WORK AUTHORIZATION NO._2____

PROJECT: On Call Geotechnical and Lab Testing Services

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated <u>February 2, 2015</u> and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and <u>Terracon Consultants, Inc.</u> (the "Engineer").

- Part1. The Engineer will provide the following Engineering Services set forth in Attachment "B" of this Work Authorization.
- Part 2. The maximum amount payable for services under this Work Authorization without modification is \$50,000.00.
- Part 3. Payment to the Engineer for the services established under this Work Authorization shall be made in accordance with the Contract.
- Part 4. This Work Authorization shall become effective on the date of final acceptance and full execution of the parties hereto and shall terminate on **September 30, 2017**. The Engineering Services set forth in Attachment "B" of this Work Authorization shall be fully completed on or before said date unless extended by a Supplemental Work Authorization.
- Part 5. This Work Authorization does not waive the parties' responsibilities and obligations provided under the Contract.
- Part 6. County believes it has sufficient funds currently available and authorized for expenditure to finance the costs of this Work Authorization. Engineer understands and agrees that County's payment of amounts under this Work Authorization is contingent on the County receiving appropriations or other expenditure authority sufficient to allow the County, in the exercise of reasonable administrative discretion, to continue to make payments under this Contract. It is further understood and agreed by Engineer that County shall have the right to terminate this Contract at the end of any County fiscal year if the governing body of County does not appropriate sufficient funds as determined by County's budget for the fiscal year in question. County may effect such termination by giving written notice of termination to Engineer.
- Part 7. This Work Authorization is hereby accepted and acknowledged below.

EXECUTED this day of	
ENGINEER:	COUNTY:
Terracon Consultants, Inc.	Williamson County, Texas
By: My Frinkwal	Ву:
Signature	Signature
James G. Bierschwale	Printed Name
Printed Name	Printed Name
<u>Vice President</u>	-
Title	Title

LIST OF ATTACHMENTS

Attachment A - Services to be Provided by County

Attachment B - Services to be Provided by Engineer

Attachment C - Work Schedule

Attachment D - Fee Schedule

Attachment A - Services to be Provided by County

- 1. County will direct type of services to be provided.
- 2. County will provide timely reviews and decisions necessary to enable Terracon to maintain an agreed upon project schedule as developed in attached Attachment C.
- 3. County will provide points of contact, to be identified upon Notice to Proceed.
- 4. County will provide project management.

Attachment B - Services to be Provided by Engineer

- l. Perform services and related reports associated with Attachment D.
- 2. Miscellaneous.

Attachment C - Work Schedule

Shall provide a work schedule for the assigned tasks. Work shall begin immediately upon receipt of agreement between County and Terracon on the work schedule and authorization to proceed on assigned services.

Attachment D - Fee Schedule

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GEOTECHNICAL ENGINEERING Schedule of Services and Fees Williamson County, Texas 2014

Geotechnical Personnel

Senior Principal / Officer / Consultant, P.E., per hour	
Principal Geotechnical Engineer, P.E., per hour	
Senior Geotechnical Engineer, P.E. / Sr. Geologist, P.G. / Sr. Project Manager, per hour	
Project Manager, per hour	
Project Geotechnical Engineer, per hour	
Staff Geotechnical Engineer, per hour	
Field Geologist, P.G., per hour	
Senior Engineering Technician, per hour	
Engineering Technician, per hour	\$44.00
Drilling / Field Services Coordinator, per hour	
Extra Drilling Crew Member, per hour	
Draftsman, per hour	
Clerical Support /Administrative Staff, per hour	\$48.00
Addl. Mileage of Truck-Mounted Drill Rig, per mile (for sites beyond 50 mile radius of office Minimum Field Charge for Truck-Mounted Drill Rig, per day	e)\$3.50 \$700.00
Addl. Mileage of Truck-Mounted Drill Rig, per mile (for sites beyond 50 mile radius of office Minimum Field Charge for Truck-Mounted Drill Rig, per day	9)\$3.50 \$700.00 \$500.00 \$6.00
Mobilization of Truck-Mounted Drill Rig, each (for sites within 50 mile radius of office)	9)\$3.50 \$700.00 \$500.00 \$6.00 .\$1,500.00
Addl. Mileage of Truck-Mounted Drill Rig, per mile (for sites beyond 50 mile radius of office Minimum Field Charge for Truck-Mounted Drill Rig, per day	9)\$3.50 \$700.00 \$500.00 \$6.00 .\$1,500.00 \$250.00
Addl. Mileage of Truck-Mounted Drill Rig, per mile (for sites beyond 50 mile radius of office Minimum Field Charge for Truck-Mounted Drill Rig, per day	e)\$3.50 \$700.00 \$500.00 \$6.00 .\$1,500.00 \$250.00 \$50.00
Addl. Mileage of Truck-Mounted Drill Rig, per mile (for sites beyond 50 mile radius of office Minimum Field Charge for Truck-Mounted Drill Rig, per day	e)\$3.50 \$700.00 \$500.00 \$6.00 .\$1,500.00 \$250.00 \$50.00 oling (SPT)
Addl. Mileage of Truck-Mounted Drill Rig, per mile (for sites beyond 50 mile radius of office Minimum Field Charge for Truck-Mounted Drill Rig, per day	e)\$3.50 \$700.00 \$500.00 \$6.00 .\$1,500.00 \$250.00 \$50.00 bling (SPT)
Addl. Mileage of Truck-Mounted Drill Rig, per mile (for sites beyond 50 mile radius of office Minimum Field Charge for Truck-Mounted Drill Rig, per day	e)\$3.50 \$700.00 \$500.00 \$6.00 .\$1,500.00 \$250.00 \$50.00 oling (SPT)
Addl. Mileage of Truck-Mounted Drill Rig, per mile (for sites beyond 50 mile radius of office Minimum Field Charge for Truck-Mounted Drill Rig, per day	e)\$3.50 \$700.00 \$500.00 \$6.00 .\$1,500.00 \$250.00 \$50.00 \$14.00 \$15.50
Addl. Mileage of Truck-Mounted Drill Rig, per mile (for sites beyond 50 mile radius of office Minimum Field Charge for Truck-Mounted Drill Rig, per day	e)\$3.50 \$700.00 \$500.00 \$6.00 .\$1,500.00 \$250.00 \$50.00 \$14.00 \$15.50
Addl. Mileage of Truck-Mounted Drill Rig, per mile (for sites beyond 50 mile radius of office Minimum Field Charge for Truck-Mounted Drill Rig, per day	e)\$3.50 \$700.00 \$500.00 \$6.00 .\$1,500.00 \$250.00 \$50.00 \$14.00 \$15.50 \$15.50



Schedule of Services and Fees Williamson County, Texas 2014

	id surface:
Softer Rocks (e.g., Austin, Eagle Ford, Del Rio, Walnut, Glen Rose formations	
0 to 25 feet, per foot	
25 to 50 feet, per foot	\$20.00
50 to 75 feet, per foot	\$22.00
75 to 100 feet, per foot	
Harder Rocks (e.g., Edwards, Buda, Georgetown, Comanche Peak formations	and similar):
0 to 25 feet, per foot	\$20.00
25 to 50 feet, per foot	\$22.00
50 to 75 feet, per foot	\$24.00
75 to 100 feet, per foot	
Additional Footage Charge if using Track or ATV-Mounted Drill Rig, per foot	
TxDOT Cone Penetration (TCP) tests, each	
Grouting of Borings with bentonite or sak-crete, per foot	
Rock coring of very hard rocks such as granite, marble, schist, gneiss, etc	
Monitor Well / Piezometer Installation	
Interior and/or Limited Access Drilling/Sampling	ACCOUNTS OF THE PROPERTY OF TH
Laboratory Classification Tests	255.00
Atterberg limits, each	
Atterberg limits, each	\$8.00
Atterberg limits, each	\$8. 00 \$15.00
Atterberg limits, each	\$8.00 \$15.00 \$70.00
Atterberg limits, each	\$8,00 \$15.00 \$70.00 \$30.00
Atterberg limits, each	\$8,00 \$15.00 \$70.00 \$30.00 \$125.00
Atterberg limits, each	\$8,00 \$15.00 \$70.00 \$30.00 \$125.00
Atterberg limits, each	\$8,00 \$15.00 \$70.00 \$30.00 \$125.00
Atterberg limits, each Moisture content, each Density Determination (using Shelby tube or SPT sample), each Specific gravity, each Soil pH, each Soil Resistivity (Miller box method), each Chloride & Soluble Sulfate Content, TEX-620-J, each. Laboratory Grain Size Tests	\$8,00 \$15.00 \$70.00 \$30.00 \$125.00 \$75.00
Atterberg limits, each Moisture content, each Density Determination (using Shelby tube or SPT sample), each Specific gravity, each Soil pH, each Soil Resistivity (Miller box method), each Chloride & Soluble Sulfate Content, TEX-620-J, each.	\$8,00 \$15.00 \$70.00 \$30.00 \$125.00 \$75.00
Atterberg limits, each Moisture content, each Density Determination (using Shelby tube or SPT sample), each Specific gravity, each Soil pH, each Soil Resistivity (Miller box method), each Chloride & Soluble Sulfate Content, TEX-620-J, each. Laboratory Grain Size Tests Sieve analysis, ASTM C 136, each	\$8,00 \$15.00 \$70.00 \$30.00 \$125.00 \$75.00



GEOTECHNICAL ENGINEERING Schedule of Services and Fees Williamson County, Texas 2014

Laboratory Strength and Volume Change Tests

Unconfined Compression Test (soil), each	\$30.00
Unconfined Compression Test (rock), each	
Triaxial Compression Tests:	2501000:300 30000 1
Unconsolidated-Undrained (UU), per circle	\$265.00
Consolidated-Undrained (CU), with pore pressure measurements, per circle	
Direct Shear Tests:	
On Coarse-Grained Soils, per point.	\$175.00
On Fine-Grained Soils, per point	
Absorption Swell Tests:	
Free Swell, each	\$100.00
Single Pressure (at estimated overburden), each	\$120.00
Additional Pressures, each	
Swell Pressure (controlled swell), each	
Consolidation Test, regular with increasing load increments (max 6 loads), each	
Additional Load Increments, each	
Additional Unload-Reload Cycles, per cycle	
Other Laboratory Tests and Miscellaneous Items	
Flexible Wall Triaxial Permeability Test (Falling Head), each	\$350.00
Optimum Moisture/Maximum Density Relations:	
ASTM D 698, each	<mark>\$170.00</mark>
ASTM D 1557, each	
TEX-113-E, each	
TEX-114-E, each	
Additional Charge for Coarse Aggregate Correction (ASTM D 4718), each	
Relative Density, ASTM D 4253 & D 4254, each	
California Bearing Ratio (CBR), each	
Soil-Lime Relationship (Lime Series using PI and pH methods), each	
Sample Preparation (if required), per hour	



GEOTECHNICAL ENGINEERING Schedule of Services and Fees Williamson County, Texas 2014

Additional Comments

- A three-hour (3) minimum charge is applicable to all trips made for the performance of testing, inspection, cancellations, or consulting services. A minimum charge of 2 hours will be assessed for trips to the project site for sample pick-up only.
- All labor, equipment, and transportation charges are billed on a portal-to-portal basis from our office.
- . Court appearances, depositions, etc. will be charged at 1.5 times the quoted hourly rate.
- Unit fees for tests not listed can be quoted on request. If Client requests a test not listed above, tests will be described and a unit fee will be set forth in a Work Authorization or Supplemental Work Authorization that is agreed to in writing by the parties prior to Terracon conducting such feet
- Engineering consultation and evaluation in connection with any laboratory testing or field inspection service will be charged at the appropriate rate.
- · Material samples should be submitted in a form that complies with applicable requirements.

Terracon

CONSTRUCTION MATERIALS ENGINEERING AND TESTING Schedule of Services and Fees Williamson County, Texas 2014

Construction Materials Engineering & Testing Personnel

Senior Principal, per hour	\$170.00
Principal, Officer, per hour	\$140.00
Senior Engineer, per hour	
Project Manager, per hour	\$115.00
Senior Engineering Technician, per hour	\$48.00
Construction Materials Technician, per hour	
Certified Welding Inspector, per hour	
Clerical Support /Administrative Staff, per hour	\$48.00
Concrete Field Services	
Engineering technician, per hour	\$46.00
Concrete Sample Pick up Inside City of Austin ETJ, per trip	\$92.00
Concrete Sample Pick up Outside City of Austin ETJ, per hour (2 hr. minimum)	\$46.00
Concrete Tests	
Cylinder compression test (ASTM C 31 & C 39), 4"x8", each	\$15.00
Cylinder compression test (ASTM C 31 & C 39), 6"x12", each	\$20.00
Beam flexural test (ASTM Č 293 or C 78), each	\$55.00
Masonry Field Services	
Masonry technician, per hour	\$48.00
Masonry Sample Pick up Inside City of Austin ETJ, per trip	\$92.00
Masonry Sample Pick up Outside City of Austin ETJ, per hour (2 hr. minimum)	\$46.00
Masonry Tests:	
Compressive strength CMU block (ASTM C 140), each	\$100.00
CMU block absorption only (ASTM C 140), each	\$75.00
CMU Block prism compressive strength (ASTM C 1314), each	\$250.00
Compressive strength of grout prism (ASTM C 1019), each	\$35.00
Compressive strength of mortar cube (ASTM C 780 & C 109), each	
compressive stronger of motion case (for in a room of room case)	



CONSTRUCTION MATERIALS ENGINEERING AND TESTING Schedule of Services and Fees Williamson County, Texas 2014

Soils Laboratory Tests

Classification

Atterberg limits (ASTM D 4318), each	\$55.00
Sieve analysis (ATM C 136), each	\$75.00
Sieve analysis percent finer than #200 (ASTM C 117), each	\$45.00
Combined sieve analysis (ASTM C 136 and C 117)	
Soil nH each	\$30.00
Soil pH, each Chloride & Soluble Sulfate Content, TEX-620-J, each	\$75.00
Hydrometer analysis, ASTM D 422, each	
Permeability (Hydraulic Conductivity) (ASTM D 5084), each	\$350.00
Sample Preparation (if required), per hour	\$48.00
our pie i reparation (ii required), per noti	
Compaction	
Optimum moisture / maximum dry density relations (proctors)	
ASTM D698, each	\$170.00
ASTM D1557, each	\$200.00
Additional charge for Coarse Aggregate Correction (ASTM D4718)	\$25.00
TXDOT TEX 113E, each	\$220.00
TXDOT TEX 114E, each	\$180.00
Relative Density (ASTM 4253 and 4254), each	\$275.00
Soils Field Services	
In place density / moisture test, nuclear method (ASTM D 2922/ASTM D 3017),	
minimum 3, each	\$18.00
Field gradation of lime treated soil, each	
Depth check of lime treated soil, each	
Soil pH value each	\$30.00
Soils technician, per hour	\$46.00
Soil Lime Relationship, (Lime Series) Combined pH and Atterberg Limits	
Soil Sample Pick up Inside City of Austin ETJ, per trip.	\$92.00
Soil Sample Pick up Outside City of Austin ETJ, per hour (2 hr. minimum)	\$46.00

Asphaltic Concrete Services (cont.)

Maximum theoretical density (ASTM D 2041 or TEX 227F), each	\$95.00 \$225.00 \$110.00 \$120.00 \$155.00
<u>Drilled Pier</u>	
Senior technician, per hour	\$48.00
Wood Truss & Fire Stop	
Senior technician, per hour	\$60.00
Structural Steel	
Visual Inspection by CWI, per hour Ultrasonic Testing, per hour Ultrasonic Testing equipment, per day Ultrasonic Testing Trip Fee	. Subcontractor's Cost . Subcontractor's Cost
Reinforcing Steel Detection	
Senior Technician, per hour Hilti Ferroscan equipment, per day	
Roofing, Waterproofing and EIFS	
Project Manager, Senior Roofing Professional, per hour Engineering Technician-Forensics/Roofing/Waterproofing, per hour	\$125.00 \$65.00

Remarks

A three hour minimum charge is applicable to all trips made for the performance of testing, inspection, cancellations or consulting services. A minimum charge of 2 hours will be assessed for trips to the project site for sample or cylinder pick up only.

All labor, equipment, and transportation charges are billed on a portal to portal basis from our office. Court appearances, depositions, etc. will be charged at 1.5 times the quoted hourly rate.

Unit fees for tests not listed can be quoted on request. If Client requests a test not listed above, tests will be described and a unit fee will be set forth in a Work Authorization or Supplemental Work Authorization that is agreed to in writing by the parties prior to Terracon conducting such test.

Engineering consultation and evaluation in connection with any laboratory testing or field inspection service will be charged at the appropriate rate.

Material samples should be submitted in a form that complies with applicable requirements.

Transportation charges are applicable for all field testing assignments including sample pick up.

Rodriguez Engineering Laboratories, LLC

Williamson County Oversight Testing Williamson County, Texas UNIT PRICES (MATERIALS TESTING)

\$	Unit	Fees
1. Fiekl Technician (2 hr. minimum)		
1.1 Soil Technician or NICET Level II	Per hr	\$52.0
1.3 Concrete Technician NICET Lovel II or ACI Grade I	Per hr	\$52.0
1.4 Asphalt Technician		
1.4.1 TxDOT Certified Technician (Level IA & IB)	Per hr	\$57.0
1.4.2 TxDOT Certified Technician (Level II)	Per hr	\$56.0
1.5 Structural Steel Technician		
1.5.1 CWI	Perhr	\$87.0
1.5.2 NDT Level II	Per hr	\$67.0
1.6. Bolting Inspection	Per hr	\$67.0
1.7 NICET Level III	Per hr	\$56.0
1.8 Senior Fauld Inspector	Per hr	\$67.0
2. Field Testing Equipment (2 hr. minimum, technician time not included)		
2.1 Vehicle		
2.1.1 Within City of Austin ETJ (Current IRS Rate will be charged)	Per Mile	\$0.56
2.1.2 Outside City of Austin ETJ (Current IRS Rate will be charged)	Per Mile	\$0.5
2.2 Dyo Penetrant — Magnetic Particle Supplies		At Cos
2.3 Ultrasonic Testing Equipment	Per hr	\$20.0
2.4 Concrete Coring Equipment	Per br	\$35.0
2.4.1 Concrete Core Bit Charges.		,,,,,,
2.4.1.1 3 inch diameter core	Per inch	\$4.00
2.4.1.2 4 inch diameter core	Per inch	\$5.00
2.4.1.3 6 inch diameter core	Per inch	\$7.00
	Test Point	\$20.00
2.5 Heavy Falling Weight Defectometer (FWD) Testing	rest rout	380.00
3. Testing of Solls and Base Materials	-	
3.1 Bulk Sample Pick-Up	Per Trio	\$104.00
3.1.1 luside the City of Austin ETJ	Per hr	\$104.00
3.1.2 Outside the City of Austin ETJ (2 hrs Minimum)		\$36.00
3.2 Field Nuclear Density [Without Technician Time (3 Minimum)]	Perea	
3.3 Sample Preparation (TEX-101-E)	Perea	\$52.00
3.4 Natural Moisture Content	Per ea	\$18.00
3.5 Sieve Analysis (TEX-110-E)	Per ea	\$65.00
3.6 Atterberg Limits (Liquid and Plastic Limits) (TEX-104-E, TEX-105-E, TEX-106-E)	Perlea	\$65.00
3.7 Percent Passing No. 200 Sieve (TEX-111-E)	Per ea	\$42.00
3.8 Bar Linear Shrinkage of Solls (TEX-107-E)	Per ea	\$55.00
 9 Moisture Density Relationship (ASTM D 698) Standard Proctor Compaction Test) 	Pér ea	\$230.00
3.10 Moisture Density Relationship (ASTM D 1557) (Modified Proctor Compaction Test)	Per oa	\$230.00
3.11 Moisture Density Relationship (TEX-113-E) Compaction Test	Per ea	\$230.00
3 12 Moisture Densily Relationship (TEX-114-E, Part I) Compaction Test	Por ca	\$230.00
3.13 Moisture Density Relationship (TEX-114-E, Part II) Compaction Test	Per ea	\$255.00
3.14 Texas Triaxial Compression Test on Base Material TEX- 117E, Part II; Including the		\$1.814.00
3.15 Molding, Curing and Testing 8 Specimens	Per ca	\$1,150,00
3.3 Sample Preparation (TEX-101-E)	Per en	\$52.00
3.5 Sieve Analysis (TEX-110-E)	Per ea	\$65.00
3.6 Atterberg Limits (TEX-104-E, TEX-105-E, TEX-106-E)	Per ea	\$65,00
3 8 Bar Linear Shrinkage of Soils (TEX-107-E)	Per ea	\$52.00
3.11 Moisture Density Relationship (TEX-113-E) Compection Test	Per ea	\$230.00
3.16 Wet Ball Mil (TEX-116-E)	Per ea	\$200.00
3.17 Permeability of Sit or Clay (ASTM D 5084)	Per ca	\$310.00
3.18 Sample Remotiling	Per hr	\$52.00

Rodriguez Engineering Laboratories, LLC

Williamson County Oversight Testing Williamson County, Texas UNIT PRICES (MATERIALS TESTING)

2	Unit	Fees
3.19 Soil Specific Gravity (TEX-108-E)	Per ea	\$61.00
3.20 Sol Lime Compression Test (TEX-121-E)	Per ea	\$67.00
3.21 Resistivity of Soils (TEX-129-E)	Per ea	\$90.00
3.22 Lime Series Curve (ASTM D 4318)	Per point	\$90.00
3.23 Stabilization Ability of Lime by Soil PH (TEX-121-E Part III) up to 6 Points	Per Each	\$196.00
3.24 Field Gradation of Lime Soil (1.75, 0.75, No 4 Sieve) In addition to hourly charge	Per Point	\$18.00
4. Testing of Concrete and Cement		
4.1 Sample Pick-Up		
4.1.1 Inside the City of Austin ETJ	Per Trip	\$104.00
4.1.2 Outside the City of Austin ETJ (2 hrs Minimum)	Per hr	\$52.00
4.2 Aggregate Gradation Analysis (TEX-200-F)	Per ea	\$65.00
4.3 Specific Gravity of Aggregate	Per ea	\$50.00
4.4 Absorption of Aggregate	Per ca	\$33.00
4.5 Unit Weight of Aggregate	Per ea	\$33.00
4.6 Abrasion Test (TEX-410-A)	Per oa	\$220.00
4.7 Decantation	Per ea	\$30.00
4.8 Organic Impunities	Per ea	\$45.00
4.9 Soundness, Sodium or Magnesium	Per cyc	\$65.00
4.10 Concrete Cylinder Compressive Strength (TEX-418-A)	Per ea	\$23.00
4.11 Beam Flexural Strength (TEX-420-A or TEX 448-A)	Per ea	\$35.00
4.12 Coarse Aggregate Angularity	Perea	\$67.00
4.13 Fine Angregate Angularity	Per ea	\$67.00
4.14 Flat, Elongated Particles	Perea	\$67.00
4 15 Deleterious Materiels (Clay Lumps/Frieble Parl I)	Perea	\$60.00
	Perea	\$78.00
4.16 Sand Equivalent (Clay Content) 5. Testing of HMAC and Liquid Asphalt	10100	410.00
5.1 Bag Sample Pick-up From Source, Project, or Field Office		
	Per Trip	\$104.00
5.1.1 Inside the City of Austin ETJ 5.1.2 Outside the City of Austin ETJ (2 hrs Minimum)	Per hr	\$52.00
5 1.2 Cate de line City of Alisin E 13 (2 nis Minimum)	ream	9,72.00
5.2 Obtaining Field-cut Specimens	Per ea	\$85.00
5.2.1 O' to 6' Depth & 6' Ø, including patching & sample Preparation, 3 minimum)	Per ea	\$95.00
5.2.2 > 6" to 10" Depth & 6" Ø, including patching & sample Preparation, 3	Per ga	\$125.00
5.2.3 > 10" to 14" Depth & 6" Ø. including patching & sample Preparation, 3	rerva	\$125.00
5.2.4 > 14' Depth & 8" Ø, including patching & sample Preparation, 3 minimum)	-{	\$5.00
plus \$5 per inch boyond 14*	Per ea	\$122.00
5.3 Specimen Molding, Bulk Density and Stability (3 per set)	Per ea	\$205.00
5.4 Extraction (Gradation & Asphalt Content)		
5.5 Extraction (Asphalt Content)	Per ea	\$139.00
5.6 Maximum Theoretical Specific Gravity, Rice Mothod (TEX-227-F)	-	****
5.6.1 Bag Sample	Per ea	\$45.00
5.6.2 Core Sample	Per ea	\$55.00
5.7 Specific Gravity, But	Per es	\$22.00
5.8 Sand Equivalent	Por ea	\$75.00
5.9 Abson Recovery	Per ea	\$194.00
5.10 Ductility	Por ea	\$83.00
5.11 Softening Point (Ring and Ball)	Per ea	\$83.00
5.12 Absolute Viscosity	Par en	\$52.00
5.13 Penetration	Per en	\$52.00
5.14 Residue by Distillation	Por ea	\$127.00
5.15 Float Test	Por ca	\$74.00

13809 Turbine Drive - Austin, TX 78728 (512) 251-4454 - Fax (512) 251-1380 - O E-mail, rodrigueztab@aut.com Registered Taxas Engineering Firm F-1563

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Terracon, November 17, 2014

Rodriguez Engineering Laboratories, LLC

Williamson County, Texas **UNIT PRICES (MATERIALS TESTING)**

	Unit	Fees
5.16 Elastic Recovery	Per ea	\$74,07
5.17 Sieve Test	Per ea	\$37.00
5.18 Demulsibility	Peres	\$63.00
5.19 Viscosity (Brookfield or Saybolt)	Per ea	\$55.00
5.20 Residue by Evaporation	Per ea	\$150.00
5.21 Uniformity	Per ea	\$50.00
5.22 Resistance to Heat	Perea	\$50.00
5.23 Resistance to Water	Per ea	\$50.00
5.24 Wel Flow, mm	Per ea	\$50.00
5. Engineering Consultation		
5.1 Principal	Portr	\$134.00
5.2 Senior Project Manager	Pertir	\$111.00
6.3 Project Manager	Pectu	\$106.00
6.4 Project Engineer	Perhr	\$106.00
5.5 Senior Geologist	Per hr	\$106.00
6.6 Laboratory Manager	Per hr	\$106.00
7 Graduale Engineer	Per hr	\$73.00
8.8 Senior Engineering Technician	Per hr	\$56.00
6.9 Secretary/Clerical	Per hr	\$48.00
7. Outside Services (Reimbursables)		At Cost
B. Subconsultants		At Cost

- 2 Minimum call-out charge for technician and equipment is 2 hours. Charges are accrued portal to portal.
- O The densities test unit rate is based on a minumum of 3 tests per trip.
 O Transportation charges are applicable for all field testing assignments including sample pick up. but, if the technician is already at the job site, there is no sample pick up charges.
- Ø Subconsultants' fees shall be approved previous to work beginning.

13809 Turbine Drive - Austin, TX 78728 (612) 251-4454 - Fax (612) 251-1380 - € E-mail, rodrigueztab @aol.com Registered Texas Engineering Firm F-1563

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Terracon, November 17, 2014