WORK AUTHORIZATION NO. 01

WILLIAMSON COUNTY ROAD AND BRIDGE PROJECT: CR 255 and CR 289 SCHEMATIC

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated October 11, 2022 and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and Seiler Lankes Group, LLC (the "Engineer").

- Part1. 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 \$145,440.00.
- 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 November 17, 2022 with final acceptance and full execution of the parties hereto and shall terminate on January 31, 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	, 20
ENGINEER:	COUNTY:
Seiler Lankes Group, LLC	Williamson County, Texas
By:	By:
Signature	Signature
Gerald Lankes Printed Name	Printed Name
CEO Title	Title

LIST OF ATTACHMENTS

Attachment A - Services to be Provided by County

Attachment B - Services to be Provided by Engineer

11/18/2022

Attachment C - Work Schedule

Attachment D - Fee Schedule

ATTACHMENT A SERVICES TO BE PROVIDED BY THE COUNTY FOR CR 255 and CR 289 SCHEMATIC

In general, Williamson County and its representatives to their best efforts will render services as follows:

- 1. Name, business address, and phone number of County's project manager.
- 2. Assistance to the Engineer, as necessary, with obtaining data and information from other local, regional, State and Federal agencies required for this project.
- 3. Obtain Rights of Entry from landowners.
- 4. Provide available appropriate County data on file including plans and specifications that are deemed pertinent to the completion of the work required by the scope of services (including previous hydraulic studies, models, previous reports and studies, available existing traffic counts, and design year traffic projections).
- 5. Provide available criteria and full information as to the client's requirements for the project. Provide examples of acceptable format for the required deliverables.
- 6. Provide information on any meetings/discussions held with adjoining property owners that may impact the project.
- 7. Provide timely reviews and decisions necessary for the Engineer to maintain the project work schedule. Review recommendations offered by the Engineer, progress of work, and final acceptance of all documents.
- 8. Submittal of documentation and permits to regulatory agencies for review and comment, when specified.
- 9. Support project development efforts with stakeholders, coordinate meetings and interface with stakeholders, as needed.
- 10. Post and maintain project information for public consumption on the County website.
- 11. Assist with Coordination between the Engineer and the County's other consultants.
- 12. Negotiate with all utility companies for any agreements and/or relocations required.
- 13. Provide an agent as necessary to secure proposed ROW and relocate/remove improvements on proposed ROW.

ATTACHMENT B SERVICES TO BE PROVIDED BY THE ENGINEER FOR CR 255 and CR 289 SCHEMATIC

PROJECT DESCRIPTION

Project Limits

The project limits are from approximately CR 254 to Ronald Reagan Blvd for approximately 2.9 miles.

Existing Facility

Existing 2-lane roadway with asphalt pavement. The existing right of way width typical is 50 ft.

Proposed Facility

Proposed interim 2-lane roadway with 2 ft shoulders and turn lanes of an ultimate median arterial divided 6-lane curbed section with a raised median. The proposed ROW width of 136 ft, from 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:
 - 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 (3 months assumed):
 - 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.
 - Prepare correspondence, invoices, and progress reports on a monthly basis in accordance with current County requirements.
- c. Quality Assurance and Quality Control (QA/QC) Plan:
 - Prepare a project specific QA/QC plan and submit to the County within thirty (30) days of notice to proceed.
 - For each deliverable submittal, provide evidence of their internal review and mark-up of that deliverable as preparation for submittal and in accordance with submitted project specific QA/QC plan.
 - Provide continuous QA/QC throughout the duration of the scheduled services included herein to appraise both technical and business performance and provide direction for project activities.
- d. Project Coordination & Administration:
 - Prepare and maintain routine project record keeping including records of meetings and minutes.

- Correspondence and coordination will be handled through & with the concurrence of the GEC.
- Manage Project activities (including documenting emails, phone and conference calls, maintain project files for the length of the project, meeting agendas, meeting minutes, and schedule meetings), direct Engineer's team/staff, coordinate and review sub-consultant work, correspond with the County and its representatives, and assist the County and its representatives in preparing responses to Project-related inquiries.
- e. Progress/Coordination Meetings (1 external meetings assumed):
 - Attend a kickoff meeting and coordination/progress meeting with the County and its representatives and stakeholders, as necessary to communicate development of the project and design issues.
 - Prepare agenda and sign-in sheets for external coordination/progress meetings.
 - Prepare meeting minutes for review via email within three (3) business days of the external coordination/progress meeting.
 - Conduct internal coordination meetings as required to advance the development of the project.
- f. Project Schedule:
 - Submit Project schedule indicating tasks
 - Submit to County 1 time.

g. **Deliverables:**

- Monthly Invoices and Progress Reports including Deliverable Table
- Project Specific OA/OC Plan
- Meeting Minutes, Sign-In Sheets, and Agendas
- Project Schedule
- Project Files
- QA/QC Documentation with Deliverable

2. ROUTE AND DESIGN STUDIES

- a. Data Collection: GEC to provide data collected from previous schematic.
 - Perform record research and obtain existing information, including but not limited to: as-built plans, construction plans, right of way maps, traffic data, environmental reports, studies, future land use maps, floodplain data, floodplain and drainage models and analyses. Obtain construction plans for projects within the project limits and abutting roadways. Obtain drainage studies, reports, and mapping for the project area, including reports for developments affecting the drainage area.
 - SLG will Review the data.
- b. Design Criteria:
 - Analyze and identify project-specific design criteria (typical sections, design speed, functional classification, geometric criteria) in accordance with the latest versions Williamson County Design Criteria Manual and other associated local and State Manuals, as applicable.

c. <u>Deliverables:</u>

• Updated Draft and Final Design Summary Form (pdf)

- <u>SCHEMATIC DEVELOPMENT</u> Prepare a 30% Interim Schematic submittal per Williamson County Schematic submittal checklist and selected design criteria.
- Prepare a Draft Traffic Control Plan narrative memo that describes the phases of construction for the interim plan.

d. Deliverables:

- Interim Schematic including cost estimate.
- Interim Traffic Control Plan narrative memo

a. Drainage:

- Data Collection
 - Conduct field inspections to observe current conditions and the outfall channels, the cross-drainage structures, drainage easements, the tributary channel, and land development projects that contribute flow to the tributary. Document field inspections with digital photos.
 - Collect available applicable data including GIS data and maps, site survey data, construction plans, previous reports and studies, and readily available rainfall history for the area. Particular sources of data collected must include, but are not limited to, the State, County, and Federal Emergency Management Agency (FEMA)
 - Review survey data and coordinate any additional surveying needs with the County.
- Hydrologic Studies

While utilizing the previous CR 255 Preliminary Hydrologic and Hydraulic Study prepared by MillerGRAY on October 2021, provide the following services:

- Verify the drainage area boundaries and hydrologic parameters. Discuss any discrepancies with the County/GEC and adjust as desired.
- Verify that computed discharges use appropriate hydrologic methods as approved by the County. New HEC-HMS computations will provided only if corrections are necessary to meet design criteria, meet County/GEC preference, or adjust for unforeseen hydraulic conditions such as split flow.
- Complex Hydraulic Design and Documentation

While utilizing HEC-RAS models prepared for the CR 255 Preliminary Hydrologic and Hydraulic Study prepared by MillerGRAY on October 2021, provide the following services.

- Verify information regarding existing drainage facilities and features from existing plans and other available studies or sources.
- Review the validity and accuracy of the HEC-RAS models and revise them, as necessary, to account for updates to existing/proposed terrain, changes to peak flow, and corrections of any discrepancies.
- Consider existing and proposed interim conditions.

 Quantify impacts, beneficial or adverse, in terms of increases in peak flow rates and water surface elevations for the above listed hydraulic conditions and hydrologic events. Impacts will be determined both upstream and downstream of the bridge crossings.

Ditch Systems

The Drainage Engineer shall provide guidance to the Roadway Engineer in the design and grading of all ditches. Ditches will typically be designed at a minimum depth of three feet to account for drainage of the subgrade crown and to allow for one foot of minimum cover above driveway culverts. Spot checks using normal depth computations will be provided at strategic locations where additional capacity may be needed.

- Cross Drainage Structures
 - The HEC-RAS reports will be utilized to validate existing culvert sizes or analyze other preferred design alternatives. Preliminary bridge-class structures will be analyzed to determine if non-bridge class solutions are available. The existing models will be utilized to make any needed or desired changes.

b. Water Quality:

• It is assumed that the wide-scale use of vegetated filter strips will provide the needed adherence to the TCEQ Edwards Aquifer Protection Rules for the Interim Condition only. Detailed design and computation of Water Quality BMPs is not provided in this scope.

c. Deliverables:

- Interim Schematic including applicable Williamson County Submittal Checklists
- Revised Drainage Models

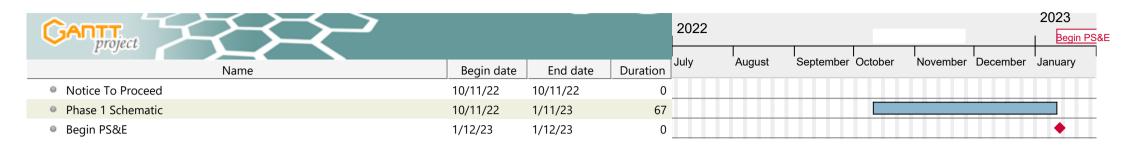
3. EXCLUSIONS:

- a. The following items are not included in this work authorization:
 - PUBLIC INVOLVEMENT
 - SURVEY
 - ROW MAPPING
 - ENVIRONMENTAL STUDIES & DOCUMENTS
 - GEOTECHNICAL SERVICES
 - CONSTRUCTION PHASE SERVICES.
 - UTILITY COORDINATION OR RELOCATION ESTIMATES.

Attachment C Work Schedule

Nov 11, 2022

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OD 055 % OD 000	No. of	Project	Senior	Project	Design	Engineer-In-		Engineer	Admin./	Total	Total Labor
CR 255 & CR 289	Sheets	Manager \$275.00	Engineer \$220.00	Engineer \$200.00	Engineer \$155.00	Training \$135.00	Tech \$130.00	Tech \$88.00	Clerical \$88.00	Hours	Cost
Route and Design Studies		\$275.00	\$220.00	\$200.00	\$155.00	\$135.00	\$130.00	φοο.υυ	φ66.00		
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Data Collection			8	8	8	<u> </u>				24	\$4,600.0
Field Investigation Photo Inventory			· •	· •	8					8	\$1,240.0
3. Review Data				8	8					16	\$2,840.0
Design Summary Report (DSR Report)										10	Ψ2,040.0
Design Guilliary Report (Bork Report) Develop Design Criteria				8	8	1				16	\$2.840.0
Subtotal - Labor	0	0	8	24	32	0	0	0	0	64	\$11,520.0
PROJECT MANAGEMENT AND ADMINISTRATION	, ,		1	1	1	1			-		
1. Prepare monthly progress reports (3 Months)		3				1			3	6	\$1,089.0
Develop and maintain a work schedule										0	\$0.0
Meet on scheduled basis with the county to disucss project status		3								3	\$825.0
4. Preapre and distribute and file both written and electronic correspondence		3								3	\$825.0
Prepare and distribute project meeting minutes		1		1						2	\$475.0
7. Prepare Invoices		3							3	6	\$1,089.0
Review Meetings (Interim Schematic)		3	3	3	3					12	\$2,550.0
10. Monthly Design Team Meetings (1 Mo.)		1	1	1	1	1	1	1		7	\$1,203.0
11. Review Sub-consultant invoices		1							3	4	\$539.0
12. Sub-consultant Coordination		1	1	1	1					4	\$850.0
13. Perform QA/QC Review of Submittals (Interim Schematic)		2		16	16					34	\$6,230.0
14. Project Closeout										0	\$0.0
15. Document phone calls and conference calls										0	\$0.0
Subtotal - Labor	0	21	5	22	21	1	1	1	9	81	\$15,675.0
Schematic Design											
Geometric Design											
1. Refine Schematic		1	5	15	30	60		30		141	\$19,765.0
2. Preliminary Geometric Project Layout		1		10	10	10				31	\$5,175.0
Revise Existing 6 Iane Schematic and Determine ROW Needs											
Typical Sections											
Existing Typical Sections				2	4			10		16	\$1,900.0
Proposed Typical Sections				2	6	1		10		18	\$2,210.0
Subtotal - Labor	0	2	5	29	50	70	0	50	0	206	\$29,050.0

Exhibit D

Fee Schedule

PRIME PROVIDER NAME: SEILER LANKES GROUP	, LLC										
	No. of	Project	Senior	Project	Design	Engineer-In-	Sr. Engineer	Engineer	Admin./	Total	Total Labor
CR 255 & CR 289		Manager	Engineer	Engineer	Engineer	Training	Tech	Tech	Clerical	Hours	Cost
		\$275.00	\$220.00	\$200.00	\$155.00	\$135.00	\$130.00	\$88.00	\$88.00		
Drainage											
A. Special Ditch Design					20	20	40			80	\$11,000.00
Subtotal - Labor	0	0	0	0	20	20	40	0	0	80	\$11,000.00
						-					!
Miscellaneous											
			•			T				<u> </u>	•
Traffic Control Memo											
Sequence of Construction Memo	1			16						16	\$3,200.00
Construction Cost Estimates (Schematic Only)		1		2	5	5				13	\$2,125.00
Subtotal - Labor	0	1	0	18	5	5	0	0	0	29	\$5,325.00
										-	•
TOTAL SHEETS	0										
Total - Labor Hours		24	18	93	128	96	41	51	9	460	
Total - Labor Cost		\$6,600.00	\$3,960.00	\$18,600.00	\$19,840.00	\$12,960.00	\$5,330.00	\$4,488.00	\$792.00		\$72,570.00
GRAND TOTAL											\$72,570.00

	No. of	Project	Senior	Project	Design	Engineer In	Sr. Engineer	Engineer	Admin./	Total	Total Labor
CR 255 & CR 289	Sheets		Engineer	Engineer	Engineer	Training	Tech	Tech	Clerical		Cost
OK 255 & OK 265	Officets	\$250.00	\$225.00	\$200.00	\$150.00	\$130.00	\$150.00	\$130.00	\$90.00	Hours	0031
		Ψ200.00	Ψ220.00	Ψ200.00	ψ100.00	ψ100.00	ψ100.00	ψ100.00	ψ50.00		
. PROJECT MANAGEMENT											
b. Monthly Progress Report, Invoices, and Billings (3 months assumed)					1	1					
Prepare monthly progress reports		3							3	6	\$1,020.00
Prepare Invoices		3							3	6	\$1,020.00
e. Progress/Coordination Meetings (3 external meetings assumed):											, , , , , , , , , , , ,
Attend a kick-off meeting		1								1	\$250.00
Attend external coordination meetings		1								1	\$250.00
8. Review Meetings (Interim Schematic)		1								1	\$250.00
Attend submittal review meetings (30%)		2								2	\$500.00
FC - 150 Subtotal - Labor	0	11	0	0	0	0	0	0	6	17	\$3,290.00
I. PLAN PREPARATION (PS&E) SERVICES											
C. Drainage											
Data Collection											
Conduct field investigations (2 site visits)			8			8				16	\$2,840.00
Collect available data			8	8		8				24	\$4,440.00
Hydrologic Studies											
Existing Condition HEC-HMS Model (10 outfalls)			8	16						24	\$5,000.00
Proposed Condition HEC-HMS Model (10 outfalls)			8	16						24	\$5,000.00
Complex Hydraulic Design and Documentation											
 Existing Condition HEC-RAS Model (3 bridge-class culverts) 			50	50						100	\$21,250.00
Proposed Condition HEC-RAS Model (3 bridge-class culverts/2 alts)			48	48						96	\$20,400.00
Cross Drainage Structures											
HY-8 Modeling (5 minor culverts)			30			30				60	\$10,650.00
FC - 161 Subtotal - Labor	0	0	160	138	0	46	0	0	0	344	\$69,580.00
10-101 Subtotal - Labor	•	J	100	130		70				J77	ψυσ,συσ.συ
TOTAL SHEETS	0										
Total - Labor Hours		11	160	138	0	46	0	0	6	361	
Total - Labor Cost					\$0.00	\$5,980.00	\$0.00	\$0.00	\$540.00		\$72,870.00
Total - Eusor Gost		Ţ <u>_</u> ,. 00.00	+30,000.00	721,000.00	, 40.00	+0,000.00	ψυ.υυ	Ψ0.00	ŢU-10.00	'	Ş. <u>2,</u> 0. 5.00

Exhibit D Fee Schedule

PRIME PROVIDER NAME: SEILER LANKES GROUP, LLC

Fee Summary											
CR 255 & CR 289	Seiler Lankes Group, LLC	CLG				Total					
Schematic Development											
Labor	\$72,570.00	\$72,870.00			\$	145,440.00					
Unit Cost (UC)					\$	-					
ODE					\$	-					
Total	\$72,570.00	\$72,870.00	\$0.00	\$0.00	\$	145,440.00					

Page 4 of 4 Exhibit D