

**SUPPLEMENTAL WORK AUTHORIZATION NO. 2
TO
WORK AUTHORIZATION NO. 2**

**WILLIAMSON COUNTY ROAD & BRIDGE PROJECT:
CR 201 FROM CR 200 TO UMBRELLA SKY**

This Supplemental Work Authorization No. 2 to Work Authorization No. 2 is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated March 9, 2021 ("Contract") and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and WSB LLC (the "Engineer").

WHEREAS, the County and the Engineer executed Work Authorization No. 2 dated effective April 26, 2023 (the "Work Authorization");

WHEREAS, pursuant to Article 14 of the Contract, amendments, changes and modifications to a fully executed Work Authorization shall be made in the form of a Supplemental Work Authorization; and

WHEREAS, it has become necessary to amend, change and modify the Work Authorization.

AGREEMENT

NOW, THEREFORE, premises considered, the County and the Engineer agree that the Work Authorization shall be amended, changed and modified as follows:

- I. The Services to be Provided by the Engineer that were set out in the original Attachment "B" of the Work Authorization are hereby amended, changed and modified as shown in the attached revised Attachment "B" (must be attached).
- II. The Work Authorization shall terminate on December 31, 2026. The Services to be Provided by the Engineer shall be fully completed on or before said date unless extended by an additional Supplemental Work Authorization. The revised Work Schedule is attached hereto as Attachment "C" (must be attached).
- III. The maximum amount payable for services under the Work Authorization is hereby increased from \$539,225 to \$700,325. The revised Fee Schedule is attached hereto as Attachment "D" (must be attached).

Except as otherwise amended by prior or future Supplemental Work Authorizations, all other terms of the Work Authorization are unchanged and will remain in full force and effect.

This Supplemental Work Authorization does not waive the parties' responsibilities and obligations provided under the Contract.

IN WITNESS WHEREOF, the County and the Engineer have executed this Supplemental Work Authorization, to be effective as of the date of the last party's execution below.

ENGINEER:

By: Robert Bailey
Signature

Robert Bailey
Printed Name

Vice President
Title

8/08/2025
Date

COUNTY:

By: _____
Signature

Printed Name

Title

Date

LIST OF ATTACHMENTS

Attachment B - Services to be Provided by Engineer

Attachment C - Work Schedule

Attachment D - Fee Schedule

APPROVED

By Christen Eschberger at 11:43 am, Aug 13, 2025

ATTACHMENT B

SERVICES TO BE PROVIDED BY THE ENGINEER FOR

CR 201

PROJECT DESCRIPTION

Project Limits

The project limits are from approximately 1100 ft north of Umbrella Skyway to CR 200 for approximately 2.0 miles.

Existing Facility

Existing 2-lane roadway with asphalt pavement. The existing right of way varies from 40 ft to 100 ft.

Proposed Facility

Proposed interim 2-lane roadway with 2 ft shoulders of an ultimate median arterial divided 4-lane curbed section with a raised median. The proposed ROW width is typically 120ft, the constrained with ROW varies from 76 ft to 110 ft through the project limits mention above.

Design Criteria

The proposed design criteria for the project will be developed from Williamson County and TxDOT design criteria. It is anticipated that in most cases the most stringent of the design criteria will be used.

1. PROJECT MANAGEMENT

a. Communication:

1. Designate one Licensed Professional Engineer (Texas) to be responsible for the project management, and all communications with the County and its representatives.

b. Monthly Progress Report, Invoices, and Billings (7 months assumed):

1. Submit monthly progress status reports to the GEC. Progress reports will include deliverable table, tasks completed, tasks/objectives that are planned for the upcoming periods, lists or descriptions of items or decisions needed from the County and its representatives. Subconsultant progress will be incorporated into the monthly progress report. A copy of the monthly progress report will be uploaded to ProjectWise.
2. Prepare correspondence, invoices, and progress reports on a monthly basis in accordance with current County requirements.

c. Progress/Coordination Meetings (4 additional meetings assumed):

1. Conduct internal coordination meetings as required to advance the development of the project.

d. Project Schedule:

1. Maintain a project schedule indicating tasks, subtasks, critical dates, milestones, and deliverables. Submit to County as requested.

e. Deliverables:

1. Monthly Invoices and Progress Reports including Deliverable Table
2. Meeting Minutes, Sign-In Sheets, and Agendas

3. Project Schedule and Updates
4. Project Files
5. QA/QC Documentation with Deliverable

2. DRAINAGE DESIGN

- a. Relocate proposed BMPs (for Ultimate Conditions) to the upstream side of each crossing culvert in locations where residential structures are adjoining:
 - Confirm culvert details meet design criteria in interim and ultimate condition.
 - Relocate sand filter systems in Ultimate Conditions for outfalls 2 and 3.
 - Determine detailed Right-Of-Way (ROW) impacts caused by all proposed BMPs.
 - Develop a high-level storm sewer network to ensure adequate BMP depths.
 - Develop rough grading of BMPs to assess ROW impacts.
 - Summarize alternatives to meet with GEC and review options.
- b. Original scope did not include detention analysis, it only included Water Quality (WQ) ponds/analyses. In addition, we were not acquiring ROW in the interim schematic for ponds. WSB was asked to analyze detention ponds as a batch facility with WQ features (if feasible) for both the Interim and Ultimate Condition. WSB was asked to determine an overall footprint and identify any required ROW as a result of the batch facilities:
 - Analyze interim hydrology and hydraulics to confirm detention requirements.
 - Update and re-submit interim condition results.
 - Analyze ultimate hydrology and hydraulics to confirm detention requirements.
 - Calculate volume requirements for detention analyses.
 - Analyze batch facility alternatives for detention and WQ treatment.
 - Size detention basins for appropriate volume control.
 - Develop a high-level storm sewer network to ensure adequate depths in both the detention ponds and BMPs.
 - Develop rough grading of detention ponds and BMPs to assess ROW impacts.
 - Update and re-submit ultimate condition hydraulics including any required facility sizes and ROW requirements.
 - Review and resolve GEC's comments.
 - Finalize design files, update drainage report, and re-submit drainage package.
- c. During the schematic phase, discharge calculations for each culvert crossing were separated into offsite (OS) and onsite (ROW) areas with independent time of concentrations and runoff coefficients. The GEC informed WSB to modify the hydrologic analysis approach for each culvert crossing:

- The new hydrologic approach includes combining the CA values for two or more drainage areas, and to utilize the higher time of concentration of said drainage areas for design and intensity purposes.
 - Re-analyze the crossing drainage culverts and impacts.
 - Re-analyze detention requirements.
 - Assess ROW impacts as a result of hydrology updates to detention ponds.
 - Finalize design files, update drainage report, and re-submit drainage package.
- d. At the request of the GEC, WSB attended a WILCO Chapter 6 Consultant Training to learn new drainage criteria and updates. Following the training, WSB requested guidance from the GEC (via email dated April 17, 2024) regarding the need to revise the hydrologic analysis to review the detention requirements for both interim and ultimate conditions since flows were expected to change for areas greater than 64 acres. The GEC responded (via email dated April 23, 2024) stating that WSB did not need to update the hydrologic calculations (for the CR 201 project) for areas greater than 64 acres or any new criteria in Chapter 6 since the project was already at 60% PS&E completion. Instead, the GEC informed WSB to only apply the new detention exemption requirements to the project and to provide a discussion in the report.
 - Attended WILCO Chapter 6 Consultant Training to learn new criteria
 - Review the drainage design criteria per Chapter 6 of the new WILCO Design Criteria.
 - Meet with GEC to outline implications of manual revisions on CR 201 project per new drainage criteria.
 - Re-analyze interim and ultimate design to verify detention exemptions and requirements.
 - Develop design waiver to avoid interim detention pond construction at one cross drainage culvert.
 - Update detention ponds in ultimate design per new geometry requirements to assess overall footprints for ROW purposes:
 - The detention ponds were resized to reflect freeboard requirements, grade requirements (side slopes), access drives, etc.
 - Finalize design files, update drainage report, and re-submit drainage package.
- e. Following the 90% PS&E submittal, the GEC requests WSB to revise their hydrological approach per the Chapter 6 updates in order to re-assess the detention impacts for areas greater than 64 acres.
 - WSB will perform a HEC-HMS analysis to quantify the discharge values for drainage areas that exceed 64 acres (per the WDCM). Drainage areas less than 64 acres will continue to utilize the Rational Method and Modified Rational Method.
 - Crossing culverts will not be reassessed because of the HEC-HMS analysis. The crossing culverts will continue to be sized per their original analysis (Rational Method).

- Collect and review readily available HEC-HMS models from the GEC. It was mentioned that areas greater than 64 acres would have a HEC-HMS model available.
 - With exception to the time of concentration values already calculated, WSB will update the HEC-HMS model for the CR 201 project area by applying the same methodologies already used (losses, rainfall, baseflows, recessions, etc.).
 - Additional data collection (land use, soils, terrain, etc.) may be required to ensure variables and parameters are calculated appropriately.
- Following the HEC-HMS model and analysis, the detention ponds will be re-analyzed (as needed) for detention requirements.
 - Detention ponds will be re-sized to ensure post-project flows are equal to or less than pre-project conditions.
 - Grading efforts will be reanalyzed to determine overall footprint and ROW needs.
 - High-level analysis of storm sewer systems (entering and leaving the ponds) will be analyzed to determine ROW/Easement needs.
- Finalize design files, update drainage report, and re-submit drainage package.

f. **Deliverables:**

1. Updated PS&E plans and related design files
2. Updated Ultimate Schematic and related design files
3. Updated Drainage Report and Drainage Models (HEC-HMS, Culvert)

3. **ROADWAY DESIGN**

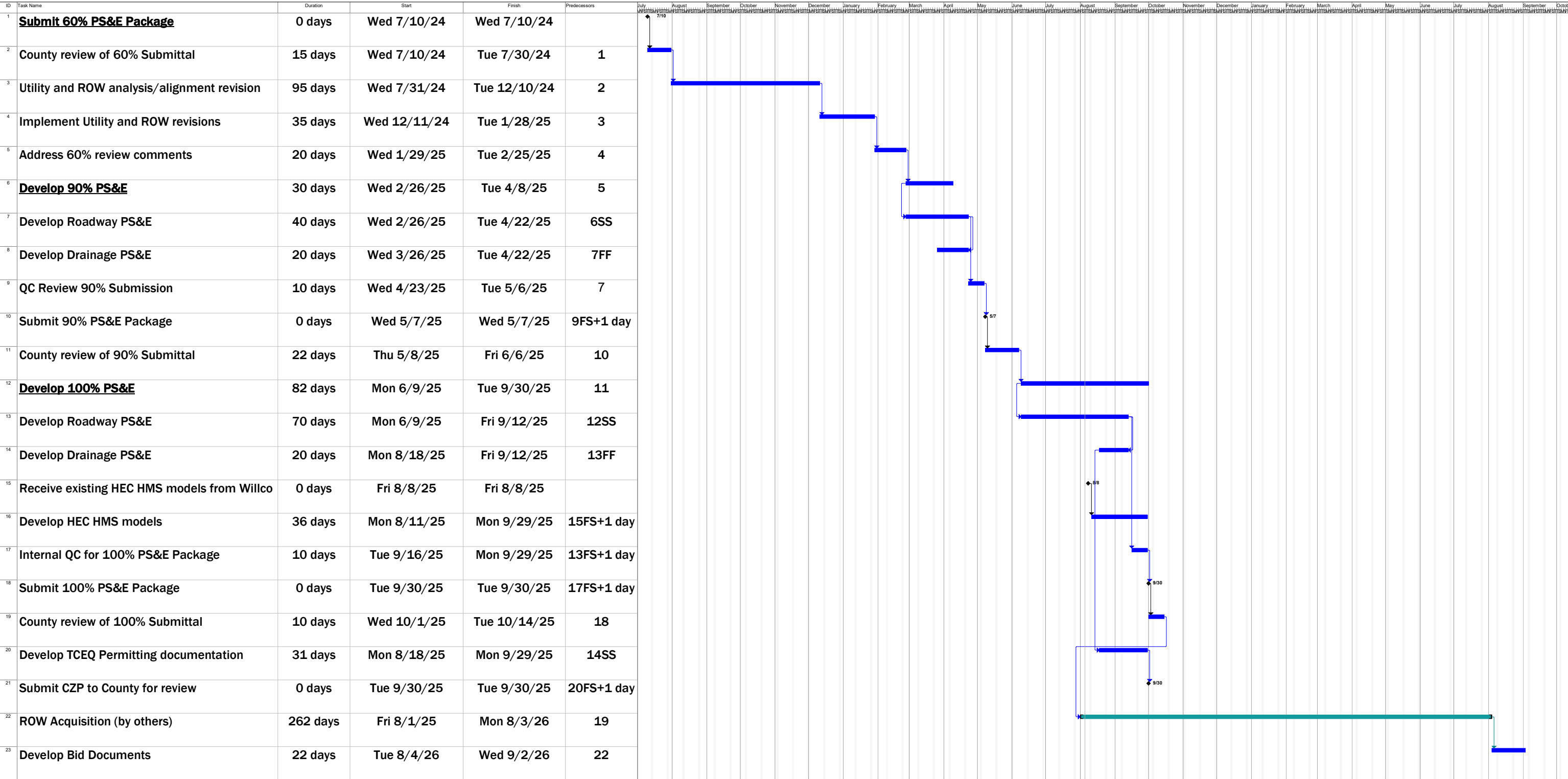
- a) Update design files, Schematic layouts, PS&E, and ROW files to reflect relocated ponds
- b) Update design files, Schematic layouts, PS&E, and ROW files to reflect interim and ultimate detention treatment
- c) Update design files, Schematic layouts, PS&E, and ROW files to reflect revised approach to hydrology
- d) Update design files, Schematic layouts, PS&E, and ROW files to reflect revision of design criteria in Chapter 6 of Wilco design Criteria Manual – develop design details and layouts needed for Design Exception

e) **Deliverables:**

1. Interim Schematic Layout
2. Updated PS&E and native design files
3. Updated ROW file
4. Design Waiver form

5. **PUBLIC INVOLVEMENT MEETINGS**

- a) Attend and provide support for meetings with individual property owners.



		CR 201 WA#2 SA#2 ATTACHMENT "D"									
		Principal	Sr. Project Manager	Sr. Project Engineer	Project Engineer II	Graduate Engineer II	Engineering Specialist IV	Sr. Planner	Project Analyst II	Total Labor Hours	Task Cost
Approved rates		\$230.00	\$210.00	\$195.00	\$160.00	\$125.00	\$160.00	\$180.00	\$115.00		
1. Project Management											
b. Develop monthly progress reports, Invoices, and billing (9 months assumed)			14							14	\$2,940.00
c. Progress Coordination Meetings (4 assumed)			8		8					16	\$2,960.00
d. Develop and maintain project schedule for Project Development tasks			6							6	\$1,260.00
TASK HOURS SUB-TOTALS			28	0	8	0	0	0	0	36	
TASK TOTALS			\$5,880.00	\$0.00	\$1,280.00	\$0.00	\$0.00	\$0.00	\$0.00		\$7,160.00
2. Drainage Design											
a. Relocate basins					153					153	\$24,480.00
b. Design Interim/Ultimate detention facilities					180					180	\$28,800.00
c. Modify Hydraulic approach					30						\$4,800.00
d. Implement revised drainage design criteria					44						\$7,040.00
e.1 Data collection and review					4	6					\$1,390.00
e.2 HEC-HMS Analysis			4		53	118					\$24,070.00
e.3 Update Drainage Report					22	12					\$5,020.00
TASK HOURS SUB-TOTALS			4	0	486	136	0	0		626	
TASK FEE TOTAL			\$840.00	\$0.00	\$77,760.00	\$17,000.00	\$0.00	\$0.00			\$95,600.00
3. Roadway Design											
a. Update design files, Schematid layouts, and ROW file to reflect relocated ponds			34				75			109	\$19,140.00
b. Update design files, Schematid layouts, and ROW file to reflect added detention ponds			29				60			89	\$15,690.00
c. Update design files, Schematid layouts, and ROW file to reflect revised Hydrologic approach			4				6			10	\$1,800.00
d. Update design files, Schematid layouts, and ROW file to reflect design revisions related to new Wilco Drainage Design criteria			13				59			72	\$12,170.00
TASK HOURS SUB-TOTALS			80	0	0	0	200	0		280	
TASK FEE TOTAL			\$16,800.00	\$0.00	\$0.00	\$0.00	\$32,000.00	\$0.00			\$48,800.00
4. PUBLIC INVOLVEMENT MEETINGS											
a. Landowner Meetings (18 assumed)			18		36					54	\$9,540.00
TASK HOURS SUB-TOTALS			18	0	36	0	0	0		54	
TASK FEE TOTAL			\$3,780.00	\$0.00	\$5,760.00	\$0.00	\$0.00	\$0.00			\$9,540.00
TOTAL WSB LABOR HOURS			130	0	530	136	200	0	0	942	
TOTAL WSB LABOR COSTS			\$27,300.00	\$0.00	\$84,800.00	\$17,000.00	\$32,000.00	\$0.00	\$0.00		\$161,100.00
	SUMMARY										
	Subtotal Labor			\$161,100.00							
	Subtotal Direct Expenses			\$0.00							
	TOTAL WA#2 SA#2 FEE			\$161,100.00							