

WORK AUTHORIZATION NO.4

PROJECT: Engineering Design Services for Drainage Improvements on CR 126, CR 347, CR 348, CR 365, CR 408, CR 411, CR 431.

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 **Gray 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 **\$229,961.06**

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 **March 31, 2025**. 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 _____, 2024.

ENGINEER:

Gray Engineering, Inc.

By: 
Signature

Seth Mearig, P.E.
Printed Name

President & CEO
Title

COUNTY:

Williamson County, Texas

By: _____
Signature

Bill Gravell, Jr.
Printed Name

Williamson 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

Williamson County Road & Bridge Division personnel will provide:

- Project direction, review, and oversight.
- LIDAR contours and aerial background.
- Existing culvert sizes and elevations.
- Construction oversight, administration, and management.

Attachment B - Services to be Provided by Engineer

Project Locations:

- 1. CR 126 from SH29 to CR 124 (approximately 16,108')**
- 2. CR 347 from N SH 95 (approximately 9,061')**
- 3. CR 348 from FM 971 to the East End (approximately 15,253')**
- 4. CR 365 from CR 374 to City Limits of Taylor (approximately 3,681')**
- 5. CR 408 from UPRR to CR 409 (approximately 3,342')**
- 6. CR 411 from CR 409 to FM 619 (approximately 4,695')**
- 7. CR 431 from US 79 to FM 112 (approximately 4,979')**

Task 1: Project Management

Maintain direction of the project with Williamson County via scheduled meetings. Provide monthly schedule and memo updates.

Task 2: LIDAR contours and aerial background, culvert inventory, sizing, and elevations.

To be provided by Williamson County.

Task 3: Preliminary Engineering

Create an existing base from information provided by Williamson County. Delineate drainage areas and perform runoff calculations for 2-yr, 5-yr, 10-yr, 25-yr, and 100-yr storm events for parallel driveway culverts and non-bridge class cross culverts within the project limits, including data collection, and field reconnaissance. Provide a scroll plot (1" = 100') showing drainage area boundaries, time of concentration path, drainage area I.D., 2' LIDAR contours and aerial background provided by the County. Provide table showing runoff calculations and existing culvert capacity analysis results.

Task 4: Final Engineering

Determine parallel driveway culverts and non-bridge class cross culverts in need of replacement due to condition, inadequate capacity, or safety treatment. Provide 11x17 Plan sheets (1" = 50') for proposed improvements to parallel driveway culverts and non-bridge class cross culverts showing roadway centerline, stationing, approximate ROW, 1' LIDAR contours (provided by the County), and aerial background. Provide Quantity summary table for proposed drainage facility improvements. The scope of this deliverable will be to provide a plan view of the improvements and computations in tabular format for culverts in need of replacement.

Task 5: Bidding Phase Services

To be conducted by Williamson County.

Task 6: Construction Phase Services

To be conducted by Williamson County.

Deliverables:

50% Submittal:

- 1 copy of scroll plot of drainage areas and runoff calculations.
- Existing Culvert Analysis Summary

100% Submittal:

- 1 paper copy of 11" x 17" Plan Set
- Proposed Culvert Analysis Summary
- Preliminary Quantity Summary

Final Signed and Seal Submittal:

- 1 paper copy of 11" x 17" Plan Sheets
- Final Quantity summary
- Electronic copy of submittal documents in PDF format on CD

Attachment C - Work Schedule

Please see next page.

Attachment C - Work Schedule
WILCO CR H&H Various Roadways

Project: Williamson County
WA#4
Prepared By: Gray Engineering, Inc.
Date: March 18, 2024
Date Revised:

WILCO CR H&H Various Roadways			Complete
50% Submittal	50	Days	6/27/2024
100% Submittal	25	Days	8/13/2024
Final Signed and Sealed Set	20	Days	9/18/2024
Total		95 Days	
Start	4/3/2024		
End	9/18/2024		

Attachment D - Fee Schedule

Please see next page.

WILCO CR H&H Various Roadways
Work Authorization No. 4

WILCO CR H&H Various Roadways - WORK SHEET		Principal			Project Manager			Project Engineer			EIT			CAD Designer			Total
Task	Sub Task	HRS	Rate	Total	HRS	Rate	Total	HRS	Rate	Total	HRS	Rate	Total	HRS	Rate	Total	
Project Management	Coordination	0	\$339.43	\$ -	32	\$287.21	\$9,190.72	0	\$219.33	\$ -	0	\$167.11	\$ -	0	\$146.22	\$ -	\$9,190.72
	Monthly Progress Reports & Schedules	0	\$339.43	\$ -	20	\$287.21	\$5,744.20	0	\$219.33	\$ -	0	\$167.11	\$ -	0	\$146.22	\$ -	\$5,744.20
	Subtotal	0		\$0.00	52		\$14,934.92	0		\$0.00	0		\$0.00	0		\$0.00	\$14,934.92
Preliminary Engineering	Import Base & Survey Information(WilCo)	0	\$339.43	\$ -	0	\$287.21	\$ -	0	\$219.33	\$ -	0	\$167.11	\$ -	56	\$146.22	\$8,188.32	\$8,188.32
	Drainage Analysis & Runoff Calculations (50% Submittal)	8	\$339.43	\$ 2,715.44	40	\$287.21	\$11,488.40	120	\$219.33	\$26,319.60	200	\$167.11	\$ 33,422.00	0	\$146.22	\$ -	\$73,945.44
	Scroll Plot (50% Submittal)	2	\$339.43	\$ 678.86	6	\$287.21	\$1,723.26	9	\$219.33	\$1,973.97	0	\$167.11	\$ -	40	\$146.22	\$5,848.80	\$10,224.89
	Culvert Analysis Table (50% Submittal)	5	\$339.43	\$ 1,697.15	12	\$287.21	\$ 3,446.52	40	\$219.33	\$8,773.20	60	\$167.11	\$ 10,026.60	0	\$146.22	\$ -	\$23,943.47
	Site Visits	0	\$339.43	\$ -	9	\$287.21	\$ 2,584.89	16	\$219.33	\$3,509.28	16	\$167.11	\$ 2,673.76	16	\$146.22	\$ 2,339.520	\$11,107.45
	Subtotal	15		\$ 5,091.45	67		\$19,243.07	185		\$40,576.05	276		\$46,122.36	112		\$16,376.64	\$127,409.57
Final Engineering	100% Progress Set (100% Submittal)	12	\$339.43	\$ 4,073.16	24	\$287.21	\$6,893.04	40	\$219.33	\$8,773.20	48	\$167.11	\$8,021.28	60	\$146.22	\$8,773.20	\$36,533.88
	Preliminary Quantities Estimate (100% Submittal)	4	\$339.43	\$ 1,357.72	4	\$287.21	\$1,148.84	16	\$219.33	\$3,509.28	0	\$167.11	\$0.00	0	\$146.22	\$ -	\$6,015.84
	Culvert Design Table (100% Submittal)	4	\$339.43	\$ 1,357.72	12	\$287.21	\$3,446.52	24	\$219.33	\$5,263.92	30	\$167.11	\$5,013.30	0	\$146.22	\$ -	\$15,081.46
	Final Set (Final Submittal)	4	\$339.43	\$ 1,357.72	16	\$287.21	\$4,595.36	24	\$219.33	\$5,263.92	32	\$167.11	\$5,347.52	60	\$146.22	\$8,773.20	\$25,337.72
	Final Quantities Estimate (Final Submittal)	2	\$339.43	\$ 678.86	4	\$287.21	\$1,148.84	6	\$219.33	\$1,315.98	9	\$167.11	\$1,503.99	0	\$146.22	\$ -	\$4,647.67
	Subtotal	26		\$ 8,825.18	60		\$17,232.60	110		\$24,126.30	119		\$19,886.09	120		\$17,546.40	\$87,616.57
	TOTAL	41		\$ 13,916.63	179		\$51,410.59	295		\$64,702.35	395		\$66,008.45	232		\$33,923.04	\$229,961.06

Note: This Attachment D - Fee Schedule includes engineering services associated with all of the ROW improvements for the following County roadways

1. CR 126 from SH29 to CR124 (approximately 16,108')
2. CR 347 from N SH 95 (approximately 9,061')
3. CR 348 from FM 971 to the East End (approximately 15,253')
4. CR 365 from CR 374 to City Limits of Taylor (approximately 3,681')
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