WORK AUTHORIZATION NO. 1

PROJECT: Construction Material Testing and Inspection for Williamson County Sheriff's Office Training Center

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated **January 10, 2017** and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and **Professional Service Industries, Inc**. (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 **$37,314.00.**

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 21st day of March, 2017.

ENGINEER:

PROFESSIONAL SERVICE LWA

By: _____
Signature

MARTIN J. ELLIOTT
Printed Name

DISTRICT MANAGER
Title

COUNTY:

Williamson County, Texas

By: _____
Signature

DAN A GATTO
Printed Name

County Judge
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

County will provide Notice to Proceed

County will provide single point of contact with County

County to provide contact information for CMAR Contractor

Attachment B - Services to be Provided by Engineer

Attend job progress and other meetings as required

Provide services as described in the attached Anticipated Construction Materials Testing Services document.

Attachment C - Work Schedule

Provide services for the duration of the construction project.

Attachment D - Fee Schedule

See attached

Anticipated Construction Materials Testing Services

Williamson County Sheriff's Office Training Center (Base Bid) - Hutto, TX — **Revision 2, (2/8/2017)**

	Unit	Quantity	Unit Price	Item Total
Earthwork Testing and Inspections				
Building Pad Backfill Inspections- Continuous				
Engineering Technician/ Inspector (In-place Density Testing)	Per Hour	40	$45.00	$1,800.00
Standard Moisture Density Relationship, Atterberg Limits, Sieve Analysis, Percent Passing No. 200 Sieve, Unified Soil Classification, Sample Preparation Using TxDOT test Methods	Each	2	$535.00	$1,070.00
Engineering Technician/ Inspector (Sample Pick-up)	Per Hour	4	$45.00	$180.00
Daily Equipment Charge	Per Trip	5	$40.00	$200.00
Transportation Charge	Per Trip	5	$40.00	$200.00
Report Review	Each	7	$25.00	$175.00
	Sub-Total			**$3,625.00**
Paving Subgrade & Flexible Base Preparation				
Engineering Technician/ Inspector (In-place Density Testing)	Per Hour	52	$45.00	$2,340.00
Comprehensive Moisture Density Relationship, Atterberg Limits, Sieve Analysis, Percent Passing No. 200 Sieve, Unified Soil Classification, Sample Preparation Using TxDOT Test Methods	Each	2	$535.00	$1,070.00
Engineering Technician/ Inspector (Sample Pick-up)	Per Hour		$45.00	$0.00
Daily Equipment Charge	Per Trip	12	$40.00	$480.00
Transportation Charge	Per Trip	13	$40.00	$520.00
Report Review	Each	15	$25.00	$375.00
	Sub-Total			**$4,785.00**
Utility Trench Backfill				
Engineering Technician/ Inspector (In-place Density Testing)	Per Hour	60	$45.00	$2,700.00
Daily Equipment Charge	Per Trip	15	$40.00	$600.00
Transportation Charge	Per Trip	15	$40.00	$600.00
Report Review	Each	15	$25.00	$375.00
	Sub-Total			**$4,275.00**
	Earthwork Testing and Inspections Estimate			**$12,685.00**
Drilled Pier Installation Inspection				
Drilled Shaft Pier Inspection- Continuous				
Engineering Technician/ Inspector (Drilled Pier Observation)	Per Hour	80	$45.00	$3,600.00
Engineering Technician/ Inspector - Overtime Hours	Per Hour	20	$67.50	$1,350.00
Concrete Cylinders (Cured and/or Tested in Compression)	Each	50	$18.00	$900.00
Engineering Technician/ Inspector (Cylinder Pick-up)	Per Hour	8	$45.00	$360.00
Daily Equipment Charge	Per Trip	10	$40.00	$400.00
Transportation Charge	Per Trip	12	$40.00	$480.00
Report Review	Each	22	$25.00	$550.00
	Sub-Total			**$7,640.00**
	Drilled Pier Installation Inspection Estimate			**$7,640.00**
Reinforcing Steel Inspection				
Cast-In-Place Concrete Reinforcing Steel Inspection- Periodic				
Engineering Technician/ Inspector	Per Hour	10	$45.00	$450.00
Transportation Charge	Per Trip	1	$40.00	$40.00
Report Review	Each	7	$25.00	$175.00
	Sub-Total			**$665.00**
	Reinforcing Steel Observation Estimate			**$665.00**

Concrete Testing and Inspection

Structural Concrete- Continuous				
Engineering Technician/ Inspector (Concrete Sampling and Testing)	Per Hour	46	$45.00	$2,070.00
Concrete Cylinders (Cured and/or Tested in Compression)	Each	45	$18.00	$810.00
Engineering Technician/ Inspector (Cylinder Pick-up)	Per Hour	8	$45.00	$360.00
Daily Equipment Charge	Per Trip	7	$40.00	$280.00
Transportation Charge	Per Trip	13	$40.00	$520.00
Report Review	Each	20	$25.00	$500.00
	Sub-Total			**$4,540.00**

Concrete Paving				
Engineering Technician/ Inspector (Concrete Sampling and Testing)	Per Hour	4	$45.00	$180.00
Concrete Cylinders (Cured and/or Tested in Compression)	Each	4	$18.00	$72.00
Engineering Technician/ Inspector (Cylinder Pick-up)	Per Hour	4	$45.00	$180.00
Daily Equipment Charge	Per Trip	1	$40.00	$40.00
Transportation Charge	Per Trip	2	$40.00	$80.00
Report Review	Each	3	$25.00	$75.00
	Sub-Total			**$627.00**

Miscellaneous Concrete (Pond Weir, sidewalks)				
Engineering Technician / Inspector (Concrete Sampling and Testing)	Per Hour	24	$45.00	$1,080.00
Concrete Cylinders (Cured and/or Tested in Compression)	Each	30	$18.00	$540.00
Engineering Technician/ Inspector (Cylinder Pick-up)	Per Hour	12	$45.00	$540.00
Daily Equipment Charge	Per Trip	6	$40.00	$240.00
Transportation Charge	Per Trip	9	$40.00	$360.00
Report Review	Each	15	$25.00	$375.00
	Sub-Total			**$3,135.00**

Concrete Testing and Inspection Estimate	**$4,540.00**

Masonry Testing and Inspection

Masonry Testing and Inspection- Periodic				
Engineering Technician/ Inspector (Grout and Mortar Sampling and Testing)	Per Hour	52	$45.00	$2,340.00
Motar Cubes (2in x 2in x 2in Cubes)(3 cubes/ set)	Each	27	$18.00	$486.00
Grout Prisms (3in x 3in x 6in) (4 cyls/ set)	Each	36	$18.00	$648.00
Engineering Technician/ Inspector (Sample Pick-up)	Per Hour	12	$45.00	$540.00
Daily Equipment Charge	Per Trip	9	$40.00	$360.00
Transportation Charge	Per Trip	16	$40.00	$640.00
Report Review	Each	21	$25.00	$525.00
	Sub-Total			**$5,539.00**

Masonry Testing and Inspection Estimate	**$5,539.00**

Asphaltic Concrete Testing and Observations

Asphaltic Testing and Observation				
Asphalt Technician (Asphaltic Concrete Sampling and Testing)	Per Hour	12	$52.00	$624.00
Extraction and Gradation	Each	1	$145.00	$145.00
Asphalt Stability	Each	1	$45.00	$45.00
Density and Thickness of Asphalt Cores	Each	2	$30.00	$60.00
Theoretical Specific Gravity	Each	1	$85.00	$85.00
Asphalt Coring Machine	Per Trip	1	$175.00	$175.00
Generator	Per Trip	1	$75.00	$75.00
Transportation Charge	Per Trip	2	$40.00	$80.00
Report Review	Each	2	$25.00	$50.00
	Sub-Total			**$1,339.00**

Asphaltic Concrete Testing and Observation Estimate	**$1,339.00**

Structural Steel Inspection

Structural Steel Inspection- Periodic

Structural Steel Technician (CWI)	Per Hour	20	$95.00	$1,900.00
UT Flaw Detector Machine	Per Day		$130.00	$0.00
UT Couplant	Per Pint		$25.00	$0.00
Transportation Charge	Per Trip	5	$40.00	$200.00
Report Review	Each	5	$25.00	$125.00
	Sub-Total			**$2,225.00**

Structural Steel Inspection Estimate **$2,225.00**

Engineering & Technical Services

Administrative and Technical Services

Project Manager	Per Hour	20	$94.00	$1,880.00
Project Set-up	Each	1	$150.00	$150.00
	Sub-Total			**$2,030.00**

Professional Engineering Services

Professional Engineer	Per Hour	2	$138.00	$276.00
Final Close-Out Letter / Report- as needed	Each	1	$375.00	$375.00
	Sub-Total			**$651.00**

Engineering & Technical Services Estimate **$2,681.00**

Testing Contingency

20% Testing Contingency for Unforeseen Circumstances

Contingency to be used on an as needed basis	**20% of $37,314.00**	**$7,462.80**

Construction Materials Testing and Observations Estimated Total $44,776.80