

**WORK AUTHORIZATION NO. 2**

**PROJECT: TRANSPORTATION CORRIDOR H – SAM BASS ROAD**

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated March 13, 2017 and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and K Friese & Associates, 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 \$ 578,180.59.

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 December 31, 2020. 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 19<sup>th</sup> day of February, 2019.

ENGINEER:

K Friese & Associates, Inc.

By:   
Signature

Thomas M. Owens, P.E.  
Printed Name

Executive Vice President  
Title

COUNTY:

Williamson County, Texas

By:   
Signature

Bill Gravel Jr.  
Printed Name

County Judge  
Title

OK  
m 2/13/19

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 THE COUNTY**  
**PRELIMINARY ENGINEERING FOR TRANSPORTATION**  
**CORRIDOR H – SAM BASS ROAD**

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 that are unwilling to grant access to the Engineer.
4. Provide available appropriate County data on file, 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 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.
7. Submittal of documentation to regulatory agencies for review and comment, when specified.
8. Support project development efforts with stakeholders, coordinate meetings and interface with stakeholders, as needed.
9. Post and maintain project information for public consumption on the County website.
10. Assist with Coordination between the Engineer and the County's other subconsultants.
11. Negotiate with all utility companies for any agreements and/or relocations required.
12. Provide an agent as necessary to secure proposed ROW.
13. Provide construction observation and review contractor pay applications and progress.

14. Provide Engineer with Contractor submittals, Requests for Information (RFI's), shop drawings, and correspondence.

15. Review Engineer progress, submittals, and plan changes.

**ATTACHMENT B**  
**SERVICES TO BE PROVIDED BY THE ENGINEER**  
**DESIGN SERVICES FOR TRANSPORTATION CORRIDOR H –**  
**SAM BASS ROAD**

**PROJECT DESCRIPTION**

Existing Facility

The project encompasses Sam Bass Road from FM 1431 to Wyoming Springs Drive. The existing facility is a two-lane roadway from FM 1431 to Tonkawa Trail and widens to four lanes from Tonkawa Trail to Wyoming Springs Drive. The existing right-of-way is variable width along the corridor. The roadway utilizes open drainage along the corridor. There is an existing traffic signal at FM 1431 and at Wyoming Springs Drive.

Proposed Facility

The proposed facility will be a three-lane roadway with shoulders, shared-use path, open drainage, and vegetative filter strips where possible. The proposed right-of-way width will be determined based on the proposed typical section. New signals will be designed at Great Oaks Dr. and Walsh Ranch Blvd. Signal modifications are proposed at RM 1431 and signal timing modifications are proposed at Wyoming Springs Drive. As the roadway footprint falls within 200-feet of the Upper Brushy Creek WCID (UBCWCID) Dam #13A, coordination with UBCWCID will be necessary. For this proposal, it is assumed that modifications to the dam and reservoir will not be necessary and are not included herein.

Design Criteria

This project will utilize Williamson County Design Criteria and will incorporate Texas Department of Transportation Standard Details and Specifications except where superceded by County details or specifications.

1. PROJECT MANAGEMENT

- a. Shall 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 REPORTS, INVOICES, AND BILLINGS:
  - Submit monthly progress status reports to the GEC. Progress reports will include: 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. **PROJECT COORDINATION & ADMINISTRATION:**

- Prepare and maintain routine project record keeping including records of meetings.
- 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, correspond with the County and its representatives, and assist the County and its representatives in preparing responses to Project-related inquiries.

d. **PROGRESS/COORDINATION MEETINGS (Four (4) 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.

e. **PROJECT SCHEDULE:**

- Maintain a project schedule indicating tasks, subtasks, critical dates, milestones, and deliverables.

f. **DELIVERABLES:**

- Monthly Invoices and Progress Reports
- Meeting Minutes, Sign-In Sheets, and Agendas
- Project Schedule

2. **PS&E PLAN PREPARATION**

- a. Plans shall be prepared per Williamson County criteria including applicable submittal requirements including: cost estimate, checklists, hardcopies, CAD files, comment responses, design waivers/exceptions, general notes, quantities, updated design schedule, and construction time determination.

**b. ROADWAY:**

- Prepare horizontal and vertical alignment of the roadway and cross streets, existing and proposed typical sections, ultimate cross sections created at fifty (50) foot increments and at cross drainage structures.
- Prepare project layout sheets that identify the project area and limits of work.
- Prepare Survey Data Sheets that clearly indicate benchmark locations and associated control information.

**c. DRAINAGE:**

- Prepare hydraulic calculations for the design of 8 cross drainage structures on the project and inclusion in the plans.
- Develop existing and onsite drainage area maps within project limits delineating drainage area boundaries based on USGS topographic maps, local contour maps, and/or field survey data.
- Design and detail open channel system, drainage outfalls, cross drainage structures, culverts, channels, roadside ditches, and erosion and sedimentation control within project limits.
- Document hydraulic design data on sheets to be included in plan set.

**d. SIGNING, MARKINGS, & SIGNALIZATION:**

- Prepare signing and marking layout per Texas Manual of Uniform Traffic Control Devices (TMUTCD). Detail all non-standard signs or marking details as required for the project.
- Prepare traffic signal plan sheets for new signals at Great Oaks Blvd and Walsh Ranch Dr and signal modifications at RM 1431 and signal timing modifications at Wyoming Springs Blvd including: existing traffic control that will remain, roadway improvements, installation, additional traffic controls, elevation sheets, phase sequence diagrams, signal sequence table, flashing operation, cycle length, interval timing. It is assumed that temporary traffic signals will not be required and that the counts collected in 2017 by Alliance Transportation will be used.
- Perform updates to existing traffic modeling as necessary to complete signal plans.

- Utilize TxDOT standard detail sheets for construction details including poles, detectors, pull box, conduit layout, and controller foundation. Utilize TxDOT specifications and provisions required for traffic signal.
  - Coordinate with GEC in identifying power sources.
  - Traffic signal warrant studies for Great Oaks Drive and Walsh Boulevard.
- e. **TRAFFIC CONTROL:**
- Prepare traffic control plan sequence of construction narrative, phase layout sheets as needed to direct traffic around construction activities per Texas Manual of Uniform Traffic Control Devices (TMUTCD).
- f. **WATER QUALITY:**
- Prepare water quality permanent BMPs to comply with TCEQ regulations. Areas of Vegetative Filter Strip will be included on E&S sheets. Vegetative Filter Strips will be used where practical. Water Quality Ponds will include layout and detail sheets. Two (2) water quality ponds have been assumed for this proposal.
- g. **DELIVERABLES:**
- 60% PS&E Submittal
  - 90% PS&E Submittal
  - 100% PS&E Submittal
  - Final PS&E Submittal
  - Draft & Final Water Pollution and Abatement Plan

### 3. PERMITS

- a. **TCEQ Water Pollution and Abatement Plan:**
- The Engineer will submit the Water Pollution and Abatement Plan to TCEQ and will provide responses to comments received.
- b. **TxDOT Coordination** – The Engineer will coordinate with the TxDOT Georgetown Area office for improvements adjacent to FM 1431 and Sam Bass Road at Wyoming Springs Blvd.

- c. UBCWCID Coordination – KFA will meet and coordinate with the Upper Brushy Creek WCID for permitting with respect to the portion of the roadway within 200-feet of SCS Reservoir 13a.

#### 4. BIDDING PHASE SERVICES

##### a. BIDDING PHASE SERVICES:

- Prepare all applicable construction documents for bidding. Attend the pre-bid meeting. Respond to bidder's questions during the bid period. Prepare project addenda (2 assumed) during bid period. Analyze contractor bids, prepare bid tabulation, and make recommendation for award to the apparent low bidder. Attend the pre-construction conference.

#### 5. DELIVERABLES

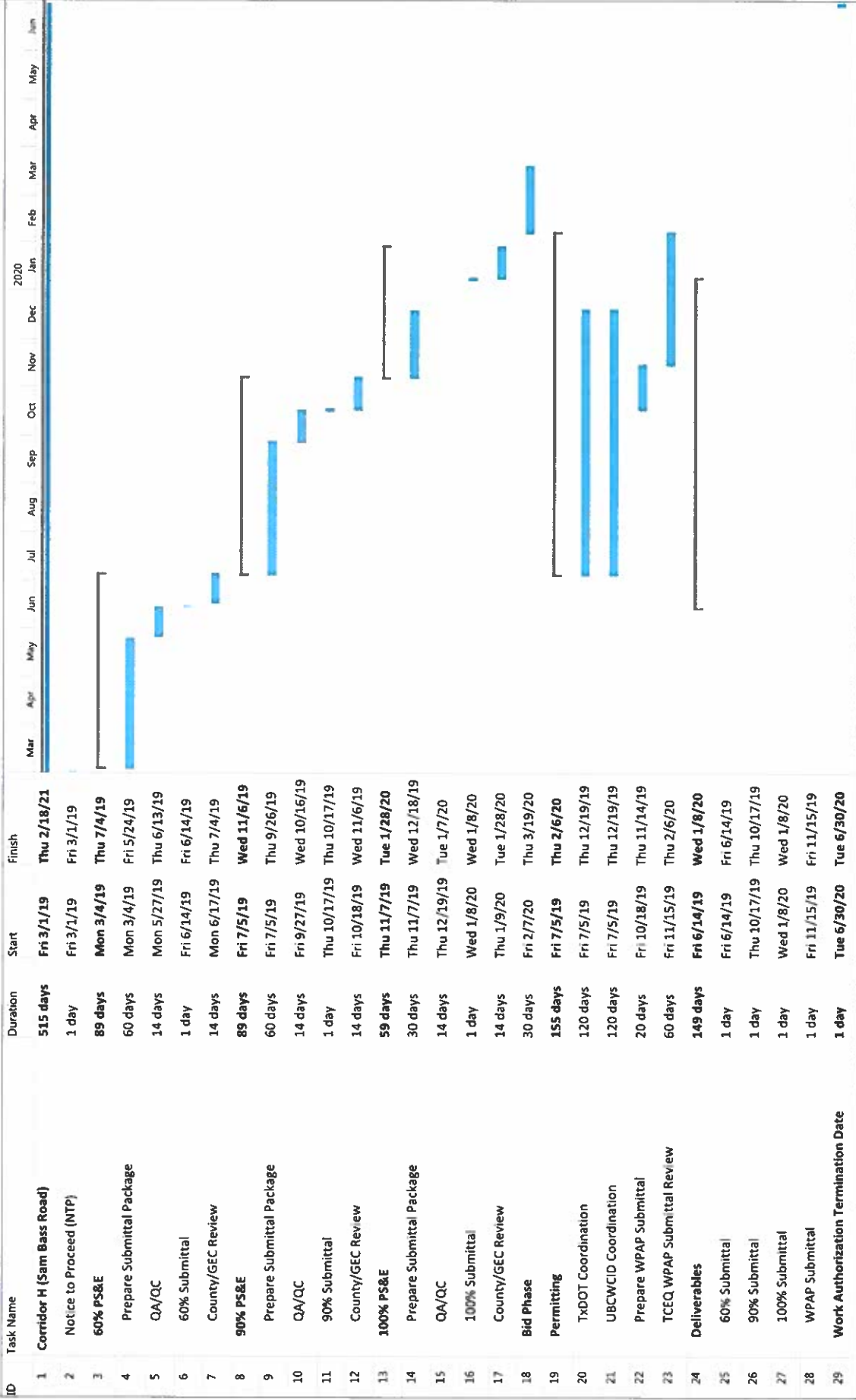
##### a. DOCUMENTS:

- All contract documents, including hard copies and electronic files, shall be turned over to the County at each milestone and at the completion of the project. Documents shall be posted to the County's project management database as requested.

#### 6. EXCLUSIONS

- LOMR and/or CLOMR
- Construction Phase Services
- Utility Coordination or Design
- Environmental services (under previous Work Authorization)
- Surveying (under previous Work Authorization)
- Public Involvement (under previous Work Authorization)
- Illumination Design
- Exclusions listed in individual sections

**WILLIAMSON COUNTY  
TRANSPORTATION CORRIDOR H  
ATTACHMENT C - WORK SCHEDULE**



Project: Sam Bass Schedule  
Date: Mon 2/4/19

Task Split Milestone Summary

Project Summary Inactive Task Inactive Milestone Inactive Summary

Manual Task Duration-only Manual Summary Rollup Manual Summary

Start-only Finish-only External Tasks External Milestone

Deadline Progress Manual Progress

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Attachment D - Fee Schedule  
Transportation Corridor H  
K Friese Associates, Inc.

TASK	KFA	WSP	Total Labor Cost
<b>1. PROJECT MANAGEMENT</b>			
b. MONTHLY PROGRESS REPORTS, INVOICES, AND BILLINGS	\$ 2,880.00	\$ 1,505.89	\$ 4,385.89
c. PROJECT COORDINATION AND ADMINISTRATION	\$ 15,900.00	\$ 1,914.52	\$ 17,814.52
d. PROGRESS COORDINATION MEETINGS (4)	\$ 11,320.00	\$ -	\$ 11,320.00
e. PROJECT SCHEDULE	\$ 1,980.00	\$ -	\$ 1,980.00
<b>2. PS&amp;E PLAN PREPARATION</b>			
b. COVER SHEET	\$ 1,885.00	\$ -	\$ 1,885.00
INDEX OF SHEETS	\$ 1,025.00	\$ -	\$ 1,025.00
GENERAL NOTES	\$ 4,995.00	\$ -	\$ 4,995.00
QUANTITY SUMMARY SHEETS	\$ 9,925.00	\$ -	\$ 9,925.00
PROJECT LAYOUT AND SURVEY NOTES	\$ 3,570.00	\$ -	\$ 3,570.00
HORIZONTAL ALIGNMENT DATA	\$ 3,570.00	\$ -	\$ 3,570.00
TYPICAL SECTIONS	\$ 10,920.00	\$ -	\$ 10,920.00
REMOVAL PLANS	\$ 4,485.00	\$ -	\$ 4,485.00
ROADWAY PLAN AND PROFILES	\$ 63,380.00	\$ -	\$ 63,380.00
INTERSECTION DETAILS	\$ 8,030.00	\$ -	\$ 8,030.00
DRIVEWAY PLAN AND PROFILES	\$ 25,960.00	\$ -	\$ 25,960.00
ROADWAY DETAIL SHEETS	\$ 2,380.00	\$ -	\$ 2,380.00
ROADWAY CROSS SECTIONS	\$ 27,360.00	\$ -	\$ 27,360.00
c. EXISTING DRAINAGE AREA MAP	\$ 2,380.00	\$ -	\$ 2,380.00
ONSITE DRAINAGE AREA MAP	\$ 11,290.00	\$ -	\$ 11,290.00
DRAINAGE PLANS	\$ 21,280.00	\$ -	\$ 21,280.00
CULVERT LAYOUTS	\$ 17,230.00	\$ -	\$ 17,230.00
CULVERT HYDRAULIC DATA	\$ 7,165.00	\$ -	\$ 7,165.00
DRAINAGE STANDARDS	\$ 7,500.00	\$ -	\$ 7,500.00
STORMWATER POLLUTION PREVENTION PLAN (SWPPP)	\$ 1,042.50	\$ -	\$ 1,042.50
EROSION AND SEDIMENTATION CONTROL PLANS	\$ 12,290.00	\$ -	\$ 12,290.00
EROSION AND SEDIMENTATION CONTROL STANDARDS	\$ 1,135.00	\$ -	\$ 1,135.00
d. SIGNING AND PAVEMENT MARKING PLANS	\$ 14,100.00	\$ -	\$ 14,100.00
TRAFFIC SIGNAL PLANS - WYOMING SPRINGS	\$ 660.00	\$ 2,262.45	\$ 2,922.45
TRAFFIC SIGNAL PLANS - RM 1431	\$ 660.00	\$ 16,485.24	\$ 17,145.24
TRAFFIC SIGNAL PLANS - WALSH BLVD	\$ 660.00	\$ 36,396.94	\$ 37,056.94
TRAFFIC SIGNAL PLANS - GREAT OAKS	\$ 660.00	\$ 36,396.94	\$ 37,056.94
TRAFFIC SIGNAL WARRANT STUDY - GREAT OAKS	\$ 660.00	\$ 10,424.50	\$ 11,084.50
TRAFFIC SIGNAL WARRANT STUDY - WALSH BLVD	\$ 660.00	\$ 10,424.50	\$ 11,084.50
TRAVEL DEMAND MODEL UPDATE - ON-CALL	\$ 660.00	\$ 23,500.42	\$ 24,160.42
e. TRAFFIC CONTROL NARRATIVE	\$ 5,670.00	\$ -	\$ 5,670.00
TRAFFIC CONTROL PLANS	\$ 42,540.00	\$ -	\$ 42,540.00
TRAFFIC CONTROL STANDARDS	\$ 3,010.00	\$ -	\$ 3,010.00
f. WATER QUALITY POND LAYOUTS	\$ 8,130.00	\$ -	\$ 8,130.00
WATER QUALITY POND STRUCTURAL PLANS	\$ 352.50	\$ 11,866.19	\$ 12,218.69
g. CONSTRUCTION COST ESTIMATE	\$ 3,700.00	\$ -	\$ 3,700.00
CONSTRUCTION TIME DETERMINATION	\$ 855.00	\$ -	\$ 855.00
PROJECT MANUAL	\$ 1,390.00	\$ -	\$ 1,390.00
PROGRESS SUBMITTALS	\$ 4,840.00	\$ -	\$ 4,840.00
<b>3. PERMITS</b>			
a. TCEQ WPAP	\$ 26,320.00	\$ -	\$ 26,320.00
b. TxDOT COORDINATION	\$ 2,240.00	\$ -	\$ 2,240.00
c. UBCWCID COORDINATION	\$ 4,400.00	\$ -	\$ 4,400.00
<b>4. BIDDING PHASE SERVICES</b>			
a. PRE-BID MEETING	\$ 1,580.00	\$ -	\$ 1,580.00
RESPOND TO BIDDER QUESTIONS	\$ 4,040.00	\$ -	\$ 4,040.00
PREPARE ADDENDA (ASSUME 2)	\$ 1,520.00	\$ -	\$ 1,520.00
BID TABULATION AND RECOMMENDATION	\$ 1,750.00	\$ -	\$ 1,750.00
PRE-CONSTRUCTION CONFERENCE	\$ 2,330.00	\$ -	\$ 2,330.00
<b>LABOR COST:</b>	<b>\$ 414,265.00</b>	<b>\$ 151,177.59</b>	<b>\$ 565,442.59</b>
<b>TOTAL DIRECT EXPENSES COST:</b>	<b>\$ 12,140.00</b>	<b>\$ 598.00</b>	<b>\$ 12,738.00</b>
<b>TOTAL PROJECT COST:</b>	<b>\$ 426,405.00</b>	<b>\$ 151,775.59</b>	<b>\$ 578,180.59</b>

Attachment D - Fee Schedule  
 Transportation Corridor H  
 K Fries Associates, Inc

TASK	Hourly Rate	SHEETS UNITS	Principal	Sr. Roadway	QA/QC	Sr. Drainage	Sr. Project	Project	Engineer In	CADD	Admin.	Sub-Total Hours	Hr/Unit	KFA Labor Cost		
			\$ 250.00	\$230.00	\$190.00	\$187.50	\$165.00	\$125.00	\$100.00	\$90.00	\$15.00					
<b>1. PROJECT MANAGEMENT</b>																
b. MONTHLY PROGRESS REPORTS, INVOICES, AND BILLINGS		12										12	24	2.0	\$ 2,880.00	
c. PROJECT COORDINATION AND ADMINISTRATION			24										24		\$ 15,900.00	
d. PROGRESS COORDINATION MEETINGS (4)		4		16			16	16	16				64	16.0	\$ 11,320.00	
e. PROJECT SCHEDULE								12					12		\$ 1,260.00	
<b>2. PS&amp;E PLAN PREPARATION</b>																
b. COVER SHEET		1		1	0.5			4	4	4			14	14.0	\$ 1,835.00	
INDEX OF SHEETS		1		1				1	2	2	2		8	8.0	\$ 1,025.00	
GENERAL NOTES		10		4	2.0	2	8	16	16				32	3.2	\$ 4,995.00	
QUANTITY SUMMARY SHEETS		6		6	2.0	6	16	16	24				70	11.7	\$ 9,935.00	
PROJECT LAYOUT AND SURVEY NOTES		7		4	1.0		4	8	8				25	3.6	\$ 3,570.00	
HORIZONTAL ALIGNMENT DATA		2		4	1.0		4	8	8				25	12.5	\$ 3,570.00	
TYPICAL SECTIONS		8		8	2.0		20	24	24				76	9.5	\$ 10,200.00	
REMOVAL PLANS		7		2	0.5		2	16	16				37	5.3	\$ 4,455.00	
ROADWAY PLAN AND PROFILES		13		60	2.0		60	120	120	100			482	37.1	\$ 63,340.00	
INTERSECTION DETAILS		8		8	1.0		8	16	16	12			61	12.2	\$ 8,030.00	
DRIVEWAY PLAN AND PROFILES		13		16	2.0		40	60	60	20			198	15.2	\$ 25,960.00	
ROADWAY DETAIL SHEETS		8		2			4	4	4	4			18	3.6	\$ 2,340.00	
ROADWAY CROSS-SECTIONS		17		12			40	80	80				212	2.4	\$ 27,560.00	
e. EXISTING DRAINAGE AREA MAP		1		2			4	4	4				15	3.6	\$ 2,340.00	
ONSITE DRAINAGE AREA MAP		7					16	40	40				105	15.0	\$ 11,280.00	
DRAINAGE PLANS		13					40	60	60				156	14.3	\$ 21,240.00	
CULVERT LAYOUTS		8		2			40	60	60				154	19.3	\$ 17,230.00	
CULVERT HYDRAULIC DATA		8		1			8	20	40				71	8.9	\$ 7,650.00	
DRAINAGE STANDARDS		20		2			8		24	40			72	3.6	\$ 7,500.00	
STORMWATER POLLUTION PREVENTION PLAN (SWPPP)		1			0.5		1						10	9.5	\$ 1,042.50	
EROSION AND SEDIMENTATION CONTROL PLANS		3			1		8	24	40	40			113	16.1	\$ 12,290.00	
EROSION AND SEDIMENTATION CONTROL STANDARDS		3				2			4	4			10	3.3	\$ 1,335.00	
d. SIGNING AND PAVEMENT MARKING PLANS		7		8	2			20	20	32			114	16.3	\$ 14,100.00	
TRAFFIC SIGNAL PLANS - WYOMING SPRINGS		1						4					4	4.0	\$ 660.00	
TRAFFIC SIGNAL PLANS - RM 141		1						4					4	4.0	\$ 660.00	
TRAFFIC SIGNAL PLANS - WALSH BLVD		1						4					4	4.0	\$ 660.00	
TRAFFIC SIGNAL PLANS - GREAT OAKS		1						4					4	4.0	\$ 660.00	
TRAFFIC SIGNAL WARRANT STUDY - GREAT OAKS		1						4					4	4.0	\$ 660.00	
TRAFFIC SIGNAL WARRANT STUDY - WALSH BLVD		1						4					4	4.0	\$ 660.00	
TRAVEL DEMAND MODEL UPDATE - ON-CALL		1						4					4	4.0	\$ 660.00	
e. TRAFFIC CONTROL NARRATIVE		1		8	1.0		16	8					33	33.0	\$ 5,670.00	
TRAFFIC CONTROL PLANS		10		32	2.0		60	60	80	40			314	24.2	\$ 47,540.00	
TRAFFIC CONTROL STANDARDS		16		2			4	6	6	6			34	3.5	\$ 3,010.00	
f. WATER QUALITY POND LAYOUTS		2			2.0		4		24	40			70	35.0	\$ 8,190.00	
WATER QUALITY POND STRUCTURAL PLANS		2					1						2	1.0	\$ 352.50	
g. CONSTRUCTION COST ESTIMATE				2	2			4	8	12			28		\$ 3,700.00	
CONSTRUCTION TIME DETERMINATION				1	0.5			2		2			6		\$ 855.00	
PROJECT MANUAL				1				4	4				9		\$ 1,390.00	
PROGRESS SUBMITTALS		4						16	8				16	40	10.0	\$ 4,340.00
<b>3. PERMITS</b>																
a. TCEQ WPAP		10					32	8	40	80	60	8	228	22.8	\$ 26,320.00	
b. TxDOT COORDINATION		2		4				8					12	6.0	\$ 2,240.00	
c. UBCWUD COORDINATION		2		4			8	12					24	12.0	\$ 4,400.00	
<b>4. BIDDING PHASE SERVICES</b>																
a. PRE-BID MEETING				4				4					8		\$ 1,540.00	
RESPOND TO BIDDER QUESTIONS				4				8	8	8			28		\$ 4,040.00	
PREPARE ADDENDA (ASSUME 2)		2		2				4		4			10	5.0	\$ 1,520.00	
BID TABULATION AND RECOMMENDATION				1				8		2			11		\$ 1,750.00	
PRE-CONSTRUCTION CONFERENCE				40				4	4				120		\$ 2,310.00	
TOTAL NUMBER OF SHEETS:																
HOURS:		24	223	31	138	566	728	888	548	36						
LABOR COST:		\$ 6,000	\$ 51,290	\$ 5,890	\$ 25,875	\$ 93,390	\$ 91,000	\$ 88,800	\$ 49,320	\$ 2,700					\$ 414,265.00	
		0.8%	7.0%	1.0%	4.3%	17.0%	22.9%	27.9%	17.2%	1.1%					\$ 414,265.00	

DIRECT EXPENSES:		Travel:						
Mileage		1500 miles				\$ 0.56	\$ 840.00	
Copies:		1000 copies				\$ 0.20	\$ 200.00	
Reproduction Media (mylar)								
Misc Expenses:		11.5				\$ 3,000.00	\$3,000.00	
UBCWUD Review Fee		4 each				\$ 25.00	\$100.00	
Express delivery		11.5				\$ 8,000.00	\$8,000.00	
TCEQ Review Fee								
<b>TOTAL DIRECT COST:</b>							<b>\$ 12,140.00</b>	
<b>TOTAL PROJECT COST:</b>							<b>\$ 426,405.00</b>	

Attachment D - Fee Schedule  
 Transportation Corridor H  
 Parsons Brinckerhoff

TASK	Hourly Rate	SHEETS/ UNITS	PERSONNEL										Sub Total Hours	Hr/Unit	PB Labor Cost		
			Principal Charge	Project Manager	Structural Engineer	Supervising Traffic Eng.	Lead Traffic Engineer	Sr. CADD Tech	Project Engineer	ITT	Project Accountant						
<b>WSP</b>																	
<b>I. PROJECT MANAGEMENT</b>																	
b. MONTHLY PROGRESS REPORTS, INVOICES, AND BILLINGS		12	1	2										9	12	1.0	\$ 1,506.59
c. PROJECT COORDINATION AND ADMINISTRATION				6	2	2									10		\$ 1,914.52
d. PROGRESS COORDINATION MEETINGS (4)		4															\$ -
e. PROJECT SCHEDULE																	\$ -
<b>II. PHASE PLAN PREPARATION</b>																	
b. COVER SHEET		1															\$ -
INDEX OF SHEETS		1															\$ -
GENERAL NOTES		10															\$ -
QUANTITY SUMMARY SHEETS		6															\$ -
PROJECT LAYOUT AND SURVEY NOTES		2															\$ -
HORIZONTAL ALIGNMENT DATA		2															\$ -
TYPICAL SECTIONS		8															\$ -
REMOVAL PLANS		7															\$ -
ROADWAY PLAN AND PROFILES		13															\$ -
INTERSECTION DETAILS		5															\$ -
DRIVEWAY PLAN AND PROFILES		13															\$ -
ROADWAY DETAIL SHEETS		5															\$ -
ROADWAY CROSS SECTIONS		17															\$ -
c. EXISTING DRAINAGE AREA MAP		1															\$ -
ONSITE DRAINAGE AREA MAP		1															\$ -
DRAINAGE PLANS		7															\$ -
CULVERT LAYOUTS		3															\$ -
CULVERT HYDRAULIC DATA		3															\$ -
DRAINAGE STANDARDS		20															\$ -
STORMWATER POLLUTION PREVENTION PLAN (SWPPP)		1															\$ -
EROSION AND SEDIMENTATION CONTROL PLANS		7															\$ -
EROSION AND SEDIMENTATION CONTROL STANDARDS		3															\$ -
d. SIGNING AND PAVEMENT MARKING PLANS		7															\$ -
TRAFFIC SIGNAL PLANS - WYOMING SPRINGS		1					1	3		6	9			19	19.0		\$ 2,262.45
TRAFFIC SIGNAL PLANS - RLI1431		1					9	27	42		54			132	132.0		\$ 16,467.24
TRAFFIC SIGNAL PLANS - WALSH BLVD		1					10	46	104		144			306	306.0		\$ 36,786.94
TRAFFIC SIGNAL PLANS - GREAT OAKS		1					10	46	104		144			306	306.0		\$ 36,786.94
TRAFFIC SIGNAL WARRANT STUDY - GREAT OAKS		1					2	12			60			94	94.0		\$ 10,424.50
TRAFFIC SIGNAL WARRANT STUDY - WALSH BLVD		1					2	12			60			94	94.0		\$ 10,424.50
TRAVEL DEMAND MODEL UPDATE - ONCALL		13					20	46			120			186	12.4		\$ 23,500.42
e. TRAFFIC CONTROL NARRATIVE																	\$ -
TRAFFIC CONTROL PLANS		13															\$ -
TRAFFIC CONTROL STANDARDS		16															\$ -
f. WATER QUALITY POND LAYOUTS		2															\$ -
WATER QUALITY POND STRUCTURAL PLANS		2		3	17				30	16	25			94	47.0		\$ 11,866.19
g. CONSTRUCTION COST ESTIMATE																	\$ -
CONSTRUCTION TIME DETERMINATION																	\$ -
PROJECT MANUAL																	\$ -
PROGRESS SUBMITTALS																	\$ -
<b>III. PERMITS</b>																	
a. TCEQ WPAP		10															\$ -
b. TxDOT COORDINATION		2															\$ -
c. UPRC WCD COORDINATION		3															\$ -
<b>IV. BIDDING PHASE SERVICES</b>																	
a. PRE-BID MEETING																	\$ -
RESPOND TO BIDDER QUESTIONS																	\$ -
PREPARE ADDENDA (ASSHAE 2)		2															\$ -
BID TABULATION AND RECOMMENDATION																	\$ -
PRE-CONSTRUCTION CONFERENCE																	\$ -
TOTAL NUMBER OF SHEETS:			1	11	19	56	196	200	22	659	9						
HOURS:																	
LABOR COST:			\$ 255	\$ 2,039	\$ 3,429	\$ 12,366	\$ 20,767	\$ 33,236	\$ 2,480	\$ 67,725	\$ 680						\$ 151,177.59
			0.1%	0.9%	1.3%	4.3%	13.8%	22.3%	1.8%	57.6%	0.7%						\$ 151,177.59

DIRECT EXPENSES:											
Travel:											
Mileage											
Traffic Counts				50	miles				\$ 0.56	\$28.00	
				1	each				\$ 500.00	\$500.00	
Copies:											
Reproduction				100	copies				\$ 0.20	\$20.00	
Misc Expenses:											
Express delivery				2	each				\$ 25.00	\$50.00	
<b>TOTAL DIRECT COST:</b>											\$ 598
<b>TOTAL PROJECT COST:</b>											\$ 151,775.59

**EXHIBIT D – RATE SCHEDULE  
TRANSPORTATION CORRIDOR H  
K FRIESE & ASSOCIATES, INC.**

**Raba Kistner Consultants, Inc.**

Senior Geotechnical Engineer.....	\$187.46
Geotechnical Engineer.....	\$128.75
Graduate Engineer.....	\$107.12
Logger (Geologist).....	\$107.12
Drafting.....	\$ 96.82
Admin/Clerical.....	\$ 66.95

**Direct Expenses**

Drill Rig Mobilization.....	\$363.00/each
Drilling and Sampling.....	\$ 18.15/linear foot
Traffic Control.....	\$ 927.00/day
Logger Truck.....	\$ 58.92/day
Lab Testing (Moisture Content).....	\$ 9.37/each
Lab Testing (Atterberg Limits).....	\$ 96.41/each
Lab Testing (Minus 200-mesh sieve).....	\$ 53.56/each
Lab Testing (Sulfate Testing).....	\$ 96.41/each
Lab Testing (Lime Series Curve).....	\$ 390.00/each
Lab Testing (Moisture/Density Test).....	\$ 262.44/each
Lab Testing (Resilient Modulus).....	\$1,500.00/each

**Danielle Skidmore Consulting, LLC**

Senior Drainage Engineer.....	\$135.00
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