

**WORK AUTHORIZATION NO. 1**

**PROJECT: On Call Professional Engineering Services for Small Drainage and Roadway Projects**

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated **March**, **2018** and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and **Alliance Transportation Group** (the "Engineer").

Part 1. 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 **\$150,000.**

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, 2018.** 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 \_\_\_\_\_, 20 \_\_\_\_.

ENGINEER:

Alliance Transportation Group

By: \_\_\_\_\_

Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

COUNTY:

Williamson County, Texas

By: \_\_\_\_\_

Signature

Dan Gattis  
Printed Name

\_\_\_\_\_  
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**

Williamson County Road & Bridge Division personnel will provide project direction, review and oversight.

## **Attachment B - Services to be Provided by Engineer**

### **General Description of Project:**

This project consists of on-call professional engineering services to support the Williamson County Road & Bridge department, relating to the repair, maintenance and replacement of drainage and roadway facilities maintained by Williamson County. Locations are unknown and may be anywhere within Williamson County.

The Engineer shall prepare a Memorandum of Understanding (MOU) prior to the start of each on-call service for review and approval by the County.

The MOU can contain one or more of the following tasks, as more fully described in Exhibit B of the Professional Services Agreement:

- TASK 1: PROJECT MANAGEMENT
- TASK 2: TOPOGRAPHIC AND R.O.W. SURVEYS
- TASK 3: PRELIMINARY ENGINEERING
- TASK 4: GEOTECHNICAL INVESTIGATION
- TASK 5: ENVIRONMENTAL STUDIES
- TASK 6: UTILITY COORDINATION
- TASK 7: FEMA COORDINATION
- TASK 8: FINAL ENGINEERING
- TASK 9: BIDDING PHASE SERVICES
- TASK 10: CONSTRUCTION PHASE SERVICES

## **Attachment C - Work Schedule**

### **General Description of Project:**

This project consists of on-call professional engineering services to support the Williamson County Road & Bridge department, relating to the repair, maintenance and replacement of drainage and roadway facilities maintained by Williamson County. Locations are unknown and may be anywhere within unincorporated areas of Williamson County.

### **Work Schedule**

Engineering services will be provided on an on-call basis, with work schedules to be developed as work is dispatched and directed by Williamson County staff.

**Attachment D - Fee Schedule**

**Alliance Transportation Group, Inc.**

<b>Labor Classification</b>	<b>Labor Rate</b>
Project Principal	\$ 265.00
Senior Project Manager	\$ 244.00
Project Manager	\$ 230.00
Hydraulic Engineer	\$ 210.00
Senior Engineer	\$ 205.00
Project Engineer	\$ 160.00
Engineer-in-Training	\$ 115.00
Senior Engineering Technician	\$ 133.00
Engineering Technician	\$ 92.00
Project Administrator	\$ 104.00
Clerical	\$ 85.00

**Arias & Associates, Inc.**

<b>Labor Classification</b>	<b>Labor Rate</b>
Professional Engineer, PE	\$ 144.74
Graduate Engineer, EIT	\$ 86.14
Graduate Geologist, GIT	\$ 54.67
Technician	\$ 52.04
Clerical	\$ 49.12

**CD&P**

<b>Labor Classification</b>	<b>Labor Rate</b>
Principal	\$ 167.55
Public Involvement Project Manager	\$ 147.84
Public Involvement Task Leader	\$ 123.20
PI & Spanish Language Specialist	\$ 98.56
Senior Graphic Designer	\$ 86.24
PI Coordinator	\$ 73.92
Clerical	\$ 49.28

### Cobb, Fendley & Associates, Inc.

Labor Classification	Labor Rate
Project Manager	\$ 173.71
Senior Engineer	\$ 233.72
Project Engineer	\$ 142.13
Graduate Engineer	\$ 107.38
Senior Technician	\$ 135.81
Technician	\$ 110.54
Senior Utility Specialist	\$ 157.92
Utility Specialist	\$ 123.18
Clerical	\$ 72.64

### CP&Y, Inc.

Labor Classification	Labor Rate
Senior Engineer	\$ 217.19
Project Engineer	\$ 186.17
Structural Engineer	\$ 145.83
Engineer-in-Training	\$ 117.91
Engineering Technician	\$ 108.60
Senior Environmental Professional	\$ 226.50
Environmental Professional	\$ 186.17
Senior Environmental Technician	\$ 139.62
Environmental Technician	\$ 102.39
Clerical	\$ 105.49



## Survey And Mapping, LLC

Labor Classification	Labor Rate
Principal	\$ 170.37
Senior Project Manager	\$ 161.32
Project Manager	\$ 125.10
Senior Survey Technician	\$ 97.12
Survey Technician	\$ 88.89
Administration/Clerical Support	\$ 70.78
Two (2) Person Survey Field Crew	\$ 131.69
Three (3) Person Survey Field Crew	\$ 161.32
Additional Rodperson, Chainperson, Flagperson	\$ 32.92
One (1) Person Survey Field Crew with Reciever or Robotic Total Station	\$ 105.35
Project Coordinator - Mobile LiDAR	\$ 121.32
Mobile LiDAR Processing Technician	\$ 96.30
Project Coordinator - AM	\$ 131.69
Certified Photogrammetrist	\$ 108.64
Analytical Triangulation Specialist	\$ 86.42
Aerial Mapping Technician	\$ 86.42
Orthophoto Specialist	\$ 86.42
Mapping Editor (includes QA/QC, Finishing, & Finalization)	\$ 75.72
Aerial Office Technician	\$ 73.25
Project Coordinator - AP	\$ 115.23
Aerial Processing Technician	\$ 85.10
Project Coordinator - FWAL	\$ 111.44
Airborne LiDAR Processing Technician	\$ 86.42
Project Coordinator - HAL	\$ 110.29
Helicopter LiDAR Processing Technician	\$ 107.16

## DIRECT EXPENSES - Alliance Transportation Group, Inc.

Description	Unit	Cost/Unit
Mileage	mile	Current IRS Rate
Standard Postage - Letter	each	Current Postal Rate
Certified Letter Return Receipt	each	Current Postal Rate
Overnight Mail - Letter Size	each	\$ 25.00
Overnight Mail - Overside Box	each	\$ 30.00
Courier Services	each	\$ 50.00
Photocopies B/W (8 1/2" x 11")	each	\$ 0.25
Photocopies B/W (11" x 17")	each	\$ 0.50
Photocopies Color (8 1/2" x 11")	each	\$ 1.00
Photocopies Color (11" x 17")	each	\$ 2.00
Plots (B/W on Bond)	square foot	\$ 6.00
Plots (Color on Bond)	square foot	\$ 8.00
CDs	each	\$ 0.50

## DIRECT EXPENSES - Arias & Associates, Inc.

Description	Unit	Cost/Unit
<b>Field Testing</b>		
Mobilization of Drilling Equipment (Austin area)	Each	\$ 425.00
Soil Drilling and Standard Sampling Per Foot	Per Foot	\$ 18.00
Shelby Tube/SPT Sample – Each (Additional Samples)	Each	\$ 20.00
TxDOT TCP Test – Each	Each	\$ 25.00
Rock Core Sampling - Per Foot	Per Foot	\$ 26.00
Patch Holes (Concrete/Asphalt Patch) - Each	Each	\$ 50.00
Backfill Boring Hole, Holeplug & Cuttings	Per Foot	\$ 6.50
Grout Boring Hole (4 - 6" dia) - Per Foot	Per Foot	\$ 10.00
Hourly Charge for Drill Crew/Rig Standby – Per Hour	Per Hour	\$ 225.00
Asphalt Coring Equipment	Per Day	\$ 175.00
Construction Truck	Per Trip	\$ 48.50
<b>Laboratory Testing</b>		
Moisture Content Test	Each	\$ 10.00
Atterberg Limits Determination (ASTM D4318)	Each	\$ 65.00
Grain Size Analysis Mechanical (ASTM D422)	Each	\$ 65.00
Grain Size Analysis with Hydrometer (ASTM D422)	Each	\$ 125.00
Material Finer than No. 200 Sieve (ASTM D1140)	Each	\$ 30.00
Moisture Density Relationship – Standard (ASTM D698)	Each	\$ 195.00
Moisture Density Relationship – Modified (ASTM D1557)	Each	\$ 220.00
Moisture Density Relationship – TEX-114-E	Each	\$ 195.00
Moisture Density Relationship – TEX-113-E	Each	\$ 210.00
Swell Test – Pressure Swell - Each	Each	\$ 125.00
Swell Test - Percent Free Swell - Each	Each	\$ 82.00
Unconfined Compressive Strength – Soil/Rock	Each	\$ 55.00
1-D Consolidation (ASTM D2435)	Each	\$ 425.00
Soluble Sulfates (TEX-145-E)	Each	\$ 55.00
Soil pH (TEX-128-E)	Each	\$ 45.00
Corrosion Suite (pH, Sulfates, Chlorides, Box Resistivity)	Each	\$ 400.00
Stabilization Ability of Lime by Soil pH (TEX-121-E, III)	Each	\$ 215.00
Soil Organic Content	Each	\$ 50.00
<b>Subcontract Services</b>		
GPR, Specialty Testing, Traffic control, etc.		At Cost

### DIRECT EXPENSES - CD&P

Description	Unit	Cost/Unit
Mileage	mile	Current IRS Rate
Photocopies B/W (8 1/2" x 11")	each	\$ 0.10
Photocopies B/W (11" x 17")	each	\$ 0.20
Photocopies Color (8 1/2" x 11")	each	\$ 0.40
Photocopies Color (11" x 17")	each	\$ 0.80
Postage	each	Current Postal Rate
Misc Supplies (estimate, only as needed)	each	At Cost

### **DIRECT EXPENSES - Cobb, Fendley & Associates, Inc.**

<b>Description</b>	<b>Unit</b>	<b>Cost/Unit</b>
Mileage	mile	Current IRS Rate
Photocopies B/W (up to 11" x 17")	each	\$ 0.15
Photocopies Color (up to 11" x 17")	each	\$ 1.50
Plots (B/W on Bond) - larger than 11"x17"	square foot	\$ 2.00
Plots (Color on Bond) - larger than 11"x17"	square foot	\$ 3.00
Courier / Deliveries	each	At Cost
Postage	each	Current Postal Rate

## UNIT COSTS - Cobb, Fendley & Associates, Inc.

Description	Unit	Cost/Unit
Level A - Location (Non-Destructive Excavation): Vertical Depth:		
0 Ft. - 5 Ft.	Each	\$ 1,200.00
5 Ft. - 8 Ft.	Each	\$ 1,600.00
8 Ft. - 13 Ft.	Each	\$ 1,850.00
> 13 ft	Vertical Foot	\$ 150.00
One-Man Designating Crew with Equipment (4-hr minimum)	Hour	\$ 100.00
Two-Man Designating Crew with Equipment (4-hr minimum)	Hour	\$ 160.00
Vacuum Excavation Truck with 2 Technicians (4-hr minimum)	Hour	\$ 285.00
Ground Penetrating Radar with 1Tech (4-Hour Minimum)	Hour	\$ 250.00
Designation & Traffic Control Vehicles	Mile	\$ 3.40
Location Vehicles	Mile	\$ 6.80
Traffic Control (Lane Closures, etc.)		At Cost
2-man Survey Crew	Hour	\$ 160.00
1-man Survey Crew	Hour	\$ 120.00

### DIRECT EXPENSES - CP&Y, Inc.

Description	Unit	Cost/Unit
Mileage	mile	Current IRS Rate
Photocopies B/W (8 1/2" x 11")	each	\$ 0.10
Photocopies B/W (11" x 17")	each	\$ 0.25
Photocopies Color (8 1/2" x 11")	each	\$ 0.75
Photocopies Color (11" x 17")	each	\$ 2.00
Plots (B/W on Bond)	square foot	\$ 0.55
Plots (Color on Bond)	square foot	\$ 1.50

### DIRECT EXPENSES - Survey And Mapping, LLC

Description	Unit	Cost/Unit
Mileage	mile	Current IRS Rate
Courier Services	each	\$ 30.00



## UNIT COSTS - Survey And Mapping, LLC

Description	Unit	Cost/Unit
LIDAR Mobile Mapping System, (Includes Vehicle Operator, LiDAR Technician mileage on project and fuel) (Does not include travel to project.)	day	\$ 6,000.00
Mobilization for Aerial Photography/LiDAR Fixed Wing Aircraft (Includes aircraft, Pilot, Camera/LiDAR Operator, fuel and transportation cost)	mile	\$ - 20,000.00
Aerial Photography Flight Crew Fixed Wing Aircraft (Includes Pilot and Camera Operator)	hour	\$ 180.00
LIDAR Flight Crew Fixed Wing Aircraft (Includes Pilot and LiDAR Operator)	hour	\$ 192.00
Mobilization for Helicopter Airborne LiDAR (Includes helicopter, Pilot, LiDAR Operator, fuel and transportation cost)	mile	\$ 20,000.00
Helicopter Flight Crew Fixed Wing Aircraft (Includes Pilot and LiDAR Operator)	hour	\$ 190.00
AP Transit Miles	mile	\$ 5.90
AP Project Flight Miles	mile	\$ 20.00
AP ABGPS Processing	project	\$ 2,250.00
FWAL Transit Miles	mile	\$ 6.00
FWAL Project Flight Miles	mile	\$ 20.00
HAL Transit Miles	mile	\$ 12.00
HAL Project Flight Miles	mile	\$ 52.00
B&W processing (film, development, scanning)	each	\$ 16.00
CIR processing (film, development, scanning)	each	\$ 23.00
Color processing (film, development, scanning)	each	\$ 26.00
Digital Image Processing	each	\$ 20.00
Mount/Lament/Print	each	\$ 4.00
Fixed Wing UAS	day	\$ 7,000.00
Rotary Wing UAS	day	\$ 6,200.00
360 degree Camera System	day	\$ 250.00
LIDAR Workstation	hour	\$ 25.00
Railroad - Flagger (Service Provided by RR)	hour	\$ 60.00
Railroad - Insurance in addition to STD Minimum Required (Minimum coverage of \$1 Million required by RR.)	each	\$ 2,500.00
Railroad - Permit	each	\$ 2,000.00
Railroad - Safety Training	per person	\$ 300.00
Traffic Control	day	\$ 1,500.00
GPS Receiver	hour	\$ 25.00
Deed Records	sheet	\$ 1.00
Map Records	sheet	\$ 6.00
Terrestrial Laser Scanner	hour	\$ 80.00