

WORK AUTHORIZATION NO. 2

**PROJECT: Engineering Design Services for Street and Drainage Improvements within the Garden Park Subdivision**

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated March 24, 2020 and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and M&S Engineering, LLC (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 \$132,015.00.

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 December 31, 2021. 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 5<sup>th</sup> day of May, 2020

ENGINEER:

By: Jerod Mott  
Signature

Jerod Mott  
Printed Name

Municipal Dept Manager  
Title

COUNTY:

Williamson County, Texas

By: Bill Gravell Jr.  
Signature

Bill Gravell Jr.  
Printed Name

County Judge  
Title

**Attachment A - Services to be Provided by County**  
**Services to be Provided by County**

Williamson County Road & Bridge Division personnel will provide:

- Project direction, review and oversight.
- Topographic and R.O.W Surveys.
- Geotechnical Investigations; data and reports.
- ROW Documents and Drainage Reports.
- Conducting pre-bid meeting, responding to contractor questions during bidding, tabulating and evaluating bids after bid opening, and providing recommendation of award of contract.
- Construction oversight, administration and management.

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

Project Location:

Design for the reconstruction of Green Pasture Drive (~3,428 LF), Spring Garden Drive (~3,206 LF), Hycrest Drive (~994 LF), and Harvest Drive (~698 LF) within the Garden Park Subdivision in Hutto, TX.

Task 1: Project Management

Attend Progress Review Meetings with County Road & Bridge department at 50%, 90% and Final. Prepare monthly progress reports and invoices. Maintain project schedule and perform QA/QC.

Task 2: Topographic and R.O.W Surveys

To be provided by the County

Task 3: Preliminary Engineering

Conduct site visit and field reconnaissance to document existing conditions. Data collection including available as-builts. Review survey and geotechnical data provided by the County for completeness. Prepare 50% plan set including the sheets listed below. Develop preliminary drainage analysis including delineation of drainage areas, calculation of peak stormwater runoff rates for 10-yr, 25-yr and 100-yr.

Plan Sheets:

- Title Sheet
- Estimate & Quantity Sheet
- Typical Sections
- Traffic Control Plan
- Horizontal Alignment Data Sheet
- Roadway Plan & Profile Sheets
- Cross Sections (50' Interval and Driveways)
- Drainage Area Map
- Culvert Layouts

Specifications

Opinion of Probable Construction Cost

General Notes

Task 4: Geotechnical Investigations

To be provided by the County

Task 5: Environmental Studies

N/A

Task 6: Utility Coordination

To be provided by the County

Task 7: FEMA Coordination

N/A

Task 8: Final Engineering

Revise 50% plan set based on review comments provided by County staff. Prepare 90% detailed design and PS&E for proposed improvements. Calculate ditch capacity and size driveway and cross culvert pipes.

Revise Plan Sheets per comments:

- Title Sheet
- Estimate & Quantity Sheet
- Typical Sections
- Traffic Control Plan
- Horizontal Alignment Data Sheet
- Roadway Plan & Profile Sheets
- Cross Sections (50' Interval and Driveways)
- Drainage Area Map
- Culvert Layouts

Additional Plan Sheets:

- Driveway Details
- Driveway Summary
- Miscellaneous Roadway Details
- Erosion Control Plan
- Standards

Specifications

Opinion of Probable Construction Cost

General Notes

Revise 90% plan set based on review comments provided by County staff. Submit 100% plan set with seals and signatures.

Task 9: Bidding Phase Services

Respond to Bidder's questions. Prepare Bid-Tabs for processing by Purchasing Department.

Task 10: Construction Phase Services

Review shop drawings and respond to contractor RFIs. Prepare electronic as-built final drawings for the County based on construction red-lines provided by the County.

**Deliverables:**

## 50% Submittal:

- 1 paper copy of 11" x 17" Plan Sheets
- Specifications
- Opinion of Probable Construction Cost
- General Notes
- Engineer's internal QA/QC marked up set

## 90% Submittal:

- 1 paper copy of 11" x 17" Plan Sheets
- Specifications
- Opinion of Probable Construction Cost
- General Notes
- Engineer's internal QA/QC marked up set

## Final Submittal:

- 1 paper copy of 11" x 17" Plan Sheets
- Specifications
- Opinion of Probable Construction Cost
- General Notes
- Engineer's internal QA/QC marked up set
- Electronic copy of submittal documents in PDF format on CD



### **Attachment C - Work Schedule**

Expected notice to proceed from Williamson County near July 1, 2020.

Notice to Proceed		July 3, 2020
50% Plans Submittal	10 weeks	September 11, 2020
50% Review Comments returned	2 weeks	September 25, 2020
90% Plans Submittal	8 weeks	November 20, 2021
90% Review Comments returned	2 weeks	December 4, 2020
100% Plans Submittal	4 weeks	December 31, 2020

#### **Attachment D - Fee Schedule**

Task 1 – Project Management	\$26,130.00
Task 3 – Preliminary Engineering	\$53,970.00
Task 8 – Final Engineering	\$35,445.00
Task 9 – Bidding Phase Services	\$3,990.00
<u>Task 10 – Construction Phase Services</u>	<u>\$12,480.00</u>
Total	\$132,015.00



**WILLIAMSON COUNTY - SMALL MAINTENANCE PROJECTS**  
**W.A. #2 - GARDEN PARK STREETS AND DRAINAGE IMPROVEMENTS**

M&S Engineering, LLC  
 376 Landa Street  
 New Braunfels, Texas 78130  
 Office (830) 629-2988  
 FIRM F-1394



	# of sheets	Project Manager	Professional Engineer	Engineer in Training	CAD Operator	Admin	Total Hours	Total Cost
		\$ 180	\$ 150	\$ 120	\$ 90	\$ 75		
<b>Task 1</b>	<b>Project Management</b>							
	Project setup	4				2	6	\$ 870
	Kickoff meeting	8					8	\$ 1,440
	Coordination with suppliers	4					4	\$ 720
	Progress review meetings	24	24				48	\$ 7,920
	Monthly invoicing and reporting	40				20	60	\$ 8,700
	QA/QC review	16	24				40	\$ 6,480
	<b>Task 1 Subtotal</b>	<b>96</b>	<b>48</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>166</b>	<b>\$ 26,130</b>
<b>Task 3</b>	<b>Preliminary Engineering</b>							
	Site visit	8	8	8			24	\$ 3,600
	Review survey data and update to M&S format			16	16		32	\$ 3,360
	Plans preparation							
	Title Sheet	1	1	2	4		8	\$ 930
	Estimate & Quantities	1	2	8			18	\$ 2,520
	Typical Sections & General Notes	1	1	2	4		8	\$ 930
	Traffic Control Plan	4	2	16	24		58	\$ 6,840
	Horizontal Alignment Data Sheet	1	1	2	2		6	\$ 750
	Roadway Plan & Profile	37	4	40	56		108	\$ 11,760
	Cross Sections (50' Intervals and Driveways)	41	8	32	48		104	\$ 12,000
	Drainage Area Map	1	1	12	8		25	\$ 2,940
	Culvert Layouts	8	4	16	24		56	\$ 6,600
	Specifications & General Notes	2	4	4		4	14	\$ 1,740
	<b>Task 3 Subtotal</b>	<b>34</b>	<b>79</b>	<b>158</b>	<b>186</b>	<b>4</b>	<b>461</b>	<b>\$ 53,970</b>
<b>Task 8</b>	<b>Final Engineering</b>							
	Address review comments							
	Estimate & Quantities	1	2	16			26	\$ 3,480
	Traffic Control Plan	4	1	2	2		6	\$ 750
	Roadway Plan & Profile	37	1	16	16		41	\$ 4,740
	Cross Sections (50' Intervals and Driveways)	41	4	24	24		64	\$ 7,560
	Culvert Layouts	8	1	16	24		49	\$ 5,460
	Plans preparation							
	Erosion Control Plan	20	1	16	24		45	\$ 4,860

Driveway Summary	3	2	4	16	8		30	\$	3,600
Driveway Details	1	1	1	1	4		7	\$	810
Miscellaneous Roadway Details	2	1	1	4	8		14	\$	1,530
Standard Detail Sheets	45	1	1	4	16		22	\$	2,250
Specifications & General Notes		1	1			1	3	\$	405
<b>Task 8 Subtotal</b>		16	49	115	126	1	307	<b>\$</b>	<b>35,445</b>
<b>Task 9 Bidding Phase Services</b>									
Respond to bidder questions		4	4	8	4	4	24	\$	2,940
Prepare Bid tabulation		2	2	2		2	8	\$	1,050
<b>Task 9 Subtotal</b>		6	6	10	4	6	32	<b>\$</b>	<b>3,990</b>
<b>Task 10 Construction Phase Services</b>									
Assemble final construction drawings		1	2	4	4		11	\$	1,320
Attend preconstruction meeting		8					8	\$	1,440
Review shop drawings		4	4	4		4	16	\$	2,100
Respond to contractor RFIs		4	8	16	8		36	\$	4,560
Prepare record drawings		2	2	8	16		28	\$	3,060
<b>Task 10 Subtotal</b>		19	16	32	28	4	99	<b>\$</b>	<b>12,480</b>
<b>Project Total</b>		171	198	315	344	37	1065	<b>\$</b>	<b>132,015</b>