

**WORK AUTHORIZATION NO. 9**  
**PROJECT: Design Survey for CR 118 Corridor**

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Surveying Services, being dated May 19, 2020 and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and Surveying And Mapping, LLC (the "Surveyor").

Part 1. The Surveyor will provide the following Surveying 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 \$32,505.00.

Part 3. Payment to the Surveyor 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 May 31, 2022. The Surveying 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. Surveyor 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 Surveyor 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 Surveyor.

Part 7. This Work Authorization is hereby accepted and acknowledged below.


EXECUTED this \_\_\_\_ day of \_\_\_\_\_, 2021.

SURVEYOR:

Surveying And Mapping, LLC (SAM)

COUNTY:

Williamson County, Texas

By:   
Signature

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

SCOTT BRASHEAR  
Printed Name

Bill Gravell, Jr.  
Printed Name

PROJECT MANAGER  
Title

Williamson County Judge  
Title

## LIST OF ATTACHMENTS

Attachment A - Services to be Provided by County

Attachment B - Services to be Provided by Surveyor

Attachment C - Work Schedule

Attachment D - Fee Schedule

## Attachment A - Services to be Provided by County

The County shall:

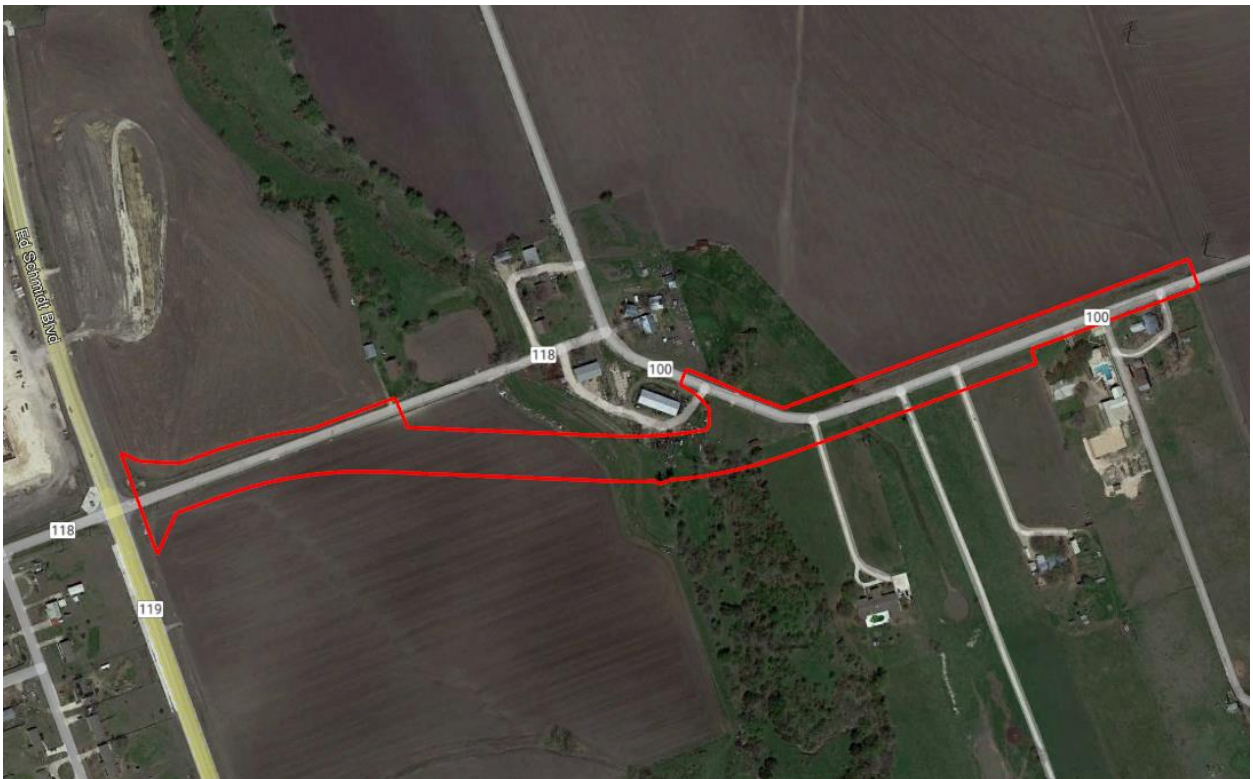
- A. Designate a project manager to serve as the County's point of contact with the Surveyor.
- B. Provide the specification requirements for all surveys.
- C. Provide timely reviews and decisions necessary to enable the Surveyor to maintain an agreed upon project schedule as developed in Attachment C.
- D. The horizontal datum for this project will be NAD83 (2011) Texas Coordinate System, Central zone, with a scale factor of 1.0001218190 or as provided by the county.
- E. Vertical values for this project will be based on NAVD88, GEOID 12B.
- F. If required, SAM anticipates that Williamson County will handle problems regarding any and all refusal to grant ROE or communication with private property owners who are hostile with respect to the completion of this scope of services.

Attachment B - Services to be Provided by Surveyor (SAM)

**Project Limits –**

Along the proposed CR 118 Corridor from CR 119 to approximately 1,300 feet southeast of the CR 118/CR 100 intersection. Approximate project limits depicted in red below in Exhibit “A”.

Exhibit “A”



## **Project Control**

SAM shall recover and utilize the existing control points previously established during TxDOT Work Authorization conducted in summer of 2020. SAM shall establish 2 additional primary survey control points. Primary control points shall consist of 5/8" iron rods with Williamson County caps. The primary survey control points will be set in locations that will likely be undisturbed by construction or State maintenance. The project control will be placed on horizontal and vertical datums [NAD83/2011/NAVD88 values (Texas Coordinate System, Central Zone)]. All coordinates will be adjusted to surface by multiplying by a surface adjustment factor of 1.0001218190, or as provided by the County. Elevations will be derived from GPS observations using Geoid 2012B model.

## **Design/Topographic Survey**

- I. SAM will obtain design survey data within the project limits at approximate 50' intervals and major grade breaks necessary to produce a one-foot interval contour DTM. This data will typically include as follows: edge of pavement/gutter & back of curb, crown (physical centerline), roadway striping, top and bottom of drainage ditches, sidewalk, fences, guardrails, signs (with text), mailboxes, retaining walls, paved areas, buildings, driveways (with type noted), driveway pipes, visible utilities and visible evidence of underground utilities only. Design survey limits will be within the proposed ROW limits. Trees 8" and larger will be located.

## **Right of Entry**

- I. SAM shall utilize right-of-entry (ROE) for private properties as obtained during Williamson County WA 5 CR 118 ROW project for the purpose of collecting design survey data. SAM anticipates that Williamson County will handle problems regarding any and all refusal to grant ROE or communication with private property owners who are hostile with respect to the completion of this scope of services. SAM shall document any interactions with property owners while performing the work.

## **Cross Sections**

- I. SAM shall collect cross section data for the creek that runs within property R020870. The cross sections shall be collected at 100 foot intervals and will extend 500 feet past either side of the proposed ROW.

**Project Deliverables (same deliverables for each site)**

- a. 2D planimetrics & 3D DTM (Microstation V8i)
- b. GPK & TIN file
- c. 1-Foot Contour map in Microstation V8i DGN format
- d. PDF Field Book copies
- e. ASCII file of points
- f. Survey Control Sheets

ADDITIONAL SERVICES - In addition to the services described in the foregoing Scope of Services, the SURVEYOR can provide additional services if requested by Williamson County, on a time and materials basis, after submittal of an estimated budget and receipt of written authorization. These additional services could include, but are not limited to, the following:

- ROW surveying and mapping services beyond that scoped herein
- Replacement of any missing control monumentation
- Subsurface Utility Engineering services.
- Additional surveying to support engineering and or architectural design, beyond the scope described herein.
- Obtaining permission to access adjoining properties.
- Providing construction surveying or layout services
- Safeguarding or maintenance of control or benchmarks during construction.

**ATTACHMENT C  
WORK SCHEDULE**

**Project:** WA # 9 CR 118 Corridor Topo Survey  
**Proposal Number:** 1019052774I

<b>WORK SCHEDULE</b>	<b>WEEK 1</b> 12/20/2021	<b>WEEK 2</b> 12/27/2021	<b>WEEK 3</b> 1/3/2022	<b>WEEK 4</b> 1/10/2022	<b>WEEK 5</b> 1/17/2022	<b>WEEK 6</b> 1/24/2022	<b>WEEK 7</b> 1/31/2022
VERIFY PROJECT CONTROL/ESTABLISH NEW							
COLLECT SURVEY							
QA/QC & PREPARE FINAL DELIVERABLES							
WILLIAMSON COUNTY REVIEW							

\*DEPENDANT ON WEATHER

**ATTACHMENT D  
FEE SCHEDULE**

Project: WA # 9 CR 118 Corridor Topo Survey  
Proposal Number: 10190527741

LABOR COSTS TASK DESCRIPTIONS	SENIOR PROJECT MANAGER	PROJECT MANAGER	STAFF SURVEYOR	SENIOR SURVEY TECHNICIAN	SURVEY TECHNICIAN	2-PERSON SURVEY CREW	3-PERSON SURVEY CREW	FIELD COORDINATOR	ADMIN/ CLERICAL	TOTAL LABOR HRS. & COSTS
RECOVER CONTROL/ESTABLISH 2 ADDITIONAL POINTS	1	2		8	12	20		1		\$5,761.00
DESIGN SURVEY	2	8		16	30	70	10	2		\$19,350.00
CREEK CROSS SECTIONS	1	1		2	4	10				\$2,502.00
FINAL DELIVERABLES	2	4		4	4					\$1,832.00
<b>TOTAL HOURS</b>	6	15	0	30	50	100	10	3	0	<b>214</b>
<b>CONTRACT RATE PER HOUR</b>	\$180.00	\$160.00	\$135.00	\$110.00	\$98.00	\$155.00	\$195.00	\$105.00	\$75.00	
<b>SUBTOTAL LABOR COSTS</b>	\$1,080.00	\$2,400.00	\$0.00	\$3,300.00	\$4,900.00	\$15,500.00	\$1,950.00	\$315.00	\$0.00	<b>\$29,445.00</b>

OTHER DIRECT EXPENSES	# OF UNITS	COST/UNIT								TOTAL COST
MILEAGE (NUMBER x CURRENT STATE RATE)	1,000	\$0.56								\$560.00
GPS RECEIVER	100	\$25.00								\$2,500.00
<b>SUBTOTAL DIRECT EXPENSES</b>										<b>\$3,060.00</b>

SUMMARY	
LABOR COSTS	\$29,445.00
NON-SALARY (OTHER DIRECT EXPENSES)	\$3,060.00
<b>TOTAL SAM SURVEY</b>	<b>\$32,505.00</b>