WORK AUTHORIZATION NO. 8

PROJECT: Engineering Design Services for Roadway Schematic on CR 130 from FM 1660 to CR 131

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated <u>March 6, 2018</u> and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and <u>Alliance Transportation Group</u> (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 \$100,457.00.
- 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 <u>December 31, 2022</u>. 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	, 2021.
ENGINEER:	COUNTY:
Alliance Transportation Group	Williamson County, Texas
By: Signature	By:Signature
Clint Jumper	Bill Gravell, Jr.
Printed Name	Printed Name
Senior Vice President	Williamson County Judge
Title	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

Please see next page.

Williamson County Road and Bridge 1711-206 Work Authorization 08

Attachment A

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
- Geotechnical investigations, data, and reports
- ROW Documents and Drainage Reports
- Conducting pre-bid meeting, responding to contractor questions during bidding, tabulating, and evaluating bids after bid opening, and providing recommendation of award of contract
- Construction oversight, administration, and management

Attachment B - Services to be Provided by Engineer

Please see next pages.

Attachment B

Services to be Provided by the Engineer

Project Location:

CR 130 from FM 1660 to CR 131 ~ approximately 3 miles

- Task 1: Project Management
 - 1.1 Attend Progress Review Meetings with County Road & Bridge Department at Kickoff (DSR), 50%, 90% and Final
 - 1.2 Prepare monthly progress reports and invoices
 - 1.3 Subconsultants OMITTED
 - 1.3 Maintain project schedule and perform QA/QC of Deliverables at Preliminary Engineering, 50%, 90% and FINAL
- Task 2: Topographic and R.O.W Surveys

N/A - To be provided by the County

- Task 3: Preliminary Engineering
 - 3.1 Conduct Site Visit and Field Reconnaissance
 - 3.2 Data Collection of available CR 130 as-builts, previously prepared drainage studies, adopted land use maps and traffic plans, and GIS information to document existing conditions
 - 3.3 Prepare and submit to the County for their review and approval a preliminary Design Summary Report (DSR) to establish project basic features and design criteria
 - 3.4 Develop Conceptual Schematic Layout on scroll plot (1"=200' Full Scale plot) reflecting ROW/Property Base Map information, roadway centerline, Typical Sections and existing drainage features
 - 3.5 Prepare Preliminary Cross-Sections (50' interval)
 - 3.6 Develop preliminary drainage analysis including delineation of drainage areas, calculation of peak stormwater runoff rates for 5-yr, 10-yr, and 25-yr storm events for proposed parallel and cross-drainage preliminary design
- Task 4: Geotechnical Investigations

N/A - To be provided by the County

Task 5: Environmental Studies

N/A

Task 6: Utility Coordination

N/A

Task 7: FEMA Coordination

N/A

Task 8: Final Engineering

N/A

Task 9: Bidding Phase Services

N/A

Task 10: Construction Phase Services

N/A

Deliverables:

Kickoff DSR Submittal:

- 2 paper copies of Design Summary Report (DSR)
- Kickoff meeting documents and meeting notes

Preliminary Engineering 50% Submittal:

- 2 paper copies of Conceptual Schematic Layout scroll plot (1"=200' Full Scale plot)
- Draft preliminary Cross-Sections (50' interval)
- Draft preliminary drainage analysis report

Preliminary Engineering 90% Submittal:

- 2 paper copies of Conceptual Schematic Layout scroll plot (1"=200' Full Scale plot)
- Draft Final preliminary Cross-Sections (50' interval)
- Draft Final preliminary drainage analysis report

Preliminary Engineering Final Submittal:

- 2 paper copies of Conceptual Schematic Layout scroll plot (1"=200' Full Scale plot)
- Final preliminary Cross-Sections (50' interval)
- Final preliminary drainage analysis report
- Engineer's internal QA/QC marked up set
- Electronic copy of submittal documents in PDF format on CD
- Electronic native Microstation Design files

Attachment C - Work Schedule

Please see next page.

			Summary		Inactive Summary		Manual Summary		External I	Milestone 🔷					
te: Tue 1	0/12/21		Milestone	♦	Inactive Milestone	♦	Manual Summary	Rollup	External -			Manual Progress			
-	rham Par	k Blank	Split		Inactive Task		Duration-only		Finish-on			Progress			
	1	1	Task		Project Summary		Manual Task		Start-onl	у [Deadline	.		
	-5		ect Completion subm	nittal of Final electr	onic files	0 days	Thu 5/5/22	Thu 5/5/22	29						•
	-5		CO Review			2 days	Wed 5/4/22	Thu 5/5/22	28	30					
	-5		mit Final Preliminary	Engineering Delive	erable	3 days	Fri 4/29/22	Tue 5/3/22	27	29					
	-5	QC/0	, ,	, , ,		5 days	Fri 4/22/22	Thu 4/28/22	25,26	28					
	-5		l Preliminary Drainag			10 days	Fri 4/8/22	Thu 4/21/22	25SS+5 days	27,203313 days					
	-3 -3		l Preliminary Cross-Se			10 days	Fri 4/1/22	Thu 4/14/22	22	27,26SS+5 days					
			l Conceptual Schema	tic Lavout		10 days	Fri 4/1/22	Thu 4/14/22	22						
			Deliverable			25 days	Fri 4/1/22	Thu 5/5/22							
	- -		.CO Review	Engineering Denve	Table	10 days	Fri 3/18/22	Thu 3/31/22	21	25,24					
			mit 90% Preliminary	Engineering Delive	rahle	0 days	Thu 3/17/22	Thu 3/17/22	20	22					3/17
		QC/0	•	alliage Allalysis		15 days 5 days	Fri 3/11/22	Thu 3/10/22	19	21					
	4		t Final Preliminary Cr t Final Preliminary Dr			15 days	Fri 2/11/22 Fri 2/18/22	Thu 3/3/22 Thu 3/10/22	15 18SS+5 days	19SS+5 days 20					
	-5		t Final Conceptual Sc	·		15 days	Fri 2/11/22	Thu 3/3/22	15	1055 LE deve					
	-		eliverable	hamatia Lavava		35 days	Fri 2/11/22	Thu 3/31/22	4.5						7
	-5		CO Review			10 days	Fri 1/28/22	Thu 2/10/22	14	17,18					
	->		mit 50% Preliminary	Engineering Delive	rable	0 days	Thu 1/27/22	Thu 1/27/22	13	15				1/27	
	-5	QC/0				5 days	Fri 1/21/22	Thu 1/27/22	12	14				1/27	
	-5		minary Drainage Ana	alysis		30 days	Fri 11/26/21	Thu 1/20/22	11SS+5 days	13					
	-5		minary Cross-Section			25 days	Fri 11/19/21	Thu 1/6/22	7	12SS+5 days					
	-5		ceptual Schematic La	•		25 days	Fri 11/19/21	Thu 1/6/22	7						
	-5		eliverable			50 days		Thu 2/10/22						\neg	
	-5	Task 3: CF	R 130 Schematic Dev	relopment		110 days	Fri 11/19/21	Thu 5/5/22				ı			
	-5	Kickoff	meeting (Confirm Pr	oject Goals, DSR)		2 days	Wed 11/17/21	Thu 11/18/21	6	10,11		Š			
	-5	Design	Summary Report			2 days	Mon 11/15/21	Tue 11/16/21	5	7		T			
	-5	Data Co	ollection			8 days	Wed 11/3/21	Fri 11/12/21	4	6					
	-5	Site vis	it and Field Recon			5 days	Wed 10/27/21	Tue 11/2/21	2	5					
	-5	Task 3: CF	R 130 Preliminary En	gineering		17 days	Wed 10/27/21	Thu 11/18/21							
	-5	Detailed S	Survey (provided by o	others)		5 days	Wed 10/20/21	Tue 10/26/21	1	4)			
	Mode	CR 130 fro	om FM 1660 to CR 13	31 - Notice to Proc	eed	0 days	Wed 10/20/21	Wed 10/20/21		2	•	10/20		30 6 13 20 27 6 13 2	

Attachment D - Fee Schedule

Please see next pages.

Williamson County Small Drainage & Roadway Design (1711-206) - WA08 Attachment D CR 130 from FM 1660 to CR 131 $^{\sim}$ approximately 3 miles

		Senior					Engineer	Senior				Total
Task Description	Project	Project	Project	Hydraulic	Senior	Project	-In-	Engineering	Engineering	Project		Labor Hours
	Principal	Manager	Manager	Engineer	Engineer	Engineer	Training	Technician	Technician	Administrator	Clerical	& Costs
Task 1: Project Management												
1.1 Progress Review Meetings (4 meetings: Kickoff, 50%, 90% & Final)			9				5					14
1.2 Invoicing and Progress Reports (12 months)			10							16	12	38
1.3 Subconsultants												
1.41 QA/QC of Kickoff DSR		16	8	8			8					40
1.42 QA/QC of Deliverables at 50%		12	8	4			4					28
1.43 QA/QC of Deliverables at 90%		10	8	4			4					26
1.44 QA/QC of Deliverables at FINAL		10	4	4			4					22
Labor Hours Subtotal	0	48	47	20	0	0	25	0	0	16	12	168
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	
Labor Costs Subtotal	\$ -	\$ 11,712.00	\$ 10,810.00	\$ 4,200.00	\$ -	\$ -	\$ 2,875.00	\$ -	\$ -	\$ 1,664.00	\$ 1,020.00	\$ 32,281.00

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer -In- Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 2: Topographic and R.O.W. Surveys												
N/A												0
Labor Hours Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	
Labor Costs Subtotal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

		Senior					Engineer	Senior				Total
Task Description	Project	Project	Project	Hydraulic	Senior	Project	-In-	Engineering	Engineering	Project		Labor Hours
	Principal	Manager	Manager	Engineer	Engineer	Engineer	Training	Technician	Technician	Administrator	Clerical	& Costs
Task 3: Preliminary Engineering												
3.1 3.1@onduct Site Visit and Field Reconnaissance				12		20						32
3.2 Data Collection				12			30					42
3.3 Design Summary Report (DSR)			12				20					32
3.4 Conceptual Schematic Layout scroll plot (1"=200' Full Scale plot)			16			20	50					86
3.5 Cross-Sections (50' intervals)			16			40	100					156
3.6 Preliminary Drainage Analysis												
Delineate Drainage Area				13			25					38
Calculate Peak Stormwater Runoff Rates (5 yr, 10 yr, 25 yr)				18			40					58
Labor Hours Subtotal	0	0	44	55	0	80	265	0	0	0	0	444
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	
Labor Costs Subtotal	\$ -	\$ -	\$ 10,120.00	\$ 11,550.00	\$ -	\$ 12,800.00	\$ 30,475.00	\$ -	\$ -	\$ -	\$ -	\$ 64,945.00

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer -In- Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 4: Geotechnical Investigation												
N/A												0
Labor Hours Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	
Labor Costs Subtotal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Task Description		roject incipal	Sen Proj Man	ject	Proj Mana	•	Hydraulic Engineer	Senio Engine		Project Engineer	gineer -In- aining	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 5: Environmental Studies																
N/A																0
Labor Hours Subto	al	0	(0	0)	0	0		0	0	0	0	0	0	0
Contract Labor Rate Per Ho	ur \$	265.00	\$ 2	244.00	\$ 2	230.00	\$ 210.00	\$ 205	5.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	
Labor Costs Subto	al \$	-	\$	-	\$	-	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Task	k Description	Project Principal	Р	enior roject anager	Projed Manag		Hydraulic Engineer	Senior Engineer	Project Engineer	Enginee -In- Trainin		Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 6: Utility Coordination																
N/A																0
	Labor Hours Subtotal	0		0	0		0	0	0	0		0	0	0	0	0
	Contract Labor Rate Per Hour	\$ 265.00) \$	244.00	\$ 230	0.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115	.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	
	Labor Costs Subtotal	\$ -	\$	-	\$	-	\$ -	\$ -	\$ -	\$	- [\$ -	\$ -	\$ -	\$ -	\$ -

		Senior					Engineer	Senior				Total
Task Description	Project	Project	Project	Hydraulic	Senior	Project	-In-	Engineering	Engineering	Project		Labor Hours
	Principal	Manager	Manager	Engineer	Engineer	Engineer	Training	Technician	Technician	Administrator	Clerical	& Costs
Task 7: FEMA Coordination												
N/A												0
Labor Hours Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	
Labor Costs Subtotal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

		Senior					Engineer	Senior				Total
Task Description	Project	Project	Project	Hydraulic	Senior	Project	-In-	Engineering	Engineering	Project		Labor Hours
	Principal	Manager	Manager	Engineer	Engineer	Engineer	Training	Technician	Technician	Administrator	Clerical	& Costs
Task 8: Final Engineering (8 Roads) (50%, 90% & Final Submittals)												
N/A												0
Labor Hours Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	
Labor Costs Subtotal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer -In- Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 9: Bidding Phase Services												
N/A												0
Labor Hours Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	
Labor Costs Subtotal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer -In- Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 10: Construction Phase Services												
N/A												0
Labor Hours Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	
Labor Costs Subtotal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

DESCRIPTION						TOTAL MH BY TASK	TOTAL COST BY TASK
Task 1: Project Management						168	\$ 32,281.00
Task 2: Topographic and R.O.W. Surveys						0	\$ -
Task 3: Preliminary Engineering						444	\$ 64,945.00
Task 4: Geotechnical Investigation						0	\$ -
Task 5: Environmental Studies						0	\$ -
Task 6: Utility Coordination						0	\$ -
Task 7: FEMA Coordination						0	\$ -
Task 8: Final Engineering (8 Roads) (50%, 90% & Final Submittals)						0	\$ -
Task 9: Bidding Phase Services						0	\$ -
Task 10: Construction Phase Services						0	\$ -
SUBTOTAL LABOR COST						612	\$ 97,226.00

DIRECT EXPENSES

Description	Unit	Co	st/Unit	Quantity	T	otal Cost
Mileage	mile	\$	0.535		\$	-
Standard Postage - Letter	each	\$	0.50		\$	-
Certified Letter Return Receipt	each	\$	6.70		\$	-
Overnight Mail - Letter Size	each	\$	25.00		\$	-
Overnight Mail - Oversized Box	each	\$	30.00		\$	-
Courier Services	each	\$	50.00		\$	-
Photocopies B/W (8 1/2" x 11")	each	\$	0.25		\$	-
Photocopies B/W (11" x 17")	each	\$	0.50	600	\$	300.00
Photocopies Color (8 1/2" x 11")	each	\$	1.00	50	\$	50.00
Photocopies Color (11" x 17")	each	\$	2.00		\$	-
Plots (B/W on Bond)	square foot	\$	6.00		\$	-
Plots (Color on Bond)	square foot	\$	8.00	360	\$	2,880.00
CDs	each	\$	0.50	2	\$	1.00
SUBTOTAL DIRECT EXPENSES					\$	3,231.00

SUMMARY	
SUBTOTAL LABOR COST	\$ 97,226.00
SUBTOTAL DIRECT EXPENSE	\$ 3,231.00
TOTAL	\$ 100,457.00