

**WORK AUTHORIZATION NO. 6**

**PROJECT: Schematic Design for CR 305**

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 **K.C. Engineering, Inc.** (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 **\$114,485.00.**

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 1, 2023**. 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 Jan 11, 2022, 20\_\_.

ENGINEER:

\_\_\_\_\_  
K.C. Engineering, Inc.

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

  
Signature

\_\_\_\_\_  
Greg Haley, P.E.

Printed Name


\_\_\_\_\_  
President

Title

COUNTY:

\_\_\_\_\_  
Williamson County, Texas

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

  
Bill Gravell (Jan 11, 2022 16:13 CST)

Signature

\_\_\_\_\_  
Bill Gravell

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**  
**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, if available
- ROW Documents and Drainage Reports, if available
- Other documentation, if available

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

### **Services to be Provided by Engineer**

#### Project Locations

1. Name of Roadways – CR 305

#### Task 1: Project Management

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

#### Task 2: Topographic Surveys and R.O.W. Surveys

To be provided by the County, if available

#### Task 3: Preliminary Schematic

Prepare preliminary schematic layout of proposed improvements.

Conduct Site Visit and Field Reconnaissance to document existing conditions. Data collection including available as-builts. Develop conceptual geometric layout on scroll plot (1" = 20' H, 1" = 2' V, or other scales, if necessary to adequately convey the project intent) showing roadway horizontal and vertical geometry, existing and proposed typical section. Indicate property ownership based upon Williamson County Appraisal District digital data. Prepare preliminary cross sections (50' interval and driveways). Develop preliminary drainage analysis including delineation of drainage areas, calculation of peak stormwater runoff rates for 10-yr, 25-yr, 50-yr, and 100-yr based upon Atlas 14, and proposed structures. Indicate existing flood hazard areas based upon existing FEMA digital data. Indicate general runoff detention best management practices.

#### Task 4: Geotechnical Investigations

N/A

#### Task 5: Environmental Studies

N/A

#### Task 6: Utility Coordination

N/A

#### Task 7: FEMA Coordination

N/A

#### Task 8: Final Schematic

Prepare final schematic layout of proposed improvements.

Develop final conceptual geometric layout on scroll plot (1" = 20' H, 1" = 2' V, or other scales, if necessary to adequately convey the project intent) showing roadway horizontal and vertical geometry, existing and proposed typical section. Indicate property ownership based upon Williamson County Appraisal District digital data. Prepare preliminary cross

sections (50' interval and driveways). Develop preliminary drainage analysis including delineation of drainage areas, calculation of peak stormwater runoff rates for 10-yr, 25-yr, 50-yr, and 100-yr based upon Atlas 14 and proposed structures. Indicate existing flood hazard areas based upon existing FEMA digital data. Indicate general runoff detention best management practices.

**Deliverables:**

50% Submittal:

- 1 PDF of scroll plot

90% Submittal

- 1 PDF of scroll plot

100% Submittal

- 1 PDF of scroll plot
- 1 paper scroll plot

**ATTACHMENT C**  
**WORK SCHEDULE**  
**WORK AUTHORIZATION NO. 6**

<b>Task No.</b>	<b>Task Name</b>	<b>Duration</b>	<b>Time</b>	<b>Start</b>	<b>Finish</b>
1	WA #6 - Notice to Proceed	0	Days	2/1/2022	2/1/2022
2	Survey (by others)	0	Days	2/1/2022	2/1/2022
3	Schematic	150	Days	2/1/2022	7/1/2022
4	50% Schematic	5	Days	7/1/2022	7/6/2022
5	QA/QC	5	Days	7/6/2022	7/11/2022
6	Submit 50% Schematic	0	Days	7/11/2022	7/11/2022
7	County Review	5	Days	7/11/2022	7/16/2022
8	90% Schematic	90	Days	7/16/2022	10/14/2022
9	QA/QC	5	Days	10/14/2022	10/19/2022
10	Submit 90% Schematic	0	Days	10/19/2022	10/19/2022
11	County Review	5	Days	10/19/2022	10/24/2022
12	Address 90% comments	10	Days	10/24/2022	11/3/2022
13	Final Schematic	5	Days	11/3/2022	11/8/2022
14	Final Quantities	0	Days	11/8/2022	11/8/2022
15	Final Estimate	0	Days	11/8/2022	11/8/2022
16	Assemble Final Schematic	5	Days	11/8/2022	11/13/2022
17	Submit Final Schematic	0	Days	11/13/2022	11/13/2022
18	County Review	5	Days	11/13/2022	11/18/2022
19	Submit Signed and Sealed Schematic	5	Days	11/18/2022	11/23/2022
20	Bid Advertisement	0	Days	11/23/2022	11/23/2022
21	Letting	0	Days	11/23/2022	11/23/2022
22	Award and Bonds	0	Days	11/23/2022	11/23/2022
23	Construction	0	Days	11/23/2022	11/23/2022
24	Complete Project	0	Days	11/23/2022	11/23/2022

ATTACHMENT D - FEE SCHEDULE  
WORK AUTHORIZATION NO. 6  
COUNTY ROAD 305 SCHEMATIC

K.C. ENGINEERING, INC.							
TASK NO.	TASK DESCRIPTION	PRINCIPAL ENGINEER	SENIOR PROJECT MANAGER	PROJECT MANAGER	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	ENGINEER-IN-TRAINING
	Labor Rates	250.00	215.00	200.00	195.00	165.00	125.00
1	PS&E or Schematic Development						
1.1	Roadway Design						
1.1.1	Establish Horizontal Alignment				16	24	
1.1.2	Establish Vertical Alignment				16	32	
1.1.3	Site Visits				4		
1.1.4	Superelevation Table						
1.1.5	Roadway Cross Sections	1			24	36	40
1.1.6	Earthwork Calculations						
1.1.7	Roadway Plan Profile Sheets	1			8	16	24
1.1.8	Driveway Profiles / Details / Summaries						
1.1.9	Side Road Profiles / Details / Summaries						
1.1.10	Miscellaneous Roadway Details						
1.1.11	Alignment Data				1	5	4
1.1.12	Sequence of Construction						
1.1.13	Intersection Layouts				8	10	12
1.1.14	Project Layout				2	4	8
1.1.15	Title Sheet				1	2	4
1.1.16	Survey Data						
1.1.17	Compile Available Data				4	6	8
1.1.18	Roadway Typical Sections	1			2	4	8
1.1.19	Index of Sheets						
1.1.20	Summary of Roadway Quantities						
1.1.21	Construction Estimate						
1.1.22	Assemble Applicable Standards						
	Task 2.1 Total	3	0	0	86	139	108
1.2	Hydrology & Hydraulics						
1.2.1	Drainage Area Mapping				4	12	16
1.2.2	Roadway Hydrology				8	16	24
1.2.3	Roadway Hydraulics				8	16	12
1.2.4	Roadway Culvert Sizing	1			6	12	8
1.2.5	Roadway H&H Summary Sheet & Tables				2	4	8
1.2.6	Driveway Hydrology						
1.2.7	Driveway Hydraulics						
1.2.8	Driveway Culvert Sizing						
1.2.9	Driveway H&H Summary Sheet & Tables						
1.2.10	Culvert Layouts & Culvert Details	1			4	10	12
1.2.11	Miscellaneous Drainage Details						
1.2.12	Summary of Drainage Quantities						
1.2.13	Assemble Applicable Standards						
	Task 2.2 Total	2	0	0	32	70	80



ATTACHMENT D - FEE SCHEDULE  
WORK AUTHORIZATION NO. 6  
COUNTY ROAD 305 SCHEMATIC

K.C. ENGINEERING, INC.									
TASK NO.	TASK DESCRIPTION	PRINCIPAL ENGINEER	SENIOR PROJECT MANAGER	PROJECT MANAGER	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	ENGINEER-IN-CHARGE		
	Labor Rates	250.00	215.00	200.00	195.00	165.00	125.00		
1.4.5	Storm Water Pollution Prevention Plan (SW3P)								
1.4.6	Prepare Env. Permits, Issues & Commitments								
1.4.7	Erosion Control Plan								
1.4.8	Miscellaneous TCP and Erosion Details								
1.4.9	Assemble Applicable Standards								
	<b>Task 2.4 Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>10</b>	<b>20</b>		
1.5	<b>PS&amp;E Documents</b>								
1.5.1	Summary of Quantities								
1.5.2	Basis of Estimate								
1.5.3	Construction Cost Estimate								
1.5.4	Construction Duration Estimate								
1.5.5	General Notes & Specifications								
1.5.6	Supporting Contract Documentation								
	<b>Task 2.5 Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
1.6	<b>Project Management</b>								
1.6.1	Project Administration	24							
1.6.2	Maintain Project Records	2			8				
1.6.3	Periodic Progress Meetings (County)				8				
1.6.4	Periodic Meetings/Coordination (Others)				16	24			
1.6.5	QA/QC	4			4	8			
1.6.6	Invoice Preparation	4							
1.6.7	Progress Reports	4							
1.6.8	Plans Preparation for Submittal								
	<b>Task 2.6 Total</b>	<b>38</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>32</b>	<b>0</b>		
	<b>Task 1 - PS&amp;E Total</b>	<b>44</b>	<b>0</b>	<b>0</b>	<b>162</b>	<b>251</b>	<b>208</b>		
2	<b>Project Bidding</b>								
2.1	<b>Project Bidding</b>								
2.1.1	Prepare Addenda								
2.1.2	Contractor Questions (RFI)								
2.1.3	Attend Pre-Bid Conference								
2.1.4	Tabulate Bids								
2.1.5	Prepare Recommendation Letter								
	<b>Task 2 Project Bidding Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
3	<b>Construction Support</b>								
3.1	<b>Construction Support (If Required)</b>								
3.1.1	Preconstruction Meeting								
3.1.2	Review Shop Drawings								
3.1.3	General Construction Support								
3.1.4	Prepare Change Orders as Necessary								