

WORK AUTHORIZATION NO. 1

**PROJECT: Engineering Services for Hot Mix Asphalt Concrete (HMAC) Widening on
CR 200**

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated May 31, 2022 and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and **B2Z 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 **\$80,881.00.**

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 19, 2024.** 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:

B2Z Engineering, LLC

By: 
Signature

Aisha Gonzalez

Printed Name

President

Title

COUNTY:

Williamson County, Texas

By: _____
Signature

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
- Existing LIDAR contours and apparent ROW (Wilco's GIS Department)
- Existing roadway centerline alignment
- Geotechnical investigations and pavement design
- Existing culvert sizes and elevations
- Construction oversight, administration and management

Attachment B - Services to be Provided by Engineer

Project Locations:

1. CR 200 from from Lackey Creek to CR 203 (~2 miles)

Task 1: Project Management

Attend progress review meetings with Road & Bridge Division at 50%. Prepare monthly progress reports and invoices. Maintain project schedule and perform QA/QC.

Task 2: LIDAR Contours and Apparent R.O.W.

To be provided by the County's GIS Department.

Task 3: Preliminary Engineering

Data collection and field reconnaissance.

Task 4: Geotechnical Investigations

To be provided by the County
(pavement design)

Task 5: Environmental Studies

N/A

Task 6: Utility Coordination

N/A

Task 7: FEMA Coordination

N/A

Task 8: Final Engineering

Determine parallel driveway pipes or utilities in need of replacement due to roadway widening.. Prepare final detailed design and PS&E.

Plan Sheets (11"x17"):

- Title Sheet
- Estimate & Quantity Sheet
- Typical Sections
- Construction Notes
- Erosion Control Plan
- Traffic Control/Detour Plans (if necessary)
- Roadway Plan & Plan Sheets showing roadway centerline, stationing, apparent ROW, required erosion control measures, 1' LIDR contours, and aerial background (provided by the County).
- TxDOT standards for proposed improvements to parallel driveway pipes and non-

bridge class cross culverts

Provide general notes and technical specifications, estimates and quantities, and bid form for proposed drainage facility improvements. Provide exhibits (8.5"x11" plan view) for temporary construction and /or drainage easements to facility construction of proposed drainage improvements (if necessary). Exhibits shall show roadway centerline, apparent ROW line, boundary and dimensions of proposed easement for the use in preparing easement documents by others.

Task 9: Bidding Phase Services

N/A

Task 10: Construction Phase Services

N/A

Deliverables:

50% Submittal:

- Scroll plot of drainage areas and runoff calculations for each roadway
- 11"x17" plan sheets, estimates and quantities for each roadway

100% Submittal:

- Scroll plot of drainage areas and runoff calculations for each roadway
- 11"x17" plan sheets for each roadway
- General Notes and Technical Specifications for each roadway
- Estimates and quantities, bid form for each roadway
- Temporary construction and/or drainage easement exhibits on 8.5"x11" (if necessary)

Final Signed and Seal Submittal:

- 11"x17" plan sheets for each roadway
- Temporary construction and/or drainage easement exhibits on 8.5"x11" (if necessary)

Attachment C - Work Schedule

Please see next page.

EXHIBIT C					
Task No.	Task Name	Duration (Work Days)	Time	Start	Finish
	1. CR 200 (Approximately 10,560')				
1	WA #1 - Notice to Proceed	0	Days	9/19/2023	9/19/2023
2	Survey (by others)	8	Days	9/19/2023	9/29/2023
3	Design	5	Days	9/29/2023	10/6/2023
4	50% PS&E	5	Days	10/6/2023	10/13/2023
5	QA/QC	1	Days	10/13/2023	10/16/2023
6	Submit 50% PS&E (County Road 200)	0	Days	10/16/2023	10/16/2023
7	County Review	2	Days	10/16/2023	10/18/2023
8	Address 50% comments	1	Days	10/18/2023	10/19/2023
9	100% PS&E	4	Days	10/19/2023	10/25/2023
10	QA/QC	1	Days	10/25/2023	10/26/2023
11	Submit 100% PS&E	0	Days	10/26/2023	10/26/2023
12	County Review	2	Days	10/26/2023	10/30/2023
13	Address 100% comments	1	Days	10/30/2023	10/31/2023
14	Final PS&E	1	Days	10/31/2023	11/1/2023
18	Submit Final PS&E	0	Days	11/1/2023	11/1/2023

Attachment D - Fee Schedule

Please see next page.

Prime Provider: B2Z Engineering, LLC
 HWY: Various
 Limits: Various
 County: Williamson County
 Method of Payment: Lump Sum
 Sub-Provider Name:

			MANHOURS											
			Principal	Project Manager	Senior Engineer	Project Engineer	Engineer-In-Training	Senior Engineering Tech	Engineering Tech	Admin / Clerical	Total Hours / Sub-Consultant Fee	Number of Sheets	Total Line Item Cost	
TASKS														
CR 200 HMA Widening														
Task 1: Project Management														
	1	Project Administration	1	6						6	13		\$2,225.00	
	2	Maintain Project Records	1	1	1					4	7		\$1,030.00	
	3	Periodic Progress Meetings (County)	1	1	1						3		\$730.00	
	5	QA/QC	1	1	2	4	1				9		\$1,830.00	
	6	Invoice Preparation	1	3						9	13		\$1,700.00	
	7	Progress Reports	1	2						8	11		\$1,375.00	
	8	Plans Preparation Submittal	1	1	1	2				2	7		\$1,270.00	
Task 1 Subtotal Labor Hours			7	15	5	6	1	0	0	29	63		\$10,160.00	
Task 2: LIDAR Contours and Apparent R.O.W.														
	1		PERFORMED BY COUNTY											
Task 3: Preliminary Engineering														
	1	Site Visits & Data Collection		2	2	6	6				16		\$2,770.00	
	2	Design Criteria		1		1	2				4		\$675.00	
	3	Preliminary Cost Estimates		1	4	8	6				19		\$3,320.00	
Task 3 Subtotal Labor Hours			0	4	6	15	14	0	0	0	39		\$6,765.00	
Task 4: Geotechnical Investigations														
	1		PERFORMED BY COUNTY											
Task 5: Environmental Studies (N/A)														
	1	NOT APPLICABLE TO PROJECT												
Task 6: Utility Coordination (N/A)														
	1	NOT APPLICABLE TO PROJECT												
Task 7: FEMA Coordination (N/A)														
	1	NOT APPLICABLE TO PROJECT												
Task 8: Final Engineering														
		CR 200 (2.0 Miles) PS&E Development												
	1.1	Roadway Design												
	1.1.1	Title Sheet	1		2	2	2	2			9	1	\$1,615.00	
	1.1.2	Index of Sheets	1		1	2	2	2			8	1	\$1,410.00	
	1.1.3	Summary of Roadway Quantities	1	1	2	6	4	2			16	1	\$2,875.00	
	1.1.4	Survey Control Sheets			1	3	4	8			16	2	\$2,490.00	
	1.1.5	Establish Horizontal Alignment/Horizontal Alignment Data Sheet	1	1	4	6	8	4			24	1	\$4,055.00	
	1.1.6	Typical Sections	1	1	4	6	8	10			30	2	\$4,985.00	
	1.1.7	Project Layout	1	1	2	3	4	4			15	1	\$2,600.00	
	1.1.8	Traffic Control Narrative	1	1	2	3	6	2			15	1	\$2,520.00	
	1.1.9	Plan Sheets	1	16	24	50	68	56			215	13	\$35,445.00	
	1.1.10	Assemble Applicable Standards (I.E. Miscellaneous TCP and Erosion Details)		1	2	3	4	4			14	15	\$2,325.00	
	1.1.11	Create Project General Notes	1		4	8	4				17		\$3,115.00	
CR 200 Subtotal Labor Hours			9	22	48	92	114	94	0	0	362		\$60,320.00	
Task 8 Subtotal Labor Hours			9	22	48	92	114	94	0	0	362		\$60,320.00	
Total Labor Hours			16	41	59	113	129	94	0	29	481		\$77,245.00	
Hourly Contract Rate			\$275.00	\$250.00	\$205.00	\$195.00	\$115.00	\$155.00	\$95.00	\$75.00				
Total Fee Proposal			\$4,400.00	\$10,250.00	\$12,095.00	\$22,035.00	\$14,835.00	\$14,570.00	\$0.00	\$2,175.00	\$80,360.00			

Sub-Consultant & Special Service Summary (Without ODE's)

1

Total Sub-Consultant & Special Service Fees

Direct Expenses

Mileage
 Photocopies B/W (11" X 17")
 Photocopies B/W (8 1/2" X 11")
 Photocopies Color (11" X 17")
 Total Direct Expenses (Edge Engineering)

Unit	Unit Price	Quantity	Cost
Mile	\$0.625	400	\$250.00
Each	\$0.21	600	\$126.00
Each	\$0.10	150	\$15.00
Each	\$1.30	100	\$130.00
See Edge Proposal			\$0.00
			\$521.00

Total Direct Expenses

B2Z Engineering WA#1 Total Cost

\$80,881.00