STATE OF TEXAS \$ \$ KNOW ALL MEN BY THESE PRESENTS: COUNTY OF FORT BEND \$

# AGREEMENT FOR PROFESSIONAL MATERIALS TESTING ENGINEERING SERVICES Mason Road - Project No. 735A&B

THIS AGREEMENT is made and entered into by and between FORT BEND COUNTY, TEXAS, a public body corporate and politic of the State of Texas acting by and through the Fort Bend County Commissioners Court (hereinafter referred to as "County") and Aviles Engineering Corporation, hereinafter referred to as "Engineer," authorized to conduct business in the State of Texas.

#### WITNESSETH:

WHEREAS, County desires that Engineer provide a professional construction materials testing services for improvements to Mason Road, Phase 2 & 3, located in Fort Bend County, Texas, hereinafter called the "Project;" and,

WHEREAS, Engineer represents that it is qualified and desires to perform such services; and

WHEREAS, County has determined that this Agreement is for personal or professional services and therefore exempt from competitive bidding under Chapter 262, LOCAL GOVERNMENT CODE.

NOW, THEREFORE, County and Engineer, in consideration of the mutual covenants and agreements herein contained, do mutually agree as follows:

#### SECTION I CHARACTER AND EXTENT OF SERVICES

- 1.01 Engineer agrees to provide the services described Engineer's Proposal No. 13-46 Rev. 1 dated June 7, 2013, as included in Exhibit A, attached hereto and incorporated by reference as if set forth herein verbatim for all purposes.
- 1.02 Engineer agrees to complete the services called for in Exhibit A within twelve (12) months of the effective date of this Agreement.

#### SECTION II ENGINEER'S COMPENSATION

- 2.01 For and in consideration of the services rendered by Engineer, and subject to the limit of appropriation under Section VI, County shall pay to Engineer an amount not to exceed \$122,402.05, including reimbursable expenses, as follows:
  - A. \$44,215.70 for Phase 2
  - B. \$78,186.35 for Phase 3
- 2.02 Engineer shall submit invoices to County and County shall pay each invoice within thirty (30) days after the County's written approval provided however, that the approval or payment of any invoice shall not be considered to be conclusive evidence of performance by the Engineer to the point indicated by such invoice or of receipt or acceptance by the County of the services covered by such invoice.

2.03 Engineer's fees shall be calculated at rates not to exceed the amounts included on Exhibit A, incorporated by reference herein as if set-forth herein verbatim.

#### SECTION III TERMINATION

- 3.01 County may terminate this Agreement at any time by providing thirty (30) days written notice to the Consultant.
- 3.02 Upon receipt of such notice, the Engineer shall discontinue all services in connection with the performance of this Agreement and shall proceed to cancel promptly all existing orders and contracts insofar as such orders or contracts are chargeable to this Agreement.
- 3.03 Within thirty (30) days after receipt of notice of termination, the Engineer shall submit a statement, showing in detail the services performed under this Agreement to the date of termination.
- 3.04 County shall then pay the Engineer that proportion of the prescribed charges which the services actually performed under this Agreement bear to the total services called for under this Agreement, less such payments on account of charges as have been previously made.
- 3.05 Copies of all completed or partially completed designs, drawings, electronic data files and specifications prepared under this Agreement shall be delivered to the County when and if this Agreement is terminated in the manner and for the purposes provided in this Agreement.

## SECTION IV INSURANCE

Engineer shall, prior to performing billable services and for the duration of term of this Agreement, keep in full force and effect a policy of general liability insurance of not less than \$1,000,000.00 for each claim aggregate, which shall be approved by the Fort Bend County Risk Management Department prior to purchase. The policy shall contain a clause that the insurer will not cancel or reduce the insurance without first giving County ten (10) days prior written notice. The insurance shall be in a company acceptable to the Fort Bend County Risk Management Department and a copy of the policy or certification of insurance shall be delivered to the Fort Bend County Risk Management Department as soon as available. Failure of Engineer to provide the appropriate insurance information shall invalidate this Agreement.

#### SECTION V NOTICE

- Any notice required to be given under the provisions of this Agreement shall be in writing and shall be duly served when it shall have been deposited, enclosed in a wrapper with the proper postage prepaid thereon, and duly registered or certified, return receipt requested, in a United States Post Office, addressed to the County or the Engineer at the addresses set forth below.
- 5.02 If mailed, any notice or communication shall be deemed to be received three days after the date of deposit in the United States Mail.
- 5.03 Unless otherwise provided in this Agreement, all notices shall be delivered to the following addresses:

A. If to Engineer:

Aviles Engineering Corporation

Attn: Ronald E. Ortwerth, P.E., Senior Vice Presidnet

5790 Windfern

Houston, Texas 77041 713-895-7943 - fax

B. If to County notice must be sent to both the Fort Bend County Purchasing Agent and County Project Manager:

Fort Bend County Purchasing Department Gilbert D. Jalomo, Jr., CPPB 301 Jackson Richmond, Texas 77469

Richard W. Stolleis, P.E. County Engineer 301 Jackson Richmond, Texas 77469

5.04 Either party may designate a different address by giving the other party ten (10) days written notice.

#### SECTION VI LIMIT OF APPROPRIATION

6.01 Prior to the execution of this Agreement, Engineer has been advised by County, and Engineer clearly understands and agrees, such understanding and agreement being of the absolute essence to this contract, that County shall have available the total maximum sum of \$122,405.05, including reimbursable expenses, if any, specifically allocated to fully discharge any and all liabilities which may be incurred by County.

6.02 Engineer does further understand and agree, said understanding and agreement also being of the absolute essence of this contract, that the total maximum compensation that Engineer may become entitled to hereunder and the total maximum sum that County shall become liable to pay to Engineer hereunder shall not under any conditions, circumstances or interpretations thereof exceed the sum of \$122,405.05 for described scope of work in Exhibit A.

#### SECTION VII SUCCESSORS AND ASSIGNS

- 7.01 County and Engineer 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 such other party, in respect to all covenants of this Agreement.
- 7.02 Neither County nor Engineer shall assign, sublet or transfer its or his interest in this Agreement without the prior written consent of the other.
- 7.03 Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of any public and/or governmental body that may be a party hereto.

#### SECTION VIII PUBLIC CONTACT

- 8.01 Contact with any media outlet, citizens of Fort Bend County or governmental agencies shall be the sole responsibility of County.
- 8.02 Under no circumstances, whatsoever, shall Engineer release any material or information developed in the performance of its services hereunder without the express written permission of County, except where required to do so by law.

## SECTION IX COMPLIANCE AND STANDARDS

Engineer shall render the services hereunder in accordance with highest accepted standards of Consultants practicing in the Greater Houston Metro Area, applicable thereto and shall use that highest degree of care and skill commensurate with the profession similar to the Project to comply with all applicable state, federal, and local laws, ordinances, rules and regulations relating to the services to be rendered hereunder, and Consultant's performance.

## SECTION X OWNERSHIP OF DOCUMENTS

- 10.01 County shall be the absolute and unqualified owner of all drawings, preliminary layouts, record drawings, sketches and other documents prepared pursuant to this Agreement by the Engineer and his contractors or subcontractors (deliverables).
- 10.02 No reuse fees or royalty payments will be paid to the Engineer in connection with future reuse or adaptation of designs derived under this contract.
- 10.03 Copies of all complete or partially completed mylar reproducible, preliminary layouts, record drawings, digital files, sketches and other documents prepared pursuant to this Agreement shall be delivered to County when and if this Agreement is terminated or upon completion of this Agreement, whichever occurs first, as provided in this Agreement.
- 10.04 Engineer is expressly prohibited from selling, licensing or otherwise marketing or donating such documents, or using such documents in the preparation of other work for any other client, or from duplicating the appearance of the Project depicted in the deliverables for any without the prior express written permission of County.
- 10.05 The documents referenced in this Section are not intended or presented by Engineer to be suitable for reuse by County or others on extensions of this Project or on other unrelated projects.
- 10.06 Any adaptation or use by County of such documents on extension of this Project or other unrelated projects shall be at County's sole risk.

## SECTION XI INDEMNIFICATION

11.01 ENGINEER SHALL SAVE HARMLESS COUNTY FROM AND AGAINST ALL CLAIMS, LIABILITY, AND EXPENSES, INCLUDING REASONABLE ATTORNEYS FEES, ARISING FROM ACTIVITIES OF CONSULTANT, ITS AGENTS, ENGINEERS OR EMPLOYEES, PERFORMED UNDER THIS AGREEMENT THAT RESULT FROM THE NEGLIGENT ACT, ERROR, OR OMISSION OF ENGINEER ANY OF ENGINEER'S AGENTS, SERVANTS OR EMPLOYEES.

11.02 ENGINEER SHALL ALSO SAVE HARMLESS COUNTY FROM AND AGAINST ANY AND ALL EXPENSES, INCLUDING REASONABLE ATTORNEY'S FEES WHICH MIGHT BE INCURRED BY COUNTY, IN LITIGATION OR OTHERWISE RESISTING SAID CLAIMS OR LIABILITIES THAT MIGHT BE IMPOSED ON COUNTY AS THE RESULT OF SUCH NELGIGENT ACTS, ERRORS OR OMISSIONS BY ENGINEER, ITS AGENTS, SUBCONTRACTORS OR EMPLOYEES.

## SECTION XII MODIFICATIONS

This instrument contains the entire Agreement between the parties relating to the rights herein granted and obligations herein assumed. Any oral or written representations or modifications concerning this instrument shall be of no force and effect excepting a subsequent written modification signed by both parties hereto.

#### SECTION XIII MISCELLANEOUS

- 13.01 By entering into this Agreement, the parties do not intend to create any obligations, express or implied, other than those specifically set out in this Agreement.
- 13.02 Nothing in this Agreement shall create any rights or obligations in any party who is not a signatory to this Agreement.
- 13.03 Engineer agrees and understands that: by law, the Fort Bend County Attorney's Office may only advise or approve contracts or legal documents on behalf of its clients; the Fort Bend County Attorney's Office may not advise or approve a contract or other legal document on behalf of any other party not its client; the Fort Bend County Attorney's Offices has reviewed this document solely from the legal perspective of its client; the approval of this document by the Fort Bend County Attorneys Office was offered solely to benefit its client; Engineer and other parties should not rely on this approval and should seek review and approval by their own respective legal counsel.
- 13.04 If there is a conflict between this Agreement and Exhibit A, the provisions of this Agreement shall prevail.

REMAINDER OF PAGE INTENTIONALLY LEFT BLANK

## SECTION XIV EXECUTION

This Agreement shall become effective upon execu	ntion by County
By: Robert E. Hebert, County Judge	Date: 8-13-13
ATTEST Grance Wilson  Dianne Wilson, County Clerk	* SON
Approved:  By:  Richard W. Stolleis, P.E.  County Engineer	Date: 8/8/13
CONSULTANT: Aviles Engineering Corporation  Signature  Royal & E Ortwert, P.E. Sv.V.P.  Printed Name & Title	8-6-13 Date
Printed Name & Title  MER:Paradigm Materials.Mason Road. Phase 2 & 3.2013	
AUDITOR'S CEI	RTIFICATE
pay the obligation of the Fort Bend County under the	the amount of \$122,405.05 to accomplish and his contract.  Fort Bend County Auditor

Exhibit A: June 3, 2013 proposal # 13-46 Rev.1



June 7, 2013

Mr. Richard W. Stolleis, PE Fort Bend County 1124 Blume Road Rosenberg, Texas 77471-1449

Re: Construction Materials Testing and Inspection Services on

Mason Road Segment 2, North of Skinner Lane to North of Oyster Creek

Fort Bend County Proj. No. 735A, Precinct 3

Our Proposal Number: 13-47 Rev. 1

To Whom It May Concern:

In response to your request, Aviles Engineering Corporation (AEC) has prepared the attached estimate for providing Construction Materials Engineering. Testing and Inspection Services on the above referenced project for your review.

AEC proposes to provide experienced technical personnel to perform testing and inspection services in general accordance with project requirements and specifications. ASTM Standards or other applicable procedures. AEC also proposes that the work be accomplished on a unit price basis in accordance with the attached Schedule of Services and Fees. AEC's Schedule of Services and Fees is enclosed herewith and is incorporated into this document. AEC's fees would be determined by the actual amount of technical time expended for this project and the amount of laboratory testing performed.

Aviles Engineering Corporation appreciates the opportunity to offer its services to your project and looks forward to working with you during the construction phase.

Respectfully submitted.

**Aviles Engineering Corporation** 

ITBPE Einn Registration No. F-42)

Ronald E. Ortwerth, P.E. Senior Vice President

Schedule of Services & Fees

Cost Estimate

5790 Windfern • Houston, Texas 77041 • (713) 895-7645 • (713) 895-7943

Missier Road Segment 2, North of Skinner Lune to North of Oyster Creek Fort Bend Coenty Proj. No. 735A, Precinct 3 Our Proposal Number: 13-46 Rev. 1 June 7, 2013 Page 2 of 7

## Aviles Engineering Corporation Schedule of Services and Fees \* Construction Materials Testing Effective January 1, 2011

#### LABORATORY TESTING SERVICES

Concrete and Aggregates Laboratory testing of concrete, grout, mortar and lightweight roof fill cylinders, by laboratory in accordance with ASTM procedures and project specifications:	eams and cubes	delive	red to our
a. Concrete Compression Test	Each	\$	15.00
b Reserves Not Tested	Each	\$	15.00
c. Lightweight Concrete Compression Test	Each	S	18.00
d. Flexural Strength of Concrete Test (Beams)	Each	S	23.00
e. Compressive Strength of Morter or Grout (2" x 2" x 2")	Each	5	20.00
f. Compressive Strength of Grout (3" x 6") or Grout Prism	Each	S	40.00
Sieve Analysis of Aggregates	Each	\$	46.00
Washed Sieve Analysis on Flexible Base Materials	Each	\$	82.00
Liquid Limit & Plasticity Index of - No. 40 from Flexible Base Materials	Each	\$	65.00
Abrasion Test of Aggregates by Los Angeles Machine	Each	S	179.00
Density of Lightweight Concrete Cylinders.	Each	\$	70.00
Terring of Appreciates for Mix Design (Sieve Analysis, Absorption.			
Specific Gravity, Unit Weight)	Per Series	\$	155.00
Specific Gravity & Absorption of Aggregate	Each	S	78.00
Moisture Content of Aggregate	Each	S	10.00
Concrete Mix Design Review for Compliance to ACI or ASTM Standards	Each	\$	150.00
Preparation and Testing of Cores	Each	\$	67.00
Soils			
Moisture/Density Relationship of Soil (Proctor Test):			
a. ASTM D 698 Method A or B	Each	5	175.00
b. ASTM D 1557 Method A or B	Each	\$	187.00
c ASTM D-698 & D-1557, Method C	Each	\$	195.00
d. TxDOT Test Method Tex-113-E	Each	\$	195,00
e. ASTM Procedure on Lime or Cement Treated Soils.	Each	\$	193.00
Atterberg Limits Determination (PI)	Each	S	53.00
Grain Size Analysis, Mechanical & Hydrometer	Each	\$	175.00
Lime Series Curve, PI Method (Virgin Soil and 4 Points)	Each	\$	178.00
Material Finer Than #200 Sieve	Each	\$	41.00
Sieve Analysis on +#200 Sieve Material	Each	S	31.00
Bearing Ratio Test (CBR), ASTM D-1883, per point			
(Does not include moisture/density relationship)	Each	S	185.00
Permeability Test:	Each	S	200.00
a. Falling Head or Constant Head	Each	Š	60.00
c. Remolded Sample		S	60.00
Organic Content	Each	3	00.00

Misson Read Segment 2. North of Skinner Land to North of Oyster Circle Fon Bend County Proj. No. 735A. Procinct 3 Our Proposal Number, 13-46 Ren. I June 7, 2013 Page 3 of 7

#### LABORATORY TESTING SERVICES, continued

Asphaltis Concrete Testing  a. Molding Specimens (3 Specimens)	Por Set Per Set	S S	54,00 46,00
b. Density (3 Specimens)	Per Set	Š	82.00
d. Extraction and Gradation	Each	Š	174.00
e. Theoretical Specific Gravity	Each	\$	78.00
Thickness Determination of Asphaltic Concrete Cores	Each Each	s S	8.00 18.00
Density Determination of Asphaltic Concrete Cores		-	
Asphaltic Concrete Mix Design Review	Each	\$	160.00
Other Items			
Compressive Strength of Cement Stabilized Sand or Soil Cement	Each	S	61.00
Comp. Str Cement or LFA Stabilized Bases or Soils (Modified Tex-120-E)	Each	S	222.00
Splitting Tensile Strength of Concrete	Each	\$	94.00
Density Determination - Soil Cement.	Each	\$	15.00
Absorption and Saturation - Facia Brick	Each	S	62.00
Compressive Strength - Facia Brick.	Each	\$	28.00
Compressive Strength of Masonry Prisms	Each	\$	117.00
Thickness Testing of Concrete or Asphaltic Concrete Cores (9 Point)	Each	\$	11.00
FIELD TESTING SERVICES			
Engineering Technician or ACI-I to Perform			
a. Concrete Placement Inspection and testing b. Concrete Batch Plant Inspection c. Cylinder/Cube/Beam Pick Up			
Engineering Technician (Minimum 4 Hours)	Per Hour Per Hour	\$ \$	44.00 66.00
Senior Engineering Technician or NICET II to Perform:			
a. Proofrolling Observation b. Concrete Placement and/or Batch Plant Inspection c. Drilled Pier, Pile and/or Foundation Inspection d. Post Tension Inspection e. Soil Cement or Lime Stabilization Inspection f. Field Compaction Testing and Observation g. Laboratory Technician h. Masonry Mortar, Grout or Prism Testing or Inspection i. Base Plate Inspection and Non-Shrink Grout Testing			
j. Sample Pick Up	Per Hour	s	50.00
Senior Engineering Technician (Minimum 4 Hours)	Per Hour	\$	75.00
Concrete Pavement Cores (Minimum Fee \$290.00) 6 Inches Thick or Less, 4 Inch Diameter Bit	Per Core	s	90.00
Additional Thickness - (6" to 12") = \$8.00 per inch; (Over 12") = \$10.00 per inch			
Coring of Structural Concrete or Core Diameters other than 4"	Will Quote U	pon Re	equest

Mason Road Segment 2. North of Skinner Lane to North of Oyster Creek Fort Bond County Proj. No. 735A. Precinct 3 Our Proposal Number 13-46 Rev. 1 June 7, 2013 Page 4 of 7

#### FIELD TESTING SERVICES, continued

Asphaltic Concrete Pavement Cores (Minimum Fee \$250.00)			
a. 6 Inches Thick or Less, 4 Inch Diameter	Per Core	Ş	80.00
b. Additional Thickness over 6"	Per Inch	\$	7.00
Roofing and/or Waterproofing Inspection (4 Hr. Min.)	Per Hour	\$	78.00
Overtime	Per Hour	S	117.00
ASNT Level II, Visual Welding and Bolting Inspection (4 Hr. Min )	Per Hour	S	78.00
Overtime	Per Hour	\$	117.00
AWS Certified Welding Inspector (4 hr. Min.)	Per Hour	S	78.00
Overtime	Per Hour	\$	117.00
Other Services		_	
Use of Nuclear Density Gauge (4 Hour Minimum)	Per Hour	S	9.00
Fireproofing - Cohesion / Adhesion Test	Each	S	33.00
Fireproofine - Density Test	Each	Ş	25.00
Floor Moisture Kit	Each	Ş	35.00
LIT Provingent	Per Day	\$	78.00
UT Couplant (Minimum Charge of 1 Pint)	Per Pint	Ş	20.00
Magnetic Particle Yoke	Per Day	S	35.00
Magnetic Powder (Minimum Charge 0.5 Pounds)	Per Pound	\$	25.00
Lies of James ReMoter	Per Day	\$	50.00
Solids Content of Lime Slurry - Field	Per Test	\$	25.00
Skidnore Wilhelm	Per Day	\$	117.00
Field Sieve Analysis	Each	S	10.00
Vehicle Charge (4 Hour Minimum)	Per Hour	S	8.00
Engineering Services and Management	Per Hour	\$	143.00
Principal or Chief Engineer	Per Hour	Š	123.00
Senior Engineer	Per Hour	S	96.00
Project Engineer	Per Hour	2	76.00
Graduate Engineer, Project Manager	Per Hour	\$	62.00
NICETIV	Per Hour	S	56.00
Technician NICET-III	set nom	•	JU.90

#### Remarks

- All hours are portal to portal from 5790 Windfern, Houston, Texas. Fractions of hours will be billed as whole hours. Overtime is classified as all hours worked over eight (8) hours per day or hours worked before 6:00am, after 6:00 pm weekdays and any hours worked on Saturdays, Sundays or Holidays. If a special trip is made just to pickup test cylinders, the minimum charge will be lowered to 2 hours for the technician.
- A mileage surcharge rate of \$0.585 per mile will apply for travel exceeding 100 miles per day. Commercial travel and subsidence costs will be invoiced at cost + 15%.
- Airport badging, safety training courses and drug screen testing will be invoiced at applicable hourly rates. The drug screen and safety course fees will be invoiced at cost + 15%.
- Project Engineer / Manager to schedule and supervise personnel and evaluate and review reports will be billed at a minimum of 0.2 hours per report issued
- Laboratory testing requiring overtime, weekend or holiday work will be invoiced at applicable test rate plus technician overtime charges.
- Services and focs not listed will be quoted upon request.

First Bend County
Masen Rd Seg. 2. North of Skusner Lanc to North of Oyster Creck
EB County Prop. No. 735A, Present 3
AEC Proposal No. 13-47 Rev. 1
June 7, 2013



# CONSTRUCTION MATERIALS TESTING & INSPECTION ESTIMATE Mason Road Segment 2, North of Skinner Lane to North of Oyster Creek Fort Bend County Proj. No. 735A, Precinct 3

#### Reinforced Concrete Pipe and Box Inspection (TxDOT DMS 7300)

Reinforced concrete pipe inspection will be provided unless the RCP is previously approved and stamped by TxDOT or by the TxDOT approved fabricator specific stamp. There will be 540 linear feet of 24" RCP and 635 linear feet of 30" RCP. AEC estimates one (1) trip for pipe inspection.

Description of Services	Quantity	Unit Fee	Unit	<u>Total</u>
Technician (NICET III)	8	\$56.00	hour	\$448.00
Vehicle Charge (up to 8 hrs)	8	\$7.50	hour	\$60.00
Project Engineer	0.3	\$96.00	hour	\$28.80
		Snb	tatel =	\$536.80

#### Soils Inspection

Soils Inspection will be provided per HCED specifications. The inspection and testing of the utility bedding and backfill will include field density testing for 1,175 L.ft. of RCP for various sizes of storm sewer, 30 L.ft. of CMP, 120 L.ft. of various sizes of water line, 60 L.ft. of 6" force main and various manholes, inlets, and tie-ins. It will also include 8" lime stabilized subgrade (6,551 yd²) for paving and (4,950 yd²) for embankment. Prior to stabilization of existing soils for paving subgrade, AEC will perform proofrolling inspection. Cement stabilized sand will also be placed behind the abutments at the bridge. CSS specimens will also be sampled for compressive strength on a weekly basis. Samples to determine the moisture density relationships (MDR) and other soil constants will be also obtained. AEC estimates fourteen (14) trips for inspection and testing.

Description of Services	Quantity	Unit Fee	Unit	<u>Total</u>
Sr. Engineering Technician (NICET II)	112	\$50.00	hour	\$5,600.00
Sr. Engineering Technician (NICET II) - Overtime	14	\$75.00	hour	\$1,050.00
Technicism (Non-NICET)	8	\$37.00	hour	\$296.00
Nuclear Density Equipment Rental	126	\$9.00	hour	\$1,134.00
Vehicle Charge (up to 8 hrs)	120	\$7.50	hour	\$900.00
Optimum Lime Content (pH)	1	\$202.00	each	\$202.00
OMD Lime / Cement Stab. Soil, (ASTM D558)	3	\$193.00	cach	\$579.00
OMD Standard Compaction, (ASTM D698)	2	\$175.00	each	\$350.00
Atterberg Limits, (ASTM D4318)	4	\$53.00	each	\$212.00
Mech. Sieve through #200	2	\$49.00	each	\$98.00
Percent Passing #200 Sieve, (ASTM D1140)	2	\$41.00	each	\$82.00
Compressive Strength of CSS	16	\$61.00	each	\$976.00
Project Engineer	7.8	\$96.00	hour	\$748.80
· -		Sub	total =	\$12,227.80

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Fort Bond County
Mason Rd Sep. 2. North of Skinner Lanc to North of Oystor Creck
FB County Proj. No. 735/A. Previous 3
AEC Proposal No. 13-47 Rev. 1
June 7, 2013



## CONSTRUCTION MATERIALS TESTING & INSPECTION ESTIMATE, continued

#### Prestressed Concrete Pile and Girder Inspection (Plant Inspection) - Seg 2 & 3

Prestressed Concrete Pile and Girder Inspection will be provided per the Project Specifications (TxDOT). It will include 1,764 linear feet of 16" prestressed concrete piles, 2,052 linear feet of 24" prestressed concrete piles, and 3,048 linear feet of TX40 prestressed concrete girders. Inspections will include reinforcing steel, prestressing inspection of tendons and testing of concrete. AEC estimates 25 days to cast piles and girders. AEC assumes each to be completed separately and the facility is out of town. AEC estimates twenty five (25) trips for inspection and testing on piles and girders.

Description of Services	Quantity	Unit Fee	Unit	Total
Sr. Engineering Technician (NICET II)	200	\$50.00	hour	\$10,000.00
Sr. Engineering Technician (NICET II) - Overtime	25	\$75.00	hour	\$1,875.00
Compressive Str. Cylinder Test, (ASTM C39)	64	\$15.00	each	\$960.00
Contingency for Out of Town Inspection, per day	25	\$200.00	each	\$5,000.00
Vehicle Charge (up to 8 hrs)	200	\$7.50	hour	\$1,500.00
Project Engineer	7.5	\$96.00	hour	\$720.00
		Sul	btotal =	\$20,055.00
Split Between Segment 2 and 3 (50% & 50%) =			\$10,027.50	

#### Prestressed Concrete Pile Inspection (Site Inspection) - Seg 2 & 3

Prestressed Concrete Pile Inspection will be provided per the Project Specifications (TxDOT). It will include witnessing the installation of 63 -16" & 24" square by 40' to 76' long prestressed concrete piles for the bridge. AEC estimates ten (10) trips for inspection.

Description of Services	Quantity	Unit Fee	<u>Unit</u>	<u>Total</u>
Sr. Engineering Technician (NICET II)	80	\$50.00	hour	\$4,000.00
Sr. Engineering Technician (NICET II) - Overtime	20	\$75.00	hour	\$1,500.00
Vehicle Charge (up to 8 hrs)	80	\$7.50	hour	\$600.00
Project Engineer	3	\$96.00	hour _	\$288.00
		Sul	ototal =	\$6,388.00
Split Between	Segment 2 and	3 (50% & 5	50%) =	\$3,194.00

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Fort Bend County
Nason Rd Seg. 2, North of Skinner Lane to North of Oyster Creek
FB County Prog No. 735A, Prounct 3
AEC Proposel No.: 13-47 Rev. 1

June 7, 2013



### CONSTRUCTION MATERIALS TESTING & INSPECTION ESTIMATE, continued

#### Concrete Inspection - Bridge - Seg 2 & 3

Concrete Inspection will be provided per HCED specifications. It will include the inspection and testing of concrete for abutments, bents, approach slabs, bridge sidewalk, concrete slabs, type T and C rail, and riprap. AEC estimates twenty two (22) trips for concrete inspection and twenty two (22) trips for cylinder pickups.

Description of Services	Quantity	Unit Fee	Unit	<u>Total</u>
Sr. Engineering Technician (NICET II)	176	\$50.00	hour	\$8,800.00
Sr. Engineering Technician (NICET II) - Overtime	22	\$75.00	hour	\$1,650.00
Technician (Non-NICET)	30	\$37.00	hour	\$1,110.00
Technician (Non-NICET) - Overtime	25	\$55.50	hour	\$1,387.50
Vehicle Charge (up to 8 hrs)	231	\$7.50	hour	\$1,732.50
Compressive Str. Cylinder Test. (ASTM C39)	96	\$15.00	each	\$1,440.00
Project Engineer	8.8	\$96.00	hour	\$844.80
		Sul	ototal =	\$16,964.80
Snlit Between	een Segment 2 and	3 (50% & 5	(0%) =	\$8,482,40

#### **Concrete Inspection - Pavement**

Concrete Inspection will be provided per HCED specifications. It will include the inspection and testing of concrete for the 6.121 sq. yds. of 8" pavement, 3.778 L. fl. of curb, 24 sq. yds. medians and directional islands, and 4 ramps. AEC estimates eleven (11) trips for concrete inspection and eleven (11) trips for cylinder pickups.

Description of Services	Quantity	Unit Fee	<u>Unit</u>	Total
Sr. Engineering Technician (NICET II)	88	\$50.00	hour	\$4,400.00
Sr. Engineering Technician (NICET II) - Overtime	11	\$75.00	hour	\$825.00
Technician (Non-NICET)	15	\$37.00	hour	\$555.00
Technician (Non-NICET) - Overtime	12.5	\$55.50	hour	\$693.75
Vehicle Charge (up to 8 hrs)	115.5	\$7.50	hour	\$866.25
Compressive Str. Cylinder Test, (ASTM C39)	68	\$15.00	each	\$1,020.00
Concrete Coring (4" Dia, up to 6" Thickness)	8	\$90.00	each	\$720.00
Additional Thickness (6" - 12")	16	\$8.00	inch	\$128.00
Measuring Thickness of Concrete Cores	8	\$11.00	cach	\$88.00
Project Engineer	4.7	\$96.00	hour	\$451.20
		Sub	total =	\$9,747.20

ESTIMATED TOTAL FOR SERVICES AND TESTING = \$44,215.70

NOTES:

Page 3 of 3



June 7, 2013

Mr. Richard W. Stolleis. PE Fort Bend County 1124 Blume Road Rosenberg, Texas 77471-1449

Re: Construction Materials Testing and Inspection Services on

Mason Road Segment 3, Oyster Creek to Farmer Rd. Fort Bend County Proj. No. 735B, Precinct 3

Our Proposal Number: 13-46 Rev. 1

To Whom It May Concern:

In response to your request, Aviles Engineering Corporation (AEC) has prepared the attached estimate for providing Construction Materials Engineering. Testing and Inspection Services on the above referenced project for your review.

AEC proposes to provide experienced technical personnel to perform testing and inspection services in general accordance with project requirements and specifications, ASTM Standards or other applicable procedures. AEC also proposes that the work be accomplished on a unit price basis in accordance with the attached Schedule of Services and Fees. AEC's Schedule of Services and Fees is enclosed herewith and is incorporated into this document. AEC's fees would be determined by the actual amount of technical time expended for this project and the amount of laboratory testing performed.

Aviles Engineering Corporation appreciates the opportunity to offer its services to your project and looks forward to working with you during the construction phase.

Respectfully submitted,

**Aviles Engineering Corporation** 

ITBPE Firm Registration No. F-42)

Ronald E. Ortwerth, P.E. Senior Vice President

Schedule of Services & Fees

Cost Estimate

5790 Windfern • Houston, Texas 77041 • (713) 895-7645 • (713) 895-7943

Mason Road Segment 3, Oyster Creek to Farmer Rd Fort Bend County Proj. No. 735B, Precinct 3 Our Proposal Number: 13-46 Rev. 3 June 7, 2013 Page 2 of 8

## Aviles Engineering Corporation Schedule of Services and Fees \* Construction Materials Testing Effective January 1, 2011

#### LABORATORY TESTING SERVICES

Concrete and Aggregates  Laboratory testing of concrete, grout, mortar and lightweight roof fill cylinders, by laboratory in accordance with ASTM procedures and project specifications:	cams and cube	deliv	ered to our
a. Concrete Compression Test	Each	\$	15.00
b. Reserves Not Tested	Each	\$	15.00
c. Lightweight Concrete Compression Test	Each	\$	18.00
d. Flexural Strength of Concrete Test (Beams)	Each	\$	23.00
e. Compressive Strength of Mortar or Grout (2" x 2" x 2")	Each	\$	20.00
f. Compressive Strength of Grout (3" x 6") or Grout Prism	Each	\$	40.00
Sieve Analysis of Aggregates	Each	\$	46.00
Washed Sieve Analysis on Flexible Base Materials	Each	S	82.00
Liquid Limit & Plasticity Index of - No. 40 from Flexible Base Materials	Each	S	65.00
Abrasion Test of Aggregates by Los Angeles Machine	Each	\$	179.00
Density of Lightweight Concrete Cylinders	Each	\$	70.00
Testing of Aggregates for Mix Design (Sieve Analysis, Absorption, Specific Gravity, Unh Weight)	Per Series	s	155.00
Specific Gravity & Absorption of Aggregate	Each	\$	78.00
Moisture Content of Aggregate	Each	S	10.00
Concrete Mix Design Review for Compliance to ACI or ASTM Standards	Each	\$	150.00
Preparation and Testing of Cores	Each	\$	67.00
Soils			
Moisture/Density Relationship of Soil (Proctor Test):			
a. ASTM D 698 Method A or B	Each	\$	175.00
b. ASTM D 1557 Method A or B	Each	\$	187.00
c. ASTM D-698 & D-1557, Method C	Each	5	195.00
d. TxDOT Test Method Tex-113-E	Each	\$	195.00
e. ASTM Procedure on Lime or Centent Treated Soils	Each	\$	193.00
Atterberg Limits Determination (PI)	Each	\$	53.00
Grain Size Analysis, Mechanical & Hydrometer	Each	5	175.00
Lime Series Curve, PI Method (Virgin Soil and 4 Points)	Each	S	178.00
Material Finer Than #200 Sieve	Ench	\$	41.00
Sieve Analysis on +#200 Sieve Material	Hach	\$	31.00
Bearing Ratio Test (CBR), ASTM D-1883, per point (Does not include moisture/density relationship)	Each	\$	185.00
Permeability Test:		_	
a. Falling Head or Constant Head	Each	S	200.00
c. Remolded Sample	Each	S	60.00
Organic Content.	Each	\$	60.00

Matter Road Segment 3, Oyster Creek to Farmer Rd. Fort Bend County Prop. No. 735B. Promet 3 Our Proposal Number 13-46 Rev. I June 7, 2013 Page 3 of 8

#### LABORATORY TESTING SERVICES, continued

Asphaltic Concrete Testing  a. Molding Specimens (3 Specimens)  b. Density (3 Specimens)  c. Stability (3 Specimens)  d. Extraction and Gradation.  e. Theoretical Specific Gravity	Per Set Per Set Per Set Each Each	\$ \$ \$ \$	54.00 46.00 82.00 174.00 78.00
Thickness Determination of Asphaltic Concrete Cores  Density Determination of Asphaltic Concrete Cores	Each Each	<b>S</b>	00.8 00.81
Asphaltic Concrete Mix Design Review	Each	\$	160.00
Other Items			
Compressive Strength of Cement Stabilized Sand or Soil Cement	Ench	S	61.00
Comp. Str Cement or LFA Stabilized Bases or Soils (Modified Tex-120-E)	Each	S	222.00
Splitting Tensile Strength of Concrete	Each	\$	94.00
Density Determination - Soil Cement	Each	\$	15.00
Absorption and Saturation - Facia Brick	Each	\$	62.00
Compressive Strength - Facia Brick	Each	\$	28.00
Compressive Strength of Masonry Prisms	Each	\$	117.00
Thickness Testing of Concrete or Asphaltic Concrete Cores (9 Point)	Each	\$	11.00
FIELD TESTING SERVICES			
Engineering Technician or ACI-I to Perform:			
a Concrete Placement Inspection and testing b. Concrete Batch Plant Inspection c. Cylinder/Cube/Beam Pick Up			
Engineering Technician (Minimum 4 Hours)	Per Hour Per Hour	\$ \$	44.00 66.00
Senior Engineering Technician or NICET II to Perform:			
a. Proofrolling Observation b. Concrete Placement and/or Batch Plant Inspection c. Drillod Pier, Pile and/or Foundation Inspection d. Post Tension Inspection e. Soil Cement or Lime Stabilization Inspection f. Field Compaction Testing and Observation g. Laboratory Technician h. Masomy Mortar, Grout or Prism Testing, or Inspection i. Base Plate Inspection and Non-Shrink Grout Testing j. Sample Pick Up			
Senior Engineering Technician (Minimum 4 Hours)	Per Hour	\$	50.00
Overline:	Per Hour	5	75.00
Concrete Pavement Cores (Minimum Fee \$290.00) 6 Inches Thick or Less, 4 Inch Diameter Bk	Per Core	\$	90.00
Additional Thickness - (6" to 12") = \$8.00 per inch; (Over 12") = \$10.00 per inch			
Coring of Structural Concrete or Core Diameters other than 4"	Will Quote L	pon Re	quest

Mason Road Segment 3, Oyster Creek to Farmer Rd Fort Bend County Proj. No. 735R, Precinct 3 Our Proposal Number! 13-46 Rev. 1 June 7, 2013 Page 4 of 8

#### FIELD TESTING SERVICES, continued

Asphaltic Concrete Pavement Cores (Minimum Fee \$250.00)

a. 6 Inches Thick or Less, 4 Inch Diameter. b. Additional Thickness over 6"	Per Core Per Inch	\$ \$	<b>8</b> 0.00 <b>7.0</b> 0
Roofing and/or Waterproofing Inspection (4 Hr. Min.)	Per Hour	S	78.00
Overtime	Per Hour	\$	117.00
ASNT Level II. Visual Welding and Bolting Inspection (4 Hr. Min.)	Per Hour	\$	78.00
Overtime	Per Hour	\$	117.00
AWS Certified Welding Inspector (4 hr. Min.)	Per Hour	S	78.00
Overtime	Per Hour	\$	117.00
Other Services			
Use of Nuclear Density Gauge (4 Hour Minimum)	Per Hour	\$	9.00
Fireproofing - Cohesion / Adhesion Test	Each	\$	33.00
Fireproofing - Density Test.	Each	\$	25.00
Floor Molsture Kit	Each	S	35.00
UT Equipment	Per Day	\$	78.00
UT Couplant (Minimum Charge of I Pint)	Per Pint	\$	20.00
Magnetic Particle Yoke	Per Day	\$	35.00
Magnetic Powder (Minimum Charge 0.5 Pounds)	Per Pound	\$	25.00
Use of James R-Meter	Per Day	\$	50.00
Solids Content of Lime Slurry - Field	Per Test	\$	25.00
Skidmore Wilhelm	Per Day	\$	117.00
Field Sieve Analysis	Each	\$	10.00
Vehicle Charge (4 Hour Minimum),	Per Hour	\$	8.00
Engineering Services and Management	S. 11.		. 42 00
Principal or Chief Engineer	Per Hour	Ş	143.00
Senior Engineer	Per Hour	S	123.00
Project Engineer	Per Hour	\$	96.00
Graduate Engineer, Project Manager	Per Hour	\$	76.00
NICET IV	Per Hour	\$	62.00
Technician NICET-III	Per Hour	\$	56.00

#### Remarks

- All hours are portal to portal from 5790 Windfern, Houston, Texas. Fractions of hours will be billed as whole hours. Overtime is classified as all hours worked over eight (8) hours per day or hours worked before 6:00am, after 6:00 pm weekdays and any hours worked on Saturdays, Sundays or Holidays. If a special trip is made just to pickup test cylinders, the minimum charge will be lowered to 2 hours for the technician.
- A mileage surcharge rate of \$0.585 per mile will apply for travel exceeding 100 miles per day. Commercial travel
  and subsidence costs will be involced at cost + 15%.
- Airport badging, safety training courses and drug screen testing will be involced at applicable hourly rates. The
  drug screen and safety course fees will be invoiced at cost + 15%.
- Project Engineer / Manager to schedule and supervise personnel and evaluate and review reports will be billed at a minimum of 0.2 hours per report issued.
- Laboratory testing requiring overtime, weekend or holiday work will be invoiced at applicable test rate plus technician overtime charges.
- Services and fees not listed will be quoted upon request.

Fort Bane County
Milson Rd Seg. 3, Oyster Crock to Farmer Rd.
FB County Proj. No. 735th. Precinor 3
AEG Proposal No.: 13-46 Rev.1
Junp 7, 2013



# CONSTRUCTION MATERIALS TESTING & INSPECTION ESTIMATE Mason Road Segment 3, Oyster Creek to Farmer Rd. Fort Bend County Proj. No. 735B, Precinct 3

#### Reinforced Concrete Pipe and Box Inspection (TxDOT DMS 7300)

Reinforced concrete pipe inspection will be provided unless the RCP is previously approved and stamped by TxDOT or by the TxDOT approved fabricator specific stamp. There will be 2,260 linear feet of 24" RCP, 641 linear feet of 30" RCP, 81 linear feet of 36" RCP, 210 linear feet of 42" RCP, and 610 linear feet of 60" RCP. AEC estimates three (3) trips for pipe inspection.

Description of Services	Quantity	Unit Fee	Unit	Total
Technician (NICET III)	24	\$56.00	hour	\$1,344.00
Vehicle Charge (up to 8 hrs)	24	\$7.50	hour	\$180.00
Project Engineer	0.9	\$96.00	hour	\$86.40
		Sub	total =	\$1,610,40

#### Soils Inspection

Soils Inspection will be provided per HCED specifications. The inspection and testing of the utility bedding and backfill will include field density testing for 3,802 L.ft. of RCP for various sizes of storm sewer and various manholes, inlets, and tie-ins. It will also include 8" lime stabilized subgrade (26,700 yd²) for paving. Prior to stabilization of existing soils for paving subgrade, AEC will perform proofrolling inspection. CSS specimens will also be sampled for compressive strength on a weekly basis. Samples to determine the moisture density relationships (MDR) and other soil constants will be also obtained. AEC estimates thitry three (33) trips for inspection and testing.

Description of Services	Quantity	Upit Fee	Unit	<b>Total</b>
Sr. Engineering Technician (NICET II)	264	\$50.00	hour	\$13,200.00
Sr. Engineering Technician (NICET II) - Overtime	33	\$75.00	hour	\$2,475.00
Technician (Non-NICET)	16	\$37.00	hour	\$592.00
Nuclear Density Equipment Rental	280	\$9.00	hour	\$2,520.00
Vehicle Charge (up to 8 hrs)	280	\$7.50	bour	\$2,100.00
Optimum Lime Content (pH)	2	\$202.00	each	\$404.00
OMD Lime / Cement Stab. Soil, (ASTM D558)	4	\$193.00	each	\$772.00
OMD Standard Compaction, (ASTM D698)	3	\$175.00	each	\$525.00
Atterberg Limits. (ASTM D4318)	10	\$53.00	cach	\$530.00
Mech. Sieve through #200	3	\$49.00	each	\$147.00
Percent Passing #200 Sieve, (ASTM D1140)	3	\$41.00	each	\$123.00
Compressive Strength of CSS	20	\$61.00	cach	\$1,220.00
Project Engineer	15.3	\$96.00	hour	\$1,468.80
		Sub	total =	\$26,076,80

Page 1 of 4

Fort Bend County
Mason Rd Sop. 3, Oyear Greek to Farmer Rd
FB County Proj. No. 1359, Precinct 3
AEC Proposel No. 13-48 Rev. 1
June 7, 2013



## CONSTRUCTION MATERIALS TESTING & INSPECTION ESTIMATE, continued

#### Prestressed Concrete Pile and Girder Inspection (Plant Inspection) - Seg 2 & 3

Prestressed Concrete Pile and Girder Inspection will be provided per the Project Specifications (TxDOT). It will include 1,764 linear feet of 16" prestressed concrete piles, 2,052 linear feet of 24" prestressed concrete piles, and 3,048 linear feet of TX40 prestressed concrete girders. Inspections will include reinforcing steel, prestressing inspection of tendons and testing of concrete. AEC estimates 25 days to cast piles and girders. AEC assumes each to be completed separately and the facility is out of town. AEC estimates twenty five (25) trips for inspection and testing on piles and girders.

Description of Services	Quantity	Unit Fee	<u>Unit</u>	Total		
Sr. Engineering Technician (NICET II)	200	\$50.00	hour	\$10,000.00		
Sr. Engineering Technician (NICET II) - Overtime	25	\$75.00	bour	\$1.875.00		
Compressive Str. Cylinder Test. (ASTM C39)	64	\$15.00	each	\$960.00		
Contingency for Out of Town Inspection, per day	25	\$200.00	each	\$5,000.00		
Vehicle Charge (up to 8 hrs)	200	\$7.50	hour	\$1,500.00		
Project Engineer	7.5	\$96.00	hour	\$720.00		
·		Sul	btotal -	\$20,055.00		
Snlit Re	Snlit Retween Segment 2 and 3 (40% & 50%) =					

#### Prestressed Concrete Pile Inspection (Site Inspection) - Seg 2 & 3

Prestressed Concrete Pile Inspection will be provided per the Project Specifications (TxDOT). It will include witnessing the installation of 63 -16" & 24" square by 40' to 76' long prestressed concrete piles for the bridge. AEC estimates ten (10) trips for inspection.

Description of Services	Quantity	Unit Fee	Unit	Total
Sr. Engineering Technician (NICET II)	80	\$50.00	hour	\$4,000.00
Sr. Engineering Technician (NICET II) - Overtime	20	\$75.00	hour	\$1,500.00
Vehicle Charge (up to 8 hrs)	80	\$7.50	hour	\$600.00
Project Engineer	3	\$96.00	hour _	\$288.00
		Sul	btotal =	\$6,388.00
Split Between	n Segment 2 and	3 (50% & 5	50%) =	\$3,194.00

Fort Bend County
Mason Rd Scg. 3, Oyster Creck to Farmer Rd
FB County Proj. No. 735B, Precinct.3
AEC Proposel No.: 13-46 Rev 1
June 7, 2013



### CONSTRUCTION MATERIALS TESTING & INSPECTION ESTIMATE, continued

#### Concrete Inspection - Bridge - Seg 2 & 3

Concrete Inspection will be provided per HCED specifications. It will include the inspection and testing of concrete for abutments, bents, approach slabs, bridge sidewalk, concrete slabs, type T and C rail, and riprap. AEC estimates twenty two (22) trips for concrete inspection and twenty two (22) trips for cylinder pickups.

Description of Services	Quantity	Unit Fee	Unit	Total		
Sr. Engineering Technician (NICET II)	176	\$50.00	hour	\$8,800.00		
Sr. Engineering Technician (NICET II) - Overtime	22	\$75.00	hour	\$1,650.00		
Technician (Non-NICET)	30	\$37.00	hour	\$1,110.00		
Technician (Non-NICET) - Overtime	25	\$55,50	hour	\$1,387.50		
Vehicle Charge (up to 8 hrs)	231	\$7.50	hour	\$1,732.50		
Compressive Str. Cylinder Test, (ASTM C39)	96	\$15.00	each	\$1,440.00		
Project Engineer	8.8	\$96.00	hour	\$844.80		
-		Sul	notal =	\$16,964.80		
Split E	Split Between Segment 2 and 3 (50% & 50%) =					

#### Concrete Inspection - Pavement

Concrete Inspection will be provided per HCED specifications. It will include the inspection and testing of concrete for the 24,300 sq. yds. of 8" pavement, 15,510 L. ft. of curb, and 25 sq. yds of ramps. AEC estimates thirty (30) trips for concrete inspection and thirty (30) trips for cylinder pickups.

Description of Services	Quantity	Unit Fee	<u>Unit</u>	Total
Sr. Engineering Technician (NICET II)	240	\$50.00	hour	\$12,000.00
Sr. Engineering Technician (NICET II) - Overtime	30	\$75.00	hour	\$2,250.00
Technician (Non-NICET)	37.5	\$37.00	hour	\$1,387.50
Technician (Non-NICET) - Overtime	37.5	\$55.50	hour	\$2,081.25
Vehicle Charge (up to 8 hrs)	315	\$7.50	hour	\$2,362.50
Compressive Str. Cylinder Test. (ASTM C39)	224	\$15.00	each	\$3,360.00
Concrete Coring (4" Dia, up to 6" Thickness)	18	\$90.00	each	\$1,620.00
Additional Thickness (6" - 12")	36	\$8.00	inch	\$288.00
Measuring Thickness of Concrete Cores	18	\$11.00	each	\$198.00
Project Engineer	12.3	\$96.00	hour	\$1,180.80
		Sub	total ==	\$26,728.05

Page 3 of 4

Fort Bend County
Mason R4 Sep. 3, Oyster Creck to Farmer Rd
FB County Proj. No. 735B, Precinct 2
AEC Proposal No. 13-46 Rev 1
June 7, 2013



## CONSTRUCTION MATERIALS TESTING & INSPECTION ESTIMATE, continued

#### **Asphalt Inspection**

Asphalt Inspection will be provided per HCED specifications. It will include 295 sq. yds of 8" HMAC black base and 270 sq. yds of 2" HMAC surface. AEC estimates two (2) trips and two (2) sets of full asphalt tests.

Description of Services	Quantity	Unit Fee	Unit	Total
Sr. Engineering Technician (NICET II)	16	\$50.00	bour	\$800.00
Sr. Engineering Technician (NICET II) - Overtime	0	\$75.00	hour	\$0.00
Nuclear Density Equipment Rental	16	\$9.00	hour	\$144.00
Vehicle Charge (up to \$ hrs)	16	\$7.50	hour	\$120.00
Molding Specimens 3/Set (TEX-206-F)	2	\$54.00	set	\$108.00
Bulk Density - Lab Molded (TEX-207-F)	2	\$46.00	set	\$92.00
HVEEM Stability (TEX-208-F)	2	\$82.00	set	\$164.00
Extraction/Gradation by Ignition (ASTM D 6307)	2	\$145.00	each	\$290.00
Maximum Theoretical Specific Gravity (TEX-227F)	3	\$78.00	each	\$234.00
Project Engineer	1.2	\$96.00	hour	\$115,20
		Sub	total =	\$2,067,20

ESTIMATED TOTAL FOR SERVICES AND TESTING = \$78,186.35

NOTES:

Page 4 of 4



#### CERTIFICATE OF LIABILITY INSURANCE

**AVILE-1** OP ID: JMC DATE (MM/DD/YYYY)

08/07/13

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to

	DUCE					800-338-1391		CT				
		ARSH				888-621-3173	PHONE	- Fush-		FAX (A/C, No):		
		ket St., Ste. 1100 s. MO 63101				888-621-3173	E-MAIL ADDRES	, EXU:		(ACC, 140).		
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										& Indemnity		22357
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Α	X	COMMERCIAL GENERA	<del></del>			84SBWKH0783		11/01/12	11/01/13	PREMISES (Ea occurrence)	S	1,000,00
		CLAIMS-MADE	OCCUR						MED EXP (Any one person)	\$	10,00	
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	X	HIRED AUTOS X	NON-OWNED AUTOS							PROPERTY DAMAGE (Per accident)	\$	716
			A0103							(i ci doddony	\$	
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_	OFF	CER/MEMBER EXCLUDE	D?	N/A				11,01,12	7.000.10			1,000,00
	If ye	Aandatory in NH) yes, describe under ESCRIPTION OF OPERATIONS below								E.L. DISEASE - EA EMPLOYEE		1,000,00
	DES	CRIPTION OF OPERATIO	ONS below							E.L. DISEASE - POLICY LIMIT	\$	1,000,00
DES(	RIPT	ION OF OPERATIONS / L	DCATIONS / VEHICL	.ES (A	ttach /	ACORD 101, Additional Remarks S	Schedule,	if more space is	required)			

CERTIFICATE HOLDER	CANCELLATION
FBCENG Fort Bend County Engineering	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
Dept. Attn: Jim Jones 1127 Blume Road Rosenberg, TX 77471	AUTHORIZED REPRESENTATIVE