



CONTRACT AMENDMENT NO. 3
TO
WILLIAMSON COUNTY CONTRACT FOR
ENGINEERING SERVICES

**WILLIAMSON COUNTY ROAD BOND PROJECT: On-Call Geotechnical Engineering
and Construction Materials Engineering/Testing Service ("Project")**

THIS CONTRACT AMENDMENT NO. 3 to Williamson County Contract for Engineering Services is by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and Terracon Consultants Inc (the "Engineer") and becomes effective as of the date of the last party's execution below.

WHEREAS, the County and the Engineer executed the Williamson County Contract for Engineering Services dated effective December 7, 2014 (the "Contract");

WHEREAS, pursuant to Article 14 of the Contract, the terms of the Contract may be modified by a written fully executed Contract Amendment;

WHEREAS, the Rate Schedule in Exhibit D of the Contract are limited to the rates noted in said Exhibit D; and,

WHEREAS, it has become necessary to amend the Contract.

AGREEMENT

NOW, THEREFORE, premises considered, the County and the Engineer agree that the Contract is amended as follows:

- I. The hourly Rates in the original Exhibit D of the Contract are hereby amended as shown in the attached revised Exhibit D (must be attached).

All other terms of the Contract are unchanged and will remain in full force and effect.

IN WITNESS WHEREOF, the County and the Engineer have executed this Contract Amendment, in duplicate, to be effective as of the date of the last party's execution below.

ENGINEER:

By:

Signature

James G. Bierschwale

Printed Name

Vice President

Title

2/24/2020

Date

COUNTY:

By:

Signature

Bill Gravell Jr.

Printed Name

County Judge

Title

3/3/2020

Date

OK
mg 2/24/2020

EXHIBIT D

RATE SCHEDULE

OK
m 2/24/2021

Rodriguez Engineering Laboratories, LLC	Unit	Fees
1. Field Technician (2 hr. minimum)		
1.1 Soil Technician	Per hr	\$55.00
1.2 Concrete Technician TxDOT or ACI Grade I	Per hr	\$55.00
1.3 Asphalt Technician		
1.3.1 TxDOT Certified Technician (Level IA & IB)	Per hr	\$55.00
1.3.2 TxDOT Certified Technician (Level II)	Per hr	\$75.00
1.4 Senior Field Inspector	Per hr	\$75.00
1.5 Structural Steel Technician		
1.5.1 CWI	Per hr	\$90.00
1.5.2 NDT Level II	Per hr	\$90.00
1.6. Bolting Inspection	Per hr	\$90.00
1.7 NICET Level III	Per hr	\$90.00
2. Field Testing Equipment (2 hr. minimum, technician time not included)		
2.1 Vehicle		
2.1.1 Vehicle (Within 50 miles from our office)	Per day	\$50.00
2.1.2 Vehicle (More than 50 miles from our office)	Per mile	IRS Rate
2.2 Dye Penetrant -- Magnetic Particle Supplies		At Cost
2.3 Ultrasonic Testing Equipment	Per hr	\$23.00
2.4 Concrete Coring Equipment	Per hr	\$39.00
2.4.1 Concrete Core Bit Charges		
2.4.1.1 3 inch diameter core	Per inch	\$4.50
2.4.1.2 4 inch diameter core	Per inch	\$5.50
2.4.1.3 6 inch diameter core	Per inch	\$7.70
2.5 Heavy Falling Weight Deflectometer (20 Test-points minimum, Technician time not included)	Test Point	\$20.00
2.6 Profilograph Testing (Technician time not included)	Day	\$400.00
3. Testing of Soils and Base Materials		
3.1 Bulk Sample Pick-Up		
3.1.1 Inside the City of Austin ETJ (2 hrs or less tech time)	Per Trip	\$110.00
3.1.2 Outside the City of Austin ETJ (2 hrs Minimum)	Per hr	\$55.00
3.2 Field Nuclear Density [Without Technician Time (3 Minimum)]	Per ea	\$39.00
3.3 Sample Preparation (TEX-101-E)	Per ea	\$68.00
3.4 Natural Moisture Content (TEX-103-E)	Per ea	\$20.00
3.5 Sieve Analysis (TEX-110-E)	Per ea	\$71.00
3.6 Atterberg Limits (Liquid and Plastic Limits) (TEX-104-E, TEX-105-E, TEX-106-E)	Per ea	\$71.00
3.7 Percent Passing No. 200 Sieve (TEX-111-E)	Per ea	\$46.00
3.8 Bar Linear Shrinkage of Soils (TEX-107-E)	Per ea	\$60.00
3.9 Moisture Density Relationship (ASTM D 698) Standard Proctor Compaction Test)	Per ea	\$253.00
3.10 Moisture Density Relationship (ASTM D 1557) (Modified Proctor Compaction Test)	Per ea	\$253.00
3.11 Moisture Density Relationship (TEX-113-E) Compaction Test	Per ea	\$253.00
3.12 Moisture Density Relationship (TEX-114-E Part I) Compaction Test	Per ea	\$253.00
3.13 Moisture Density Relationship (TEX-114-E, Part II) Compaction Test	Per ea	\$280.00
3.14 Texas Triaxial Compression Test on Base Material TEX- 117E, Part II; Including the		
3.15 Molding, Curing and Testing 8 Specimens	Per ea	\$1,265.00
3.3 Sample Preparation (TEX-101-E)	Per ea	\$55.00
3.5 Sieve Analysis (TEX-110-E)	Per ea	\$71.00
3.6 Atterberg Limits (TEX-104-E, TEX-105-E, TEX-106-E)	Per ea	\$71.00
3.8 Bar Linear Shrinkage of Soils (TEX-107-E)	Per ea	\$60.00
3.11 Moisture Density Relationship (TEX-113-E) Compaction Test	Per ea	\$253.00
3.16 Wet Ball Mill (TEX-116-E)	Per ea	\$220.00

EXHIBIT D**RATE SCHEDULE**

OK
m 2/24/2020

Rodriguez Engineering Laboratories, LLC	Unit	Fees
3.17 Permeability/Conductivity of Silt or Clay (ASTM D 5084)	Per ea	\$425.00
3.18 Sample Remolding	Per ea	\$58.00
3.19 Soil Specific Gravity (TEX-108-E)	Per ea	\$68.00
3.20 Soil Lime Compression Test (TEX-121-E), per specimen	Per ea	\$74.00
3.21 Resistivity of Soils (TEX-129-E)	Per ea	\$99.00
3.22 Lime Series Curve (ASTM D 4318)	Per point	\$99.00
3.23 Stabilization Ability of Lime by Soil pH (TEX-121-E Part III) up to 6 Points	Per Each	\$270.00
3.24 Field Gradation of Lime Soil (1.75, 0.75, No 4 Sieve), in addition to technician time	Per Point	\$20.00
3.25 Soluble Sulfate Content (TEX-145-E)	Per ea	\$95.00
3.26 pH of Soils (TEX-128-E)	Per ea	\$65.00
3.27 Hydrometer Analysis (ASTM D 422) (Without mechanical sieve analysis)	Per ea	\$104.00
3.28 Thickness Determination (Tex-140-E), in addition to technician time	Per ea	\$18.00
4. Testing of Concrete and Aggregates		
4.1 Sample Pick-Up		
4.1.1 Inside the City of Austin ETJ (2 hrs or less tech time)	Per Trip	\$110.00
4.1.2 Outside the City of Austin ETJ (2 hrs Minimum)	Per hr	\$55.00
4.2 Aggregate Gradation (TEX-401-A)	Per ea	\$71.00
4.3 Specific Gravity of Aggregate	Per ea	\$55.00
4.4 Absorption of Aggregate	Per ea	\$36.00
4.5 Unit Weight of Aggregate	Per ea	\$36.00
4.6 Abrasion Test (TEX-410-A)	Per ea	\$242.00
4.7 Decantation (TEX-406-E)	Per ea	\$33.00
4.8 Organic Impurities, Tex-408-A	Per ea	\$50.00
4.9 Soundness, Sodium or Magnesium, 5 cycles (Tex-411-A)	Per ea	\$355.00
4.10 Concrete Cylinder Compressive Strength (TEX-418-A)	Per ea	\$25.50
4.11 Beam Flexural Strength (TEX-420-A or TEX 448-A)	Per ea	\$38.50
4.12 Coarse Aggregate Angularity	Per ea	\$74.00
4.13 Fine Aggregate Angularity	Per ea	\$74.00
4.14 Flat, Elongated Particles	Per ea	\$74.00
4.15 Deleterious Materials (Clay Lumps/Friable Part I)	Per ea	\$66.00
4.16 Crushed Face Count	Per ea	\$75.00
4.17 Sand Equivalent (Clay Content), Tex-203-F	Per ea	\$86.00
5. Testing of HMA and Liquid Asphalt		
5.1 Bag Sample Pick-up From Source, Project, or Field Office		
5.1.1 Inside the City of Austin ETJ (2 hrs or less tech time)	Per Trip	\$110.00
5.1.2 Outside the City of Austin ETJ (2 hrs Minimum)	Per hr	\$55.00
5.2 Obtaining Field-cut Specimens		
5.2.1 0" to 6" Depth & 6" Ø, including patching & sample Preparation, 3 minimum)	Per ea	\$93.50
5.2.2 > 6" to 10" Depth & 6" Ø, including patching & sample Preparation, 3 minimum)	Per ea	\$104.50
5.2.3 > 10" to 14" Depth & 6" Ø, including patching & sample Preparation, 3 minimum)	Per ea	\$137.50
5.2.4 > 14" Depth & 6" Ø, including patching & sample Preparation, 3 minimum)		\$137.50
plus \$5 per inch beyond 14"		\$5.50
5.3 Specimen Molding by TGC, Tex-206-F (3 per set)	Per ea	\$60.00
5.4 Specimen Molding by SGC, Tex-241-F (3 per set)	Per ea	\$85.00
5.5 Bulk Density of Compacted Specimens, Tex-207-F, Part I (3 per set)	Per ea	\$60.00
5.6 Hveem Stability, Tex-208-F (3 per set)	Per ea	\$60.00
5.7 Asphalt Content by Extraction, Tex-210-F	Per ea	\$161.00
5.8 Asphalt Content by Ignition Oven, Tex-236-F	Per ea	\$161.00
5.9 Gradation of Aggregate from Extraction or Ignition, Tex-200-F	Per ea	\$71.00

EXHIBIT D

RATE SCHEDULE

OK
m 2/24/22

Rodriguez Engineering Laboratories, LLC	Unit	Fees
5.10 Maximum Theoretical Specific Gravity, Rice Method (TEX-227-F)		
5.10.1 Bag Sample, Rice	Per ea	\$50.00
5.10.2 Core Sample, Rice	Per ea	\$60.00
5.11 Bulk Density of Core Specimens (Tex-207-F, Part I)	Per ea	\$24.00
5.12 Bulk Density of Core Specimens (Vacuum Method) (Tex-207-F, Part I & VI)	Per ea	\$60.00
5.13 Sand Equivalent, Tex-203-F	Per ea	\$86.00
5.14 Micro Deval Abrasion (Tex-461-A)	Per ea	\$220.00
5.15 Indirect Tensile Strength, Tex-226-F (Molding Not Included)	Per ea	\$65.00
5.16 Residue by Evaporation	Per ea	\$135.00
5.17 Boiling Stripping Test (Tex-530-C)	Per ea	\$100.00
5.18 Hamburg Wheel Tracker (Tex-242-F)	Per ea	\$500.00
5.19 Hamburg Wheel Tracker (Tex-242-F) (Molded by Client)	Per ea	\$350.00
5.20 Cantabro Loss (Tex-245-F) (Molding Not Included)	Per ea	\$100.00
5.21 Absorb Recovery, Tex-211-F (Extraction Not included)	Per ea	\$214.00
5.22 Storage Stability (24 Hrs)	Per ea	\$100.00
5.23 Density of Emulsified Asphalt (ASTM D6937)	Per ea	\$65.00
5.24 Demulsibility (Anionic or Cationic Emulsions)	Per ea	\$65.00
5.25 Viscosity (Brookfield or Saybolt)	Per ea	\$55.00
5.26 Penetration	Per ea	\$57.00
5.27 Ductility	Per ea	\$91.00
5.28 Float Test	Per ea	\$75.00
5.29 Elastic Recovery	Per ea	\$75.00
5.30 Cement Mix	Per ea	\$65.00
5.31 Softening Point (Ring and Ball)	Per ea	\$91.00
5.32 Absolute Viscosity (Cutback Asphalt or Coal Tars)	Per ea	\$57.00
5.33 Residue by Distillation (Cutback or Emulsified Asphalts)	Per ea	\$135.00
5.34 Breaking Index (Asphalt Emulsions)	Per ea	\$85.00
5.35 Sieve Test	Per ea	\$40.00
6. Geotechnical Services		
6.1 Mobilization/Demobilization (Within 50 miles from our office), 2-Man Crew with Rig	Per ea	\$250.00
6.2 Mobilization/Demobilization, 2-Man Crew with Rig (More than 50 miles from our office)	Per mile	\$3.20
6.3 Vehicle (Water Truck, Pick-Up, etc.)		
6.3.1 Vehicle (Within 50 miles from our office)	Per day	\$50.00
6.3.2 Vehicle (More than 50 miles from our office)	Per mile	IRS Rate
6.4 Technician (Drilling Support)		
6.4.1 Helper, Engineering Technician (Mobilization/Demobilization)	Per hr	\$55.00
6.4.2 Logger, Senior Engineering Technician (Portal to Portal)	Per hr	\$75.00
6.5 Drilling		
6.5.1 Auger or Wash Borings, Soil (Add \$3.00/LF for drilling deeper than 50 ft)	Per LF	\$15.00
6.5.2 Auger or Coring, Soft Rock	Per LF	\$20.00
6.5.3 Rock Coring	Per LF	\$22.50
6.6 Grout/Bentonite Backfill	Per LF	\$4.60
6.7 Undisturbed Shelby Tube Sample	Per ea	\$25.00
6.8 Standard Penetration Test	Per ea	\$45.00
6.9 Texas Cone Penetration Test	Per ea	\$45.00
6.10 Dynamic Cone Penetrometer (Without Technician time)	Per ea	\$125.00
6.11 Unconsolidated/Consolidated Undrained Triaxial (Multiple Stage)	Per ea	\$515.00
6.12 Consolidated Drained Triaxial (Multiple Stage)	Per ea	\$750.00
6.13 Organic Content Determination	Per ea	\$95.00

EXHIBIT D

RATE SCHEDULE

Rodriguez Engineering Laboratories, LLC	Unit	Fees
6.14 Consolidation Test	Per ea	\$525.00
6.15 California Bearing Ratio (CBR) Test	Per ea	\$485.00
6.16 Dry Unit Weight Test	Per ea	\$35.00
6.17 Unconfined Compressive Strength Test	Per ea	\$55.00
6.18 Traffic Control (Safety Cones and Signs)	Per day	\$250.00
6.19 Traffic Control (Single Moving Lane Closure)	Per day	\$880.00
6.20 Flagging Services (Incl. Equipment, Set-up, Two-man Crew)	Per day	\$980.00
6.21 Patching Bores/Cores	Per ea	\$25.00
6.22 Bulk Sample (Triaxial, Proctor, etc)	Per hr	\$55.00
6.23 Cut & Excavate Test Pit on Pavement, Approx. 18"x18", Inc. Sampling	Per ea	\$200.00
6.24 Standby Time (Drill Rig and Crew)	Per hr	\$195.00
7. Engineering Consultation		
7.1 Principal	Per hr	\$145.00
7.2 Senior Project Manager	Per hr	\$130.00
7.3 Project Manager	Per hr	\$115.00
7.4 Project Engineer	Per hr	\$115.00
7.5 Senior Geologist	Per hr	\$106.00
7.6 Laboratory Manager	Per hr	\$106.00
7.7 Graduate Engineer	Per hr	\$85.00
7.8 Senior Engineering Technician	Per hr	\$75.00
7.9 Secretary/Clerical	Per hr	\$48.00
8. Outside Services (Reimbursables)		At Cost
9. Subconsultants		At Cost

- Ø Minimum call-out charge for technician and equipment is 2 hours. Charges are accrued portal to portal.
- Ø The densities test unit rate is based on a minimum of 3 tests per trip.
- Ø 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.

OK
m 2/21/2022

PAVETEX - Williamson County 2016 Price List

OK
m 2/24/2022

Field Technician	Unit	Unit Cost	
		Reg.	OT
1A	hr.	\$58	\$69
1B	hr.	\$58	\$69
Soils	hr.	\$50	\$61
Concrete	hr.	\$50	\$61
Nuclear Gauge Calibration	hr.	\$75	
Concrete Plant/ Truck Inspection	hr.	\$75	
Asphalt Distributor Calibration	hr.	\$75	
Senior Professional Engineer	hr.	\$195	
Professional Engineer	hr.	\$145	
EIT	hr.	\$85	
Project Manager	hr.	\$98	
Administrative Assistant	hr.	\$45	

Field Testing Equipment (2 Hr Min, Tech Time Not Included)	Unit	Unit Cost
HMAC Coring		
Coring Equipment Mobilization	trip	\$75
0"-6" Depth & 6" ϕ (incl. Patching & Sample Prep)	ea.	\$95
> 6"-10" Depth & 6" ϕ (incl. Patching & Sample Prep)	ea.	\$110
> 10"-14" Depth & 6" ϕ (incl. Patching & Sample Prep)	ea.	\$150
> 14" Depth & 6" ϕ (incl. Patching & Sample Prep)	ea.	\$4/ in. over 14"
Concrete Coring		
Mileage- State Allowable Rate (Portal to Portal)	mile	IRS Rate
Concrete Coring Equipment	hr.	\$55.00
Concrete Core Bit Charges		
3" Diameter Core	in.	\$5
4" Diameter Core	in.	\$6
6" Diameter Core	in.	\$8
Traffic Control		at Cost

Soils & Aggregates (100-E Series)

Test For	Test Method	Unit	Unit Cost
Sample Preparation	Tex-101-E	ea.	\$50
Moisture Content	Tex-103-E	ea.	\$25
Atterberg Limits	Tex-104-E, 105-E & 106-E	ea.	\$75
Linear Bar Shrinkage	Tex-107-E	ea.	\$75
Sieve Analysis	Tex-110-E, Pt. 1	ea.	\$55
Sieve Analysis	Tex-110-E, Pt. 2	ea.	\$85
Moisture- Density Relationship	Tex-113-E	ea.	\$350
Moisture- Density Relationship	Tex-114-E	ea.	\$250
Wet Ball Mill	Tex-116-E	ea.	\$250
Texas Triaxial Compression	Tex-117-E, Pt. 1	ea.	\$1,100
Full Triaxial Testing *	* See Note	ea.	\$1,700
Soil- Cement Testing	Tex-120-E, Pt. 1	ea.	\$1,100
Soil- Cement Testing	Tex-120-E, Pt. 2	ea.	\$300
Soil- Lime Testing	Tex-121-E, Pt. 1	ea.	\$1,100
Soil- Lime Testing	Tex-121-E, Pt. 2	ea.	\$300
Lime-Fly Ash Compression	Tex-127-E	ea.	\$1,100

PAVETEX - Williamson County 2016 Price List

Soils & Aggregates (100-E Series)- Cont.			
Test For	Test Method	Unit	Unit Cost
Soil pH	Tex-128-E	ea.	\$50
Resistivity	Tex-129-E	ea.	\$300
Tube Suction Test	Tex-144-E	ea.	\$100
Sulfate Content	Tex-145-E	ea.	\$225
Conductivity of Soils	Tex-146-E	ea.	\$25
Hydrometer Analysis	AASHTO T 88	ea.	\$450
California Bearing Ratio	AASHTO T 193/ ASTM C 1883	ea. point	\$300

* Full Triaxial Testing includes the following: Washed Gradation, Atterberg Limits, Moisture- Density Relationship, Wet Ball Mill & Texas Triaxial

Bituminous (200-F Series)			
Test For	Test Method	Unit	Unit Cost
Dry Sieve Analysis	Tex-200-F, Part I	ea.	\$50
Washed Sieve Analysis	Tex-200-F, Part II	ea.	\$85
Bulk Specific Gravity & % Absorption	Tex-201-F	ea.	\$85
Apparent Specific Gravity	Tex-202-F	ea.	\$85
Sand Equivalent	Tex-203-F	ea.	\$85
Mix Design	Tex-204-F	ea.	\$2,500
Mixing	Tex-205-F	set of 3	\$75
Molding (TGC)	Tex-206-F	set of 3	\$60
Laboratory-Molded Density	Tex-207-F, Part I	set of 3	\$40
In-Place Density (Core Testing)	Tex-207-F, Part I	ea.	\$25
In-Place Density (Nuclear Method)	Tex-207-F, Part III (Min. of 3)	ea.	\$30
In-Place Air Voids (Core Lock)	Tex-207-F, Part VI	set of 2	\$75
Hveem Stability	Tex-208-F	set of 3	\$120
Asphalt Content by Extraction & Gradation	Tex-210-F	ea.	\$175
Asphalt Recovery from Abson Process	Tex-211-F	ea.	\$250
Moisture Content	Tex-212-F	ea.	\$25
Hydrocarbon Volatile Content	Tex-213-F	ea.	\$100
Deleterious Material	Tex-217-F	ea.	\$50
Decantation	Tex-217-F, Part II	ea.	\$100
Flakiness Index	Tex-224-F	ea.	\$100
Indirect Tensile Strength	Tex-226-F	ea.	\$50
Theoretical Maximum Specific Gravity	Tex-227-F	ea.	\$60
Drain-down Test	Tex-235-F	ea.	\$75
Asphalt Content by Ignition Oven & Gradation	Tex-236-F	ea.	\$175
Ignition Oven Correction Factors	Tex-236-F	ea.	\$500
Hamburg Wheel-Tracking Test	Tex-242-F	ea.	\$500
Cantabro Loss	Tex-245-F	ea.	\$200
Overlay Test	Tex-248-F	ea.	\$750
Flat and Elongated Particles	Tex-280-F	ea.	\$100

OK
m 2/24/2021

PAVETEX - Williamson County 2016 Price List

Concrete (400-A Series)			
Test For	Test Method	Unit	Unit Cost
Sieve Analysis of Fine and Coarse Aggregate & Fineness Modulus	Tex-401-A & Tex-402-A	ea.	\$85
Saturated Surface-Dry Specific Gravity & Absorption of Aggregates	Tex-403-A	ea.	\$85
Unit Weight	Tex-404-A	ea.	\$85
Material Finer than 75 Micrometer (No. 200) Sieve in Mineral Aggregates (Decantation)	Tex-406-A	ea.	\$100
Acid Insoluble Residue for Concrete Aggregate	Tex-406-A, Part III	ea.	\$350
Organic Matter Content	ASTM D 5268	ea.	\$100
Organic Impurities in Fine Aggregate for Concrete	Tex-408-A	ea.	\$100
Los Angeles Abrasion	Tex-410-A	ea.	\$300
Magnesium or Sodium Sulfate Soundness	Tex-411-A	ea.	\$300
Concrete Cylinder Compressive Strength	Tex-418-A	ea.	\$22
Concrete Flexural Beam Compressive Strength	Tex-419-A	ea.	\$22
Pressure Slake	Tex-431-A	ea.	\$250
Freezer Thaw	Tex-432-A	ea.	\$250
24 Hr Water Absorption	Tex-433-A	ea.	\$85
Polish Test for Coarse Aggregate	AASHTO T 278 & 279/ Tex-438-A	ea.	\$1,200
Coarse Aggregate Angularity (Crushed Faces)	Tex-460-A	ea.	\$30
Micro-Deval Abrasion	Tex-461-A	ea.	\$300
Moisture Susceptibility	Tex-530-C	ea.	\$50
Alkali-Silica Reactivity (ASR)	AASHTO T 303 (ASTM C 1260)	ea.	\$1,200
	ASTM C1567		

Asphalt (500-C Series)			
Test For	Test Method	Unit	Unit Cost
Boil Test	Tex-530-C	ea.	\$50
Penetration	AASHTO T 49	ea.	\$50
Ductility	AASHTO T 51	ea.	\$200
Softening Point	AASHTO T 53	ea.	\$150
Distillation of Cutback Asphalt Products	AASHTO T 78	ea.	\$150
Rolling Thin-Film Oven (RTFO)	AASHTO T 240	ea.	\$250
Elastic Recovery	AASHTO T 301	ea.	\$250
Dynamic Shear Rheometer (DSR)	AASHTO T 315	ea.	\$100
-Additional DSR Readings		ea.	\$50
Rotational Viscosity		ea.	\$50
Rubber Property—Resilience by Vertical Rebound	ASTM D 2632	ea.	\$50
Float Test	AASHTO T 50 (ASTM D 139)	ea.	\$100
Flash Point by Cleveland Open Cup	AASHTO T 48 & T 72 (ASTM D 92)	ea.	\$55
Settlement and Storage Stability of Emulsified Asphalts	AASHTO T 59 (ASTM D 6930)	ea.	\$75
Oversized Particles in Emulsified Asphalt	AASHTO T 59 (ASTM 6933)	ea.	\$85
Residue by Evaporation of Emulsified Asphalt	AASHTO T 59 (ASTM D6934)	ea.	\$55
Demulsibility of Emulsified Asphalt	AASHTO T 59 (ASTM D6936)	ea.	\$55
Distillation of Emulsified Asphalt	AASHTO T 59 (ASTM D 86)	ea.	\$150
Saybolt Viscosity	AASHTO T 72 (ASTM D 88)	ea.	\$100
Spot Test	AASHTO T 102	ea.	\$200
Specific Gravity of Emulsified Asphalt	ASTM D 244	ea.	\$55

OK
mly 2/24/2021

EXHIBIT D

Terracon

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

no change
to this
page

Rock Coring, using Nx core barrel sampling, depths measured from existing ground surface:

Softer Rocks (e.g., Austin, Eagle Ford, Del Rio, Walnut, Glen Rose formations and similar):

0 to 25 feet, per foot	\$18.00
25 to 50 feet, per foot	\$20.00
50 to 75 feet, per foot	\$22.00
75 to 100 feet, per foot	\$24.00

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	\$26.00

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. On request

Monitor Well / Piezometer Installation

Interior and/or Limited Access Drilling/Sampling

Laboratory Classification Tests

Atterberg limits, each	\$55.00
Moisture content, each	\$8.00
Density Determination (using Shelby tube or SPT sample), each	\$15.00
Specific gravity, each	\$70.00
Soil pH, each	\$30.00
Soil Resistivity (Miller box method), each	\$125.00
Chloride & Soluble Sulfate Content, TEX-620-J, each	\$75.00

Laboratory Grain Size Tests

Sieve analysis, ASTM C 136, each	\$75.00
Percent Passing No. 200 Sieve, ASTM C 117, each	\$45.00
Combined ASTM C 136 and C 117, each	\$95.00
Hydrometer analysis, ASTM D 422, each	\$125.00

OK
m/j 2/24/2022

EXHIBIT D



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

NO change
to this
page

Laboratory Strength and Volume Change Tests

Unconfined Compression Test (soil), each.....	\$30.00
Unconfined Compression Test (rock), each	\$35.00
Triaxial Compression Tests:	
Unconsolidated-Undrained (UU), per circle	\$265.00
Consolidated-Undrained (CU), with pore pressure measurements, per circle	\$450.00
Direct Shear Tests:	
On Coarse-Grained Soils, per point.....	\$175.00
On Fine-Grained Soils, per point	\$275.00
Absorption Swell Tests:	
Free Swell, each	\$100.00
Single Pressure (at estimated overburden), each	\$120.00
Additional Pressures, each.....	\$50.00
Swell Pressure (controlled swell), each	\$300.00
Consolidation Test, regular with increasing load increments (max 6 loads), each	\$440.00
Additional Load Increments, each	\$50.00
Additional Unload-Reload Cycles, per cycle	\$125.00

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.....	\$170.00
ASTM D 1557, each	\$200.00
TEX-113-E, each.....	\$220.00
TEX-114-E, each.....	\$180.00
Additional Charge for Coarse Aggregate Correction (ASTM D 4718), each	\$25.00
Relative Density, ASTM D 4253 & D 4254, each	\$275.00
California Bearing Ratio (CBR), each.....	\$315.00
Soil-Lime Relationship (Lime Series using PI and pH methods), each	\$700.00
Sample Preparation (if required), per hour	\$48.00

OK
m 2/24/2022

EXHIBIT D



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

NO change
to this
page

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 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.

EXHIBIT D



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

No change
to this
page

Construction Materials Engineering & Testing Personnel

Senior Principal, per hour	\$170.00
Principal, Officer, per hour	\$140.00
Senior Engineer, per hour	\$110.00
Project Manager, per hour	\$115.00
Senior Engineering Technician, per hour	\$48.00
Construction Materials Technician, per hour	\$46.00
Certified Welding Inspector, per hour	\$80.00
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 C 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	\$16.00

OK
m 2/24/2021

EXHIBIT D



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

OK
my 2/24/2020

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
Decantation, TXDOT TEX 406-A, each.....	\$45.00 - new ✓
Combined sieve analysis (ASTM C 136 and C 117)	\$95.00
Soil pH, each	\$30.00
Chloride & Soluble Sulfate Content, TEX-620-J, each	\$75.00
Hydrometer analysis, ASTM D 422, each	\$125.00
Permeability (Hydraulic Conductivity) (ASTM D 5084), each	\$350.00
Sample Preparation (if required), per hour	\$48.00
Wet Ball Mill, TXDOT TEX 116-E, each.....	\$200.00 - new ✓
Triaxial, Base Materials, TXDOT TEX 117-E, each	\$1,150.00 - new ✓

Wet Ball Mill
✓

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	\$45.00
Depth check of lime treated soil, each	\$25.00
Soil pH value each	\$30.00
Soils technician, per hour	\$46.00
Soil Lime Relationship, (Lime Series) Combined pH and Atterberg Limits	\$700.00
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
Measuring Thickness, Base, Subbase, Subgrade, TXDOT TEX 140-E.....	\$50.00 - new ✓

EXHIBIT D



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

OK
m 2/24/2022

Asphaltic Concrete Services

Asphalt technician (Level 1A and 1B), per hour	\$55.00
Asphalt Sample Pick up Inside City of Austin ETJ, per trip	\$92.00
Asphalt Sample Pick up Outside City of Austin ETJ, per hour (2 hr. minimum)	\$46.00
Molding specimens (TEX 206F), set of 3	\$58.00
Bulk specific gravity of lab molded specimens, set of 3	\$58.00
Bulk specific gravity of core specimen (TEX 207F), each	\$58.00
Maximum theoretical density (ASTM D 2041 or TEX 227F), each	\$86.00
Hveem stability (ASTM D 1560 or TEX 208F), set of 3	\$95.00
Extraction and Sieve Analysis (ASTM D 2172 or TEX 210F), each	\$225.00
Asphalt coring (6" diameter, minimum 3 per trip) Up to 6" thick, each	\$110.00
Asphalt coring (6" diameter, minimum 3 per trip) 6 to 10" thick, each	\$120.00
Asphalt coring (6" diameter, minimum 3 per trip) 10 to 14" thick, each	\$155.00
Asphalt core thickness & density, each	\$57.00
Asphalt Binder, TXDOT Item 300, each	\$750.00 - New ✓

Drilled Pier

Senior technician, per hour	\$48.00
-----------------------------------	---------

Wood Truss & Fire Stop

Senior technician, per hour	\$60.00
-----------------------------------	---------

Structural Steel

Visual Inspection by CWI, per hour	\$80.00
Ultrasonic Testing, per hour	Subcontractor's Cost
Ultrasonic Testing equipment, per day	Subcontractor's Cost
Ultrasonic Testing Trip Fee	Subcontractor's Cost

Reinforcing Steel Detection

Senior Technician, per hour	\$60.00
Hilti Ferroskan equipment, per day	\$220.00

Roofing, Waterproofing and EIFS

Project Manager, Senior Roofing Professional, per hour	\$125.00
Engineering Technician-Forensics/Roofing/Waterproofing, per hour	\$65.00

EXHIBIT D



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

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.