

Project Name: CR 111 (Westinghouse Road)

**CONTRACT FOR ENGINEERING SERVICES**  
**SUPPLEMENTAL AGREEMENT NO. 4**  
**TO THE PROFESSIONAL SERVICES AGREEMENT**

STATE OF TEXAS                       §  
COUNTY OF WILLIAMSON          §

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 Huggins/Seiler & Associates, LP (*the "Engineer"*) and becomes effective when fully executed by both parties.

WHEREAS, the *County* and the *Engineer* executed a contract on February 27, 2001;

WHEREAS, the not-to-exceed fee in Exhibit 1, Section 1, Item 1.1 of the agreement, as amended by Supplemental Agreement No.3, is \$800,000.00 and,

WHEREAS, the “*Compensation Cap*” in Exhibit 1, Section 4, Item 4.3, as amended by Supplemental Agreement No. 3, limits the maximum amount payable under the agreement to \$800,000.00 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:

I. The not-to-exceed fee in Exhibit 1, Section 1, Item 1. I is hereby increased from \$800,000.00 to \$1,000,000.00.

II. The Compensation Cap in Exhibit 1, Section 4, Item 4.3 is hereby increased from \$800,000.00 to \$1,000,000.00.

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

Project Name: CR 111 (Westinghouse Road)

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

ENGINEER:

By:

Signature

Billy L. Huggins

Printed Name

President

Title

4-30-08

Date

COUNTY:

By:

Signature

DAN A. GATTI

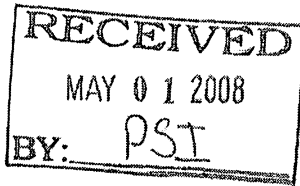
Printed Name

County Judge

5-17-08

Date

OK  
my 5/2/08



Project Name: CR 111 (Westinghouse Road)

## ATTACHMENT A

### WORK AUTHORIZATION NO. 7

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 Huggins/Seiler & associates, LP (*the "Engineer"*).

**Part 1.** The *Engineer* will provide the following engineering services:: PS&E (plans, specifications and estimate) for the reconstruction of CR 111 and FM 1460 intersection and construction phase services for CR 111 from Kelly Lane to FM 1460.

**Part 2.** The maximum amount payable for services under this Work Authorization without modification is **\$235,995.20**.

**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 December 31, 2009, unless extended by a Supplemental Work Authorization.

**Part 5.** This Work Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

Project Name: CR 111 (Westinghouse Road)

**ATTACHMENT A (con't.)**

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

ENGINEER:

Huggins/Seiler & Associates, LP

By: Billy L. Huggins

Signature

Billy L. Huggins

Printed Name

President

Title

4-30-08

Date

COUNTY:

Williamson County, Texas

By: [Signature]

Signature

DAN A. GATTI

Printed Name

(Civil) Supv

Title

5-14-08

Date

**LIST OF EXHIBITS**

Exhibit A - Services to be Provided by County NA

Exhibit B - Services to be Provided by Engineer

Exhibit C - Work Schedule NA

Exhibit D - Fee Schedule

ok  
m 5/2/08

## **EXHIBIT "B"**

### **SERVICES TO BE PROVIDED BY THE ENGINEER**

County: Williamson  
CR 111 at FM 1460 Intersection  
Limits:

The work to be performed by the Engineer under this contract consists of providing engineering services required for the preparation of a preliminary schematic for Williamson County use and the preparation of Plans, Specifications and Estimates (PS&E) for the reconstruction and widening of the intersection of CR 111 and FM 1460. It is assumed that the finished product will be included as a Change Order to the current contract for the reconstruction of CR 111 from Kelly Lane to just west of FM 1460. The Engineer shall use CADD (Microstation V8) to develop all drawings. The CADD drawings developed shall be compatible with Williamson County Standards. The Engineer shall provide earthwork cross-sections data files in GEOPAK format. The Engineer shall prepare plans, details and compute quantities to include roadway design, grading, paving, drainage, signing, pavement markings, signals, traffic control plans, and construction cost estimates.

The Engineer shall collect, review and evaluate the available existing data pertaining to the project and prepare the Plans, Specifications and Estimates in accordance with the latest requirements and policies of Williamson County.

The Engineer shall be responsible for identifying and delineating any necessary right of way requirements for the project. TxDOT has previously prepared Right of Way Plans for the area, but preliminary investigations show that two parcels will require revision.

The Engineer shall prepare drawings early in the design phase to be used as exhibits in utility agreements. The exhibits shall be prepared using English units. The Engineer shall show existing utilities, including those in conflict with construction on this project. The Engineer shall prepare plans to avoid or minimize utility adjustments, where feasible.

The Engineer shall provide information and plan sheets necessary for completion of the environmental assessment.

The Engineer shall prepare Traffic Control Plans (TCP) in coordination with the County. The TCP shall include interim signing for every phase of construction. This is to include regulatory, warning, construction, route, and guide signs.

The Engineer shall make every effort to prevent detours and utility relocations from extending beyond the proposed Right-of-way lines. If it is necessary to obtain additional permanent or temporary easements and/or Right-of-Entry, the Engineer shall notify the County in writing of the need and justification for such action. The Engineer shall identify and coordinate with all utility companies for relocations required.

The PS&E shall be complete and organized in accordance with County's latest practices. The PS&E package shall be suitable for inclusion in the adjacent project plan set as a Change Order.

The PS&E shall be developed in English units. The final plan sheets shall be on standard white Mylar, size 11" x 17", signed, sealed and dated by a Professional Engineer registered in the State of Texas.

PS&E for the above work shall be prepared in accordance with the applicable County requirements of the TxDOT's Specifications, Standards and Manuals (latest revision). Whenever possible, standard drawings, standard specifications, or previously approved special provisions and/or special specifications shall be used. If a special provision or a special specification must be developed or modified for this project, it shall be in the State's format and, to the extent possible, incorporate references to approved test procedures. Any specifications developed by the Engineer shall be submitted to the County for approval prior to inclusion in the PS&E. The Engineer shall sign, seal, and date all project specific modifications to standard drawings.

The Engineer may be required to meet with the County's Project Manager to report on progress.

### **WORK OUTLINE BY FUNCTION CODE**

#### **1) COLLECT AND REVIEW DATA (Function Code 110):**

- a) Data Collection: The Engineer will collect, review and evaluate:
  - i) As-built plans, existing schematics, right-of-way maps, and current unit bid prices information.
  - ii) Utility plans and documents from appropriate municipalities and utility companies.
- b) Field Reconnaissance: The Engineer will conduct field reconnaissance and collect data as necessary to complete the project development.

#### **2) DEVELOP DESIGN SCHEMATIC (Function Code 110):**

- a) Design Schematic: The Engineer will perform the following tasks including:
  - i) Develop roadway design criteria.
  - ii) Prepare a design schematic for County use. This schematic will depict all horizontal aspects of the design (plan view) without any vertical criteria included.

##### Deliverables:

Design Schematic

#### **3) ENVIRONMENTAL STUDIES (Function Code 120):**

- a) Provide support for any document preparation by others.

#### **4) RIGHT-OF-WAY AND UTILITY COORDINATION (Function Code 130)**

- a) Utilities: The Engineer will perform utility coordination tasks including:
  - I. Review existing utilities (located by others) within the limits of the project.
  - II. Review proposed permits submitted to TxDOT within the FM 1460 project limits
  - III. Attend utility coordination meetings as required
- b) Right of Way: The Engineer will provide the Right of Way line for ROW Mapping revisions.
- c) Deliverables:

- Review of utility plans for constructability with proposed design.
- Right of Way widths for all parcels.

#### **5) FIELD SURVEYING / MAPPING (Function Code 150)**

a) Field Surveying: Field surveying will be accomplished as required for ROW mapping revisions and design surveys.

**The Engineer shall provide the following engineering services required for the preparation of the plans, specifications and estimate (PS&E) which will be complete and suitable for inclusion as a Change Order to a County construction contract. Plans will be prepared on 11"x17" sheets and the deliverables are as follows:**

#### **6) ROADWAY DESIGN CONTROLS (Function Code 160)**

- a) Prepare Geometric Design.
- b) Prepare Grading Design.
- c) Develop Typical Sections.
- d) Prepare a detailed index of sheets for all plans in the contract documents.
- e) Develop required general notes.
- f) Identify special specifications and special provisions that shall be included in the contract documents.
- g) Prepare any additional special provisions or special specifications required,
- h) Prepare general notes and specification data.
- i) Select the standard drawings applicable to the project, and develop a sheet list for review.
- j) Prepare Engineer's opinion of probable construction costs.

#### **7) DRAINAGE (Function Code 161)**

- a) Prepare Hydrologic and Hydraulic studies and documentation.
- b) Prepare layouts and detailing of drainage features,
  - i) Culverts.
  - ii) Storm Sewers and Inlets
  - iii) Outfall channels.
  - iv) Summary of Quantities.
- c) Prepare SW3P Sheets.

#### **8) SIGNING, MARKING AND SIGNALIZATION (Function Code 162)**

- a) Prepare Signing and Marking Layout,
  - i) Roadway Layout.
  - ii) Existing sign to remain, to be removed, to be relocated.
  - iii) Proposed signs (illustrated and numbered).
  - v) Proposed markings (illustrated and quantified) including pavement markings, object markings and delineation.
  - vi) Quantities of existing markings to be removed.
- b) Prepare Summary of Small Signs.
- c) Prepare Sign Detail Sheets.
- d) Traffic Signals,
  - i) Layouts.

- (1) Condition diagram.
- (2) Plan sheets.
- (3) Elevation Sheets.
- (4) Phase sequence diagrams.
- (5) Standards.
- e) Summary of Quantities.

**9) MISCELLANEOUS (ROADWAY) (Function Code 163)**

- a) Prepare Traffic Control Plan, Detours and Sequence of Construction.
  - i) Layouts.
    - (1) Sequence of construction and method of handling traffic during each phase.
    - (2) Existing and proposed traffic control devices for each construction sequence.
    - (3) If detours are provided, typical sections and horizontal and vertical alignment shown on plan layout.
    - (4) General Notes providing construction work hours and any conditions relating to the various construction phases.
- b) Utility Layouts (1"=100')
  - i) Layouts.
    - (1) Horizontal and vertical (if available) location of utility
    - (2) Proposed plan and profile of the highway facility.
- c) Sidewalks and Pedestrian Elements
  - i) Layouts
  - ii) Summary of Quantities

**10) MANAGING CONTRACTED PS&E PE SERVICES (Function Code 164):**

- a) Project Coordination: The Engineer will direct and coordinate the various elements and activities associated with project development.
- b) Project Administration: The Engineer will perform administrative duties, including:
  - i) Coordination with subconsultants.
  - ii) Preparing and executing contracts with subconsultants.
  - iii) Monitoring subconsultant activities.
  - iv) Reviewing and recommending approval of subconsultant invoices.

**Deliverables**

- Monthly progress reports.
- Monthly invoice and billings.
- c) QA/QC: The Engineer will provide ongoing quality assurance and quality control to ensure completeness of product and compliance with County procedures.
- d) Progress Meetings: The Engineer will attend progress meetings with the County on an as needed basis.

**11) CONSTRUCTION SUPPORT SERVICES (Function Code 310)**

- a) Project Meetings: The Engineer will attend monthly project meetings with the contractor, and County representatives to discuss progress, problems, production



and upcoming activities. When appropriate, H/SA will provide responses to inquiries from others regarding the project and attend other requested meetings.

- b) Monthly Construction Estimates : When applicable or approved by County, H/SA will review monthly pay estimates and material reports and present approved submittals and/or report any discrepancies to known or reported field conditions and progress.
- c) Review and Interpretation of Plans: The Engineer shall provide review and interpretation of the plan set and provide responses to inquiries from the contractor or County representatives regarding the information contained therein.

## **12) DESIGN VERIFICATION AND ALTERATIONS (Function Code 351)**

- a) Shop Drawing Review – When applicable or approved by County, H/SA will review and check (or coordinate the review and check of) shop drawing furnished from the construction contractor.
- b) Change Orders – The Engineer will prepare the engineering data, including plan sheet drawings, specifications, and estimates, for the preparation of construction contract change orders as required due to actual field conditions encountered or new requirements directed by the County
- c) As-Built Plans – H/SA will coordinate the creation and submittal of “As-Built” plans at the end of this construction project. These plans will be reproduced and distributed as directed by the County.

**Exhibit C**  
**Work Schedule**  
**CR 111 at FM 1460**  
**Work Authorization #7**

Item	2008											2009						
Description	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Authorization to begin W.A. No.7			◆															
Total Project Time																		
Utility Coordination																		
Utility Identification and Coordination																		
Utility Clear										◆								
Survey / ROW																		
Additional Survey																		
ROW Plans Revisions																		
ROW Acquisition																		
ROW Clear							◆											
PS & E Development																		
Develop 60% Plans																		
Plan Preparation per Contract Requirements																		
60% Plan Review Mtg					◆													
Develop 95% Plans																		
Plan Preparation per Contract Requirements																		
95% Plan Review Mtg						◆												
Develop 100% Plans																		
Plan Preparation per Contract Requirements																		
100% Plan Review							◆											
Final Revisions and Submittal - paper copies only																		
Final PS&E Documen Review																		
Final PS&E Documents - Mylar Copy																		
Scheduled Letting									◆									

**EXHIBIT D**  
**Williamson county**  
**CR111 at FM 1460 Intersection**  
**H/SA Contract No. 2228.01.00**  
**WA 7**

RATES				
Project Manager	PM	\$	46.00	Hour
Engineer V	E5	\$	46.00	Hour
Engr Spec V	ES5	\$	46.00	Hour
Engineer III	E3	\$	42.00	Hour
Engr Spec III	ES3	\$	42.00	Hour
Engineer I	E1	\$	38.00	Hour
Engr Tech III	ET3	\$	34.00	Hour
Clerical	C	\$	15.00	Hour
Final Mylar Plots		\$	-	SF
Reproduction		\$	-	EA
Mileage		\$	-	Mile
Airline Flights		\$	-	EA
Per Diem		\$	-	Day
Mail & Deliveries		\$	-	EA
Overhead Rate			150.00%	
Profit			12.00%	

PROJECT DETAILS			
Project Length			Mi
Railroad Crossings	0		Each
Bridges	0		Each
Channels (Requiring Sections)	0		Each
Bridge Class Culverts	0		Each
Other Culverts	0		Each
Traffic Signals	0		Each
Overhead Sign Bridges (OSB)	0		Each
Cantilever Overhead Signs (COSS)	0		Each
Large Signs	0		Each
ROW Parcels	0		Each
Agency / Committee meetings	0		Each
Public Meetings	0		Each
Public Hearings	0		Each
Environmental Documents:	Cat Ex	0	Each
	EA	0	Each
	EIS	0	Each

## H/SA SHEET COUNT

**Williamson county  
CR111 at FM 1460 Intersection**

H/SA Contract No. 2228.01.00  
WA 7

<b>F.C. 160 ROADWAY DESIGN CONTROLS</b>	Scale	No	Hrs / Ea
Title Sheet			16.0
Sheet Index			18.0
Project Layout	1"=200'	1	16.0
Typical Sections		1	24.0
Horizontal Align Data			24.0
Cross Slope Data			24.0
Cross Sections			10.0
Plan / Profile Sheets	1"=50' 1"=10'	8	30.0
Intersection Details	1"=20'	2	30.0
Roadway Details	1"=20'		24.0
Driveway Details			30.0
Roadway Summaries		1	24.0
Earthwork Summary			24.0
Miscellaneous Summary			24.0
<b>FC 160 Total</b>		<b>13</b>	<b>28.00</b>

<b>F.C. 161 DRAINAGE</b>	Scale	No	Hrs / Ea
Drainage Area Maps	1"=200'	1	34.0
Hydraulic Computations / Data		1	20.0
Bridge Hydraulic Data			20.0
Storm Sewer Plan / Profile	1"=50' 1"=5'	4	30.0
Culvert Cross Section and Details	1"=20' 1"=2'	3	24.0
Bridge Class Culvert Layouts	1"=20' 1"=2'		30.0
Channel Plan / Profile	1"=20' 1"=2'		30.0
Misc Drainage Details			24.0
SW3P	1"=100'		16.0
Permanent Erosion, Sedimentation and WP	1"=100'		24.0
Drainage Summaries		1	24.0
Inlet and Manholes Summary		1	24.0
Structure Summary		1	26.0
Erosion Control Summary			24.0
<b>FC 161 Total</b>		<b>12</b>	<b>26.67</b>

<b>F.C. 162 SIGNING, MARKINGS, AND SIGNALIZATION</b>	Scale	No	Hrs / Ea
Signing & Pavement Marking Plans	1"=50'	8	24.0
Large Sign Layouts and Sign Details	1"=100'		24.0
Overhead Sign Support Details			24.0
Signal Layouts and Details	1"=20'	6	30.0
Pavement Marking Summary		1	20.0
Small Sign Summaries		1	20.0
Large Sign Summaries			20.0
<b>FC 162 Total</b>		<b>16</b>	<b>25.75</b>

<b>F.C. 163 MISCELLANEOUS (ROADWAY)</b>	Scale	No	Hrs / Ea
Traffic Control Plans	1"=100'	6	30.0
Detour Plan / Profile	1"=100' 1"=10'	2	30.0
Retaining Wall Layouts	1"=50' 1"=5'		30.0
Illumination	1"=50'		34.0
Railroad Exhibits			40.0
General Notes			26.0
Illumination Summary			26.0
Standards			1.0
<b>FC 163 Total</b>		<b>8</b>	<b>30.00</b>

<b>F.C. 170 BRIDGE DESIGN</b>	Scale	No	Hrs / Ea
Bridge Layouts	1"=40'		40.0
Bridge Details	1"=20'		40.0
Bridge Summaries			27.0
<b>FC 170 Total</b>		<b>0</b>	<b>0.00</b>

## Sheet 1 of 3

H/SA Contract No. 2228.01.00  
WA 7

F.C. 150	FIELD SURVEYS / MAPPING	PM	E5	ES5	E3	ES3	E1	ET3	Total
150.01	Coordination of Sub-Consultants								0.0
150.02	Project Meetings								0.0
150.03	Field Surveying								0.0
150.04	Deliverable Preparation								0.0
150.05	Aerial Photography/Mapping								0.0
									0.0
	FC 150 Total	0	0	0	0	0	0	0	0

# ATTACHMENT D

Sheet 2 of 3

Williamson county  
CR111 at FM 1460 Intersection

H/SA Contract No. 2228.01.00  
WA 7

F.C. 160 ROADWAY DESIGN CONTROLS		PM	E5	ES5	E3	ES3	E1	ET3	Total
160.01	Coordination of Sub-Consultants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160.02	Project Meetings								0.0
160.03	Site Investigations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160.04	Geometric Design and Earthwork	8.0	12.0	12.0	12.0	20.0	24.0	32.0	120.0
160.05	Roadway Plan Preparation	23.0	36.0	36.0	36.0	60.0	73.0	100.0	364.0
160.06	Pavement Design	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FC 160 Total		31	48	48	48	80	97	132	484

F.C. 161 DRAINAGE DESIGN		PM	E5	ES5	E3	ES3	E1	ET3	Total
161.01	Coordination of Sub-Consultants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161.02	Project Meetings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161.03	Hydrologic Studies	2.0	3.0	3.0	3.0	5.0	7.0	11.0	34.0
161.04	Hydraulic Design	4.0	8.0	8.0	8.0	15.0	19.0	30.0	92.0
161.05	Hydraulic Design - Storm Sewer	8.0	12.0	12.0	12.0	20.0	24.0	32.0	120.0
161.06	Prepare Hydraulic Summaries	3.0	7.0	7.0	7.0	12.0	15.0	23.0	74.0
161.07	Hydraulic Structure Design	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161.08	Prepare Hydraulic Report								0.0
161.08	SW3P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FC 161 Total		17	30	30	30	52	65	96	320

F.C. 162 SIGNING, STRIPING AND SIGNALIZATION		PM	E5	ES5	E3	ES3	E1	ET3	Total
162.01	Coordination of Sub-Consultants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.02	Project Meetings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.03	Prepare Signing, Striping and Delineation Plans	10.0	20.0	20.0	20.0	38.0	48.0	76.0	232.0
162.04	Prepare Large Sign Layouts and Details	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.05	Prepare Signal Layouts and Details	12.0	18.0	18.0	18.0	30.0	36.0	48.0	180.0
FC 162 Total		22	38	38	38	68	84	124	412

F.C. 163 MISCELLANEOUS ROADWAY		PM	E5	ES5	E3	ES3	E1	ET3	Total
163.01	Coordination of Sub-Consultants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163.02	Project Meetings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163.03	Prepare TCP / Detours / Sequence of Construction	16.0	24.0	24.0	24.0	40.0	48.0	64.0	240.0
163.04	Prepare Illumination Plans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163.05	Prepare Retaining Wall Layouts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163.06	Agency Agreements (Railroad, etc.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163.07	Prepare Estimate / Basis of Estimate								0.0
163.08	Prepare General Notes / Specifications / Provisions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163.09	Prepare Project Manual / Letting								0.0
163.09	Standards	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FC 163 Total		16	24	24	24	40	48	64	240

F.C. 170 BRIDGE DESIGN		PM	E5	ES5	E3	ES3	E1	ET3	Total
170.01	Coordination of Sub-Consultants				0.0	0.0	0.0	0.0	0.0
170.02	Project Meetings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170.03	Prepare Bridge Layouts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170.04	Foundation Studies and Design	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170.05	Detailed Bridge Design	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170.06	Miscellaneous Structural Design	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FC 170 Total		0	0	0	0	0	0	0	0

# ATTACHMENT D

Sheet 3 of 3

Williamson county  
CR111 at FM 1460 Intersection

H/SA Contract No. 2228.01.00  
WA 7

F.C. 164 MANAGING CONTRACTED PROF. SERVICES		PM	E5	ES5	E3	ES3	E1	ET3	Total
164.01	Coordination of Sub-Consultants								0.0
164.02	Project Meetings								0.0
164.03	Develop Contract Scope of Services								0.0
164.04	Professional Services Selection Process								0.0
164.05	Monitoring and Review of Contracted Work								0.0
164.06	Auditing of Billing Statements								0.0
FC 164 Total		0	0	0	0	0	0	0	0
F.C. 165 TRAFFIC MANAGEMENT SYSTEMS		PM	E5	ES5	E3	ES3	E1	ET3	Total
165.01	Coordination of Sub-Consultants								0.0
165.02	Project Meetings								0.0
165.03	Traffic Analysis and Model Simulation								0.0
165.04	Develop Traffic Signal Systems								0.0
165.05	Develop Freeway Control Systems								0.0
165.06	Develop HOV Control Systems								0.0
165.07	Develop Intelligent Vehicle Highway Systems								0.0
FC 165 Total		0	0	0	0	0	0	0	0
F.C. 190 PROJECT MANAGEMENT		PM	E5	ES5	E3	ES3	E1	ET3	Total
190.01	Coordination of Sub-Consultants								0.0
190.02	Project Meetings								0.0
190.03	Prepare Monthly Billings								0.0
190.04	Prepare Supplemental Agreements / Work Authorizations								0.0
190.05	Project Scheduling and Workload Management								0.0
FC 190 Total		0	0	0	0	0	0	0	0
F.C. 191 SUPPORT SERVICES		PM	E5	ES5	E3	ES3	E1	ET3	Total
191.01	Coordination of Sub-Consultants								0.0
191.02	Project Meetings								0.0
191.03	Training								0.0
191.04	IT Infrastructure								0.0
FC 191 Total		0	0	0	0	0	0	0	0
F.C. 310 CONSTRUCTION SUPPORT SERVICES		PM	E5	E3	E3	ET3	ES5	ES3	Total
310.01	Coordination of Sub-Consultants								0.0
310.02	Project Meetings	36.0							36.0
310.03	Review of monthly Pay Estimates and Progress Reports	48.0							48.0
310.04	Review and Interpretation of Plans with Contractor	36.0	40.0				60.0		136.0
FC 310 Total		120	40	0	0	0	60	0	220
F.C. 320 CONSTRUCTION INSPECTION		PM	E5	E3	E3	ET3	ES5	ES3	Total
320.01	Coordination of Sub-Consultants								0.0
320.02	Project Meetings								0.0
320.03	General Construction Inspection								0.0
320.04	Structural Inspection								0.0
FC 320 Total		0	0	0	0	0	0	0	0
F.C. 351 DESIGN VERIFICATION AND ALTERATIONS		PM	E5	E3	E3	ET3	ES5	ES3	Total
351.01	Coordination of Sub-Consultants								0.0
351.02	Project Meetings								0.0
351.03	Shop Drawing Review	24.0	16.0	2.0			36.0		78.0
351.04	Laboratory Testing								0.0
351.05	Plant Inspection								0.0
351.06	Change Orders	12.0	24.0			36.0	36.0		108.0
351.07	AS-Built Plans	8.0				36.0	8.0		52.0
FC 330 Total		44	40	2	0	72	80	0	238

# H/SA MANHOUR SUMMARY

Sheet 1 of 3

**Williamson county**  
**CR111 at FM 1460 Intersection**

H/SA Contract No. 2228.01.00  
WA 7

<b>F.C. 110</b>	<b>ROUTE AND DESIGN STUDIES</b>	<b>Manhours</b>	<b>Rate</b>	<b>Direct Labor</b>
	Project Manager	0	\$46.00	\$ -
	Engineer V	0	\$46.00	\$ -
	Engr Spec V	0	\$46.00	\$ -
	Engineer III	0	\$42.00	\$ -
	Engr Spec III	0	\$42.00	\$ -
	Engineer I	0	\$38.00	\$ -
	Engr Tech III	0	\$34.00	\$ -
	Sub-total	0		\$ -
<b>F.C. 120</b>	<b>ENVIRONMENTAL STUDIES</b>	<b>Manhours</b>	<b>Rate</b>	<b>Direct Labor</b>
	Project Manager	0	\$46.00	\$ -
	Engineer V	0	\$46.00	\$ -
	Engr Spec V	0	\$46.00	\$ -
	Engineer III	0	\$42.00	\$ -
	Engr Spec III	0	\$42.00	\$ -
	Engineer I	0	\$38.00	\$ -
	Engr Tech III	0	\$34.00	\$ -
	Sub-total	0		\$ -
<b>F.C. 130</b>	<b>RIGHT OF WAY PLANS</b>	<b>Manhours</b>	<b>Rate</b>	<b>Direct Labor</b>
	Project Manager	24	\$46.00	\$ 1,104.00
	Engineer V	0	\$46.00	\$ -
	Engr Spec V	16	\$46.00	\$ 736.00
	Engineer III	16	\$42.00	\$ 672.00
	Engr Spec III	0	\$42.00	\$ -
	Engineer I	0	\$38.00	\$ -
	Engr Tech III	0	\$34.00	\$ -
	Sub-total	56		\$ 2,512.00
<b>F.C. 150</b>	<b>FIELD SURVEYS / MAPPING</b>	<b>Manhours</b>	<b>Rate</b>	<b>Direct Labor</b>
	Project Manager	0	\$46.00	\$ -
	Engineer V	0	\$46.00	\$ -
	Engr Spec V	0	\$46.00	\$ -
	Engineer III	0	\$42.00	\$ -
	Engr Spec III	0	\$42.00	\$ -
	Engineer I	0	\$38.00	\$ -
	Engr Tech III	0	\$34.00	\$ -
	Sub-total	0		\$ -



# H/SA MANHOUR SUMMARY

Sheet 2 of 3

**Williamson county**  
**CR111 at FM 1460 Intersection**

H/SA Contract No. 2228.01.00  
WA 7

<b>F.C. 160</b>	<b>ROADWAY DESIGN CONTROLS</b>	<b>Manhours</b>	<b>Rate</b>	<b>Direct Labor</b>
	Project Manager	31	\$46.00	\$ 1,426.00
	Engineer V	48	\$46.00	\$ 2,208.00
	Engr Spec V	48	\$46.00	\$ 2,208.00
	Engineer III	48	\$42.00	\$ 2,016.00
	Engr Spec III	80	\$42.00	\$ 3,360.00
	Engineer I	97	\$38.00	\$ 3,686.00
	Engr Tech III	132	\$34.00	\$ 4,488.00
	Sub-total	484		\$ 19,392.00
<b>F.C. 161</b>	<b>DRAINAGE</b>	<b>Manhours</b>	<b>Rate</b>	<b>Direct Labor</b>
	Project Manager	17	\$46.00	\$ 782.00
	Engineer V	30	\$46.00	\$ 1,380.00
	Engr Spec V	30	\$46.00	\$ 1,380.00
	Engineer III	30	\$42.00	\$ 1,260.00
	Engr Spec III	52	\$42.00	\$ 2,184.00
	Engineer I	65	\$38.00	\$ 2,470.00
	Engr Tech III	96	\$34.00	\$ 3,264.00
	Sub-total	320		\$ 12,720.00
<b>F.C. 162</b>	<b>SIGNING, MARKINGS, AND SIGNALIZATION</b>	<b>Manhours</b>	<b>Rate</b>	<b>Direct Labor</b>
	Project Manager	22	\$46.00	\$ 1,012.00
	Engineer V	38	\$46.00	\$ 1,748.00
	Engr Spec V	38	\$46.00	\$ 1,748.00
	Engineer III	38	\$42.00	\$ 1,596.00
	Engr Spec III	68	\$42.00	\$ 2,856.00
	Engineer I	84	\$38.00	\$ 3,192.00
	Engr Tech III	124	\$34.00	\$ 4,216.00
	Sub-total	412		\$ 16,368.00
<b>F.C. 163</b>	<b>MISCELLANEOUS (ROADWAY)</b>	<b>Manhours</b>	<b>Rate</b>	<b>Direct Labor</b>
	Project Manager	16	\$46.00	\$ 736.00
	Engineer V	24	\$46.00	\$ 1,104.00
	Engr Spec V	24	\$46.00	\$ 1,104.00
	Engineer III	24	\$42.00	\$ 1,008.00
	Engr Spec III	40	\$42.00	\$ 1,680.00
	Engineer I	48	\$38.00	\$ 1,824.00
	Engr Tech III	64	\$34.00	\$ 2,176.00
	Sub-total	240		\$ 9,632.00
<b>F.C. 170</b>	<b>BRIDGE DESIGN</b>	<b>Manhours</b>	<b>Rate</b>	<b>Direct Labor</b>
	Project Manager	0	\$46.00	\$ -
	Engineer V	0	\$46.00	\$ -
	Engr Spec V	0	\$46.00	\$ -
	Engineer III	0	\$42.00	\$ -
	Engr Spec III	0	\$42.00	\$ -
	Engineer I	0	\$38.00	\$ -
	Engr Tech III	0	\$34.00	\$ -
	Sub-total	0		\$ -

# H/SA MANHOUR SUMMARY

Sheet 3 of 3

Williamson county  
CR111 at FM 1460 Intersection

H/SA Contract No. 2228.01.00  
WA 7

<b>F.C. 164</b>	<b>MANAGING CONTRACTED PROF. SERVICES</b>	<b>Manhours</b>	<b>Rate</b>	<b>Direct Labor</b>
	Project Manager	0	\$46.00	\$ -
	Engineer V	0	\$46.00	\$ -
	Engr Spec V	0	\$46.00	\$ -
	Engineer III	0	\$42.00	\$ -
	Engr Spec III	0	\$42.00	\$ -
	Engineer I	0	\$38.00	\$ -
	Engr Tech III	0	\$34.00	\$ -
	Sub-total	0		\$ -
<b>F.C. 165</b>	<b>TRAFFIC MANAGEMENT SYSTEMS</b>	<b>Manhours</b>	<b>Rate</b>	<b>Direct Labor</b>
	Project Manager	0	\$46.00	\$ -
	Engineer V	0	\$46.00	\$ -
	Engr Spec V	0	\$46.00	\$ -
	Engineer III	0	\$42.00	\$ -
	Engr Spec III	0	\$42.00	\$ -
	Engineer I	0	\$38.00	\$ -
	Engr Tech III	0	\$34.00	\$ -
	Sub-total	0		\$ -
<b>F.C. 190</b>	<b>PROJECT MANAGEMENT</b>	<b>Manhours</b>	<b>Rate</b>	<b>Direct Labor</b>
	Project Manager	0	\$46.00	\$ -
	Engineer V	0	\$46.00	\$ -
	Engr Spec V	0	\$46.00	\$ -
	Engineer III	0	\$42.00	\$ -
	Engr Spec III	0	\$42.00	\$ -
	Engineer I	0	\$38.00	\$ -
	Engr Tech III	0	\$34.00	\$ -
	Sub-total	0		\$ -
<b>F.C. 191</b>	<b>SUPPORT SERVICES</b>	<b>Manhours</b>	<b>Rate</b>	<b>Direct Labor</b>
	Project Manager	0	\$46.00	\$ -
	Engineer V	0	\$46.00	\$ -
	Engr Spec V	0	\$46.00	\$ -
	Engineer III	0	\$42.00	\$ -
	Engr Spec III	0	\$42.00	\$ -
	Engineer I	0	\$38.00	\$ -
	Engr Tech III	0	\$34.00	\$ -
	Sub-total	0		\$ -
<b>F.C. 310</b>	<b>CONSTRUCTION SUPPORT SERVICES</b>	<b>Manhours</b>	<b>Rate</b>	<b>Direct Labor</b>
	Project Manager	120	\$46.00	\$ 5,520.00
	Engineer V	40	\$46.00	\$ 1,840.00
	Engr Spec V	0	\$46.00	\$ -
	Engineer III	0	\$42.00	\$ -
	Engr Spec III	0	\$42.00	\$ -
	Engineer I	60	\$38.00	\$ 2,280.00
	Engr Tech III	0	\$34.00	\$ -
	Sub-total	220		\$ 9,640.00

ATTACHMENT D Williamson county CR111 at FM 1460 Intersection Sheet 1 of 1						
LABOR COSTS BY FUNCTION CODE :		DIRECT LABOR	OVERHEAD 150.00%	TOTAL LABOR+OVHD	FIXED FEE 12.00%	TOTAL COST
F.C. 110	ROUTE AND DESIGN STUDIES	\$ -	\$ -	\$ -	\$ -	\$ -
F.C. 120	ENVIRONMENTAL STUDIES	\$ -	\$ -	\$ -	\$ -	\$ -
F.C. 130	RIGHT OF WAY PLANS	\$ 2,512.00	\$ 3,768.00	\$ 6,280.00	\$ 753.60	\$ 7,033.60
F.C. 150	FIELD SURVEYS / MAPPING	\$ -	\$ -	\$ -	\$ -	\$ -
F.C. 160	ROADWAY DESIGN CONTROLS	\$ 19,392.00	\$ 29,088.00	\$ 48,480.00	\$ 5,817.60	\$ 54,297.60
F.C. 161	DRAINAGE	\$ 12,720.00	\$ 19,080.00	\$ 31,800.00	\$ 3,816.00	\$ 35,616.00
F.C. 162	SIGNING, MARKINGS, AND SIGNALIZATION	\$ 16,368.00	\$ 24,552.00	\$ 40,920.00	\$ 4,910.40	\$ 45,830.40
F.C. 163	MISCELLANEOUS (ROADWAY)	\$ 9,632.00	\$ 14,448.00	\$ 24,080.00	\$ 2,889.60	\$ 26,969.60
F.C. 164	MANAGING CONTRACTED PROF. SERVICES	\$ -	\$ -	\$ -	\$ -	\$ -
F.C. 165	TRAFFIC MANAGEMENT SYSTEMS	\$ -	\$ -	\$ -	\$ -	\$ -
F.C. 170	BRIDGE DESIGN	\$ -	\$ -	\$ -	\$ -	\$ -
F.C. 190	PROJECT MANAGEMENT	\$ -	\$ -	\$ -	\$ -	\$ -
F.C. 191	SUPPORT SERVICES	\$ -	\$ -	\$ -	\$ -	\$ -
F.C. 310	CONSTRUCTION SUPPORT SERVICES	\$ 9,640.00	\$ 14,460.00	\$ 24,100.00	\$ 2,892.00	\$ 26,992.00
F.C. 320	CONSTRUCTION INSPECTION	\$ -	\$ -	\$ -	\$ -	\$ -
F.C. 330	DESIGN VERIFICATION AND ALTERATIONS SIGNAL WARRANT STUDY	\$ 10,020.00	\$ 15,030.00	\$ 25,050.00	\$ 3,006.00	\$ 28,056.00
TOTALS		\$ 80,284.00	\$ 120,426.00	\$ 200,710.00	\$ 24,085.20	\$ 230,795.20
DIRECT COSTS:						
EXPENSES:	UNIT	RATE	QUANTITY	TOTAL		
Final Mylar Plots	SF	\$ -	-	\$ -		
Reproduction	EA	\$ -	-	\$ -		
Mileage	Mile	\$ -	-	\$ -		
Airline Flights	EA	\$ -	-	\$ -		
Per Diem	Day	\$ -	-	\$ -		
Mail & Deliveries	EA	\$ -	-	\$ -		
			1	\$ -		
	0	\$ -	-	\$ -		
	0	\$ -	-	\$ -		
TOTAL EXPENSES				\$ -		
SUB-CONTRACTS:		TASK		TOTAL		
Baker-Alcken		Surveying and ROW Plan revisions		\$ 5,200.00		
TOTAL SUB-CONTRACTS				\$ 5,200.00		
TOTAL DIRECT COSTS				\$ 5,200.00		
TOTAL COST					\$ 235,995.20	