WORK AUTHORIZATION

WORK AUTHORIZATION NO._1

PROJECT: Speed Studies for 30 Williamson County Roads

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated <u>September 3, 2015</u> and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and <u>Kimley-Horn and Associates</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 \$34,597.00.
- 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>September 30, 2016</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 or, 2	
ENGINEER:	COUNTY:
Kimley-Horn and Associates	Williamson County, Texas
By: Andu b. Van hun Signature	By: Signature
Andrew VanLeeuwen Printed Name	Printed Name
Sr. Vice President 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

EXECUTED this 19 day of January, 2016.

ENGINEER:

Kimley-Horn and Associates

By:

Andrew VanLeeuwen

Printed Name

COUNTY:

Williamson County, Texas

By:

Signature

Printed Name

LIST OF ATTACHMENTS

Title

Sr. Vice President

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 the County

Locations: Multiple (30 County Roadways)

Project: Speed Studies to Establish Speed Limits

SCOPE OF WORK OVERVIEW

This project involves speed studies for multiple Williamson County roadways. Kimley-Horn and Associates (K-H) will perform studies to determine the appropriate speed limits for each roadway listed in the table below.

Road	From	То	Road	From	То
Landfill Road	FM 1660	End of Road	CR 200	SH 29	CR 236
CR 100	SH 29	FM 1660	CR 220	CR 223	CR 226
CR 105	CR 110	CR 100	CR 226	SH 138	Florence City Limits
CR 110	US 79	Rockride Ln	CR 234	CR 143	FM 487
CR 112	AW Grimes	CR 110	CR 241	RM 2338	SH 195
CR 117	CR 112	Redbud Ln	CR 245	RM 2338	FM 970
CR 123	Redbud Lane	US 79	CR 279	Liberty Hill City Limits	CR 281
CR 137	FM 1660	CR 138	CR 281	CR 279	CR 282
CR 138	SH 130	CR 137	CR 282	RM 1869	Rural Space Rd
CR 139	CR 137	Rowe Ln	CR 283	CR 284	CR 282
CR 143	IH 35	SH 195	CR 284	CR 282	CR 286
CR 145	CR 311	FM 1105	CR 301	CR 380	E FM 487
CR 147	SH 195	East of CR 234	CR 311	IH 35	FM 1105
CR 153	FM 1105	FM 1105	CR 313	CR 312	CR 3001
CR 175	FM 2243	RM 1431	CR 122	Red Bud	CR 110

SERVICES TO BE PROVIDED BY THE COUNTY

The County shall provide all information requested by K-H during the project, including but not limited to the following:

- Timely responses to requests for information or clarification; and
- Timely review of all submittals.
- Provide available copies of associated studies and coordination with ongoing related county projects.
- Provide decisions in a timely manner.
- Process payment to Engineer in a timely manner.

ATTACHMENT B

Services to be Provided by the Engineer

Locations:

Multiple (30 Williamson County Roadways)

Project:

Speed Studies to Establish Speed Limits

SCOPE OF WORK OVERVIEW

This project involves speed studies for multiple Williamson County roadways. Kimley-Horn and Associates (K-H) will perform studies to determine the appropriate speed limits for each roadway listed in the table below.

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CR 110	US 79	Rockride Ln	CR 234	CR 143	FM 487
CR 112	AW Grimes	CR 110	CR 241	RM 2338	SH 195
CR 117	CR 112	Redbud Ln	CR 245	RM 2338	FM 970
CR 123	Redbud Lane	US 79	CR 279	Liberty Hill City Limits	CR 281
CR 137	FM 1660	CR 138	CR 281	CR 279	CR 282
CR 138	SH 130	CR 137	CR 282	RM 1869	Rural Space Rd
CR 139	CR 137	Rowe Ln	CR 283	CR 284	CR 282
CR 143	IH 35	SH 195	CR 284	CR 282	CR 286
CR 145	CR 311	FM 1105	CR 301	CR 380	E FM 487
CR 147	SH 195	East of CR 234	CR 311	IH 35	FM 1105
CR 153	FM 1105	FM 1105	CR 313	CR 312	CR 3001
CR 175	FM 2243	RM 1431	CR 122	Red Bud	CR 110

SERVICES TO BE PROVIDED BY THE ENGINEER

Task 1. Project Management

Project management spans the entire duration of the project and involves monitoring and coordination of services provided to the County to assure timely and efficient completion of the project. K-H will perform typical project management duties to meet the schedule discussed in subsequent sections. Project management duties will include coordination and communication with the Client, coordination with subcontractors, and accounting activities related to the performance of the study.

Task 2. Data Collection

K-H will conduct a segment analysis to determine the number of data collection locations needed for a given roadway. Typical segment lengths will be every one to two miles.

K-H will review each roadway and develop specific locations for the speed tube counts to be located.

K-H will collect daily (24-hour) vehicle speed tube counts in both directions at up to 45 locations.

Speed data will be collected on a typical weekday (Tuesday, Wednesday, or Thursday)

Task 3. Speed Study Analysis

K-H will apply criteria from the Texas Manual on Uniform Traffic Control Devices (TMUTCD) and governing state law to the traffic and speed data to determine the applicable speed zones that are warranted for each section of roadway studied.

Task 4. Technical Memorandum Report

The findings of the above scope of services will be documented in a technical memorandum report. The report will include findings and recommendations in a tabular format. For each road segment identified in Task 2, a recommended speed limit will be provided. This report will not include any analysis or recommendations for advisory signage.

Task 5. Project Coordination Meetings

After submission of the draft report, K-H will attend one (1) meeting with County staff to review the project findings and receive their comments. Additional meetings may be scheduled; however, such meetings are not included in this scope.

Additional Services

Any services not specifically provided for in the above scope will be considered additional services and can be performed at our then current hourly rates. Additional services we can provide include, but are not limited to, the following:

- Additional analyses or major re-works that are required as a result of comments that are inconsistent with K-H's original direction from the County;
- Advisory speed studies for horizontal curves, and
- Attendance at additional meetings beyond those listed.

Schedule

KHA will provide our services as expeditiously as practicable to meet the mutually agreed upon schedule, attached as Attachment C. This schedule shall be extended as necessary, for periods of delay or suspension, resulting from circumstances the Consultant does not control.

County Speed Studies

WORK AUTHORIZATION 1

ATTACHMENT C: PROJECT SCHEDULE

Williamson County Speed Studies Project Name:

Project Description: Speed Limit Studies - 30 Roads

Kimley-Horn and Associates, Inc. Prepared By:

Task#	: .	Sche	Schedule
	lask Name	Month 1	Month Month
1 Projec	Project Management		
2 Data C	Data Collection		
3 Analysis	sis		
4 Tech	Fech Memo Report		
5 Meetings	sbu		
Count	County Review		

WORK AUTHORIZATION 1

Attachment D

Williamson County Speed Studies Project Name:

Speed Limit Studies - 30 Roads Kimley-Horn and Associates, Inc. Project Description:

Prepared By:

				Direct Labor (Person-Hours)	(Person-Hou	rs)						
			Senior		Analyst	Secretary /				KHA	КНА	-qns
Task#	KHA Task Name	Principal	Transportation	Engineer		Clerical				Labor	Labor	Contractor
			Engineer II							Total	Expense	and Expense
		\$240.00	\$215.00	145.00	115.00	75.00				(hours)	(\$)	(\$)
1	Project Management											
	Project Administration and Documentation	-	2			2				'n	820	
	Project Reporting and Invoicing	-	2			2				'n	820	
	Subconsultant Coordination		1	2	4					7	965	
	Task Total (Hours)	2	5	2	4	4	0	0	0	17		
	Task Total (Dollars)	\$480	\$1,075	\$290	\$460	\$300	0	0	0		\$2,605	\$0
2	Data Collection											
	Segment Analysis	1	2	4	15					22	2975	
	Map of Count Locations for GRAM		2		15					17	2155	
	Tube Counts (up to 45)		2		15					17	2155	\$7,800
	Task Total (Hours)	-	9	4	45	0	0	0	0	56		
	Task Total (Dollars)	\$240	\$1,290	\$580	\$5,175	\$0	\$0	\$0	\$0		\$7,285	\$7,800
3	Speed Study Analysis											
	Speed Limit Analysis	2	2	5	45					54	6810	
	Task Total (Hours)	2	2	5	45	0	0	0	0	54		
	Task Total (Dollars)	\$480	\$430	\$725	\$5,175	\$0	\$0	\$0	\$0		\$6,810	\$0
4	Technical Memo											
	Draft Tech Memo	1	8	16	20					45	6580	
	Address Review Comments		1	2	4					7	965	
	Final Tech Memo	1	1	1	2					5	830	
	Printing / Binding				2	2				4	380	
		2	10	19	28	2	0	0	0	61		
	Task Total (Dollars)	\$480	\$2,150	\$2,755	\$3,220	\$150	80	\$0	\$0		\$8,755	\$0

				Direct Labor	Direct Labor (Person-Hours)	rs)						
			Senior		Analyst	Secretary /				КНА	КНА	-qns
	KHA Task Name	Principal	Transportation	Engineer		Clerical				Labor	Labor	Contractor
			Engineer II							Total	Expense	and Expense
		\$240.00	\$215.00	145.00	115.00	75.00				(hours)	(\$)	(\$)
Project Co	Project Coordination Meeting											
County Re	County Review Meeting		4		4					8	1320	
	Task Total (Hours)	0	4	0	4	0	0	0	0	1328		
	Task Total (Dollars)	\$0	\$860	\$0	\$460	\$0	\$0	\$0	\$0		\$1,320	\$0
	TOTAL (Hours)	7	27	30	126	9	0	0	0	196		
	TOTAL (Fee)	\$1,680	\$5,805	\$4,350	\$14,490	\$450	\$0	\$0	\$0		\$26,775	\$7,800
				Project Summary	ımmary							
	Expenses											
	Subconsultants Data Collection	Jata Collection								\$7,800		
	Mileage	40.0	0.0 Miles	×	\$0.540	per mile				\$22		
	11"x17" Plots	0.0	0.0 Plots	×	\$0.20	per plot				\$0		
	8-1/2"x11" Plots	0.0	0.0 Plots	×	\$0.10	per plot				\$0		
	Total									\$7,822		
	K-H LABOR									\$26,775		
	GRAND TOTAL									\$34,597		

Task#