STATE OF TEXAS

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COUNTY OF FORT BEND

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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 SES HORIZON CONSULTING ENGINEERS, 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 paving and drainage improvements to a new boulevard type roadway construction (100 foot right of way to include two – two lane travel ways, left turn bays and a closed storm sewer system) on Mason Road from the North Limit of Fieldstone Subdivision to Beechnut Street, for Mason Road Project Number 17405, 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 surveying, right-of-way mapping, geotechnical investigations, roadway design, drainage design, traffic control design and utility coordination for the project as described Scope of Services and Deliverable Documents 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.

Agreement for Professional Engineering Services 2017 Mobility Bond Program – Project No. 17405 Page 1 of 10 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 Two Hundred Fifty-three Thousand, Three Hundred Twenty-three and 41/100 (\$253,323.41) 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 Two Hundred Fifty-three Thousand, Three Hundred Twenty-three and 41/100 (\$253,323.41), 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 Two Hundred Fifty-three Thousand, Three Hundred Twenty-three and 41/100 (\$253,323.41).

Section 5. Time of Performance

Time for performance of the Scope of Services under this Agreement shall begin with receipt of the Notice to Proceed and end no later than December 31, 2022. Contractor shall complete the tasks described in the Scope of Services, within this time or within such additional time as may be extended by the County.

Section 6. Modifications and Waivers

- 6.1 The parties may not amend or waive this Agreement, except by a written agreement executed by both parties.
- 6.2 No failure or delay in exercising any right or remedy or requiring the satisfaction of any condition under this Agreement, and no course of dealing between the parties, operates as a waiver or estoppel of any right, remedy, or condition.
- 6.3 The rights and remedies of the parties set forth in this Agreement are not exclusive of, but are cumulative to, any rights or remedies now or subsequently existing at law, in equity, or by statute.

Section 7. Termination

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

7.2 Termination for Default

- 7.2.1 County may terminate the whole or any part of this Agreement for cause in the following circumstances:
- 7.2.1.1 If Contractor fails to perform services within the time specified in the Scope of Services or any extension thereof granted by the County in writing;
- 7.2.1.2 If Contractor materially breaches any of the covenants or terms and conditions set forth in this Agreement or fails to perform any of the other provisions of this Agreement or so fails to make progress as to endanger performance of this Agreement in accordance with its terms, and in any of these circumstances does not cure such breach or failure to County's reasonable satisfaction within a period of ten (10) calendar days after receipt of notice from County specifying such breach or failure.
- 7.2.2 If, after termination, it is determined for any reason whatsoever that Contractor was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the County in accordance with Section 7.1 above.
- 7.3 Upon termination of this Agreement, County shall compensate Contractor in accordance with Section 3, above, for those services which were provided under this Agreement prior to its termination and which have not been previously invoiced to County.

Contractor's final invoice for said services will be presented to and paid by County in the same manner set forth in Section 3 above.

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

Section 8. Ownership and Reuse of Documents

All documents, data, reports, research, graphic presentation materials, etc., developed by Contractor as a part of its work under this Agreement, shall become the property of County upon completion of this Agreement, or in the event of termination or cancellation thereof, at the time of payment under Section 3 for work performed. Contractor shall promptly furnish all such data and material to County on request.

Section 9. Inspection of Books and Records

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

Section 10. Insurance

- 10.1 Prior to commencement of the Services, Contractor shall furnish County with properly executed certificates of insurance which shall evidence all insurance required and provide that such insurance shall not be canceled, except on 30 days' prior written notice to County. Contractor shall provide certified copies of insurance endorsements and/or policies if requested by County. Contractor shall maintain such insurance coverage from the time Services commence until Services are completed and provide replacement certificates, policies and/or endorsements for any such insurance expiring prior to completion of Services. Contractor shall obtain such insurance written on an Occurrence form (or a Claims Made form for Professional Liability insurance) from such companies having Best's rating of A/VII or better, licensed or approved to transact business in the State of Texas, and shall obtain such insurance of the following types and minimum limits:
- 10.1.1 Workers' Compensation insurance. Substitutes to genuine Workers' Compensation Insurance will not be allowed. Employers' Liability insurance with limits of not less than \$1,000,000 per injury by accident, \$1,000,000 per injury by disease, and \$1,000,000 per bodily injury by disease.
- 10.1.2 Commercial general liability insurance with a limit of not less than \$1,000,000 each occurrence and \$2,000,000 in the annual aggregate. Policy shall cover liability for bodily injury, personal injury, and property damage and products/completed operations arising out of the business operations of the policyholder.

- 10.1.3 Business Automobile Liability insurance with a combined Bodily Injury/Property Damage limit of not less than \$1,000,000 each accident. The policy shall cover liability arising from the operation of licensed vehicles by policyholder.
- 10.1.4 Professional Liability insurance may be made on a Claims Made form with limits not less than \$1,000,000.
- 10.2 County and the members of Commissioners Court shall be named as additional insured to all required coverage except for Workers' Compensation and Professional Liability. All Liability policies including Workers' Compensation written on behalf of Contractor shall contain a waiver of subrogation in favor of County and members of Commissioners Court.
- 10.3 If required coverage is written on a claims-made basis, Contractor warrants that any retroactive date applicable to coverage under the policy precedes the effective date of the contract; and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of 2 years beginning from the time that work under the Agreement is completed.

Section 11. Indemnity

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

Section 12. Confidential and Proprietary Information

- 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:

SES Horizon Consulting Engineers, Inc.

Attn: Epifanio E. Salazar, Jr., P.E., Principal

10101 Southwest Freeway, Suite 400

Houston, Texas 77074

- 14.3 A Notice is effective only if the party giving or making the Notice has complied with subsections 14.1 and 14.2 and if the addressee has received the Notice. A Notice is deemed received as follows:
- 14.3.1 If the Notice is delivered in person, or sent by registered or certified mail or a nationally recognized overnight courier, upon receipt as indicated by the date on the signed receipt.

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

Section 15. Compliance with Laws

Contractor shall comply with all federal, state, and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts or administrative bodies or tribunals in any matter affecting the performance of this Agreement, including, without limitation, Worker's Compensation laws, minimum and maximum salary and wage statutes and regulations, licensing laws and regulations.

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

Section 16. Standard of Care

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

Section 17. Assignment

- 17.1 Neither party may assign any of its rights under this Agreement, except with the prior written consent of the other party. That party shall not unreasonably withhold its consent. All assignments of rights are prohibited under this subsection, whether they are voluntarily or involuntarily, by merger, consolidation, dissolution, operation of law, or any other manner.
 - 17.2 Neither party may delegate any performance under this Agreement.
- 17.3 Any purported assignment of rights or delegation of performance in violation of this Section is void.

Section 18. Applicable Law

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

Section 19. Successors and Assigns

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

Section 20. Third Party Beneficiaries

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

Section 21. Severability

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

Section 22. Publicity

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

Section 23. Captions

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

Section 24. Conflict

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

Section 25. Certain State Law Requirements for Contracts

- 25.1 Agreement to Not Boycott Israel Chapter 2270 Texas Government Code: By signature below, Contractor verifies Contractor does not boycott Israel and will not boycott Israel during the term of this Agreement.
- 25.2 Texas Government Code Section 2251.152 Acknowledgment: By signature below, Contractor represents pursuant to Section 2252.152 of the Texas Government Code, that Contractor is not listed on the website of the Comptroller of the State of Texas concerning the listing of companies that are identified under Section 806.051, Section 807.051 or Section 2253.153.

	to 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	SES HORIZON CONSULTING ENGINEERS, INC.
Rollert E. Hebert, County Judge	Epifanio E. Salazar, Jr., P.E., Principal
gune 26, 2018	06-14-2018
Date	Date
ATTEST:	
Jama Richard 2	
Laura Richard, County Clerk	(SA)
APPROVED:	in.
Michael .	
Richard W. Stolleis, P.E., County Engineer	
APPROVED AS TO LEGAL FORM:	
LaNetra S. Lary, Assistant County Attorney	
Larvetra 3. Lary, Assistant County Acta	
	CERTIFICATE
I hereby certify that funds are available in	the amount of \$\frac{253,333.41}{\tag{40}}\to accomplish and
pay the obligation of Fort Bend County under th	is contract,
./.	11/2 / //
### Rot	pert Ed Sturdivant, County Auditor

I:\LANETRA\Agreements\2018\Engineering\Prof Engineering Services Agrmt.Mason Road (6.4.18).docx. (LSL)

EXHIBIT A



May 16, 2018

Fort Bend County Engineering Department C/O Mr. Robert W. Barnett, P.E. LJA Engineering 2929 Briarpark Drive, Suite 600 Houston, Texas 77042

Reference Project: 2017 Fort Bend County (FBC) Mobility Program Mason Road From: North Limit Of Fieldstone Subdivision To Beechnut Street Fort Bend Project No. 4-05

Dear Mr. Barnett:

SES Horizon Consulting Engineers, Inc. (SES) respectfully submits this fee proposal for the above referenced project to include the professional engineering, geotechnical engineering and topographic surveying services for the preparation of the subject project construction documents. The project scope includes a new boulevard type roadway construction (100 foot right of way to include two – two lane travel ways, left turn bays and a closed storm sewer system) on Mason Road between the North Limit Of Fieldstone Subdivision To Beechnut Street. The approximate length of the project is 2000 linear feet with an estimated construction cost of \$2,000,000.00 as provided by Fort Bend County.

The project will be prepared in accordance with the following documents provided by the Program Manager:

Attachment A – 2017 Mobility Bond Program Summary Of Design Process Attachment B – Mobility Design Standards

The proposal assumes that any changes to the design concepts will be provided during the Preliminary Engineering Phase (30% Submittal). Changes to the design concepts requested after the Preliminary Engineering Phase may result in additional services. An estimate of additional services will be provided upon request.

Compensation:

SES proposes to perform the services described in Attachments A and B for the fees indicated below.

Reference Project:

2017 Fort Bend County Mobility Program

Mason Road

From: North Limit Of Fieldstone Subdivision To Beechnut Street

Fort Bend Project No. 4-05

May 16, 2018

Page 2

Basic Services

Geotechnical Engineering Services	\$17,781.00
Preliminary Engineering Phase (PER):	
SES Preliminary Design	\$55,465.81
Topographic Survey	\$18,852.15
Subtotal PER Phase	\$74,317.96
Final Plans Phase:	
Preparation Of PS&E	\$130,132.00
	4000 000 00
Subtotal Basic Services	\$222,230.96
Bid Phase And Construction Phase Services	\$222,230.96 \$25,005.00
Bid Phase And Construction Phase Services	
Bid Phase And Construction Phase Services Additional Services:	\$25,005.00
Bid Phase And Construction Phase Services Additional Services: Right Of Way Parcel Plans (1 Parcel)	\$25,005.00 \$4,057.45

Exclusions:

- 1. Environmental services, including but not limited to, preliminary wetlands investigations and Phase I Environmental Site Assessment
- 2. Fault Studies
- 3. Traffic Impact Study or collection of Traffic Count Data
- 4. Traffic Signal Design.
- 5. Subsurface utility exploration to determine exact locations and depths. Utility coordination is included in our fee proposal and utility locations will be determined and be based on 811 call, record drawings, and communication with utility companies.
- 6. Utility company signatures on completed drawings.
- 7. Construction Staking.
- 8. Material testing during construction.
- 9. Construction inspection services.
- 10. Construction management services, including processing of pay applications, change orders, etc..



Reference Project:

2017 Fort Bend County Mobility Program

Mason Road

From: North Limit Of Fieldstone Subdivision To Beechnut Street

Fort Bend Project No. 4-05

May 16, 2018

Page 3

Please review and advise if you require any additional information and/or clarifications. We look forward to providing this service to **FBC**.

Sincerely,

SES HORIZON CONSULTING ENGINEERS, INC.

TBPE Firm Registration Number 3922

Epifanio (Epi) E. Salazar Jr., P.E., Principal

Fort Bend County 2017 Mobility Bond Program Fee Estimate Worksheet

Project: Mason Road From North Limit Of Fieldstone Subdivision To Beechnut Street

TASK DESCRIPTION	PRINCIPAL	PROJECT COORDINATOR	STRUCTURAL ENGINEER	SENIOR ENGINEER	ENGINEER	ENGINEERING TECHNICIAN	TECHNICIAN	ADMINISTRATION	TOTAL HOURS	Task Total
. Preliminary Design (LS)										\$ 98,186.4
Establish a Typical Cross Section					8	8			16	\$ 1,680.
Determine ROW Acquisition Needs					16	16			32	\$ 3,360.
Determine Potential Conflicts with existing facilities & utilities					16				16 24	\$ 2,080. \$ 3,120.
Identify Critical Path Items			100		24				16	\$ 3,120.
Identify Problem Areas and Potential Resolutions					16 16	8			24	\$ 2,720.
Site Visit				100	24	0	-		24	\$ 3,120.
Prepare a Construction Cost Estimate					80	80			160	\$ 16,800.
Prepare 30% Plans (Roadway, Drainage And Water Line)					12	4			16	\$ 1,880.
Utility Coordination					12	-			0	\$ 18,852.
Topographic Survey Control & Monumentation - Prepare Survey Control Map					12	8			20	\$ 2,200
Right-of-way Parcel Exhibits (\$ per parcel)									0	\$ 6,087
Geotechnical Investigation									0	\$ 17,781
Survey And Geotechnical Coordination									0	\$ 4,729
Project Management & Meetings	24								24	\$ 4,848
Project Management & Meetings With LID, MUD And Adjacent FBC Mobility Project	24								24	\$ 4,848
Preliminary Phase Expenses										\$ 2,000
Final Design (LS)										\$ 130,132
Final Design (LS) Cover Sheet & Index					4	4			8	\$ 840
General Notes					8	8			16	\$ 1,680
Quantities (Summary Sheets - Optional)				CONTRACTOR OF THE					0	\$
Typical Sections (70%-Final)					12	16			28	\$ 2,840
Project Layout			100		8	8			16	\$ 1,680
Drainage Area Maps					40	40			80	\$ 8,400
Drainage Calculations					120	40			160	\$ 18,800
Plan and Profile Sheets (Roadway And Drainage)					120	120			240	\$ 25,200
Plan and Profile Sheets (Water Line)					0	0			0	\$
Intersection Layouts or Cross Street Details		79			0				0	\$
TCP Advance Warning Signs					0	0			0	\$
TCP Overview & Narrative					0				0	\$.
Detour Plans (with County Approval only)		0.039			0	8			8	\$ 640.
Traffic Control Plan					4	4			8	\$ 840.
Temporary Traffic Signal Plans						The same of the sa			0	\$.
SWPPP Sheets					16	16			32	\$ 3,360.
Culvert/Bridge Layouts					24	24			48	\$ 5,040
Culvert/Bridge Detail Sheets		117			12	12			24	\$ 2,520
Design Calculations									0	\$
Signing & Pavement Markings					40	40			80	\$ 8,400
Traffic Signal & Warrant Study				9				A STATE OF THE PARTY OF	0	\$
Detail Sheets					-				0	\$ 3,360
Standard Details					16	16			32 24	\$ 3,360
Technical Specifications					24				16	\$ 2,080
Bid Form					16				48	\$ 5,840
Construction Cost Estimate					40	8			24	\$ 2,720
Utility & Agency Approvals & Signatures					16 40	40			80	\$ 8,400
Cross Sections with earthwork calculations		-		-	24	24			48	\$ 5,040
Responses to Comments	28				24	24			28	\$ 5,656
Project Management & Meetings	38								38	\$ 7,676
Project Management & Meetings With LID, MUD And Adjacent FBC Mobility Project Final Design Phase Expenses	30						Tall and			\$ 6,000
										\$ 25,005.
. Bid & Construction Phase Services (T&M					40	0		18.5	67	\$ 7,325
Project Manual & Plans (PDF Format on Compact Disc * 28)		8	-		6	U		10.0	10	\$ 1,380
Attend Pre-Bid Meeting	-	4	-	-	12				12	\$ 1,560
Answer Bidder Questions & Addendum Attend Pre-Construction Meeting		4			6				10	\$ 1,380
Attend Pre-Construction Meeting Review Contractor Submittals		-			24	0			24	\$ 3,120
Answering Requests for Information					40	-			40	\$ 5,200
Substantial Completion Walkthrough					8	0			8	\$ 1,04
Record Drawings					8	12			20	\$ 2,00
Bid & Construction Phase Expenses										\$ 2,000
ANHOUR SUBTOTAL	114	16	0	0	952	572	0	18.5	1,673	
ANHOUR SUBTUTAL	7%	1%	0%	0%	57%	34%	0%	1%	1,010	
ABOR RATE PER HOUR	\$202.00	\$150.00	\$144.00	\$135.00	\$130.00	\$80.00	\$59.00	\$50.00		
BOR RATE PER HOUR SUBTOTAL LABOR	\$23,028.00	\$2,400.00	\$0.00	\$0.00	\$123,760.00	\$45,760.00	\$0.00	\$925.00		
SUBTOTAL EABOR	\$20,020.00	\$2,130.00	\$3.00	23.00	0.25,123,00	0.00	23.00			2011 CH 129
TOTAL	-	Market and the second second second	DESCRIPTION OF THE PARTY OF THE	State of the later		CONTRACTOR DESCRIPTION	CHICAGO CONTRACTOR CON		CONTRACT SOURCE SANDARDON	\$ 253,323



TranSystems

2777 Allen Parkway Suite 500 Houston, TX 77019 Tel 713-807-0600 TBPLS Firm Reg. No. 100383 www.transystems.com

May 16, 2018

Mr. Epifanio (Epi) Salazar, Jr., PE SES Horizon Consulting Engineers, Inc. 10101 Southwest Freeway, Suite 400 Houston, TX 77074

Re: Proposal for Professional Surveying Services

Fort Bend County 2017 Mobility Projects - Mason Road (4-05) (the "Project")

Dear Mr. Salazar:

TranSystems Corporation dba TranSystems Corporation Consultants (TranSystems) appreciates the opportunity to submit this proposal to perform professional surveying services to SES Horizon Consulting Engineers, Inc. (Client) for the above listed project.

The scope of services and related deliverables is based on the information outlined in the 2017 Mobility Bond Program Summary of Design Process document provided to TranSystems by Client via email on March 22, 2018 and subsequent discussions, the following represents our understanding of the requirements for this project.

PROJECT LOCATION (See Exhibit "A")

Project 4-05 Mason Road from north limit of the Fieldstone subdivision to Beechnut Street.

The survey will include existing Mason Road 300' south of the end of pavement in the Fieldstone subdivision to Beechnut Street. Total 2.250 LF.

SURVEY DATUM

Horizontal datum will be referenced to the Texas Coordinate System, South Central Zone (4204), North American Datum of 1983 (NAD83) (2011 adjustment) (Epoch 2010.0000) and based on existing National Geodetic Survey (NGS) monuments;

Vertical datum will be referenced to the North American Vertical Datum of 1988 (NAVD88) (GEOID12A) and based on existing National Geodetic Survey (NGS) monuments;

All survey data will be surface values in US Survey Feet;



PRELIMINARY DESIGN

SCOPE OF SERVICES

- Research county records to obtain current vesting deeds, subdivision plats and easement documents along the proposed Mason Road alignment;
- · Research location of existing pipelines crossing proposed alignment;
- Obtain existing LiDAR data from Fort Bend County to verify accuracy and determine overland flow characteristics;
- Contact Texas 811 to identify and locate existing underground utilities within the project limits;
- Secure right of entry to 688 Partners, LP property for survey and geotechnical;
- Establish temporary benchmarks along proposed Mason Road at 1,000' intervals;
- Establish project control points along proposed Mason Road at 1,000' intervals;
- Recover and tie existing right-of-way monumentation and property corners;
- Cross section proposed Mason Road at 100' intervals from right-of-way to right-of-way plus 25' where possible;
- Stake proposed Mason Road centerline and right-of-way for site visits by others;
- Locate and detail existing storm and sanitary sewer and waterline facilities within project limits;
- Locate boreholes and provide horizontal and vertical location;

DELIVERABLES

- · Copies of vesting deeds, subdivision plats and easement documents in pdf format;
- Survey Control map with horizontal and vertical data and reference sketches for each control point;
- 2D design file with approximate location of existing right-of-way lines and property lines;
- 2D planimetric design file;
- 3D DTM design file;

RIGHT-OF-WAY MAPPING

SCOPE OF SERVICES

- Perform final analysis of existing right-of-way lines, property lines:
- Determine proposed right-of-way acquisition parcel boundaries:
- Prepare an overall project map showing the existing and proposed right-of-way lines;
- Prepare parcel plat for each right-of-way acquisition parcel;
- Prepare metes and bounds description for each right-of-way acquisition parcel;
- Prepare a kmz file showing existing right-of-way with ownership information, proposed takings with parcel numbers;

DELIVERABLES

- Overall project map showing existing and proposed right-of-way lines, ownership information, existing easements and other matters of record;
- Parcel plat and metes and bounds description of each parcel to be acquired;
- KMZ file showing existing right-of-way with ownership information, proposed takings and parcel numbers;

Design files, right-of-way map and parcel plats will be prepared in AutoCAD Civil 3D; Metes and bounds descriptions will be prepared in Microsoft Word 2013; KMZ files will be prepared in Google Earth Pro version 7.174.1529;



Please note that no meetings have been included in this scope of services. Preparation for and attendance at meetings will be billed as Additional Services on a time and materials basis in accordance with the general provisions of this Proposal.

COMPENSATION

PRH	IMINA	RYL)FSIGN

TREE INTO THE STATE OF THE STAT	
Abstracting Research / Abstract Map	\$ 1,560.00
Establish control and control map	\$ 3,500.00
Cross-sections, topographic survey, utility ties	\$ 5,530.00
Right-of-way monument, property corner ties	\$ 3,880.00
Planimetric (2D), DTM (3D) and existing right-of-way design files	\$ 3,760.00
Expenses (mileage, deed and plat copies)	\$ <u>352.15</u>
Total lump sum fee	\$18,582.15
RIGHT-OF-WAY MAPPING (1 Parcel)	
Final right-of-way map and parcel plat	\$ 2,560.00
Metes and bounds description	\$ 680.00
QA/QC right-of-way maps, parcel plat, metes and bounds description	\$ 680.00
Final right-of-way monumentation	\$ 2,030.00
Expenses (mileage, supplies)	\$ 137.45
Total lump sum fee	\$ 6,087.45

Invoices will be submitted monthly by a date to be determined and will be based on TranSystems' estimate of the total Services completed as of the time of billing.

ASSUMPTIONS

This proposal and TranSystems' agreement to perform the Services is based upon, and subject to, the following assumptions:

- Client will provide the proposed Mason Road alignment and right-of-way in electronic format prior to work beginning on project;
- Client will provide TranSystems with existing construction drawings/plans of roadways, storm sewer, sanitary sewer and waterlines within the project limits;
- Client will provide TranSystems with existing utility drawings/plans within the project limits;
- Client will provide TranSystems with CAD files of sheet borders for survey control map and parcel plats;
- Client will provide TranSystems with examples of preferred formats of survey control map, parcel plats and metes and bounds descriptions;
- This proposal includes a maximum of one (1) field trip to restake/reflag the proposed centerline and right-ofway lines;

ADDITIONAL SERVICES

Any special surveying services not required to complete the original scope of service which may be requested by the Client. Payment to TranSystems as compensation for these services will be in addition to the contract amount identified above in the Compensation section. TranSystems will be reimbursed by the Client for these services at a cost to be determined under a separate proposal.



Please do not hesitate to contact me at 713-807-4416 if you have any questions or require additional information regarding this proposal.

Sincerely,

TranSystems Corporation dba TranSystems Corporation Consultants

Richard R. Dorr, RPLS Survey Division Leader Assistant Vice President



April 10, 2018 Proposal No.: 18-090

Mr. Epifanio Salazar, Jr., P.E. SES Horizon Consulting Engineers, Inc. 10101 Southwest Freeway, Suite 400 Houston, Texas 77074

Proposal for Geotechnical Engineering Study Roadway Segment Mason Road Richmond, Texas 77407

Mr. Salazar:

Paradigm Consultants, Inc., (Paradigm) appreciates the opportunity to submit this draft proposal to perform a geotechnical study for the referenced project. We prepared our proposal based on the 18-0322 FBC Mobility Scope of Work you provided via e-mail on March 22, 2018.

Scope of Services

Plans are to construct a 1,800-ft roadway south of Beechnut Road at Mason Road in Richmond, Texas. The roadway will be concrete and similar to S Mason Road at Beechnut Road.

Our scope of services will consist of exploring subsurface soil conditions and developing geotechnical engineering recommendations to assist others in the design and construction of the proposed road and utilities. The following subsections present details of our proposed scope of service.

Field Exploration

Based on the information provided, we propose to drill and sample five borings to a depth of 15-ft for the roadway and utilities. The proposed plan of borings is attached for your review. Our geotechnical technician will be present during the field exploration activities to oversee the drilling operations, direct the sampling efforts, and log the borehole in general accordance with applicable ASTM standards. We will coordinate with the surveyors to tie down the borehole locations.

Cohesive soils will be sampled using a 3-in. diameter, thin-walled tube and granular soils will be sampled with a split-barrel sampler while performing a Standard Penetration Test (SPT). Soil sampling will be performed in general accordance with applicable ASTM standards. We will transport portions of the recovered samples to our soil mechanics laboratory for testing.



Paradigm Consultants, Inc.

9980 W. Sam Houston Pkwy S. Suite 500 Houston, Texas 77099

Main: 713.686.6771 Dispatch: 713-686-6999 paradigmconsultants.com TBPE Reg. No. F-001478 Mr. Epifanio Salazar, Jr., P.E. SES Horizon Consulting Engineers, Inc. April 10, 2018 Page 2 of 3

We will collect samples at 2-ft intervals to 12-ft depth with additional samples taken from 13 ft to 15 ft and at 5-ft intervals, thereafter, to the completion depth of borings. The borehole will be dry-augered to the depth where water is encountered or borehole instability occurs. If water is encountered, the water level will be allowed to stabilize for at least 15 minutes before we resume drilling with wet-rotary methods. We will take depth-to-water measurements within the open boreholes on the day of drilling. The open boreholes then will be filled with soil cuttings from our drilling operations.

Laboratory Testing

We will perform laboratory tests on selected samples to evaluate the physical and engineering properties of the recovered soils. The testing will include measurement of the undrained shear strength, unconfined compressive strength test, total unit weight, in situ moisture content, and liquid limit and plastic limit testing to determine plasticity characteristics of the cohesive soils. For granular soils, laboratory testing will include determination of fines content and possibly grain size distribution. Laboratory testing will be performed using applicable ASTM methods.

Engineering Analyses and Reporting

The details of our field and laboratory programs, our findings, and our recommendations will be presented in our geotechnical report. Our geotechnical engineering recommendations will include design and construction recommendations for the proposed roadway and utilities. Construction considerations including subgrade preparation, stabilization, select fill placement, and excavations will also be presented in the report. Based on the field and laboratory data, and our experience, we will provide recommendation to assist in road subgrade preparation, select fill selection and concrete paving thickness.

Fee and schedule

Our fee to provide the scope of services described in this proposal will be \$17,781. Barring any weather delays, we will provide a complete report in about 3 weeks to 4 weeks following drilling.

Variations in the scope of the project may necessitate a change in the scope of services outlined and a change in fees. We will not proceed with a change in the scope of services without your approval.

Assumptions and Conditions

We assumed the borings are accessible to an ATV drill rig. Access, right-of-entry, and/or other permits will be provided by the client. Professional services (engineering recommendations) required/requested beyond the scope mentioned above will be provided on a time-and-materials basis.

Mr. Epifanio Salazar, Jr., P.E. SES Horizon Consulting Engineers, Inc. April 10, 2018 Page 3 of 3

Proposal Acceptance

To accept our proposal and authorize our services, please sign the attached *Professional Services Agreement* and send a copy to our office.

Closing

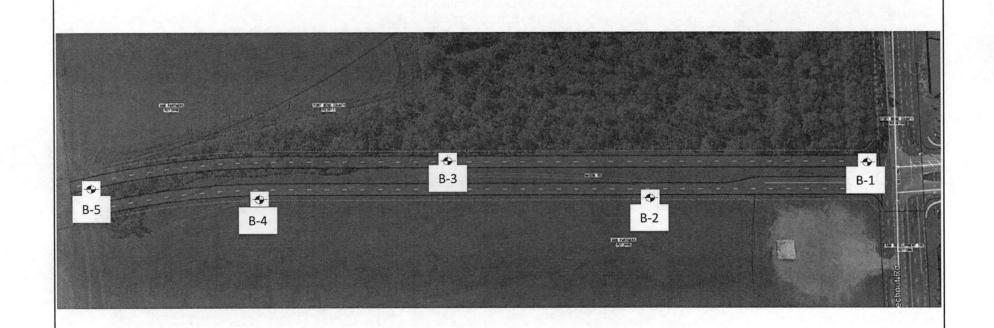
We appreciate having the opportunity to develop this proposal and look forward to working with you on this project. If you have any questions, please contact us at your convenience.

Sincerely,

Paradigm Consultants, Inc.

Frank Ong, P.E.

Engineering Manager





Reference: Base map provided by Client
Note: Boring locations are approximate

Legend: Boring location

ROADWAY SEGMENT

MASON ROAD

RICHMOND, TEXAS

SES HORIZON CONSULTING ENGINEERS, INC.
HOUSTON, TEXAS

PROPOSAL NO. 18-090

Paradigm Consultants, Inc.

9980 West Sam Houston Parkway South, Suite 500
Houston, Texas 77099

FIGURE 1
PROPOSAL NO. 18-090

FIGURE 1

	Geotechnical Study Budget							
	Fort Bend County Mason	Worksheet						
	Proposal No. 18-090	Tromonos.						
	1100000110.10000							
Code	Subcontract Field Charges	Units	Rate					
11110	Mobilization (LS)	1	349.00		349.00			
11010	Drilling - truck (intermittant 0'-50')	75	19.00		1,425.00			
11080	Grouting boreholes	75	10.00		750.00			
11000	Subtotal Subcontract Field		, , , , , ,		2,524.00			
	PCI Field Charges	Units	Rate					
10700	Logger (12 hour days)	12	65.00		780.00			
15000	Vehicle	12	10.00		120.00			
	Subtotal PCI Field				900.00			
	Laboratory Services	Units	Rate					
90900	Unconfined compression	5	45.00		225.00			
90100	Liquid and plastic limits	10	62.00		620.00			
90200	Natural moisture contents	30	9.00		270.00			
90600	Percent finer than no. 200	10	48.00		480.00			
91100	Unconsolidated undrained	5	63.00		315.00			
	Subtotal Laboratory Services				1,910.00			
	PCI Engineering Fees	Units	Rate	Staff				
10400	Lab assignments	2	101.00	Grad Engineer	202.00			
10400	Logs	10	101.00	Grad Engineer	1,010.00			
10400	Engineering	55	101.00	Grad Engineer	5,555.00			
10200	Review	20	183.00	Seni Engineer	3,660.00			
10400	Finalize report	20	101.00	Grad Engineer	2,020.00			
	Subtotal Engineering Fees				12,447.00			
	Total Fee				17,781.00			

CERTIFICATE OF INTERESTED PARTIES

FORM **1295**

1 of 1

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	Complete Nos. 1 - 4 and 6 if there are interested parties. Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.	c	OFFICE USE ONLY CERTIFICATION OF FILING					
1	Name of business entity filing form, and the city, state and country of business.		Certificate Number: 2018-368197					
	SES Horizon Consulting Engineers, Inc.							
	Houston, TX United States	contract for which the for	L.,	Date Filed: 06/14/2018				
2	Name of governmental entity or state agency that is a party to the being filed.	contract for which the fo	·······					
	Fort Bend County (FBC)			ate Acknowledged: 6/26/2018				
3	Provide the identification number used by the governmental entity description of the services, goods, or other property to be provided to the services of the provided to the services of the		or identify the	e contract, and pro	vide a			
	Project Number 4-05 2017 FBC Mobility Program, Mason Road, From North Limits C	Of Fieldstone Subdivision	n To Beechn	ut Street				
4				Nature o				
	Name of Interested Party	City, State, Country (plac	e of business	· · · · · · · · · · · · · · · · · · ·				
				Controlling	Intermediary			
	j							
					-			
5	Check only if there is NO Interested Party.							
6	UNSWORN DECLARATION							
	My name is	, and ı	my date of birt	h is				
	My address is				,			
	(street)	(city)	(state)	(zip code)	(country)			
	I declare under penalty of perjury that the foregoing is true and correct.							
	Executed inCounty,	State of	, on the	day of	, 20			
				(month)	(year)			
	Signature of authorized agent of contracting business entity (Declarant)							