,601.00
A2	DRAINAGE (H&H) ANALYSIS (ROAD)		2	40	38	152	228	20	12	492	\$	64,426.00
A4	GEOTECHNICAL INVESTIGATIONS (BY Associated Testing Laboratories, Inc.)										\$	32,122.00
A4.1	COORDINATION WITH GEOTECHNICAL SUBCONSULTANT		0	4	0	8	&	0	<b>&amp;</b>	28	€	3,404.00
A5	TOPOGRAPHIC SURVEY AND ROW MAPS (BY Landtech, In)										\$ 1	189,010.00
A5.1	COORDINATION WITH SURVEYOR SUBCONSULTANT		2	8	0	8	12	0	0	30	\$	4,394.00
A6	PROJECT MANAGEMENT		2	44	0	84	64	8	22	224	\$	30,230.00
A7	OTHER EXPENSES										\$	1,500.00
	TOTAL ESTIMATE FOR PRELIMINARY DESIGN										\$ 4	440,687.00
PRELIN	PRELIMINARY DESIGN											
PRELIN	PRELIMINARY ENGINEERING/DESIGN (TASK A1)											
1	Key Maps, Vicinity Maps and Other Maps					2	2	8		12	\$	1,318.00
2	General Notes			1		2	4			7	\$	923.00
8	Requesting Facility Maps and Record Drawings from the concerned companies/organizations			2		8	12		4	26	\$	3,194.00
4	Evaluate Existing Conditions											
4.1	1 Geometrics			1	2	2	4			6	\$	1,235.00
4.2	2 Topographic Conditions			1		4	4			6	\$	1,213.00
4.3	3 Soils			1		2	2			5	\$	695.00
4.4	4 Drainage			1		4	4			6	\$	1,213.00
4.5	5 Traffic			1		2	2			5	\$	695.00
4.6	5 Structures			1		2	2			5	\$	695.00
4.7	7 Environmental			1		2	2			5	\$	695.00
5	Utilities Coordination and Contact List Table			1		8	12			21	\$	2,705.00
9	Major Utility Conflicts Table			1		8	20			29	\$	3,617.00
7	Proposed Improvements											

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## WEST SYCAMORE SEGMENT 3 FROM SOUTH POST OAK BOULEVARD TO FM 521 ISANI CONSULTANTS, L.P. PROPOSAL - SEPTEMBER 18, 2020 PRELIMINARY DESIGN LEVEL OF EFFORT



Employe	Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs		Total
Contract	Contract Rate Per Hour		\$225.00	\$177.00	\$156.00	\$145.00	\$114.00	\$100.00	\$78.00			
NO.	LEVEL OF EFFORT: SUMMARY				LEV	/EL OF EFFO	RT (ESTIMA	LEVEL OF EFFORT (ESTIMATED HOURS)				
7.1	Geometrics (Design Criteria and Typical Sections)			1	2	8	8			19	\$	2,561.00
7.2	Paving			1	2	8	4			15	\$	2,105.00
7.3	Drainage			1	2	8	12			23	\$	3,017.00
7.4	Traffic			1	4	4	8			17	\$	2,293.00
7.5	Structures			1	2	4	2			6	\$	1,297.00
7.6	Permitting Requirements			2		4	8			14	\$	1,846.00
8	Review and Check Topograpihc Survey (with field visit)				4	16	8			28	\$	3,856.00
6	Basemaps & Existing Plan and Profiles	6		9	8	18	28	42		102	\$	12,312.00
10	Proposed Horizontal Design/Alignments (Roadway)			2	4	8	16	24		54	\$	6,362.00
11	Proposed Horizontal Design/Alignments (Storm Sewers)			2	4	8	12	16		42	\$	5,106.00
12	Preparing Roadway Schematics			2	&	12	12	24		58	\$	7,110.00
13	Sight Triangles (Existing and Proposed Cross Streets)	5		2	4	12	12	24		54	\$	6,486.00
14	Intersection Details/Driveway Details	5		1		8	12	16		37	\$	4,305.00
15	Signing and Pavement Marking Schematic/Plans	5		1		8	12	16		37	\$	4,305.00
16	Traffic Signal Plan Preliminary Schematic	2		1		4		8		13	\$	1,557.00
17	Exhibits and Appendices	10		3	5	16	20	28		72	\$	8,711.00
18	Preliminary Drainage Area Maps	5		4	8	12	12	16		52	\$	6,664.00
19	Preliminary Engineering Report			8	12	40	24			84	\$	11,824.00
20	Specifications and Preliminary Construction Cost Estimate			4	∞	10	20			42	<del>\$</del>	5,686.00
	SHEETS/HOURS SUB-TOTALS		0	22	62	254	300	222	4	914		
	TOTAL LABOR COSTS		\$0.00	\$9,735.00	\$12,324.00	\$36,830.00	\$34,200.00	\$22,200.00	\$312.00		\$	115,601.00
	% DISTRIBUTION OF STAFFING		0.00%	6.02%	8.64%	27.79%	32.82%	24.29%	0.44%	100.00%		
	SUBTOTAL (TASK A1)										\$	115,601.00
DRAIN	DRAINAGE ANALYSIS FOR ROADWAY (H&H) (TASK A2)											
1	Review of data including survey, record drawings, site visits and other information			∞	4	12	16			40	€	5,604.00



		Jo oIV		Duciost		Duciost	0.10	(		Total I oba		
Employ	Employee Classification	Sheets	Principal	riojeci Manager	Engineer	Froject Engineer	Engineer	Technician	Admin	Hrs & Costs		Total
Contract	Contract Rate Per Hour		\$225.00	\$177.00	\$156.00	\$145.00	\$114.00	\$100.00	\$78.00			
NO.	LEVEL OF EFFORT: SUMMARY				LE	VEL OF EFFO	RT (ESTIMA	LEVEL OF EFFORT (ESTIMATED HOURS)				
2	Delineate all sub-drainage areas contributing to project limits			2	2	8	24			36	<del>\$</del>	4,562.00
3	Perform Hydrologic calculations for Existing Conditions based on Atlas 14 data			2	2	12	28			44	<del>\$</del>	5,598.00
4	Develop Hydraulic model for Existing Conditions based on Atlas 14 data			4	2	16	28			50	\$	6,532.00
ഹ	Determine Change in 2-yr and 100-yr flows for change in Tc and New Imperviousness Outside Existing ROW, Validate Drainage Boundaries and hydrologic calculations			4	2	∞	12	∞		34	€	4,348.00
9	Determine Detention Volume based on ROW, hydrographs and physical constraints			2	2	8	12			24	\$	3,194.00
7	Develop Preliminary Proposed Alternatives and Hydraulic models			4	4	20	32			09	\$	7,880.00
8	Perform Mitigation Analysis and Finalize models			4	4	12	28			48	\$	6,264.00
6	Prepare OPCC			2	2	∞				12	\$	1,826.00
10	Prepare and Present Preliminary Findings to Fort Bend County Engineering Department/Drainage District			2	2	8	8			20	\$	2,738.00
11	Prepare Exhibits and Appendices required for the Drainage Report				2	4	12	12		30	\$	3,460.00
12	Prepare Drainage Impact and Mitigation Analysis Report for Fort Bend County Engineering Department/Drainage District Submittal		1	4	∞	28	20		12	73	\$	9,457.00
13	Submit the Drainage Report with Roadway to Fort Bend County Engineering Department and Fort Bend County Drainage District		1	2	2	&	8			21	\$	2,963.00
	SHEETS/HOURS SUB-TOTALS		2	40	38	152	228	20	12	492		
	TOTAL LABOR COSTS		\$450.00	\$7,080.00	\$5,928.00	\$22,040.00	\$25,992.00	\$2,000.00	\$936.00		\$	64,426.00
	% DISTRIBUTION OF STAFFING		0.41%	8.13%	7.72%	30.89%	46.34%	4.07%	2.44%	100.00%		
	SUBTOTAL (TASK A2)										\$	64,426.00

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## WEST SYCAMORE SEGMENT 3 FROM SOUTH POST OAK BOULEVARD TO FM 521 ISANI CONSULTANTS, L.P. PROPOSAL - SEPTEMBER 18, 2020 PRELIMINARY DESIGN LEVEL OF EFFORT



											ļ	
Employ	Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs		Total
Contrac	Contract Rate Per Hour		\$225.00	\$177.00	\$156.00	\$145.00	\$114.00	\$100.00	\$78.00			
NO.	LEVEL OF EFFORT: SUMMARY				LEV	LEVEL OF EFFORT (ESTIMATED HOURS)	RT (ESTIMA	TED HOURS	(			
GEOTE	GEOTECHNICAL INVESTIGATIONS (TASK A4) (by Associated Testing		Laboratories, Inc.)	1c.)								
1	Geotechnical Investigations and Report (Roadway & Drainage)(Including coring of pavement, flagman, Peace Officer)  (by Associated Testing Laboratories, Inc.)										\$	18,544.00
2	Detention Pond										\$	13,578.00
3	Coordination with Geotechnical Consultants (This is included in Item A4.1)			4		8	8		8	28	\$	3,404.00
	SHEETS/HOURS SUB-TOTALS		0	4	0	8	8	0	8	28		
	TOTAL LABOR COSTS		\$0.00	\$708.00	\$0.00	\$1,160.00	\$912.00	\$0.00	\$624.00		\$	32,122.00
	% DISTRIBUTION OF STAFFING		0.00%	14.29%	0.00%	28.57%	28.57%	%00.0	28.57%	100.00%		
	SUBTOTAL (TASK A4)										\$	32,122.00
TOPOC	TOPOGE APHIC STRVEY AND ROW MAPS (TASK A5) (Inv Landbock In	( oul Hoo)										
		יבכנוי זווניי)										
1	Topographic Survey (by Landtech, Inc.)										\$	68,640.00
2	ROW Maps (by Landtech, Inc.)										\$	46,220.00
8	Topographic Survey for Detention Pond (2 ac @ \$3500/acre) (by Landtech, Inc.)										\$	7,000.00
4	Level A SUE (Optional) (by Landtech, Inc.)										\$	10,000.00
ιΩ	Prepare parcel plat and metes and bounds for acquisitons.(17 parcels @ \$3,200/parcel)(Optional) (by Landtech, Inc.)										€	54,400.00
9	Prepare parcel plate and metes and Bounds for UVE (14 parcels @ \$2,750/parcel)(Optional) (by Landtech, Inc.)										\$	2,750.00
7	Coordination with Surveying Consultants (This is included in Item A5.1)		2	∞		8	12			30	\$	4,394.00

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## WEST SYCAMORE SEGMENT 3 FROM SOUTH POST OAK BOULEVARD TO FM 521 ISANI CONSULTANTS, L.P. PROPOSAL - SEPTEMBER 18, 2020 PRELIMINARY DESIGN LEVEL OF EFFORT



Emplo	Employee Classification	No. of	Principal	Project	QA/QC	Project	Graduate	CAD	Admin	Total Labor	 Total
•		Sheets	•	Manager	Engineer	Engineer	Engineer	Technician		Hrs & Costs	
Contra	Contract Rate Per Hour		\$225.00	\$177.00	\$156.00	\$145.00	\$114.00	\$100.00	\$78.00		
NO.	). LEVEL OF EFFORT: SUMMARY				TE	LEVEL OF EFFORT (ESTIMATED HOURS)	RT (ESTIMA	TED HOURS	(9		
	SHEETS/HOURS SUB-TOTALS		2	8	0	8	12	0	0	30	
	TOTAL LABOR COSTS		\$450.00	\$1,416.00	\$0.00	\$1,160.00	\$1,368.00	\$0.00	\$0.00		\$ 189,010.00
	% DISTRIBUTION OF STAFFING		7.14%	28.57%	0.00%	28.57%	42.86%	%00.0	0.00%	107.14%	
	SUBTOTAL (TASK A5)										\$ 189,010.00
	-										
PROJ	PROJECT MANAGEMENT FOR PRELIMINARY ENGINEERING (TASK	(TASK A6)									
1	Site/Field Visit			8		12				20	\$ 3,156.00
7	Co-ordination with Centerpoint Energy (Electric and Gas)			П		4			7	7	\$ 913.00
3	Co-ordination with AT&T			1		4			2	7	\$ 913.00
4	Coordination with TxDOT (for Signals and Permits)			4		8	16		2	30	\$ 3,848.00
5	UPRR Coordination			8		16	28		4	99	\$ 7,240.00
9	Coordination with Other Utility Companies			4		8	12		7	26	\$ 3,392.00
^	Project Management and Meetings			12		16			2	30	\$ 4,600.00
∞	Approval from FBCED and FBCDD			2		4			4	10	\$ 1,246.00
6	Submittal Milestones (Draft Report and Final Report)		2	4		12	8	8	4	38	\$ 4,922.00
	SHEETS/HOURS SUB-TOTALS		2	44	0	84	64	8	22	224	
	TOTAL LABOR COSTS		\$450.00	\$7,788.00	\$0.00	\$12,180.00	\$7,296.00	00.008\$	\$1,716.00		\$ 30,230.00
	% DISTRIBUTION OF STAFFING		%68.0	19.64%	0.00%	37.50%	28.57%	3.57%	9.82%	100.00%	
	SUBTOTAL (TASK A6)										\$ 30,230.00
OTHE	OTHER EXPENSES (TASK A6)										
Н	Printing/Plotting/Copying										\$ 1,000.00
2	Mileage/Postage/Courier										\$ 500.00
	SUBTOTAL (TASK A6)										\$ 1,500.00
	TOTAL HOURS		2	103	26	346	372	230	34	1166	
	TOTAL ESTIMATE FOR PRELIMINARY DESIGN		\$450	\$18,231	\$12,324	\$50,170	\$42,408	\$23,000	\$2,652		\$ 440,687.00



Contract Ra  NO. LEV  FINAL DE		Sheets	Turcibar	Manager	Engineer	Engineer	Engineer	Technician	Admin	Hrs & Costs	-	Total
NO. LEY FINAL DE	Contract Rate Per Hour		\$225.00	\$177.00	\$156.00	\$145.00	\$114.00	\$100.00	\$78.00			
FINAL DE	NO. LEVEL OF EFFORT: SUMMARY				LEVE	L OF EFFOR	T (ESTIMA	LEVEL OF EFFORT (ESTIMATED HOURS)				
	FINAL DESIGN (TASKS A TO K)											
	ROADWAY DESIGN		0	31	09	186	232	288	0	797	\$	97,065.00
B DRA	DRAINAGE DESIGN		2	14	24	26	102	102	0	300	\$	36,620.00
C DET	DETENTION POND DESIGN		0	13	27	34	26	58	0	188	\$	23,627.00
D TRA	TRAFFIC CONTROL PLANS		0	5	12	32	28	82	0	189	\$	22,209.00
D.1 SYC	TEMPORARY TRAFFIC SIGNALS AT WEST SYCAMORE ROAD AND FM 521 (by KBH Traffic Engineering)										\$	5,799.48
E PER (by	PERMANENT TRAFFIC SIGNAL PLANS (by KBH Traffic Engineering)										\$	22,807.64
E.1 CO	COORDINATION WITH TRAFFIC SUBCONSULTANT		2	8	0	8	12	0	0	30	\$	4,394.00
F SIG	SIGNING AND STRIPING PLANS		0	3	7	13	18	16	0	57	\$	7,160.00
G STC	STORM WATER POLLUTION PREVENTION PLANS & REPORT		0	4	9	17	30	22	4	83	<del>\$</del>	10,041.00
H REF	STORM WATER QUALITY MANAGEMENT PLANS & REPORT		0	9	7	24	32	20	4	93	\$	11,594.00
LED	UTILITIES RELOCATION (Optional Additional)		0	∞	4	16	24	32	∞	92	\$	10,920.00
LOC I FRA BOU	LOCATE MILE POST MARKER AND PREPARE UPRR FRANCHISE CROSSING EXHIBIT AND METES AND BOUNDS (by Landtech, Inc.)										€	4,000.00
I.1 COG	COORDINATION WITH SURVEY SUBCONSULTANT		2	4	0	12	12	0	0	30	€	4,266.00
J PRC	PROJECT MANAGEMENT		0	48	4	100	72	0	32	256	\$	34,324.00
K OTF	OTHER EXPENSES										\$	2,000.00
	TOTAL ESTIMATE FOR FINAL DESIGN										\$	296,827.12
FINAL DESIGN	SIGN											
ROADWA	ROADWAY DESIGN (TASK A)	-	-									
1 For	Fort Bend County Design Criteria					2		4		9	\$	00.069



Empl	Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total	_
Contr	Contract Rate Per Hour		\$225.00	\$177.00	\$156.00	\$145.00	\$114.00	\$100.00	\$78.00			
NO.	LEVEL OF EFFORT: SUMMARY				LEVEL		T (ESTIMA)	OF EFFORT (ESTIMATED HOURS)				
2	General Notes, and Project Layouts	4		1		4		8		13	\$ 1,5	1,557.00
3	Horizontal and Vertical Design/Alignments (Roadway)			2	4	8	12	24		50	\$ 5,90	5,906.00
4	Existing and Proposed Typical Sections	4		1	2	4	12	12		31	\$ 3,6	3,637.00
5	Demolition Plans	4		1	2	8	12	16		39	\$ 4,6	4,617.00
9	Roadway Plan view Drawings			1	9	8	10	12		37	\$ 4,6	4,613.00
^1	Design for Cross Streets	2				16	16	24		56	\$ 6,5	6,544.00
8	Intersection Details/Layouts	5			2	8	10	12		32	8,83,8	3,812.00
6	Typical Street/Driveway Connection Details	2				12	8	10		30	3,6	3,652.00
10	Roadway Plan and Profile Sheets	6		8	18	48	64	84		222	\$ 26,88	26,880.00
11	Cross Sections	25		4	14	24	26	30		86	\$ 12,33	12,336.00
12	Existing Waterline Relocation (Included with Roadway Plan and Profile Sheets)			œ	12	24	30	48		122	\$ 14,98	14,988.00
13	Project Calculations and Earthwork Calculations	2		2		9	12			20	\$ 2,59	2,592.00
14	Specifications and Construction Cost Estimate			3		12	20			35	\$ 4,58	4,551.00
15	Standard Details/Drawings	9				2		4		9	\$ \$	00.069
	SHEETS/HOURS SUB-TOTALS	63	0	31	09	186	232	288	0	797		
	TOTAL LABOR COSTS		\$0.00	\$5,487.00	\$9,360.00	\$26,970.00	\$26,448.00	\$28,800.00	\$0.00		\$ 97,00	97,065.00
	% DISTRIBUTION OF STAFFING		0.00%	3.89%	7.53%	23.34%	29.11%	36.14%	%00.0	100.00%		
	SUBTOTAL (TASK A)										\$ 97,00	97,065.00
DRA	DRAINAGE DESIGN (TASK B)											
7	Drainage Area Maps	4		4	8	12	24	30		78	\$ 9,43	9,432.00
2	Hydraulic Data Sheets	9		2	4	8	12	16		42	\$ 5,10	5,106.00
3	Horizontal and Vertical Design/Alignments (Storm)		2	2	4	12	20			40	\$ 5,4	5,448.00
4	Drainage Plan and Profile Sheets (Included with Roadway Plan and Profile Sheets)			2	4	12	30	40		88	\$ 10,13	10,138.00
5	Drainage System Laterals	4		2	4	9	8	12		32	3,96	3,960.00
9	Standard Details/Drawings	4				2	4	4		10	\$ 1,14	1,146.00
7	Specifications and Construction Cost Estimate			2		4	4			10	\$ 1,39	1,390.00



L												
Emp	Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Ĕ	Total
Cont	Contract Rate Per Hour		\$225.00	\$177.00	\$156.00	\$145.00	\$114.00	\$100.00	\$78.00			
NO.	LEVEL OF EFFORT: SUMMARY				LEVE	L OF EFFOR	RT (ESTIMA	LEVEL OF EFFORT (ESTIMATED HOURS)				
	SHEETS SUB-TOTALS	18	2	14	24	26	102	102	0	300		
	TOTAL LABOR COSTS		\$450.00	\$2,478.00	\$3,744.00	\$8,120.00	\$11,628.00	\$10,200.00	\$0.00		\$	36,620.00
	% DISTRIBUTION OF STAFFING		0.67%	4.67%	8.00%	18.67%	34.00%	34.00%	0.00%	100.00%		
	SUBTOTAL (TASK B)										€	36,620.00
DET	DETENTION POND DESIGN (TASK C)											
1	Detention Pond Design and Layout per FBC Standards			4	12	16	30	36		86	<del>\$</del>	11,920.00
2	Detention Pond Design Calculations	1		4	4	8	12			28	\$	3,860.00
8	Proposed Cross Sections for Detention Pond	2		2	8	4	9	12		32	\$	4,066.00
4	Standard Details/Drawings	3		1	1	2	4	10		18	\$	2,079.00
Ŋ	Specifications and Construction Cost Estimate			2	2	4	4			12	\$	1,702.00
	SHEETS SUB-TOTALS	9	0	13	27	34	26	58	0	188		
	TOTAL LABOR COSTS		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$	23,627.00
	% DISTRIBUTION OF STAFFING		0.00%	4.33%	%00.6	11.33%	18.67%	19.33%	0.00%	62.67%		
	SUBTOTAL (TASK C)										\$	23,627.00
TRA	TRAFFIC CONTROL PLANS (TASK D)											
1	General Notes and Index	1				1	2	2		5	\$	573.00
2	Project Approach Signing	1				3	4	8		15	\$	1,691.00
3	Phasing Overview	1				2	2	8		12	\$	1,318.00
4	Phasing Description and Typical Sections	3		1	1	2	4	8		16	\$	1,879.00
rO	TCP for Temporary Pavement Construction	4				2	4	8		14	\$	1,546.00
9	TCP Phase I	5		1	4	8	12	16		41	\$	4,929.00
^	TCP Phase II	5		1	4	8	12	16		41	\$	4,929.00
∞	TCP Tie- Ins	2		1	1	4	8	8		22	\$	2,625.00
6	TCP Temporary Traffic Signals at West Sycamore Road and FM 521 (by KBH Traffic Engineering)	1									€	5,799.48
10	TCP Specifications and Construction Cost Estimate			1	1	1	∞	4		15	\$	1,790.00
11	Standard Details/Drawings	2			1	1	2	4		8	\$	929.00
	SHEETS/HOURS SUB-TOTALS	25	0	5	12	32	28	82	0	189		



L												
En	Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Г	Total
Co	Contract Rate Per Hour		\$225.00	\$177.00	\$156.00	\$145.00	\$114.00	\$100.00	\$78.00			
Z	NO. LEVEL OF EFFORT: SUMMARY				LEVI	I OF EFFOI	RT (ESTIMA)	LEVEL OF EFFORT (ESTIMATED HOURS)				
	TOTAL LABOR COSTS		\$0.00	\$885.00	\$1,872.00	\$4,640.00	\$6,612.00	\$8,200.00	\$0.00		\$	22,209.00
	% DISTRIBUTION OF STAFFING		0.00%	2.65%	6.35%	16.93%	30.69%	43.39%	0.00%	100.00%		
	SUBTOTAL (TASK D)										€	22,209.00
PE	PERMANENT TRAFFIC SIGNAL PLANS (TASK E)											
	1 Field Investigation										\$	1,405.24
. ,	2 Existing Traffic Signal Layout										\$	1,589.30
	3 Proposed Traffic Signal Layout										\$	12,346.24
	4 Standard Details and Drawings										\$	1,438.74
	5 Plans, Specification and Estimates										\$	2,119.06
	6 Utility Coordination										\$	881.08
-	7 Coordination with TxDOT										\$	970.30
	8 Plan Review Submittals to TxDOT										\$	652.44
	9 Railroad Preemption Coordination w/ TxDOT										\$	1,405.24
	Coordination with Sub-Consultants (This is included in Item E.1)		2	8		8	12				\$	4,394.00
	SHEETS/HOURS SUB-TOTALS		2	8	0	8	12	0	0	30		
	TOTAL LABOR COSTS		\$450.00	\$1,416.00	\$0.00	\$1,160.00	\$1,368.00	00.0\$	\$0.00		\$	22,807.64
	% DISTRIBUTION OF STAFFING		3.51%	14.04%	%00.0	14.04%	21.05%	%00.0	0.00%	52.63%		
	SUBTOTAL (TASK E)										\$	22,807.64
SIC	SIGNING AND STRIPING PLANS (TASK F)											
	1 Signing and Striping Plans	4		2	4	∞	8	12		34	\$	4,250.00
. ,	2 SPM Specifications and Construction Cost Estimate			1	2	4	8			15	\$	1,981.00
	3 Standard Details/Drawings	2			1	1	2	4		8	\$	929.00
	SHEETS/HOURS SUB-TOTALS	9	0	3	7	13	18	16	0	22		
	TOTAL LABOR COSTS		\$0.00	\$531.00	\$1,092.00	\$1,885.00	\$2,052.00	\$1,600.00	\$0.00		\$	7,160.00
	% DISTRIBUTION OF STAFFING		0.00%	5.26%	12.28%	22.81%	31.58%	28.07%	0.00%	100.00%		
	SUBTOTAL (TASK F)										<del>\$</del>	7,160.00



Empl	Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Т	Total
Cont	Contract Rate Per Hour		\$225.00	\$177.00	\$156.00	\$145.00	\$114.00	\$100.00	\$78.00			
NO.	LEVEL OF EFFORT: SUMMARY				LEVE	L OF EFFOR	T (ESTIMA)	LEVEL OF EFFORT (ESTIMATED HOURS)	(			
STO	STORM WATER POLLUTION PREVENTION PLANS (TASK G)	3)										
1	Storm Water Pollution Prevention Plans	4		2	2	4	9	12		26	\$	3,130.00
2	SWPPP Specifications and Construction Cost Estimate					4	8			12	\$	1,492.00
8	SWPPP Written Report			2	4	8	16	8	4	42	\$	5,074.00
4	Standard Details/Drawings	1				1		2		3	\$	345.00
	SHEETS/HOURS SUB-TOTALS	5	0	4	9	17	30	22	4	83		
	TOTAL LABOR COSTS		\$0.00	\$708.00	\$936.00	\$2,465.00	\$3,420.00	\$2,200.00	\$312.00		\$	10,041.00
	% DISTRIBUTION OF STAFFING		0.00%	4.82%	7.23%	20.48%	36.14%	26.51%	4.82%	100.00%		
	SUBTOTAL (TASK G)										\$	10,041.00
STO	STORM WATER QUALITY MANAGEMENT PLANS (TASK H)	0										
	Storm Water Quality Management Plan	2		1	1	2	8	8		20	\$	2,335.00
2	SWQMP Written Report			2	4	12	16			34	\$	4,542.00
33	Floatable Collection Screen Design and Details	2		1	1	4	9	8		20	\$	2,397.00
4	Standard Details/Drawings as applicable	2			1	2	2	4		6	\$	1,074.00
5	Approval from FBCED and FBCDD			2		4			4	10	\$	1,246.00
	SHEETS/HOURS SUB-TOTALS	9	0	9	7	24	32	20	4	93		
	TOTAL LABOR COSTS		\$0.00	\$18.00	\$49.00	\$312.00	\$576.00	\$320.00	\$0.00		\$	11,594.00
	% DISTRIBUTION OF STAFFING		0.00%	7.23%	8.43%	28.92%	38.55%	24.10%	4.82%	112.05%		
	SUBTOTAL (TASK H)										€	11,594.00
UTIL	UTILITIES RELOCATION (Optional Additional)											
1	Existing Sanitary Sewer Relocation (Included with Roadway Plan and Profile Sheets)			8	4	16	24	32	8	92	\$	10,920.00
	SHEETS/HOURS SUB-TOTALS	0	0	8	4	16	24	32	8	92		
	TOTAL LABOR COSTS		\$0.00	\$16.00	\$16.00	\$128.00	\$288.00	\$768.00	\$0.00		\$	10,920.00
	% DISTRIBUTION OF STAFFING		0.00%	9.64%	4.82%	19.28%	28.92%	38.55%	9.64%	110.84%		
	SUBTOTAL (TASK I)										€	10,920.00

## WEST SYCAMORE ROAD

# FROM SOUTH POST OAK BOULEVARD TO FM 521 ISANI CONSULTANTS, L.P. PROPOSAL - SEPTEMBER 18, 2020 FINAL DESIGN LEVEL OF EFFORT



											EATHDLL	0 T1
Emp	Employee Classification	No. of	Principal	Project Manager	QA/QC Fnoineer	Project	Graduate	CAD	Admin	Total Labor Hrs & Costs	Total	1
		Olicets		wanaga	Ligiteer	Liignicei	Luguicei	recinician		1113 & COSES		
Cont	Contract Rate Per Hour		\$225.00	\$177.00	\$156.00	\$145.00	\$114.00	\$100.00	\$78.00			
NO.	). LEVEL OF EFFORT: SUMMARY				LEVE	L OF EFFOR	LEVEL OF EFFORT (ESTIMATED HOURS)	TED HOURS	(			
TOP	TOPOGRAPHIC SURVEY AND ROW MAPS (TASK I) (by Landtech, Inc.)	ıdtech, İnc	(1)									
	Locate mile post marker and prepare UPRR franchise											
1	crossing exhibit and metes and bounds (by										\$ 4,00	4,000.00
	Landtech, Inc.)											
2	Coordination with Surveying Consultants (This is included in Item I.1)		2	4		12	12			30	\$ 4,20	4,266.00
	SHEETS/HOURS SUB-TOTALS		2	4	0	12	12	0	0	30		
	TOTAL LABOR COSTS		\$450.00	\$900.00	\$0.00	\$2,700.00	\$2,700.00	\$0.00	\$0.00		\$ 4,00	4,000.00
	% DISTRIBUTION OF STAFFING		1.06%	2.12%	%00.0	6.35%	6.35%	%00:0	%00.0	15.87%		
	SUBTOTAL (TASK I)										\$ 4,0	4,000.00
Cuu	TO A THE STATE OF THE TOTAL THE STATE OF THE											
LINO	JECT MANAGEMENT FOR FINAL DESIGN (TASK J)											
1	Field Visit			8		8	4		4	24	\$ 3,3,	3,344.00
2	Project Manual			9	4	12	20		4	46	\$ 6,0	6,018.00
8	Co-ordination with Centerpoint Energy (Electric and Gas)			1		4			4	6	\$ 1,0	1,069.00
4	Co-ordination with AT&T, and other private Utilities			П		4			4	6	\$ 1,00	1,069.00
5	Coordination with TxDOT			8		24	20		4	56	\$ 7,4	7,488.00
9	Coordination with UPRR			12		28	24		4	89	\$ 9,2	9,232.00
^1	Project Management and Meetings			8		12			4	24	\$ 3,4	3,468.00
∞	Milestones (70%, 90%, Final )			4		8	4		4	20	\$ 2,6	2,636.00
	HOURS SUB-TOTALS		0	48	4	100	72	0	32	256		
	TOTAL LABOR COSTS		\$0.00	\$8,496.00	\$624.00	\$14,500.00	\$8,208.00	\$0.00	\$2,496.00		\$ 34,3;	34,324.00
	% DISTRIBUTION OF STAFFING		0.00%	18.75%	1.56%	39.06%	28.13%	%00.0	12.50%	100.00%		
	SUBTOTAL (TASK I)										\$ 34,3;	34,324.00
												1

## WEST SYCAMORE ROAD

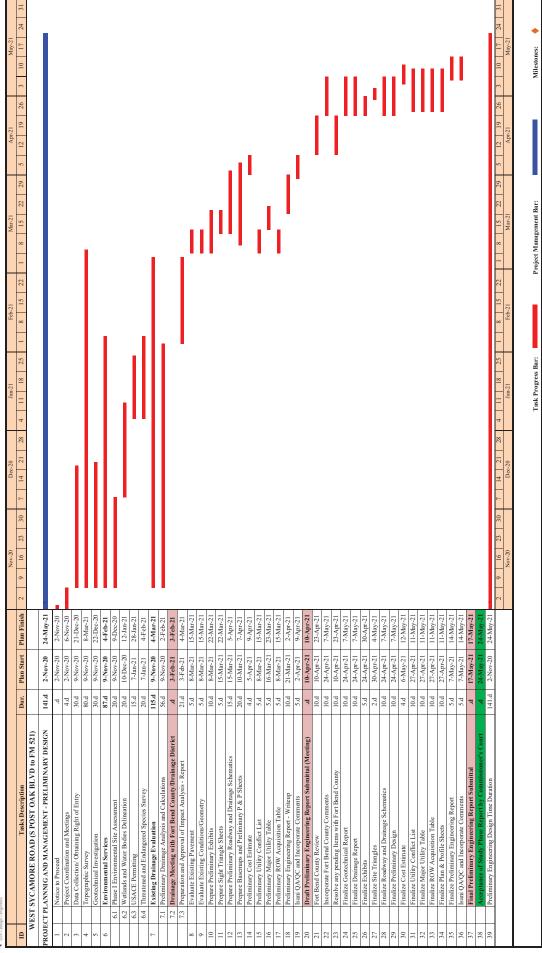
# FROM SOUTH POST OAK BOULEVARD TO FM 521 ISANI CONSULTANTS, L.P. PROPOSAL - SEPTEMBER 18, 2020 FINAL DESIGN LEVEL OF EFFORT



Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total
Contract Rate Per Hour		\$225.00	\$177.00	\$156.00	\$145.00	\$114.00	\$100.00	\$78.00		
NO. LEVEL OF EFFORT: SUMMARY				LEVE	L OF EFFOR	T (ESTIMA	LEVEL OF EFFORT (ESTIMATED HOURS)			
OTHER EXPENSES (TASK K)										
1 Printing/Plotting/Copying (Including Mylars)										\$ 1,500.00
2 Mileage/Postage/Courier										\$ 500.00
SUBTOTAL (TASK K)										\$ 2,000.00
TOTAL HOURS		2	105	113	404	512	510	36		
TOTAL ESTIMATE FOR FINAL DESIGN (TASKS A-K)		\$450	\$18,585	\$17,628	\$58,580	\$58,368	\$51,000	\$2,808		\$ 296,827.12
BID PHASE & CONSTRUCTION PHASE										
1 Bid Phase										\$ 7,000.00
2 Construction Phase Services (T&M)										\$ 37,000.00
TOTAL HOURS										
TOTAL ESTIMATE FOR BID PHASE AND CONSTRUCTION PHASE										\$ 44,000.00
TOTAL ESTIMATE FOR FINAL DESIGN, BID AND CONSTRUCTION PHASE SERVICES	R FINAL	DESIGN, BI	ID AND COP	NSTRUCTIO	N PHASE S	ERVICES				\$ 340,827.12



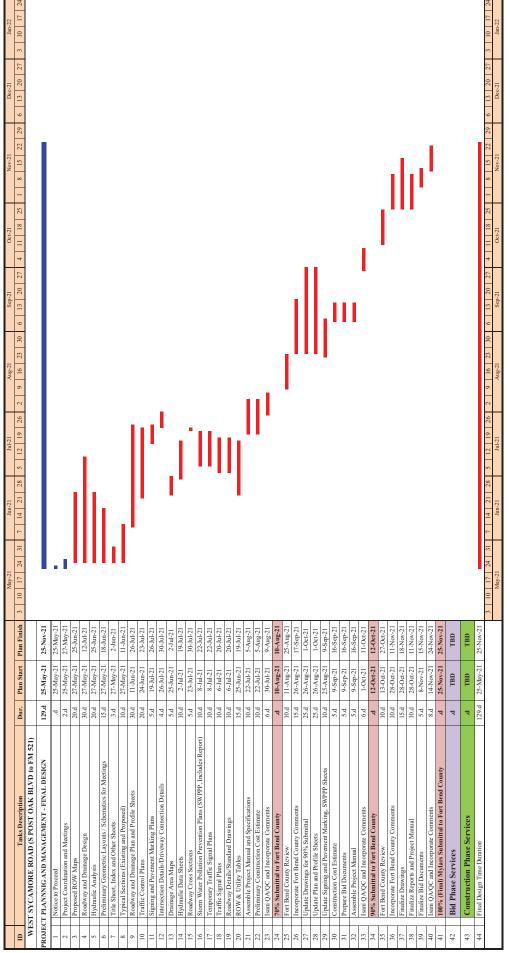
"EXHIBIT C" - Preliminary Engineering Design and Report Schedule WEST SYCAMORE ROAD (From South Post Oak Blvd. to FM 521)



9/18/2020

## "EXHIBIT C" - Final Design Schedule WEST SYCAMORE ROAD SEGMENT 3 (From South Post Oak Blvd to FM 521)





9/18/2020

Project Management Bar:

Task Progress Bar:



### Exhibit "D" - Project Team Sub-Consultants

West Sycamore Road-Segment 3 **Project Name:** 

**Project Limits:** From South Post Oak Boulevard to FM 521

**FBC Precinct:** 1

Surveying: Landtech, Inc.

Associated Testing Laboratories, Inc. **Geotechnical:** 

KBH Traffic Engineering, LLC Traffic:



### Isani Consultants, LP 2020 Schedule of Raw Hourly Rates

PERSONNEL/TITLE:	HOURLY RATE
Principal	\$75.00
Senior Project Manager	\$66.00
Project Manager	\$59.00
Senior Project Engineer	\$54.00
Project Engineer	\$48.50
QA/QC Engineer	\$52.00
Senior Civil Engineer	\$48.50
Civil Engineer	\$41.50
Engineer-In-Training (EIT)	\$38.00
Senior Designer	\$46.00
Designer	\$41.50
Project Coordinator	\$37.00
CAD Technician	\$33.50
GIS Technician	\$33.50
Document Control	\$33.50
Administrative Assistant	\$26.50