

FORT BEND COUNTY FY 2009  
COMMISSIONERS COURT AGENDA REQUEST FORM  
Return Completed Form by E-Mail to: Agenda Coordinator, County Judge's Office

Date Submitted: 05/27/2009 Submitted By: P.Batts  
Department: Engineering  
Court Agenda Date: 06/02/09 Phone Number: 281 633 7507

SUMMARY OF ITEM: Take all appropriate action to approve the Cost Estimate for Construction Materials Testing Services between Fort Bend County and Terracon regarding improvements to Greenbusch Road (from Katy Flewellen Road to Falcon Landing Blvd.), Phases 1&2 in an amount not to exceed ~~20000~~, Precinct 3.  
\$ 274,824.00  
RENEWAL AGREEMENT/APPOINTMENT YES  NO   
REVIEWED BY COUNTY ATTORNEY'S OFFICE: YES  NO

FINANCIAL SUMMARY:  
BUDGETED ITEM: YES  NO   
FUNDNG SOURCE: Accounting Unit: \_\_\_\_\_ Account Number: \_\_\_\_\_  
Activity (If Applicable): \_\_\_\_\_  
DESCRIPTION OF LAWSOM ACCOUNT: \_\_\_\_\_

Instructions to submit Agenda Request Form:  
• Completely fill out agenda form: incomplete forms will not be processed.  
• Agenda Request Forms should be submitted by e-mail, fax, or inter-office mail, and all back-up information must be provided by Wednesday at 2:00 p.m. to all those listed below.  
• All original back-up must be received in the County Judge's Office by 2:00 p.m. on Wednesday.  
DISTRIBUTION:  
Original Form Submitted with back up to County Judge's Office  (✓ when completed)  
If by E-Mail to [ospindon@co.fort-bend.tx.us](mailto:ospindon@co.fort-bend.tx.us) If by Fax to (281) 341-8609  
Distribute copies with back-up to all listed below. If by fax, send to numbers below:  

<input type="checkbox"/> Auditor (281-341-3774)	<input type="checkbox"/> Comm. Pct. 1 (281-342-0587)
<input type="checkbox"/> Budget Officer (281-344-3954)	<input type="checkbox"/> Comm. Pct. 2 (281-403-8009)
<input type="checkbox"/> Facilities/Planning (281-633-7022)	<input type="checkbox"/> Comm. Pct. 3 (281-242-9060)
<input type="checkbox"/> Purchasing Agent (281-341-8642)	<input type="checkbox"/> Comm. Pct. 4 (281-980-9077)
<input type="checkbox"/> Information Technology (281-341-4526)	<input type="checkbox"/> County Clerk (281-341-8697)
<input type="checkbox"/> Other:	<input type="checkbox"/> County Atty (281-341-4557)

RECOMMENDATION / ACTION REQUESTED:  
Special Handling Requested (specify):

6-11-09 2 orig. ret. to Paulette at Engineering



receipt or acceptance by the County of the services covered by such invoice. Contractor's reimbursable expenses, if any, associated with the Project, shall be reimbursed at cost upon submission of properly submitted expense records to County.

- 3.03 Any additional and/or "as requested" services shall be subject to express written approval of County.

#### SECTION IV TERMINATION

- 4.01 County may terminate this Agreement at any time by providing ten (10) days written notice to Contractor.
- 4.02 Upon receipt of such notice, Contractor 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.
- 4.03 Within thirty (30) days after receipt of notice of termination, Contractor shall submit a statement, showing in detail the services performed under this Agreement to the date of termination.
- 4.04 County shall then pay Contractor 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.
- 4.05 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 V INSURANCE

Contractor shall furnish certificates of insurance to County evidencing compliance with the insurance requirements hereof. Certificates shall indicate name of Contractor, name of insurance company, policy number, term of coverage and limits of coverage. Contractor shall cause its insurance companies to provide County with at least 30 days prior written notice of any reduction in the limit of liability by endorsement of the policy, cancellation or non-renewal of the insurance coverage required under this Agreement. Contractor shall obtain such insurance from such companies having Bests 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:

- A. Workers' Compensation insurance with statutory limits. Substitutes to genuine Workers' Compensation Insurance will not be allowed.
- B. Commercial General Liability insurance with limits of not less than \$1,000,000 each occurrence and \$2,000,000 in the annual aggregate.
- C. Employers' liability insurance with limits of not less than \$100,000 per accident and \$500,000 in the annual aggregate.

- D. Professional Liability insurance with limits not less than \$1,000,000 each claim/annual aggregate.

SECTION VI  
NOTICE

- 6.01 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 Contractor at the addresses set forth below. If mailed, any notice or communication shall be deemed to be received three days after the date of deposit in the United States Mail.
- 6.02 Unless otherwise provided in this Agreement, all notices shall be delivered to the following addresses:
- A. If to the Contractor:

Terracon Consultants, Inc.  
11555 Clay Road, Suite 100  
Houston, Texas 77043  
Attn: Alfonzo Hernandez, P.E., Construction Services Manager

- 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  
4520 Reading Road, Suite A  
Rosenberg, Texas 77471

D. Jesse Hegemier, P.E.  
County Engineer  
1124-52 Blume Road  
Rosenberg, Texas 77471

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

SECTION VII  
LIMIT OF APPROPRIATION

- 7.01 Prior to the execution of this Agreement, Contractor has been advised by County, and Contractor 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 \$274,824.00, including reimbursable expenses, if any, specifically allocated to fully discharge any and all liabilities which may be incurred by County.
- 7.02 Contractor does further understand and agree, said understanding and agreement also being of the absolute essence of this contract, that the total maximum compensation that

Contractor may become entitled to hereunder and the total maximum sum that County shall become liable to pay to Contractor hereunder shall not under any conditions, circumstances or interpretations thereof exceed the sum of \$274,824.00.

#### SECTION VIII SUCCESSORS AND ASSIGNS

- 8.01 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 such other party, in respect to all covenants of this Agreement.
- 8.02 Neither County nor Contractor shall assign, sublet or transfer its or his interest in this Agreement without the prior written consent of the other.
- 8.03 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 IX PUBLIC CONTACT

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

#### SECTION X COMPLIANCE AND STANDARDS

Contractor shall render the services hereunder in accordance with generally accepted standards of Contractors practicing in Fort Bend County, Texas applicable thereto and shall use that customary 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 Contractor's performance.

#### SECTION XI OWNERSHIP OF DOCUMENTS

- 11.01 County shall be the absolute and unqualified owner of all drawings, preliminary layouts, record drawings, sketches, report and other documents prepared pursuant to this Agreement by the Contractor and his Contractors (deliverables).
- 11.02 No reuse fees or royalty payments will be paid to the Contractor in connection with future reuse or adaptation of designs derived under this contract.
- 11.03 Copies of all complete or partially completed mylar reproducible, preliminary layouts, record drawings, digital files, sketches, reports 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.

- 11.04 Contractor 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.
- 11.05 The documents referenced in this Section are not intended or presented by the Contractor to be suitable for reuse by County or others on extensions of this Project or on other unrelated projects.
- 11.06 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 XII  
INDEMNIFICATION

- 12.01 **CONTRACTOR SHALL SAVE HARMLESS COUNTY FROM AND AGAINST ALL CLAIMS, LIABILITY, AND EXPENSES, INCLUDING REASONABLE ATTORNEYS FEES, ARISING FROM ACTIVITIES OF CONTRACTOR, ITS AGENTS, CONSULTANTS, CONTRACTORS OR EMPLOYEES, PERFORMED UNDER THIS AGREEMENT THAT RESULT FROM THE NEGLIGENT ACT, ERROR, OR OMISSION OF THE CONTRACTOR OR ANY OF CONTRACTOR'S AGENTS, SERVANTS OR EMPLOYEES.**
- 12.02 **CONTRACTOR 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 ACTIVITIES BY THE CONTRACTOR, ITS AGENTS, CONSULTANT'S, CONTRACTORS OR EMPLOYEES.**

SECTION XIII  
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 XIV  
MISCELLANEOUS

- 14.01 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.
- 14.02 Nothing in this Agreement shall create any rights or obligations in any party who is not a signatory to this Agreement.
- 14.03 Contractor 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; Contractor and other parties should not rely on this approval and should seek review and approval by their own respective legal counsel.


14.04 If there is any conflict between this Agreement and Exhibit A, the provisions of this Agreement shall prevail.

*REMAINDER OF PAGE INTENTIONALLY LEFT BLANK*

SECTION XV  
EXECUTION

This Agreement shall become effective on the date executed by County.

FORT BEND COUNTY:

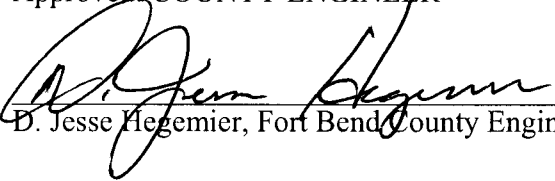
  
\_\_\_\_\_  
Robert E. Hebert, County Judge

June 2, 2009  
Date

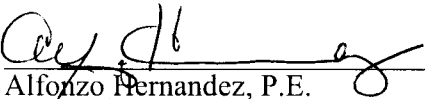
Attest:

  
\_\_\_\_\_  
Dianne Wilson, County Clerk

Approved: COUNTY ENGINEER

  
\_\_\_\_\_  
D. Jesse Hegemier, Fort Bend County Engineer

CONTRACTOR: TERRACON CONSULTANTS, INC.

  
\_\_\_\_\_  
Alfonzo Fernandez, P.E.  
Construction Services Manager

5-28-09  
Date

MER:Terracon.Greenbusch Rd.3791-732(05272009)

**AUDITOR'S CERTIFICATE**

I hereby certify that funds are available in the amount of \$274,824.00 to accomplish and pay the obligation of the Fort Bend County under this contract.

  
\_\_\_\_\_  
Ed Sturdivant, Fort Bend County Auditor

Exhibit A: May 27, 2009 Proposal from Contractor

EXHIBIT A



May 27, 2009

Fort Bend County Engineering Department  
c/o Schaumburg & Polk, Inc.  
Attn: Ms. Erin L. Knesek, P.E.  
11767 Katy Freeway, Ste. 900  
Houston, Texas 77079

Phone: 281.920.0487

Fax: 281.920.9924

Subject: Cost Estimate for Construction Materials Testing Services  
Fort Bend County Mobility Improvement Project #732  
Improvements to Greenbusch Rd from Katy Flewellen Rd to Falcon Landing Blvd  
Phases 1 and 2  
Terracon Cost Estimate P92090595

Dear Ms. Knesek:

Terracon Consultants, Inc. (Terracon) is pleased to submit this cost estimate to provide construction materials engineering and testing services for the above referenced project. We understand that we have been selected based solely on our professional qualifications. In this letter we present our understanding of the scope of the project, our proposed services, and our budget estimate.

**A) PROJECT INFORMATION**

Phase 1 of the project consists of drainage and pavement improvements to Greenbusch Road from north of existing Katy Flewellen Road (Station 20+74) to northwest of Shadow Forest Drive (Station 62+18). Phase 2 of the project also consists of pavement improvements to Greenbusch Road / Westheimer Parkway from Station 47+89 to northwest of Falcon Landing Boulevard (Station 149+87).

In general the work for Phase 1 will include the installation of approximately 5,500 feet of storm sewer pipe, approximately 24,700 square yards of 8-inch reinforced concrete pavement over 6-inches of lime stabilized subgrade, and 1,215 tons of 3-inch hot mix asphaltic concrete over 8-inches of flexible base and 6-inches of lime stabilized subgrade. Other work will include reinforced concrete sidewalks, wheelchair ramps, driveways, and drilled foundations for traffic signal poles.

In general the work for Phase 2 will include the installation of approximately 13,330 feet of storm sewer pipe, approximately 71,200 square yards of 8-inch reinforced concrete pavement over 6-

Terracon Consultants, Inc. 11555 Clay Road, Suite 100 Houston, Texas 77043  
P [713] 690 6989 F [713] 690 6787 terracon.com

**Geotechnical** ■ **Environmental** ■ **Construction Materials** ■ **Facilities**

Agreement for Professional Materials Testing Services

Terracon Consultants, Inc. – Greenbusch Road

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inches of lime stabilized subgrade, and 360 tons of 3-inch hot mix asphaltic concrete over 8-inches of flexible base and 6-inches of lime stabilized subgrade. Other work will include reinforced concrete slope paving.

## **B) SCOPE OF SERVICES**

Construction plans prepared by Cobb Fendley for Phase 1 dated March 16, 2009 and for Phase 2 dated May 19, 2009 and specifications for Phase 1 dated March 25, 2009 were reviewed in preparation for the following scope of services:

### **Earthwork Observations and Testing:**

1. Provide an engineering technician to sample trench backfill, treated subgrade, and base materials. Prepare and test the samples for classification by the Atterberg Limits (ASTM D4318), percent finer than 200 sieve (ASTM D1120), and sieve analysis (ASTM C136).
2. Test soil samples for moisture-density relationship (ASTM D698, ASTM D1557 and ASTM D588).
3. Sample cement-sand backfill for utility trenches, mold specimens, and perform compressive strength tests in the laboratory (ASTM D1633).
4. Perform stabilization evaluation of subgrade soil for proposed chemically treated paving subgrade.
5. Observe the chemical stabilization process for the pavement subgrade.
6. Perform field gradation tests of treated subgrade.
7. Observe proofrolling operations, verify the depth of the treated subgrade, and perform density tests using the nuclear method (ASTM D6938) to determine the moisture content and percent compaction of the soil materials.

### **Foundation Observations and Testing:**

1. Observe the installation of the drilled pier foundations. For each pier observed, information regarding shaft depth, and auger diameter will be documented.
2. Obtain pocket penetrometer readings on soil cuttings removed during excavation at or near the bearing stratum in order to document the approximate shear strength of the soil.



3. Perform compressive tests of concrete test cylinders cast in the field (ASTM C1231, C39).

**Rebar Observation and Testing:**

1. Observe reinforcing steel prior to concrete placement. We will observe the rebar size, spacing and configuration. Terracon recommends we be scheduled a minimum of 24 hours prior to concrete placement.

**Cast-in-Place Concrete Observations and Testing:**

1. Sample and test the fresh concrete for each mix. Perform tests including slump, air content, concrete temperature, and cast test specimens (ASTM C172, C31, C143, C173, and C1064).
2. Concrete will be sampled at a frequency of 1 set of 4 cylinders every 150 cubic yards for concrete paving. Terracon requests that a copy of the approved mix design be provided to us prior to placement of the concrete.
3. Perform compressive strength tests of concrete test cylinders cast in the field (ASTM C1231, C39). One set of four concrete cylinders will be prepared and two cylinders will be tested at 7 and 28 days.
4. Provide an engineering technician to observe the concrete batching operation, document the truck scale calibration date, and perform concrete slump tests on a periodic basis.
5. Obtain cores from the pavements and perform 9-point thickness measurements and compressive strengths (ASTM C42, C174). Cores will be obtained at a rate of one core for each 500 square yards of pavement.

**Asphalt Pavement Observations and Testing:**

1. Sample asphalt materials during placement, prepare, and test the samples for extraction, gradation, bulk specific gravity of lab molded specimens, theoretical maximum specific gravity, and Hveem stability and density. One sample will be obtained for every 300 tons of asphalt placed each day.
2. Perform in-situ nuclear density tests to assist in determining an asphalt rolling pattern.



3. Perform in-situ nuclear density tests to determine the relative percent compaction at the frequency specified.
4. Obtain cores from the pavements and perform thickness measurements and bulk density within one day of placement. Cores will be obtained at a rate of one core for each 500 square yards of pavement.

**Additional Services:**

If you would like us to perform additional work, please contact us and we will issue a short Supplement to Agreement form, or Supplemental Proposal, that outlines the additional work to be performed and associated fees. To authorize us to begin work, you simply return a signed copy of the Supplemental agreement.

**C) PROJECT STAFFING AND ADMINISTRATION**

Terracon's approach to providing materials engineering services is to assign qualified engineering technicians, directed by Professional Engineers licensed in the State of Texas, to perform the required tests for your project. Many of our technicians are certified by the National Institute for Certification in Engineering Technologies (NICET) and are involved in continuing training through on-the-job experience and formal instructions. Terracon is accredited by The American Association for Laboratory Accreditation (A2LA) to perform the field and laboratory tests listed in this cost estimate. Terracon will assign a professional engineer to manage this project. The Project Manager's responsibilities will include:

- Attending monthly progress meetings,
- Coordinating field and laboratory testing,
- Verifying quality control monitoring and testing is in accordance with the Project Documents,
- Communicating with our field technician, Contractor, and Owner's site representative,
- Reviewing laboratory and field test reports and concrete mixes,
- Informing the owner's representative and the contractor of failing results,
- Controlling our budget, and Invoicing.

**D) SITE ACCESS AND SAFTY**

Owner shall secure all necessary site related approvals, permits, licenses, and consents necessary to commence and complete the services and will execute any necessary site access agreement. Terracon will be responsible for supervision and site safety measures for its own employees, but shall not be responsible for the supervision or health and safety precautions for any third parties, including Owner's contractors, subcontractors, or other parties present at the site.



**E) TESTING AND OBSERVATION**

Owner understands that testing and observation are discrete sampling procedures, and that such procedures indicate conditions only at the depths, locations, and times the procedures were performed. Terracon will provide test results and opinions based on tests and field observations only for the work tested. Owner understands that testing and observation are not continuous or exhaustive, and are conducted to reduce – not eliminate - project risk. Owner agrees to the level or amount of testing performed and the associated risk. Owner is responsible (even if delegated to contractor) for notifying and scheduling Terracon so Terracon can perform these services. Terracon shall not be responsible for the quality and completeness of Owner's contractor's work or their adherence to the project documents, and Terracon's performance of testing and observation services shall not relieve contractor in any way from its responsibility for defects discovered in its work, or create a warranty or guarantee. Terracon will not supervise or direct the work performed by contractor or its subcontractors and is not responsible for their means and methods.

**Field testing services will be provided on an "as requested" basis when scheduled by your representative. A minimum of 24 hours notice is required to properly schedule our services. To schedule our services please contact our dispatcher at (713) 690-2258. The dispatch office hours are from 7:00 a.m. to 5:00 p.m. Messages left after business hours will be checked the following business day. Terracon shall not be held responsible for tests not performed as a result of a failure to schedule our services or any subsequent damage caused as a result of a lack of testing. Terracon recommends that a copy of this proposal be provided to the general contractor so they understand our scope of services and schedule us accordingly.**

**F) COMPENSATION**

Based on the project information available for our review, we will perform the proposed scope of services for an estimate of **\$85,077** for Phase 1 and **\$189,747** for Phase 2. Services provided will be based on the unit rates included in the attached Cost Estimate. Please note that this is only a budget estimate and not a not-to-exceed price. Many factors beyond our control, such as weather and the contractor's schedule, will dictate the final fee for our services.

For services provided on an "as requested" basis, overtime is defined as all hours in excess of eight hours per day, outside of the normal hours of 7:00 a.m. to 6:00 p.m. Monday through Friday, and all hours worked on weekends and holidays. Overtime rates will be 1.5 times the hourly rate quoted. A four hour minimum charge for labor only is applicable to all trips made to provide our testing, observation and consulting services. The minimum charge is not applicable for trips to the project site for sample pickup only. All labor, equipment and transportation charges are billed on a portal to portal basis from our office. You will be invoiced on a monthly



basis for services actually performed and/or as authorized by you or your designated representative.

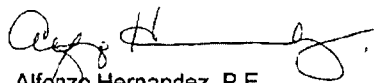
Test reports will be distributed via e-mail. Terracon requests that a distribution list be provided prior to the beginning of the project. The list will need to include the company name, address, contact person's name, phone number, and e-mail address for each person.

**G) AUTHORIZATION**

Terracon understands that Fort Bend County will issue an Agreement for Professional Materials Testing Services for our signature.

We appreciate this opportunity of working with you and we look forward to working with you on this project.

Sincerely,  
**Terracon Consultants, Inc.**  
(Texas Firm Registration No. F-3272)

  
Alfonzo Hernandez, P.E.  
Construction Services Manager

Attachments: Cost Estimates for Phase 1 and 2

**BUDGET ESTIMATE  
GREENBUSCH RD IMPROVEMENTS FROM KATY FLEWELLEN TO SHADOW FOREST PHASE I  
FORT BEND COUNTY MOBILITY IMPROVEMENT PROJECT #732  
TERRACON COST ESTIMATE P92090595**

Service	Quantity	Unit	Unit Rate	Estimate
<b>Personnel</b>				
Project Manager, Sr. Engineer, P.E.	40	hour	\$123.00	\$4,920.00
Engineering Technician, Regular Time (NICET II)	592	hour	\$50.00	\$29,600.00
Engineering Technician, Overtime (NICET II)	148	hour	\$75.00	\$11,100.00
Engineering Technician, Regular Time (ACI I)	84	hour	\$44.00	\$3,696.00
Engineering Technician, Overtime (ACI I)	28	hour	\$66.00	\$1,848.00
Vehicle Charge	676	hour	\$7.50	\$5,070.00
<b>Earthwork</b>				
Moisture Density Relationship Soil (ASTM D698)	10	each	\$175.00	\$1,750.00
Moisture Density Relationship Stabilized Soil (ASTM D698)	6	each	\$193.00	\$1,158.00
Moisture Density Relationship Base (ASTM D1557)	2	each	\$187.00	\$374.00
Atterberg Limits (ASTM D4318)	16	each	\$53.00	\$848.00
Percent Passing #200 Sieve Analysis (ASTM D1120)	10	each	\$41.00	\$410.00
Sieve Analysis, Base (ASTM C136)	2	each	\$82.00	\$164.00
Cement Sand Compressive Strength (ASTM D1633)	100	each	\$61.00	\$6,100.00
Optimum Lime Content - PI Method	2	each	\$208.00	\$416.00
Nuclear Density Gauge	512	hour	\$9.00	\$4,608.00
<b>Reinforced Cast-in-Place Concrete Pavement</b>				
Compressive Strength Concrete Cylinders	236	each	\$15.00	\$3,540.00
Concrete Coring (ASTM C42)	57	each	\$90.00	\$5,130.00
Measuring thickness of Concrete Cores (ASTM C174)	57	each	\$11.00	\$627.00
<b>Asphalt Pavement</b>				
Sieve Analysis, Fine & Coarse Aggregates (TEX 200F)	1	each	\$46.00	\$46.00
Abrasion Resistance, Coarse Aggregates (ASTM C131)	1	each	\$179.00	\$179.00
Specific Gravity, Fine & Coarse Aggregates (ASTM C128 & C127)	1	each	\$80.00	\$80.00
Sand Equivalent, Fine Aggregates (ASTM D2419)	1	each	\$56.00	\$56.00
Atterberg Limits (ASTM D4318)	1	each	\$53.00	\$53.00
Deleterious Materials (TEX 217F)	1	each	\$80.00	\$80.00
Decantation (TEX 217F)	1	each	\$80.00	\$80.00
Extraction / Gradation (TEX 210F)	4	each	\$174.00	\$696.00
Hveem Stability (TEX 208F)	4	set	\$82.00	\$328.00
Bulk Density - Lab Molded Specimen or Cores (TEX 207F)	4	set	\$46.00	\$184.00
Molding Specimens (TEX 206F)	4	set	\$54.00	\$216.00
Maximum Theoretical Specific Gravity (TEX 227F)	4	each	\$78.00	\$312.00
Asphalt Coring (4" diameter)	16	each	\$80.00	\$1,280.00
Measuring thickness of Asphalt Cores	16	each	\$8.00	\$128.00
<b>ESTIMATED PROJECT BUDGET</b>				<b>\$85,077</b>

<b>BUDGET ESTIMATE</b>				
<b>GREENBUSCH RD IMPROVEMENTS FROM SHADOW FOREST TO FALCON LANDING BLVD PHASE 2</b>				
<b>FORT BEND COUNTY MOBILITY IMPROVEMENT PROJECT #732</b>				
<b>TERRACON COST ESTIMATE P92090595</b>				
Service	Quantity	Unit	Unit Rate	Estimate
<b>Personnel</b>				
Project Manager, Sr. Engineer, P.E.	120	hour	\$123.00	\$14,760.00
Engineering Technician, Regular Time (NICET II)	1,320	hour	\$50.00	\$66,000.00
Engineering Technician, Overtime (NICET II)	330	hour	\$75.00	\$24,750.00
Engineering Technician, Regular Time (ACI I)	304	hour	\$44.00	\$13,376.00
Engineering Technician, Overtime (ACI I)	58	hour	\$66.00	\$3,828.00
Vehicle Charge	1,624	hour	\$7.50	\$12,180.00
<b>Earthwork</b>				
Moisture Density Relationship Soil (ASTM D698)	12	each	\$175.00	\$2,100.00
Moisture Density Relationship Stabilized Soil (ASTM D698)	10	each	\$193.00	\$1,930.00
Moisture Density Relationship Base (ASTM D1557)	2	each	\$187.00	\$374.00
Atterberg Limits (ASTM D4318)	22	each	\$53.00	\$1,166.00
Percent Passing #200 Sieve Analysis (ASTM D1120)	7	each	\$41.00	\$287.00
Sieve Analysis, Base (ASTM C136)	2	each	\$82.00	\$164.00
Cement Sand Compressive Strength (ASTM D1633)	220	each	\$61.00	\$13,420.00
Optimum Lime Content - PI Method	4	each	\$208.00	\$832.00
Nuclear Density Gauge	1120	hour	\$9.00	\$10,080.00
<b>Reinforced Cast-in-Place Concrete Pavement</b>				
Compressive Strength Concrete Cylinders	488	each	\$15.00	\$7,320.00
Concrete Coring (ASTM C42)	142	each	\$90.00	\$12,780.00
Measuring thickness of Concrete Cores (ASTM C174)	142	each	\$11.00	\$1,562.00
<b>Asphalt Pavement</b>				
Sieve Analysis, Fine & Coarse Aggregates (TEX 200F)	1	each	\$46.00	\$46.00
Abrasion Resistance, Coarse Aggregates (ASTM C131)	1	each	\$179.00	\$179.00
Specific Gravity, Fine & Coarse Aggregates (ASTM C128 & C127)	1	each	\$80.00	\$80.00
Sand Equivalent, Fine Aggregates (ASTM D2419)	1	each	\$56.00	\$56.00
Atterberg Limits (ASTM D4318)	1	each	\$53.00	\$53.00
Deleterious Materials (TEX 217F)	1	each	\$80.00	\$80.00
Decantation (TEX 217F)	1	each	\$80.00	\$80.00
Extraction / Gradation (TEX 210F)	4	each	\$174.00	\$696.00
Hveem Stability (TEX 208F)	4	set	\$82.00	\$328.00
Bulk Density - Lab Molded Specimen or Cores (TEX 207F)	4	set	\$46.00	\$184.00
Molding Specimens (TEX 206F)	4	set	\$54.00	\$216.00
Maximum Theoretical Specific Gravity (TEX 227F)	4	each	\$78.00	\$312.00
Asphalt Coring (4" diameter)	6	each	\$80.00	\$480.00
Measuring thickness of Asphalt Cores	6	each	\$8.00	\$48.00
<b>ESTIMATED PROJECT BUDGET</b>				<b>\$189,747</b>

# ACORD™ CERTIFICATE OF LIABILITY INSURANCE

1/1/2010

DATE (MM/DD/YYYY)

5/28/2009

**PRODUCER** Lockton Companies, LLC-1 Kansas City  
444 W. 47th Street, Suite 900  
Kansas City MO 64112-1906  
(816) 960-9000

**THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.**

**INSURED** TERRACON CONSULTANTS, INC.  
1312891 11555 CLAY RD., SUITE #100  
HOUSTON TX 77043

**INSURERS AFFORDING COVERAGE**

**NAIC #**

INSURER A: AMERICAN INTL. SPCLTY. LINES INS CO  
INSURER B: AN AIG COMPANY A+XV (CHICAGO)  
INSURER C: Travelers Property Casualty Company of America  
INSURER D: The Travelers Indemnity Company  
INSURER E: Lexington Insurance Company

25674  
25658  
19437

**COVERAGES** TERCO01 PC

THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER AND THE CERTIFICATE HOLDER.

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR	ADD'L LTR	INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A			<b>GENERAL LIABILITY</b>	PROP3779274	1/1/2009	1/1/2010	EACH OCCURRENCE	\$ 1,000,000
			<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY				DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 100,000
			<input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR				MED EXP (Any one person)	\$ 5,000
			<input checked="" type="checkbox"/> CONTR'L LIABILITY				PERSONAL & ADV INJURY	\$ 1,000,000
			GEN'L AGGREGATE LIMIT APPLIES PER:				GENERAL AGGREGATE	\$ 2,000,000
			<input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC				PRODUCTS - COMP/OP AGG	\$ 1,000,000
C	C		<b>AUTOMOBILE LIABILITY</b>	TJ-CAP-131J3858-TIL-09	1/1/2009	1/1/2010	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
			<input checked="" type="checkbox"/> ANY AUTO	TJ-BAP-131J3895-TIL-09	1/1/2009	1/1/2010	BODILY INJURY (Per person)	\$ XXXXXXXX
			<input type="checkbox"/> ALL OWNED AUTOS				BODILY INJURY (Per accident)	\$ XXXXXXXX
			<input type="checkbox"/> SCHEDULED AUTOS				PROPERTY DAMAGE (Per accident)	\$ XXXXXXXX
			<input checked="" type="checkbox"/> HIRED AUTOS				AUTO ONLY - EA ACCIDENT	\$ XXXXXXXX
			<input checked="" type="checkbox"/> NON-OWNED AUTOS				OTHER THAN AUTO ONLY: EA ACC	\$ XXXXXXXX
							AGG	\$ XXXXXXXX
			<b>GARAGE LIABILITY</b>	NOT APPLICABLE			EACH OCCURRENCE	\$ 5,000,000
			<input type="checkbox"/> ANY AUTO				AGGREGATE	\$ 5,000,000
A	A		<b>EXCESS/UMBRELLA LIABILITY</b>	PROU1920977	1/1/2009	1/1/2010		\$ XXXXXXXX
			<input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE	(EXCLUDES PROF. LIAB.)				\$ XXXXXXXX
			<input type="checkbox"/> DEDUCTIBLE <input checked="" type="checkbox"/> UMBRELLA FORM					\$ XXXXXXXX
			RETENTION \$					\$ XXXXXXXX
C	D		<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b>	TRJ-UB-131J3846-09	1/1/2009	1/1/2010	<input checked="" type="checkbox"/> WC STATUTORY LIMITS	
			ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <b>NO</b>	TC2K-UB-131J3742-09 (AOS)	1/1/2009	1/1/2010	E. L. EACH ACCIDENT	\$ 1,000,000
			If yes, describe under SPECIAL PROVISIONS below				E. L. DISEASE - EA EMPLOYEE	\$ 1,000,000
							E. L. DISEASE - POLICY LIMIT	\$ 1,000,000
E			<b>OTHER PROFESSIONAL LIABILITY</b>	015054489	1/1/2009	1/1/2010	\$1,000,000 EACH CLAIM & \$1,000,000 ANNUAL AGGREGATE	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS  
RE: FORT BEND COUNTY MOBILITY IMPROVEMENT PROJECT #732

**CERTIFICATE HOLDER**

**CANCELLATION**

10553130  
FORT BEND COUNTY PURCHASING DEPARTMENT  
GILBERT D. JALOMO, JR., CPPB  
4520 READING ROAD, SUITE A  
ROSENBERG TX 77471

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

