Project Same, SH 29 and CR 10 Haprovements



CONTRACT FOR ENGINEERING SERVICES SUPPLEMENTAL AGREEMENT NO. 1 TO THE PROFESSIONAL SERVICES AGREEMENT

THIS SUPPLEMENTAL AGREEMENT to contract for engineering services is by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and Steger & Bizzell Engineering, Inc. (the "Engineer") and becomes effective when fully executed by both parties.

WHEREAS, the County and the Engineer executed a contract on April 24, 2007;

WHEREAS, the not-to-exceed fee in Exhibit 1, Section 1, Item 1.1 in the agreement is the sum of \$394,345; and,

WHEREAS, the "Compensation Cap" in Exhibit 1, Section 4, Item 4.3 limits the maximum amount payable under the agreement to \$434,000; and,

WHEREAS, the Hourly Rates in Exhibit II are limited to the rates noted; and,

WHEREAS, it has become necessary to amend the agreement.

AGREEMENT

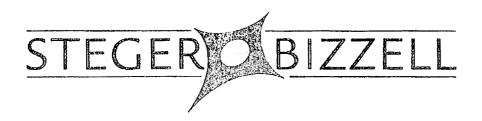
NOW, THEREFORE, premises considered, the *County* and the *Engineer* agree that said contract is amended as follows:

- 1. The not-to-exceed fee in Exhibit 1, Section 1, Item 1. I is hereby increased from \$394,345 to \$752,303.
- II. The Compensation Cap in Exhibit 1, Section 4, Item 4.3 is hereby increased from \$434,000 to \$800,000.
- III. The hourly Rates in the original Exhibit II are hereby amended as shown in the attached revised Exhibit II.

All other provisions are unchanged and remain in full force and effect.

IN WITNESS WHEREOF, the *County* and the *Engineer* have executed this supplemental agreement in duplicate,

ENGINEER: By: Signature	By: Signature
Printed Name	Printed Name
Title	Title
10/21/08 Date	11-5-01 Date



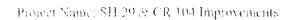
Rate Schedule Effective June 26, 2008

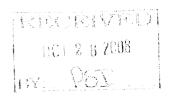
(All Rates Per Hour)

Engineer (Principal)	\$175.00
Engineer (P.E.)	\$132.00
Registered Surveyor	\$110.00
Project Specialist-2	\$160.00
Project Manager	\$105.00
GIS Technician	\$ 90.00
Senior Technician	\$105.00
Engineer in Training (E.I.T.)	\$105.00
Graduate Engineer	\$100.00
Surveyor in Training (S.I.T.)	\$ 88.00
Geologist	\$110.00
CADD Technician/Draftsman	\$ 87.00
Clerical	\$ 65.00
Field Inspector	\$ 55.00
1 Man Survey	\$110.00
2 Man Survey Party	\$120.00
3 Man Survey Party	\$140.00
4 Man Survey Party	\$165.00
GPS Survey Party	\$160.00
Technician	\$ 95.00

Mileage 58.5¢/Mile

Note: Expert Witness Fees is charged at 1.5 times hourly rate.





ATTACHMENT A

WORK AUTHORIZATION NO. 4

This Work Authorization is made pursuant to the terms and conditions of the Agreement entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and Steger & Bizzell Engineering, Inc. (the "Engineer").

Part1. The Engineer will provide the following engineering services:

County Road 104, Phase 2 Improvements consists of improving 1.6 miles of County Road 104 County Road from the terminus of the recently completed County Road 104 Phase 1 Improvements for approximately 1.6 miles to SH130. The project includes the following tasks:

- 1. Support the preparation of environmental documents for this project to perform necessary due diligence, and to satisfy TxDOT requirements for the replacement of the low water crossing at Mankins Branch with off-system bridge funds (NEPA Categorical Exclusion).
- 2. Prepare field notes and survey plats for right of way and utility easement acquisition.
- 3. Coordinate the relocation of utilities as necessary. Coordinate with Jonah SUD to relocate water line along the proposed route as necessary.
- 4. Prepare Construction Plans, Specifications and Cost Estimates (PS&E) for the construction of the road and two associated bridges in compliance with City of Georgetown and Williamson County requirements, and prepare plans for Mankins Branch bridge to also comply with TxDOT requirements.

The existing County Road 104 right of way varies from 40' to 80' in width, and the roadway consists of a narrow two-lane section of varying width. The proposed CR104 will be improved to a 4-lane urban section from Phase I terminus south to Ronald Road, where the road will transition to a 40'-wide pavement section with two lanes and 8' paved shoulders. The road will be designed in accordance with City of Georgetown standards for lane widths, right of way widths, and drainage requirements.

The work to be performed by the Engineer under this work authorization shall include schematic development, surveying, plans, specifications and engineer's estimates (PS&E), project manual, and management of the construction bidding process.

- Part 2. The maximum amount payable for services under this Work Authorization without modification is \$357,958.
- Part 3. Payment to the *Engineer* for the services established under this Work Authorization shall be made in accordance with the Agreement.
- Part 4. This Work Authorization shall become effective on the date of final acceptance of the parties hereto and shall terminate on March 31, 2010, unless extended by a Supplemental Work Authorization.
- Part 5. This Work Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

0 × 12/22/02

ATTACHMENT A (con't.)

Part 6. This Work Authorization is hereby accepted and acknowledged below.

ENGINEER:	COUNTY:
	Williamson County, Texas
By: Signature	By:Signature
PERRY CHTECKER	Dan A. Gattis
Printed Name	Printed Name
<u> </u>	County Judge
Title	Title
10/27/00	
Date '	Date

LIST OF EXHIBITS

Exhibit A - Services to be Provided by County

Exhibit B - Services to be Provided by Engineer

Exhibit C - Work Schedule

Exhibit D - Fee Schedule (based on approved rates in PSA Exhibit II executed by Commissioners Court action)

Project Description:

County Road 104, Phase 2 Improvements consists of improving 1.6 miles of County Road 104 County Road from the terminus of the recently completed County Road 104 Phase 1 Improvements for approximately 1.6 miles to SH130. The project includes the following tasks:

- 1. Support the preparation of environmental documents for this project to perform necessary due diligence, and to satisfy TxDOT requirements for the replacement of the low water crossing at Mankins Branch with off-system bridge funds (NEPA Categorical Exclusion).
- 2. Prepare field notes and survey plats for right of way and utility easement acquisition.
- 3. Coordinate the relocation of utilities as necessary. Coordinate with Jonah SUD to relocate water line along the proposed route as necessary.
- 4. Prepare Construction Plans, Specifications and Cost Estimates (PS&E) for the construction of the road and two associated bridges in compliance with City of Georgetown and Williamson County requirements, and prepare plans for Mankins Branch bridge to also comply with TxDOT requirements.

The existing County Road 104 right of way varies from 40' to 80' in width, and the roadway consists of a narrow two-lane section of varying width. The proposed CR104 will be improved to a 4-lane urban section from Phase I terminus south to Ronald Road, where the road will transition to a 40'-wide pavement section with two lanes and 8' paved shoulders. The road will be designed in accordance with City of Georgetown standards for lane widths, right of way widths, and drainage requirements.

Williamson County shall provide the following services in conjunction with this project, and shall assist the ENGINEER as required:

I. Planning and Programming

Coordinate meetings between Commissioners, County, City and TxDOT to discuss project issues and make decisions related to the project

II. Preliminary Design

1. Coordinate a Public Meeting to be scheduled by Engineer

III. Environmental

1. Evaluate the need for permits with assistance from ENGINEER

2. Prepare environmental documents as required to receive environmental clearances.

IV. Right of Way and Utilities

- 1. Assist Engineer in meetings with landowners, as needed
- 2. Coordinate and resolve conflicts with landowners who refuse to give right of entry or are otherwise hostile with respect to ENGINEER's ability to complete Scope of Services
- 3. Acquire right of way
- 4. Assist Engineer in meetings with affected utilities, as needed

V. PS&E Development

- 1. Attend Design Conference
- 2. County shall provide a 30/60/90/100 check list for submittal package requirements

VI. Letting

- 1. Advertise the project for construction
- 2. Host pre-bid conference
- 3. Host bid opening

Project Description:

County Road 104, Phase 2 Improvements consists of improving 1.6 miles of County Road 104 County Road from the terminus of the recently completed County Road 104 Phase 1 Improvements for approximately 1.6 miles to SH130. The project includes the following tasks:

- 1. Support the preparation of environmental documents for this project to perform necessary due diligence, and to satisfy TxDOT requirements for the replacement of the low water crossing at Mankins Branch with off-system bridge funds (NEPA Categorical Exclusion).
- 2. Prepare field notes and survey plats for right of way and utility easement acquisition.
- 3. Coordinate the relocation of utilities as necessary. Coordinate with Jonah SUD to relocate water line along the proposed route as necessary.
- 4. Prepare Construction Plans, Specifications and Cost Estimates (PS&E) for the construction of the road and two associated bridges in compliance with City of Georgetown and Williamson County requirements, and prepare plans for Mankins Branch bridge to also comply with TxDOT requirements.

The existing County Road 104 right of way varies from 40' to 80' in width, and the roadway consists of a narrow two-lane section of varying width. The proposed CR104 will be improved to a 4-lane urban section from Phase 1 terminus south to Ronald Road, where the road will transition to a 40'-wide pavement section with two lanes and 8' paved shoulders. The road will be designed in accordance with City of Georgetown standards for lane widths, right of way widths, and drainage requirements.

The work to be performed by the Engineer under this work authorization shall include schematic development, surveying, plans, specifications and engineer's estimates (PS&E), project manual, and management of the construction bidding process, and is more completely outlined as follows:

FC 110 Route and Design Studies

- 1. Perform site visit
- 2. Obtain related data, plats, plans, studies and reports
- 3. Obtain information on existing utilities
- 4. Obtain hydraulics studies
- 5. Prepare Design Schematic Layout including
 - a. Locations of main lanes and intersections
 - b. Direction of flow and number of lanes on all roadways
 - c. Proposed typical sections
 - d. Design speeds

- e. Proposed pavement sections/designs
- f. Preliminary vertical and horizontal alignments of main lanes, including horizontal and vertical curve data, including "K" values
- g. Existing and proposed ROW limits
- h. Preliminary right of way requirements
- 6. Assemble preliminary cost estimates
- 7. Develop Roadway Design Criteria (with TxDOT/County)

FC 130 Right-of-Way Data

- 1. Develop ownership information
- 2. Obtain Right of Entry for project team
- 3. Prepare a right of way map, parcel plats and field notes
- 4. Perform closure computations for each parcel
- 5. Right of way map, parcel maps and field notes shall be revised as required due to changes in highway design, ownership changes or revised parcel numbering.
- 6. Assist County in right-of-way and casement acquisition as required
- 7. Determine utilities that will require relocation
- 8. Coordinate utility adjustment plans with providers (utility owners prepare plans and adjust facilities)
- 9. Stake proposed right of way including permanent monumentation when appropriate

FC 150 Field Surveying

- 1. Primary Project Control establish horizontal and vertical control points
- 2. Establish benchmark circuit throughout the project
- 3. Profile and cross-section intersecting streets for tie into project
- 4. Cross section in vicinity of existing creeks and profile drainage structures
- 5. Soil core hole staking (as needed)
- 6. Stake project base line and appropriate offsets
- 7. Tie base line to existing ROW monuments
- 8. Locate and map x, y and z coordinates of existing underground utilities, as uncovered by utility companies
- 9. Locate and map overhead utilities, utility poles, fences, and any visible junction boxes, valve boxes and manholes.

FC 160 Roadway Design Controls

- 1. Geometric Design
 - a. Preliminary horizontal and vertical alignments
 - b. Schematic layout
 - c. Circulate geometric design for County and TxDOT review
 - d. Obtain final approval of geometric design schematic
- 2. Prepare typical section sheets
- 3. Prepare plan and profile sheets
- 4. Prepare design cross-section sheets
- 5. Determine cut and fill quantities

- 6. Perform geotechnical investigation
- 7. Prepare pavement designs for all applicable roadways
- 8. Coordinate pavement design with TxDOT and County

FC 161 Drainage

- 1. Perform hydrologic studies at existing culvert crossings and intersections as required
 - a. Drainage area maps, showing existing conditions and proposed improvements
 - b. Hydrologic data/discharge determination
- 2. Prepare Hydraulic Drainage Study
 - a. Determine FEMA floodway requirements
 - b. Determine impact of proposed drainage plan on existing creeks
 - Determine if existing culverts and drainage structures can be extended or must be replaced based on current hydrologic data and current TxDOT design guidelines
- 3. Prepare layout, structural design and detailing of drainage features
- 4. Culvert replacement and extension plans
- 5. Storm sewer plans (if required)
- 6. Outfall channels within the right-of-way
- 7. Summary of quantities for culverts and storm sewer items
- 8. Stormwater Pollution Prevention Plan

FC 162 Signing, Markings and Signalization

- 1. Signing and Markings Layout including:
 - a. Roadway layout
 - b. Centerline with station numbering
 - c. ROW lines
 - d. Culverts and other structures that present a hazard to traffic
 - e. Approximate location of utilities
 - f. Existing signs to remain, to be relocated, to be removed
 - g. Proposed signs
 - h. Proposed markings
 - i. Quantities of existing pavement markings to be removed
 - j. Proposed delineators and object markers
- 2. Summary of small signs tabulation
- 3. Summary of signage, striping and details tabulation
- 4. Sign detail sheets
- 5. Final pavement marking and delineation layouts
- 6. Traffic signals
 - a. Develop justification (warrant) and make recommendations
 - b. Layout including details, quantities, estimates and specifications

FC 163 Miscellaneous (Roadway)

- 1. Meet with utility owners to develop relocation plans and schedule
- 2. Update project schedule to reflect anticipated relocation completion

- 3. Depict existing utility locations on the schematic map, using available data
- 4. Prepare Utility location plans (relocation plans and construction by utility providers)
- 5. Prepare Traffic Control Plan
- 6. Prepare Detours Plan, including exhibit and narrative for presentation to and approval by Commissioners Court prior to closure of any County facility.
- 7. Prepare Sequence of Construction
- 8. Prepare Removal Item Plans, including pavement, culverts headwalls, signs, fencing
- 9. Develop Miscellaneous Details
- 10. Prepare Engineer's Estimates
- 11. Prepare Specifications and General Notes
- 12. Develop Project Manual
- 13. Bidding Phase Services
 - a. Prepare all construction documents, including project manual, for bidding
 - b. Attend the pre-bid meeting and furnish construction documents to prospective bidders
 - c. Respond to bidders' questions during pre-bid period
 - d. Prepare and distribute project addenda during pre-bid period
 - e. Analyze bids, prepare bid tabulation, check references and make recommendation for award to qualified low bidder
 - f. Furnish construction documents to low bidder
 - g. Attend pre-construction conference

FC 170 Bridge Design

- 1. Preparation of Structural Details
- 2. Preparation of Bridge Layouts
- 3. (unused)
- 4. Foundation Studies
- 5. Bridge Total Quantities and Cost Estimates
- 6. Bridge Special Provisions and Specifications
- 7. Bearing Seat Elevations for each beam or girder
- 8. Prepare Removal Item Plans, incl. pavement, culverts, signs, fencing

Exclusions

Categorical Exclusion (except for support for environmental consultant) Construction Management

Project Deliverables:

Including but not limited to the following:

- 1. All electronic files, including documents, DTM, schematic design, DSR, PS&E and any other documents and design files generated for this project.
- 1. Engineer's Estimated Probable Cost of Construction shall be furnished at the 30%, 90% and Final submittals.
- 2. Design schedule, in Microsoft Project format, shall be updated and furnished at each review submittal.

- 3. Schematic plots.
- 4. Roll plot color exhibit, to appropriate scale, showing the schematic alignment in relation to the ROW/easements. This information shall be shown in reference to design schematic, with stationing, overlaid on an aerial photograph of the project area. A minimum of three copies shall be provided.
- 5. Right-of-way map, parcel plats and field notes for right of way acquisition
- 6. Contract documents, including hard copies and electronic files, shall be turned over to the County at completion of project. Contract documents shall be posted to the County's Internet project management database as requested.
- 7. A 30%, 60%, 90% and 100% (Final) design submittal shall be included. The project construction manual shall be included with the 90% and 100% submittals, and furnished as part of the bid documents.
- 8. Engineer's Estimated Probable Cost of Construction shall be furnished at the 30%, 90% and Final submittals.
- 9. Design schedule shall be updated and furnished with each review submittal.
- 10. Plans shall be developed to half-scale, 11" x 17".
- 11. Permits ENGINEER shall be responsible for securing all required permits and agreements, with direction and coordination provided by OWNER, as required.
- 12. Upon approval of the contract and Notice to Proceed, the ENGINEER shall host a design kick-off meeting with the County/HNTB to discuss the project development plan and schedule. Issues to be discussed at the kickoff meeting include:
 - i. Project history and relevant background information
 - ii. Review of contract scope and schedule
 - iii. Roadway Design Criteria
 - iv. Project communication and protocol
- 13. The Engineer shall prepare responses to the plan review comments and plan to attend a comment resolution meeting following each design review.
- 14. Plans shall be developed to the level and standard of detail as set forth in the Williamson County Design Criteria Manual Chapter 7, Plan Preparation, latest edition and City of Georgetown standards, as required.

Mon 19/27/08

		VVOIK	Authorization #4				
ID Task Name	Duration	Start	Finish	% Complete	SOOS SOON SOON	2009 DJFMAMJJASONI	2010 DJFMAMJJAS (
Preliminary Design & Calculations	3 mons	Mon 6/2/08	Sat 8/30/08			M. F. S. J. P. J. Ph. J. Children William Committee Comm	
² Schematic Development	150 days	Tue 7/1/08	Thu 11/27/08	80%	V	•	
³ Preliminary	4 mons	Tue 7/1/08	Tue 10/28/08	100%	<u> </u>		
⁴ Final	1 mon	Wed 10/29/08	Thu 11/27/08	0%		-	
⁵ Plans, Specifications & Estimates	180 days	Fri 11/28/08	Tue 5/26/09	0%			
⁶ 30%	3 mons	Fri 11/28/08	Wed 2/25/09	0%	-		
⁷ 60%	1 mon	Thu 2/26/09	Fri 3/27/09	0%			
90%	1 mon	Sat 3/28/09	Sun 4/26/09	0%			
9 100%	1 mon	Mon 4/27/09	Tue 5/26/09	0%	_		
¹⁰ Environmental Approval (CE)	5 mons	Fri 11/28/08	Sun 4/26/09	0%	-		
11 Right-of-Way	2 mons	Mon 4/27/09	Thu 6/25/09	0%			
¹² Utility Relocation	2 mons	Fri 6/26/09	Mon 8/24/09	0%		The second secon	
13 Letting	1 mon	Tue 8/25/09	Wed 9/23/09	0%			
14 Construction	12 mons	Thu 9/24/09	Sat 9/18/10	0%			

Task Progress Milestone Critical Path Summary Deadline

\[
\text{Vault\Company\PROJECTS 2006\21120-2 CR104 Phase II\DOCUMENTS\SCHEDULES\SH2\text{8 CR104 WS.mpp}}
\]

EXHIBIT D / FEE ESTIMATE

WORK AUTHORIZATION NO. 4 EXHIBIT D - FEE SCHEDULE ENGINEER: STEGER BIZZELL

PROJECT SCOPE: SH 29 and CR 104 Improvements

Date: October 10, 2008

SH 29 and CR 104 Improvements Williamson County, Texas

TASK AND DESCRIPTION	Shoets			Registered		Project	Senior	Engineer	CADD		3-Man		Contract		Hours
	-	(Principal)					Technician	In Training	Technician			Survey	Fee	Fees	/Sheet
Hourly Rate	<u> </u>	175	132	110	160	105	105	105	87	65	140	160	ļ		
	<u> </u>								 		 	 	-	 	├ ──
FC 440 P 4 4 P 1 C4 - 41	-						 		l			 		 	├
FC 110 Route and Design Studies 1. Perform site visit	 			2					 			ļ	<u> </u>	430	
Obtain related data, plats, plans, studies and reports						4		4	-	_		 	 	840	
Obtain related data, plats, plans, studies and reports Obtain information on existing utilities	┼			8		16	 				16	 		4.800	
Obtain Information on existing durings Obtain hydraulics studies				°		2		 	-					210	
Obtain hydratiles studies Prepare Design Schematic Layout						6	1	40	40	8	 	 	 	8,830	
Subtotal Hours:				10		30		44				 	 	0,000	+
Subtotal Fees:	ļ			1,100		3,150		4.620						15,110	
FC 130 Right-of-Way Data						0.100		7,020	5,400	320	-,240	 	 	10,110	
Develop ewnership information						4		ļ	!				 	420	+
Obtain Right of Entry for project team								-							+
Prepare a right of way map, parcel plats and field notes			-	60				<u> </u>	80	2				13.690	
Perform closure computations for each parcel	 			4			6					-	 	1,070	
Revise right of way map, parcel maps and field notes as required			3	4				 	3					1.097	
Kevise right of way map, putch maps and redo rolles as required Assist County in right-of-way and easement acquisition as required		2				-		 		2		 	 	695	
Assist County in ingin-or-way and easement acquisition as required Dotermine utilities that will require relocation	 	- 8		-	4	4	8		-		1	+		3.860	
Dotermine utilities that will require relocation Coordinate utility adjustment plans with providers	 	8		1	4	40		 	h		+ 4	 	 	5,974	
Stake proposed right of way including permanent monumentation	 			1		40		 			40	1 3		6,190	
9 Stake proposed right of way including permanent monumentation Subtotal Hours:	 -	18	5			49	14		83	4	44			0,190	
Subtotal Fees:	 	3,150		7,810	640				7,221	260				32,996	
FC 150 Field Surveying		3,130	- 000	7,810	0.0	3,143	1.470		1,221	250	0,100	400		32,330	<u>'</u>
Primary Project Control – establish horizontal and vertical control points	 			8		2					4	4		2.290	
Establish benchmark circuit throughout the project	 		_	2		4		4			2			1,340	
Profile and cross-section intersecting streets for tie into project	-			2	2						40			7.241	
Cross section in vicinity of existing creeks and profile drainage structures	-				1		2		3		3			1.051	
Soll core hole staking (as needed)				4	<u>.</u>			2				3		1,235	
Soli colle note staking (as needed) Stake project base line and appropriate offsets	-	····					ļ .	- 2			6			1.050	
7. Tie base line to existing ROW monuments	-				-				1					87	
Locate existing underground utilities	1			12				1	1		4			2,072	
Docate utilities, fences, junction boxes, valve boxes, etc.	-			16				40			4			6,694	
Subtotal Hours:	-			44	3	9		53	10		63	7			
Subtotal Fees:				4,840	480	945			870		8,820		<u> </u>	23,060	
FC 160 Roadway Design Controls	 							5,555	***						†
1. Geometric Design	1										-				t .
a. Preliminary horizontal and vertical alignments	 	_	3				2	8	4					1,794	†
b. Schematic lavout			8		4	2	2	5		8			-	4.031	
c. Circulate geometric design for County and City review	1	2												350	
d. Obtain final approval of geometric design schematic	-	2			3		8	2	3					2.246	
2. Prepare typical section sheets			16		2		8		- 6				i .	3.899	
Prepare plan and profile sheets		- 2		3	- 8	8						<u> </u>		18,892	
Prepare design cross-section sheets		1		4	8	3			8					10,838	
5. Determine cut and fill quantities			4			2	4		2			i		1,647	
Obtain pavement designs for all applicable roadways		1				1							15,000		
Subtotal Hours:		8	53	7	25	18		130	73	8			15,000		
Subtotal Fees:	 	1,400	6,996	770	4,000	1,890	8,400	13,650	6,351	520			15,000		
FC 161 Drainage	\vdash		2,200					2,300							_
Perform hydrologic studies at existing culvert crossings and intersections	1													 	1
Brainage area maps, showing existing conditions and improvements			2		1	2	2		2					1,018	
b. Hydrologic data/discharge determination	<u> </u>	4		1		1								915	
2. Preparo Hydraulic Drainago Study				1					i - i	4				260	1
Determine FEMA floodway requirements	1			i	1	2								370	
b. Determine impact of proposed drainage plan on existing creeks			1		2	2		-	2					836	
c. Culvert extension/replacement determination						<u>-</u>			-					1	i —
Prepare layout of drainage features			-											1	!
Culvert replacemetri and extension plans	† <u>-</u>		2			4			2					858	1
5. Storm Sewer Plans (as required)	t	24				20	80		24				l	16,788	
Outfall channels within right of way						~~~								1	$\overline{}$
Summary of quantities for culverts and storm sewer items		1				4	8		1				· · · · · · · · · · · · · · · · · · ·	1,522	1
			2			4	8		8					2.220	t
8. Stormwater Poliution Prevention Plan															

WORK AUTHORIZATION NO. 4 EXHIBIT D - FEE SCHEDULE ENGINEER: STEGER BIZZELL

PROJECT SCOPE: SH 29 and CR 104 Improvements

Date: October 10, 2008

EXHIBIT D / FEE ESTIMATE

SH 29 and CR 104 Improvements
Williamson County, Texas

Subtotal Fees:	5.075	924	110	640	4,095	10,290		3,393	260				24,787
FC 162 Signing, Markings and Signalization		T				I							
Signing and Markings Layout	1			8	8	. 2		20					4.245
Summary of small signs tabulation								1					
Summary of signange, striping and delineation	4	8				2		40					6.286
4. Sign detail sheets			l		3	20							2.415
Final payoment marking and delineation layouts		I					1						1
Traffic signats				1				1					
Develop justification (warrant) and make recommendations					i							İ	1
b. Layout including details, quantities, estimates and specifications													
Subtotal Hours:	5	8		8	19:	24		60				1	
Subtotal Fees:	875	1,056		1,280	1,995	2,520		5,220				1	12,946
FC 163 Miscellaneous (Roadway)		1						Ī				1	
Meet with utility owners to develop relocation plans and schedule	8			1	8		8						3.080
Update project schedule to reflect anticipated relocation completion	1				4		4		1			-	905
3. Depict existing utility locations on the schematic map, using available data					6			8	1				1.391
Prepare Utility location plans (from owner plans)	4	1	2		6	2	16	10	5				4.635
5. Prepare Traffic Control Plan	4	7			12	8	12	15					6.289
6. Prepare Detours Plan	1 7	1			8		16	2					2.826
7. Prepare Sequence of Construction	4	3	1		40	2	8	15					7.651
8. Prepare Removal Item Plans, Incl. pavement, culverts, signs, fencing	21	1	-		20	2	16	5				 i-	4 907
Develop Miscellaneous Details, title, index, layout sheets, quantities	6	- 2			3	41	4	15				-	4 299
10. Prepare Engineer's Estimates	6				8	5	8	2					3.693
11. Prepare Specifications and General Notes	1 4				16	1	12	11					3.964
12. Develop Project Manual		4	-		20	8	40	21	20				9.142
13. Bidding Phase Services			- 1										2,1-2
a. Prepare all construction documents, including project manual, for bid	3	3			5		4	5	8				2.821
b. Attend the pre-bid meeting and furnish plans to prospective bidders	2				2		2		4				1,030
c. Respond to bidders' questions during pre-bid period	2			-	2		2		2				900
d. Prepare and distribute project addenda during pre-bid period	2	1			1				3				650
e. Analyze bids, prepare bid tabulation, bid recomendation	4		- 1		4			8	3	-			2,121
Furnish construction documents to low bidder	1	1			2			8	5				1.538
Attend pre-construction conference		2						2			1		438
14. Standard Sheets					8	8	i	16					3.072
Subtotal Hours:	52	27	3		180	40	152	114	52				
Subtotal Foes:	9,100	3.564	330		18.900	4.200	15,960	9.918	3.380	-		+	65,352
C 170 Bridge Design	3,100	5,504	330		15,500	4,200	.3,500	3.3.0	-5,500				00,002
Preparation of Structural Details	16	12		6	8		55	8					13,180
Preparation of Bridge Layouts	40	20		40	60	48	120	32	2		+		42 894
Foundation Studies	8	8	+		4	2	16	21	- 2			35,000	40.070
Podrigator Studies Bridge Total Quantities and Cost Estimates	2	- "	2		16	2	20	- 4	8		 +	33.000	5.428
Bridge Special Provisions and Specifications	20				40	16	40	24	- 0			-+	15.800
Bearing Seat Elevations for each beam or girder	20	3			12	2	12	24	-				3,650
Bearing Sear Elevations for each beam or green Repare Removal Item Plans, Incl. pavement, culverts, signs, fencing		3			8	8	15	4					3,650
												75.005	3,708
Subtotal Hours:	15,400	5.808	220	7.360	148 15,540	78 8.190	284	76 6,612	780			35,000	404 700
Subtotal Fees:	15,400	5,808	220	7,360	15,540	8,190	29,820	6,612	780			35,000	124,730
Total Hours:	200	144	138	90	492	338	663	495	88	123	10	50,000	
Total Fees:	35,000	19,008	15,180	14,400	51,660	35,490	69,615	43,065	5.720	17,220	1,600	50,000	357,958