

STATE OF TEXAS §
 §
COUNTY OF FORT BEND §

**AMENDMENT TO AGREEMENT FOR
PROFESSIONAL ENGINEERING SERVICES**

THIS AMENDMENT, 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 McDonough Engineering Corporation (hereinafter “Contractor”), a company authorized to conduct business in the State of Texas.

WHEREAS, the parties executed and accepted that certain Agreement for Professional Engineering Services on May 4, 2021 pursuant to SOQ 14-025, (hereinafter “Agreement”); and

WHEREAS, the parties desire to amend the Agreement to allow Contractor to provide additional Services under the Agreement.

NOW, THEREFORE, the parties do mutually agree as follows:

1. County shall pay Contractor an additional amount not to exceed fifty-two thousand eight hundred thirty-six dollars and no/100 (\$52,836.00) to perform the additional Services, as described in Contractor’s proposal dated January 17, 2022 attached hereto as Exhibit “A” and incorporated herein for all purposes.
2. The Maximum Compensation payable to Contractor for all Services rendered is hereby increased to an amount not to exceed six hundred thirty-two thousand two hundred eighty-one dollars and no/100 (\$632,281.00), authorized as follows:

 \$579,445.00 under the Agreement; and
 \$52,836.00 under this Amendment.
3. In no case shall the amount paid by County for all Services under the Agreement and this Amendment exceed the Maximum Compensation without an agreement executed by the parties.
4. BY ACCEPTANCE OF AGREEMENT, CONTRACTOR 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.

Except as provided herein, all terms and conditions of the Agreement shall remain unchanged.

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 final party.

FORT BEND COUNTY

MCDONOUGH ENGINEERING CORPORATION

KP George, County Judge

Ranney McDonough
Authorized Agent – Signature

Date

RANNEY McDONOUGH
Authorized Agent – Printed Name

ATTEST:

Pres.
Title

Laura Richard, County Clerk

2-16-22
Date

APPROVED:

J. Stacy Slawinski
J. Stacy Slawinski, P.E., County Engineer

AUDITOR'S CERTIFICATE

I hereby certify that funds are available in the amount of \$ _____ to accomplish and pay the obligation of Fort Bend County under this contract.

Robert Ed Sturdivant, County Auditor

EXHIBIT A



McDONOUGH ENGINEERING CORPORATION
Civil Engineers

EXHIBIT "A" SCOPE OF SERVICES

January 17, 2022

Binkley & Barfield, Inc.
Tommy V. Cromer, P.E.
1710 Seamist Dr.
Houston, TX 77008

Attn: Kevin A. Mineo, P.E.

RE: Proposal for Professional Engineering Services- Amendment No. 1
Stella Road: From Cottonwood School Road to Band Road
Precinct 1
Fort Bend County
FBC Project No. 20116
MEC Project No. 21060

PROPOSED SCOPE

In response to project scope changes requested by Fort Bend County, a scope amendment for the Stella Road project has been prepared which includes the following items:

BASIC SERVICES

1. Reduce the project limits from Cottonwood School Road to Band Road, revised to Cottonwood School Road to West Fairgrounds Road. This is a reduction in project limits of approximately 2,470 Linear Feet. This change reduces the Level of Effort by the following:
 - a. Reduces the Final Design Phase - Roadway Plan and Profile Sheets by 5 Sheets
 - b. Reduces the Final Design Phase - Traffic Control Plan Phase One Layouts by 2 Sheets
 - c. Reduces the Final Design Phase - Traffic Control Plan Phase Two Layouts by 2 Sheets
 - d. Reduces the Final Design Phase - Storm Water Pollution Prevention Plans by 1 Sheet
 - e. Reduces the Final Design Phase - Signing and Pavement Marking Plans by 2 Sheets
 - f. Reduces the Cross Section Sheets by 4 Sheets
 - g. Overall reduction in fee of approximately \$21,660.00 based on the hours deducted for the removed sheets. This deduction has been shown in the attached Level of Effort for the amendment.
2. Evaluate increasing the radii of the existing two (2) horizontal roadway curves along Stella Road between the unnamed tributary to Seabourne Creek and West Fairgrounds Road. It is understood based on scoping discussions that no additional Right-of-Way or roadway easements are to be acquired for the alteration of these curves, and that their redesign should keep them within currently owned Fort Bend County property. Civil engineering design services related to this item are further outlined in the attached task breakdown by MEC below
3. Evaluate removing the existing two (2) horizontal roadway curves along Stella Road just east of the intersection with Cottonwood School Road, and extending Stella Road straight through CenterPoint Energy's parcel and a parcel owned by Fort Bend County to connect to Cottonwood School Road. It is anticipated based on scoping discussions that Right-of-Way or a roadway

easement will be acquired to cross the CenterPoint Energy parcel. Civil engineering design services related to this item are further outlined in the attached task breakdown by MEC below.

4. Additional hydrology and hydraulic work as related to the items added above, as further outlined in the attached scope of work from RG Miller.
5. Additional survey as related to the items added above, as further outlined in the attached scope of work from Landtech, Inc.
6. Additional geotechnical services as related to the items added above, as further outlined in the attached scope of work from Aviles Engineering Corporation.

CIVIL DESIGN SERVICES

McDonough Engineering Corporation proposes to complete the following tasks:

- Revise existing Index, Project Layout, Existing and Proposed Typical Section, and Plan and Profile Sheets to reduced project limits, restationed baseline, and revised roadway alignment
- Evaluate and design horizontal curves between the unnamed tributary to Seabourne Creek and West Fairgrounds Road, including drainage swales, channels, culverts, and driveways impacted by realignment
- Evaluate and design realignment of Stella Road at tie-in to Cottonwood School Road, including revising drainage swales, culverts, and driveways impacted by realignment
- Coordinate with subconsultants, including RG Miller, Landtech, and Aviles

Stella Road - Cottonwood School Road to Band Road - Precinct 1
Scope Amendment No 1 - Revised Level of Effort

McDonough Engineering Corporation

1/17/2022

	Proj. Man.	Engineer	Senior Designer	Sr. CADD	CADD	Clerical	Fee	Total Hours per Task	Number of sheets	Hour per Sheet
Phase I - Preliminary Design Phase										
Coordination and review deliverables by subconsultants (Drainage, Geotech, Surveyor)	2	4					\$ 1,200.00	6		
Coordination with Environmental consultant (Independent of project team)							\$ -	0		
Coordination with Agencies and Entities (City of Rosenberg, MUD 148)							\$ -	0		
Attend Progress Meetings (Bi-weekly for 3 months)							\$ -	0		
Topo Site Walk Review	2	2					\$ 840.00	4		
Research Documentation for Existing Utilities within ROW	1	3					\$ 780.00	4		
Attend Utility Coordination Meetings (3 meetings budgeted)							\$ -	0		
Prepare 30% plans (Typical sections, plan and profile- proposed plan view only)							\$ -	0		
Prepare Executive Summary Letter							\$ -	0		
QA/QC							\$ -	0		
Attend a Preliminary Design Phase Meeting to Review PER							\$ -	0		
Address Comments							\$ -	0		
Final Submittal of Letter Report							\$ -	0		
Construction Cost Estimate	1	2	4				\$ 1,200.00	7		
Phase II - Final Design Phase										
Project Administration							\$ -	0	N/A	N/A
Attend Progress Meetings (Bi-weekly for 6 months)							\$ -	0	N/A	N/A
QA/QC										
Internal QA/QC (3 submittals)	1	2					\$ 600.00	3	N/A	N/A
Construction Documents										
Plans										
Cover sheet							\$ -	0		
Index of Sheets	1			1	2		\$ 565.00	4		
General Notes							\$ -	0		
Legend							\$ -	0		
Survey Control Sheets							\$ -	0		
Existing Typical Section	1	2	4	1	6		\$ 1,925.00	14	1	14.0
Proposed Typical Sections	2	4	6	3	8		\$ 3,275.00	23		
Demolition Plans	2	4	6	2	8		\$ 3,150.00	22		
Project Layout Sheet	1	2	4	1	6		\$ 1,925.00	14	2	7.0
Plan and Profile (1"=40' scale 11x17)	12	24	32	42	65		\$ 23,750.00	175	2	87.5
Details										
Typical Pavement Details							\$ -	0		
Concrete Driveway Details							\$ -	0		
ADA Ramp Details							\$ -	0		
Storm Sewer Construction Details							\$ -	0		
Precast Concrete Storm Sewer Manhole Details							\$ -	0		
Junction Box Manhole Detail							\$ -	0		
Safety End Treatment for 12"-72" Dia. Pipe Culverts							\$ -	0		
Traffic Control Plans										
Phasing Layout with General Notes							\$ -	0		
Typical Construction Cross-sections							\$ -	0		
Advanced Warning Signs Layouts							\$ -	0		

Stella Road - Cottonwood School Road to Band Road - Precinct 1
Scope Amendment No 1 - Revised Level of Effort

McDonough Engineering Corporation

1/17/2022

	Proj. Man.	Engineer	Senior Designer	Sr. CADD	CADD	Clerical	Fee	Total Hours per Task	Number of sheets	Hour per Sheet
Phase One Layouts (1"=50' scale)							\$ -	0		
Phase Two Layouts (1"=50' scale)							\$ -	0		
Storm Water Pollution Prevention Plans (1"=100' scale)							\$ -	0		
Storm Water Pollution Prevention Plan Details							\$ -	0		
Signing and Paving Marking Plans (1"=50' scale)							\$ -	0		
Pavement Marking Details							\$ -	0		
Earthwork Table							\$ -	0		
Cross Sections	2	4	6	8	12		\$ 4,300.00	32	N/A	
Construction Cost Estimate							\$ -	0	N/A	N/A
Project Manual (Bid form, specification TOC, special specs)							\$ -	0	N/A	N/A

Total Hours Phase I - Preliminary Design	6	11	4	0	0	0	Total Hours	21
Rate (\$/HR)	240	180	150	125	100	75	Total Sheets	0

Phase I - Pre-Design Phase Subtotal (Lump Sum)	\$ 1,440.00	\$ 1,980.00	\$ 600.00	\$ -	\$ -	\$ -	\$ 4,020.00
	36%	49%	15%	0%	0%	0.0%	

Total Hours Phase II - Final Design	22	42	58	58	107	0	Total Hours	287
Rate (\$/HR)	240	180	150	125	100	75	Total Sheets	5

Phase II - Design Phase Subtotal (Lump Sum)	\$ 5,280.00	\$ 7,560.00	\$ 8,700.00	\$ 7,250.00	\$ 10,700.00	\$ -	\$ 39,490.00
	13%	19%	22%	18%	27%	0.0%	

Fee Reduction for Revised Project Limits
Phase II Design Subtotal

Subsurface Utility Engineering (SUE)- MEC

SUE Subtotal (Lump Sum)	\$ -
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Survey - LandTech, Inc.

Topographic Survey	\$ 11,266.00
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Survey Subtotal (Lump Sum)	\$ 11,266.00
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Geotechnical Report - Aviles Engineering Corporation

Roadway Supplemental (2 additional bores, updating report)	\$ 8,920.00
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Geotechnical Report Subtotal (Lump Sum)	\$ 8,920.00
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Civil Design Services - R. G. Miller Engineers, Inc.

Revise Drainage Analysis and Preliminary Detention Design	\$ 10,800.00
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Civil Design Subtotal (Lump Sum)	\$ 10,800.00
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Total Professional Services Budget	\$ 52,836.00
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January 7, 2022

Conner McBride, P.E.
McDonough Engineering Corporation
5625 Schumacher Lane
Houston, TX 77057

RE: Stella Road Improvements; Project Number: 20116
Drainage Studies Proposal

Dear Mr. McBride,

R. G. Miller Engineers, Inc. (RGME) is respectfully submitting this proposal for the revised drainage studies to support the roadway improvements for the above Fort Bend County project. The following scope of work (SOW) items have been identified to support the project. For a detailed description of scope for each task, refer to the attached Exhibit A1.

- **Task 1a: Revised Stella Road Drainage Analysis** is the revision of the basic SOW from the proposal dated April 5, 2021. This task revises the completed drainage analysis from the previous SOW due to further coordination with Fort Bend County and McDonough Engineering. RGME will provide hydraulic computations and revised letter report of the results of the analysis.

Please find the following attached:

- Exhibit A1: Scope of Services
- Attachment A: Detailed Level of Effort

The proposed fees and schedule are summarized below:

Task	Original Fee	Additional Fee Requested	Total Fee	Required Calendar Days to Complete
Task 1: Stella Road Drainage Analysis and Preliminary Detention Design	\$ 60,465	\$ 10,800	\$ 71,265	<ul style="list-style-type: none">• 30 days – Draft submittal• 21 days to address comments once received.
Task 2: Detention Basin Detailed Design	\$ 42,060	\$ 0	\$ 42,060	<ul style="list-style-type: none">• 45 days – 70% Submittal• 28 days – 90% once 70% comments are received• 28 days – 100% Submittal once 90% comments are received
Total Proposed Fixed Fees	\$ 102,525	\$ 10,800	\$ 113,325	

r. g. miller
engineers, inc.

If you have any questions or require further information regarding the above, please do not hesitate to contact me.

Sincerely,
R. G. Miller Engineers, Inc.

A handwritten signature in blue ink, appearing to read "Mark Rotz", with a stylized flourish at the end.

Mark Rotz, P.E.
Project Manager

EXHIBIT A1

SCOPE OF SERVICES

Fort Bend County Engineering Department – 20116 – Revision to Stella Road Drainage Project

R. G. Miller Engineers, Inc. (RGME or Design Consultant (DC)) as Drainage Studies Sub-Consultant to McDonough Engineering Corporation (McDonough or Client) will provide the following professional services to McDonough for Fort Bend County Engineering Department (FBCED) for a supplemental scope for the revisions to Project Number 20116, Stella Road from Cottonwood School Road to W. Fairgrounds Road. McDonough is the prime consultant for FBCED in this project. The original Stella Road improvement project invoices approximately 1.5 miles of roadway reconstruction. The eastern limit of the project is changed from Band Road to W. Fairgrounds Road, which reduced the improvement segment to approximately 1.0 mile. The revision also includes proposed changes to “S” curve within the roadway and the intersection at Cottonwood School Road. The project will reconstruction the existing asphalt road to a 2-lane with 6-foot shoulders. The proposed storm sewer will be open ditch.

The revised Stella Road improvement project involves approximately 1.0 miles of roadway. The existing 2-lane, crowned asphalt roadway with roadside ditches will add approximately 6 feet shoulder to each lane. Storm runoffs from the Stella Road improvement section mainly drains to Seabourne Creek through the existing tributary channel and roadside ditches of Cottonwood School Road and W. Fairground Road. The proposed detention plan for the project is to provide detention basins at the outfall locations to mitigate for any downstream flow rate impacts.

The drainage analysis will follow the effective Fort Bend County Interim Atlas 14 Design Criteria Manual per Fort Bend County Drainage District. It is understood that a simplified method will be conducted for the drainage model and Atlas 14 rain data will be compared to the model to acquire the necessary detention for the proposed roadway expansion.

To address the above requirements and document that adequate drainage and detention (if required) are provided for proposed roadway improvements, the ensuing sections define required scope of work items per task.

Task 1: Stella Road Drainage Analysis and Preliminary Detention Design

1. Attend meetings as requested from the Client.
2. Gather and review available information on the Stella Road and surrounding areas, including information from the Fort Bend County.
3. Visit the project area to observe and document existing drainage patterns and facilities.
4. Calculate the 10-year, and 100-year flow rates from the proposed expanded portion of the roadway development and determine the size of the detention storage volume required using the simplified methods as shown in Fort Bend County drainage criteria manuals.
5. Develop a base conditions hydrologic model of the study area using the HEC-HMS software package.
6. Revise the hydrologic parameters for the sub-watershed(s) in which the subject development is located to reflect the proposed roadway improvement project. If necessary, create a new sub-watershed and develop hydrologic parameters for that sub-watershed.
7. Compute proposed conditions 10-year and 100-year flow rates that reflect the presence of the proposed development. Compare existing, proposed, and detention conditions flow rates from both models.
8. Revise the routing data for the detention/mitigation basin, the configuration of that basin, or other design parameters as needed in order to eliminate any residual impacts on downstream flow rates.

9. Provide preliminary sizing of the roadside ditch and preliminary size and location of the detention basin(s), if applicable.
10. Prepare a letter report with sufficient text, exhibits, and technical appendices to completely illustrate the results of the investigation.

Task 1a: Revised Stella Road Drainage Analysis

1. Calculate the revised 10-year and 100-year flow rates from the proposed expanded portion of the roadway development and determine the size of the detention storage volume required using the simplified methods as shown in Fort Bend County drainage criteria manuals.
2. Revise the hydrologic parameters for the sub-watershed(s) in which the subject development is located to reflect the proposed roadway improvement project. If necessary, create a new sub-watershed and develop hydrologic parameters for that sub-watershed.
3. Compute proposed conditions 10-year and 100-year flow rates that reflect the presence of the proposed development. Compare existing, proposed, and detention conditions flow rates from both models.
4. Revise a hydraulic model of the proposed roadway drainage system using the XP-SWMM software package. Compute the revised proposed flood levels for 10-year and 100-year storm events.
5. Revise the routing data for the detention/mitigation basin, the configuration of that basin, or other design parameters as needed in order to eliminate any residual impacts on downstream flow rates.
6. Provide preliminary sizing of the roadside ditch and preliminary size and location of the detention basin(s), if applicable.
7. Prepare a letter report with sufficient text, exhibits, and technical appendices to completely illustrate the results of the investigation.

Task 2: Detention Basin Detailed Design

1. To be authorized in design phase of the project.
2. Attend meetings as requested from the Client.
3. To prepare engineering drawings in accordance with the latest FBCED design manual and standards. Construction drawings shall be prepared so they are legible and to scale when printed to the standard 11"x17" size paper. Provide quantities associated with the detention basin construction to Client. Conduct Quality Assurance/Quality Control (QA/QC) procedure for each submittal.
4. Client shall provide the geotechnical investigations findings for the proposed detention basin(s).
5. Each submittal shall include the following drawings:
 - a) Existing Conditions
 - b) Demolition Plan
 - c) Drainage Area and Hydraulic Calculations Sheets
 - d) Proposed Layout and Grading
 - e) Geometric Layout and Point Table
 - f) Typical Sections
 - g) Outfall Plan and Profile
 - h) Storm Water Pollution Prevention Plan
 - i) Detention basin quantities
 - j) Response to comments (as applicable)

Time of completion**Task 1: Sella Road Drainage Analysis**

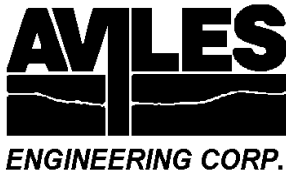
1. Draft report to be completed within 45 days upon the provided Notice to Proceed.
2. Final report to be provided within 21 days upon receiving comments.

Task 1a: Revised Stella Road Drainage Analysis

3. Draft revised report to be completed within 30 days upon the provided Notice to Proceed.
4. Final report to be provided within 21 days upon receiving comments.

Task 2: Detention Basin Detailed Design

1. 70% Submittal to be provided within 45 days upon receiving Notice to Proceed, survey, and Stella Road outfall.
2. 90% submittal to be provided within 28 days upon receiving comments.
3. 100% submittal to be provided within 28 days upon receiving comments.



January 14, 2022

Connor McBride, P.E., Project Manager
McDonough Engineering Corporation
5625 Schumacher Lane
Houston, TX 77057

Re: Revised Supplemental Geotechnical Investigation Proposal
Improvements of Stella Road from Cottonwood School Road to W Fargrounds Road
Fort Bend County Precinct 1
Fort Bend County, Texas
AEC Proposal No. G2021-03-02SR

Dear Mr. McBride,

Aviles Engineering Corporation (AEC) is pleased to present this revised supplemental geotechnical investigation proposal for the proposed improvements of Stella Road from Cottonwood School Road to W Fargrounds Road, Fort Bend County Precinct 1 in Fort Bend County, Texas. According to the updated project map and information provided, AEC understands that there are some changes on the project: (i) the east end limit will be at W Fairgrounds Road; (ii) increase radii of horizontal roadway curves for 2 large curves in the center of the project (as shown by the red lines on the proposed boring location plan); and (iii) straighten out the west end of the project where we connect Stella Road to Cottonwood School Road by removing curves. AEC has drilled 17 borings along Stella Road from Cottonwood School Road to Band Road based on the original alignment, and issued a draft geotechnical report G126-21 (dated July 2021).

Based on the updated project alignment and your request, AEC proposes to drill two (2) additional soil borings at 20 feet deep for the storm sewer and new roadway pavement. The roadway borings are shown on the attached boring location plan. The total additional drilling footage is 40 feet for basic services. We will perform a site reconnaissance prior to drilling and mark the boring locations. We will contact the Texas 811 System to confirm utility locations; however, Texas 811 does not locate water, sanitary, or storm sewer lines. We also request the entry permits for the detention pond area be provided to us at no cost to AEC.

Based on Google Earth and our site visit, AEC anticipates that Borings B-18 and B-19 can be accessed by ATV drill rig. We will collect samples continuously in the top 20 feet. Undisturbed samples will be obtained of cohesive soils by pushing a Shelby tube (ASTM D-1587). Standard Penetration Test samples will be obtained of granular soils (ASTM D-1586). Representative portions of all soil samples will be sealed, packaged, and transported to our laboratory. We will note any visual evidence or odor indicating hazardous materials if encountered in the samples. Water level readings will be noted during drilling and obtained upon completion of drilling; then boreholes will be backfilled with bentonite chips.

Laboratory testing may consist of moisture contents, Atterberg limits, percentage passing No. 200 sieve, sieve analysis, and unconfined compression and unconsolidated-undrained triaxial tests depending on the soil types encountered.

We will analyze the field and laboratory data and incorporate the existing borings to develop geotechnical engineering recommendations in a geotechnical report for (i) boring logs shown subsurface soils and ground water depth encountered in the borings; (ii) geotechnical guidelines for the storm sewer installation including open cut and/or auger methods; (iii) recommendations for asphalt pavement thickness and subgrade preparation; and (iv) geotechnical recommendations and dewatering guidelines for the facility construction.



The lump sum fee for our supplemental services is **\$8,920.00** as presented on the Itemized Fee Estimates in the Attachments. The fees are based on the following assumptions: The fee assumes (i) the site will be open and accessible by an ATV drill rig, and the field personnel will use Level D during the field exploration; (ii) any right-of-way for private property access permits if required, except for FBC ROW, for drilling will be provided to AEC at no charge; (iii) standby time, Phase I fault study, safety training, surveying, tree clearing, fence removal/restoration, working with hazardous materials, environmental sampling/testing/evaluation, and plan/specification review are not included in the above fee.

We propose to perform a site reconnaissance 2 weeks after we receive notice to proceed. Weather permitting, and assuming no field delays, we plan to start the field exploration about 1.5 to 2 weeks after all necessary permits are obtained (note that the permitting for private properties entry may take up to 3 to 4 weeks). The field exploration will take about 2 to 3 weeks. Laboratory soil testing will require 2 to 3 weeks to complete after completion of the drilling, and the draft report will take 3 to 4 weeks after laboratory testing is completed. We will submit final report and trench safety letter two weeks after we receive review comments on the draft report.

To reduce delays in the schedule and avoid additional fees, we request that we be provided with any proposed or preferred geotechnical-related design details including existing utility drawings, and design 100-year flood elevation at the onset. Also, you will notify AEC whether the additional services will be performed prior to AEC marking the borings in the field.

If any of the project details described in this proposal are incorrect or the scope described or the assumptions listed need to be revised, please inform us immediately so we can revise the proposal as necessary. To authorize us to proceed with the proposed geotechnical services, you may sign and return a copy of this proposal to authorize AEC to proceed with the services, or issue us a Professional Services Contract to proceed with the services clearly reflecting the scope of services to be performed and referencing this proposal.

We appreciate the opportunity to present this proposal, and look forward to working with you.

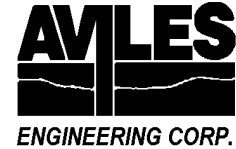
Respectfully Submitted,
AVILES ENGINEERING CORPORATION
(TBPE FIRM REGISTRATION NO. 42)

A handwritten signature in blue ink, appearing to read "Shou Ting Hu", is written over a light blue circular stamp.

Shou Ting Hu, M.S.C.E., P.E.
President

Attachments: Terms and Conditions, Itemized Fee Estimate, Boring Location Plan

AGREED TO THIS _____ DAY OF _____,
PRINTED NAME: _____
SIGNATURE: _____
TITLE: _____
FIRM: _____



GEOTECHNICAL INVESTIGATION TERMS AND CONDITIONS

STANDARD OF CARE

The CLIENT recognizes that actual subsurface conditions can vary from those observed and/or encountered at locations where borings, surveys, or explorations are made, and that site conditions may change with time. Data interpretations and recommendations by AVILES ENGINEERING will be based solely on information available to the AVILES ENGINEERING during the investigation. AVILES ENGINEERING is responsible for those data, interpretations, and recommendations, but will not be responsible for other parties' interpretations or use of the information developed.

The CLIENT should expect AVILES ENGINEERING to perform Services under this PROPOSAL/AGREEMENT in a manner consistent with the level of care and skill ordinarily exercised by members of the engineering profession practicing contemporaneously under similar conditions in the locality of the project. No other warranty, expressed or implied, is made.

SCOPE OF SERVICES

AVILES ENGINEERING will develop a scope of services based on the project information provided by the CLIENT. AVILES ENGINEERING shall not be responsible for problems arising due to inadequate number of borings and/or depths dictated or required by others or inadequate engineering analyses, if the CLIENT reduces the scope of services and/or provides insufficient or invalid project or other relevant information to AVILES ENGINEERING. In the event the CLIENT or his representative orders work described in this PROPOSAL/AGREEMENT, that action shall constitute the CLIENT's acceptance of this PROPOSAL/AGREEMENT and its terms and conditions

SITE ACCESS AND SITE CONDITIONS

The CLIENT will grant or obtain free access to the site for all equipment and personnel necessary for AVILES ENGINEERING to perform the services described in this PROPOSAL/AGREEMENT, as well as provide location data for all below and above ground structures, pipelines and utilities. For such items encountered, not called to the attention of AVILES ENGINEERING, the CLIENT shall assume responsibility for any resultant damages. AVILES ENGINEERING will take reasonable precautions to minimize damage to the site, but it is understood by the CLIENT that, in the normal course of work, some damage may occur and the correction of such damage is not part of this AGREEMENT. The CLIENT will notify AVILES ENGINEERING of any known toxic and/or hazardous materials on site and shall assume responsibility for the cost of occurrences due to unknown toxic and/or hazardous materials on site.

BILLING AND PAYMENT

The CLIENT will pay AVILES ENGINEERING the lump sum amount(s) shown in the PROPOSAL/AGREEMENT. Invoices will be submitted to the CLIENT by AVILES ENGINEERING, and will be due and payable within thirty (30) days of the invoice date. CLIENT will pay an additional charge of 1.5 percent per month on any delinquent amount, and agrees to pay attorney's fees and/or other costs involved in any required collection activity.

LIMITATION OF LIABILITY / INDEMNIFICATION

If at any time, there shall be or arise any liability on the part of AVILES ENGINEERING by virtue of this Agreement or because of the relation hereby established, whether due to the negligence of AVILES ENGINEERING (including gross negligence) or otherwise, such liability is and shall be limited to a sum equal in amount to the fee charged by AVILES ENGINEERING. AVILES ENGINEERING and CLIENT agree to indemnify each other from any claims, etc., including attorney's fees and litigation costs, to the proportionate extent caused by each party's own negligence. If AVILES ENGINEERING is found to be prevalent in any third party lawsuits relating to this AGREEMENT, the CLIENT shall pay all AVILES ENGINEERING costs, including legal fees, that were incurred as a result thereof.

ITEMIZED FEE ESTIMATE

Two (2) borings@20'

A. FIELD EXPLORATION	QTY	UNIT		RATE	AMOUNT
Mobilization/Demobilization (Buggy Rig)	1	LS	@	\$950.00	\$950.00
Drill Crew Travel	0	hrs.	@	\$500.00	\$0.00
Coordination & Utility Checking (Sr. Technician)	5	hrs.	@	\$90.00	\$450.00
Boring Layout & Site Reconnaissance (Graduate Engineer)	6	hrs.	@	\$115.00	\$690.00
Boring Logging and Field Supervising (Technician)	9	hrs.	@	\$65.00	\$585.00
Concrete Pavement Coring and Patching (6" dia, 0"-6" thick)	0	ea.	@	\$170.00	\$0.00
Concrete Pavement Coring (6" dia, 6" to 12" thick)	0	in.	@	\$16.00	\$0.00
Asphalt Coring and Patching (6" dia, 0"-6" thick)	0	ea.	@	\$159.00	\$0.00
Asphalt Patching (6" diameter)	0	ea.	@	\$50.00	\$0.00
Soil Drilling w/truck-mounted rig (0'-20' continuous)	40	ft.	@	\$25.00	\$1,000.00
Soil Drilling w/truck-mounted rig (20'-50' continuous)	0	ft.	@	\$30.00	\$0.00
Soil Drilling w/truck-mounted rig (20 to 50 ft intermittent)	0	ft.	@	\$23.00	\$0.00
Grouting Holes	40	ft.	@	\$12.00	\$480.00
Surcharge for Drilling with Buggy Rig	40	ft.	@	\$10.00	\$400.00
Metal Cover for Piezometers	0	ea.	@	\$100.00	\$0.00
Installing Piezometers	0	ft.	@	\$24.00	\$0.00
Piezometer Monitoring (Technician, 2 Trips)	0	hrs.	@	\$65.00	\$0.00
Plug and Abandon Piezometers	0	ea.	@	\$20.00	\$0.00
Standby Time (Drill Crew)	0	hrs.	@	\$300.00	\$0.00
Vehicle Charge	15	hrs.	@	12.00	\$180.00
	SUBTOTAL				\$4,735.00
B. ALLOWANCE					
Traffic Control Plan and Permits for Lane Closure (Graduate Engineer)	0	hrs.	@	\$115.00	\$0.00
Traffic Control along County Road (Two Flaggers)	0	day	@	\$900.00	\$0.00
	SUBTOTAL				\$0.00
C. GEOTECHNICAL LABORATORY TESTING					
Atterberg Limits (ASTM D-4318)	6	ea.	@	\$71.00	\$426.00
Passing No. 200 Sieve (ASTM D-1140)	5	ea.	@	\$55.00	\$275.00
Sieve Analysis w/o Hydrometer (ASTM D-422)	1	ea.	@	\$65.00	\$65.00
Double Hydrometer (ASTM D-4221)	0	ea.	@	\$250.00	\$0.00
Crumb Test (ASTM D-6572)	0	ea.	@	\$43.00	\$0.00
Moisture Content (ASTM D-2216)	20	ea.	@	\$11.00	\$220.00
Unconfined Compression (ASTM D-2166)	3	ea.	@	\$51.00	\$153.00
Unconsolidated-Undrained Triaxial Test (ASTM D-2850)	3	ea.	@	\$72.00	\$216.00
Consolidated-Undrained Triaxial Test (ASTM D-4767)	0	ea.	@	\$1,800.00	\$0.00
	SUBTOTAL				\$1,355.00
D. ENGINEERING ANALYSIS & REPORT PREPARATION					
Senior Engineer, P.E.	2	hrs.	@	\$205.00	\$410.00
Project Engineer, P.E.	8	hrs.	@	\$165.00	\$1,320.00
Graduate Engineer, EIT	8	hrs.	@	\$115.00	\$920.00
Senior Technician	2	hrs.	@	\$90.00	\$180.00
Engineering Assistant	0	hrs.	@	\$70.00	\$0.00
Reproduction (3 Copies of Final Report)	0	copies	@	\$40.00	\$0.00
	SUBTOTAL				\$2,830.00
	TOTAL ESTIMATED FEE				\$8,920.00



GRAPHIC SCALE, FT

LEGEND:

B-# (X')
BORING NO. & (DEPTH IN FEET)
PROPOSED BORING LOCATION - APPROXIMATE

B-# (X)
BORING NO. & (DEPTH IN FEET)
EXISTING JULY 2021 BORING LOCATION - SURVEYED

Notes:
1) Existing boring locations have been surveyed.
2) Boring locations may be adjusted in field as necessary for drill rig access.

AVILES ENGINEERING CORPORATION

PROPOSED BORING LOCATION PLAN

STELLA ROAD IMPROVEMENTS
FROM COTTONWOOD SCHOOL ROAD TO
W FAIRGROUNDS ROAD
FORT BEND COUNTY, TEXAS

AEC PROPOSAL NO.:		DATE:		SOURCE DRAWING PROVIDED BY:	
G2021-03-02SR		1-14-22		GOOGLE EARTH	
APPROX. SCALE:		DRAFTED BY:		PLATE NO.:	
1" = 500'		YY		PLATE 1	



Landtech, Inc.
2525 North Loop West, Suite 300
Houston, Texas 77008
T: 713-861-7068; F: 713-861-4131
TBPELS Reg. No. 10019100

January 14, 2022

Mr. Connor McBride, P.E.
Project Manager
McDonough Engineering
5625 Schumacher Lane
Houston, Texas 77057

Re: Stella Road from Cottonwood School Road to Band Road

Dear Mr. McBride:

It is my pleasure to submit the following proposal for providing professional surveying services for the above referenced project. The scope of work and associated fee are as follows:

Topographic survey for the realignment at Cottonwood School Road and the reverse curves at the county property. The cross section taken at 50 foot interval extending 20 feet pass the proposed alignment. Update existing DTM, AutoCad topo file and point file.

2 Man Field Party.....	32 hours x \$165.00=	\$5,280.00
Survey Technician.....	12 hours x \$115.00=	1,380.00
CADD.....	28 hours x \$102.00=	2,856.00
Project Surveyor.....	8 hours x \$170.00=	1,360.00
Project Manager.....	2 hours x \$195.00=	<u>390.00</u>
		\$11,266.00

Thank you for the opportunity to submit this proposal.

Paul Kwan, RPLS
President