

WORK AUTHORIZATION NO. 10
PROJECT: Design survey services & ROW delineation along Remuda Drive and San Gabriel Ranch Road

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated **February 9, 2015** and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and **Surveying And Mapping, LLC** (SAM) (the "Surveyor").

Part 1. The Engineer 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 **\$44,594.00**.

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 **August 31, 2020**. 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. This Work Authorization is hereby accepted and acknowledged below.

EXECUTED this ____ day of _____, 20____.

SURVEYOR:

COUNTY:

SURVEYING AND MAPPING, LLC (SAM)

Williamson County, Texas

By: Scott C. Brashear

By: _____

Signature

Signature

Scott Brashear

Printed Name

Printed Name

Project Manager

Title

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 - Rate Schedule

ATTACHMENT A
SERVICES TO BE PROVIDED BY THE COUNTY

The County shall:

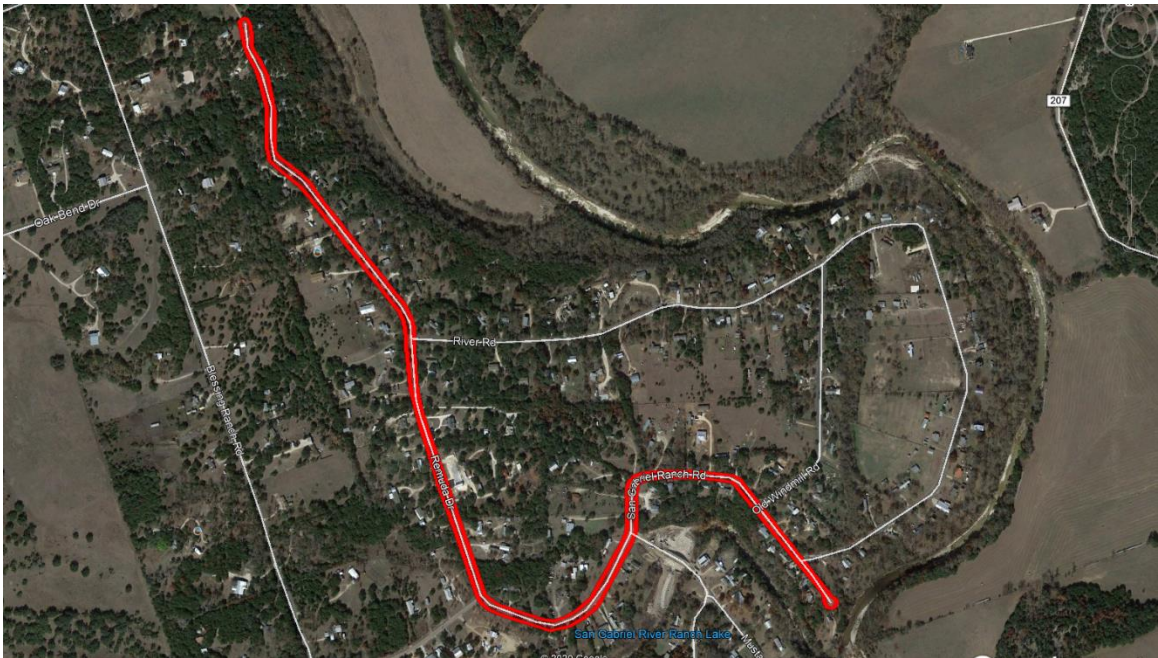
- A. Designate a project manager to serve as the County's point of contact with the Surveyor.
- B. Provide the specification requirements for all surveys.
- C. Provide timely reviews and decisions necessary to enable the Surveyor to maintain an agreed upon project schedule as developed in Attachment C.
- D. The horizontal datum for this project will be NAD83 (2011) Texas Coordinate System, Central zone, with a scale factor of 1.00014530 in order to match existing projects.
- E. Vertical values for this project will be based on NAVD88, GEOID 12B.
- F. It is assumed that Right-of-Entry (ROE) will not be required during this Work Authorization. If ROE is required, Williamson County will coordinate with the Property Owners prior to the Surveyor entering private property.

ATTACHMENT B
SERVICES TO BE PROVIDED BY THE SURVEYOR (SAM)

Project Limits –

Throughout San Gabriel River Ranch Subdivision, San Gabriel Ranch Road from approximately 325 south east of River Road to intersection with Remuda Drive (~1,944') & Remuda Drive from intersection with San Gabriel Ranch Road to north terminus of Remuda Drive (~5,256'). As depicted in Exhibit "A".

Exhibit "A"



Project Control

The Surveyor shall utilize existing project control (4 points) as established during previous work authorizations. The Surveyor shall verify and re-establish if necessary the values for the existing control. The Surveyor shall establish one additional horizontal & vertical control point along the northern portion of Remuda Drive. The additional survey control point (5/8" iron rod with Williamson County cap) will be set in locations that will likely be undisturbed by construction or maintenance. The project control will be placed on horizontal & vertical datum's [NAD83/2011/NAVD88 values (Texas Coordinate System, Central Zone)] with a scale factor of 1.00014530 in order to match existing projects. Elevations will be derived from GPS observations using Geoid 2012B model. Secondary control points will be set throughout the project corridors as needed to complete the scope of work.

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 from fence line to fence line within the existing right-of-way. No trees will be located during this work authorization.

Right-of-Way Delineation Survey

- I. Upon notice to proceed, the Surveyor will conduct research at the Williamson County Appraisal District/County Clerk's Office in order to obtain the most recent plat & right-of-way information. The Surveyor will recover monuments/front property corners marking the existing ROW lines (if any). This shall be done in conjunction with the design survey. Utilizing the records research and data collected from the field survey, the Surveyor shall determine locations of the existing ROW lines.

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. 2D DGN of existing ROW delineation
- e. PDF Field Book copies
- f. ASCII file of points

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

Surveying and Mapping, LLC

	Week 1 (5/18)	Week 2 (5/25)	Week 3 (6/1)	Week 4 (6/8)	Week 5 (6/15)	Week 6 (6/22)	Week 7 (6/29)
Verify/Establish Project Control							
Collect Design Survey							
Locate Existing Right of Way							
QA/QC & Prepare Final Deliverables							
Williamson County Review							

* Dependant upon weather and Right-of-Entry

SAM, LLC has sufficient office & field staff available to accommodate accelerated work schedules that may become necessary during the course of the project. Please contact us immediately upon becoming aware of this situation to discuss compressing the schedule, along with associated fees, to deliver the final product to meet the new deadline.

ATTACHMENT D
TIME & MATERIALS PAYMENT BASIS
SURVEY SERVICES

Project: WA # 10 Remuda Drive/San Gabriel Ranch Road Topo & ROW Delineation
Proposal Number: 1020055462

TASK DESCRIPTION	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
Control Survey (Recover existing and set additional as needed)	1	2		4	8	24				\$4,515.00
Topo/ROW Survey (Remuda Drive +/- 5,256' & San Gabriel Ranch Road +/- 1,944')	2	4		40	20	146	20			\$28,170.00
Abstract Map	4	16		36	20					\$7,420.00
Final Deliverables	1	2		4	4					\$1,075.00
										\$0.00
SUB-TOTALS	8	24	0	84	52	170	20	0	0	\$41,180.00
HOURS SUB-TOTALS	8	24	0	84	52	170	20	0	0	358
CONTRACT RATE PER HOUR	\$145.00	\$125.00	\$110.00	\$90.00	\$80.00	\$130.00	\$160.00	\$85.00	\$60.00	
TOTAL LABOR COSTS	\$1,160.00	\$3,000.00	\$0.00	\$7,560.00	\$4,160.00	\$22,100.00	\$3,200.00	\$0.00	\$0.00	\$41,180.00

OTHER DIRECT EXPENSES		# OF UNITS	COST/UNIT							
Mileage (number x current state rate)		1520	\$0.575							\$874.00
GPS Receiver		100	\$25.00							\$2,500.00
Courier Services			\$30.00							\$0.00
Deed Copies		40	\$1.00							\$40.00
SUBTOTAL DIRECT EXPENSES										\$3,414.00

SUMMARY		
LABOR COSTS		\$41,180.00
NON-SALARY (OTHER DIRECT EXPENSES)		\$3,414.00
TOTAL SAM SURVEY		\$44,594.00