

Project Name: SH45N – O'Connor Interchange

CONTRACT FOR ENGINEERING SERVICES
SUPPLEMENTAL AGREEMENT NO. 3
TO THE PROFESSIONAL SERVICES AGREEMENT

[illegible]

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 **PBS&J, Inc.** *(the "Engineer")* and becomes effective when fully executed by both parties.

WHEREAS, the *County* and the *Engineer* executed a contract on **October 31, 2009**;

WHEREAS, the not-to-exceed fee in Exhibit 1, Section 1, Item 1.1 limits the agreement to \$1,690,848.80 ; and,

WHEREAS, the “*Compensation Cap*” in Exhibit 1, Section 4, Item 4.3 limits the maximum amount payable under the agreement to \$ 1,780,000.00; 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:

- I. The not-to-exceed fee in Exhibit 1, Section 1, Item 1.1 is hereby increased from **\$1,690,848.80** to **\$1,949,711.66**.
- II. The Compensation Cap in Exhibit 1, Section 4, Item 4.3 is hereby increased from **\$1,780,000.00** to **\$2,000,000.00**.

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 _____

Printed Name

Title

Date _____

COUNTY:

By:

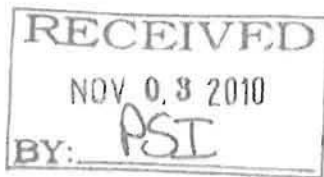
Signature

Printed Name

Title

Date _____

OK
M



Project Name: SH45N - O'Connor Interchange

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 PBS&J, Inc. (the "Engineer").

Part 1. The *Engineer* will provide the following engineering services:
Updated design including schematic and PS&E documents to complete modifications to bridges over Rattan Creek.. (See Exhibits A, B, C & D)

Part 2. The maximum amount payable for services under this Work Authorization without modification is \$258,862.86.

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 July 29, 2011, unless extended by a Supplemental Work Authorization.

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

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

ENGINEER:
PBS&J, Inc.
By: [Signature]
Signature
Clinton Ray
Printed Name
Project Director
Title
11/2/10
Date

COUNTY:
Williamson County, Texas
By: [Signature]
Signature
Dan A. Gattis
Printed Name
County Judge
Title
11-9-10
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)
- ok
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EXHIBIT B
ADDITIONAL SERVICES TO BE PROVIDED BY THE ENGINEER
WORK AUTHORIZATION NO. 4
November 03, 2010

SCOPE OF WORK:

The Engineer will redesign the Eastbound Frontage Road (EBFR) bridge, Westbound Frontage Road (WBFR) bridge, and Ramp East-South Direct Connector (RESDC) bridge to remove all bridge columns from the Ordinary High Water Mark (OHWM) for Rattan Creek.

The Engineer will update all the plan sheets from the 90% design plans, specifications and estimates (PS&E) for the SH 45 – O'Connor Drive project affected by the design changes.

The Engineer will prepare new 90% PS&E documents and deliver them to Williamson County, TxDOT Austin District, and TxDOT TTA prior to the 90% review of the plans.

The PS&E services provided under this Work Authorization will cover all the areas impacted by the redesign and will consist of items in the categories listed below and as described within Exhibit D:

- Project Management
- Roadway Design
- Drainage Design
- Bridge Design
- Traffic Design
- Miscellaneous

The services not described within this Work Authorization (Exhibit B and Exhibit D) and variations to the concept provided shall not be performed unless authorized by TxDOT Austin District and Williamson County through a supplemental agreement.

Project Management

Additional services to be provided are as follows:

1. Design
 - Coordination needed for approval of the redesign from the TxDOT-Austin District, TxDOT-Georgetown Area Office, and TxDOT-TTA.
 - Coordinating the maintenance area design with the TTA Tolls Integrators (Jacobs, Arcadis, and Raytheon) for the RESDC including toll gantry and cabinet locations, maintenance vehicle access, and conduit routing through the bridge deck.
2. Environmental
 - Gathering updated information from TxDOT needed for the EPIC plan sheet.
 - Monthly meetings related to the development of the environmental document.
3. Drainage
 - Coordinating with TCEQ regarding the update to the WPAP as a result of the redesign.
4. General
 - Coordination meetings with Williamson County including commissioner meetings.
 - Plans production meetings with design staff from the various disciplines during the redesign.
 - Review of plan set changes with Williamson County prior to final submittal.

Roadway Design

Additional services to be provided are as follows:

1. Design changes for all three phases of the traffic control plan (TCP) including redesign of barrier location, barrier tapers, and work zone pavement markings.
2. Changes to affected plan sheets for all three phases of the TCP.
3. Design of a new RESDC alignment and profile as well as superelevation and sight distance calculations.
4. Design of a new RESDC maintenance area, including AutoTurn and sight distance analysis for maintenance vehicles.
5. Changes to affected horizontal alignment data, plan and profile, and removal sheets.
6. Design changes to retaining wall alignment and profile for Wall 09.
7. Changes to the affected retaining wall sheets.
8. Recalculating all affected TCP, roadway, removal, and retaining wall quantities and changing the corresponding quantity summary plan sheets.

The 90% cross sections will not be affected by the redesign and additional services will not be provided to revise them.

Drainage Design

Additional services to be provided are as follows:

1. Design changes to the proposed deck drains along the EBFR, WBFR, and RESDC as well as changes to the existing deck drains along the East-South Direct Connector.
2. Design changes to the drainage areas and hydraulic data for the affected deck drains.
3. Design changes to the hydraulic data for Rattan Creek.
4. Design changes to the grading plans under the EBFR, WBFR, and RESDC bridges.
5. Changes to the affected drainage area map, hydraulic data, drainage plan, bridge deck drain detail, and Rattan Creek sheets.
6. Design changes to the erosion control (SW3P) plan in the areas under the EBFR, WBFR, and RESDC bridges.
7. Changes to the affected erosion control, water quality, and environmental (EPIC) sheets.
8. Changes to the 100-year flood elevation model to keep it consistent with the proposed design.
9. Changes to the 100-year flood elevation shown on plan sheets.
10. Changes to the Water Pollution Abatement Plan (WPAP) including recalculating the impervious cover, updating the WPAP report, and coordinating the updated WPAP submittal with TCEQ.
11. Recalculating all affected drainage, erosion control, and water quality quantities, and changing the corresponding quantity summary plan sheets.

The 90% scour analysis and hydraulic report will not be affected by the redesign and additional services will not be provided to revise them.

Bridge Design

Eastbound Frontage Road (EBFR) Bridge

The ENGINEER will modify the EBFR Bridge from Station 418+50.49 to Station 421+79.04 to remove Bent 6 from the OHWM boundaries and add two additional bent caps. Due to this modification, the existing 3-span bridge unit will become 4-span unit with different span length.

Westbound Frontage Road (WBFR) Bridge

The ENGINEER will modify the WBFR Bridge from Station 418+81.33 to Station 422+48.83 to remove Bent 6 from the OHWM boundaries and add two additional bent caps. Due to this modification, the existing 3-span bridge unit will become 4-span unit with different span length.

Ramp East-South Direct Connector (RESDC) Bridge

Compared to the previous bridge design, the RESDC is a new alignment bridge with more spans and a longer area where widening of the existing East-South Direct Connector is necessary. The ENGINEER will redesign the RESDC and extend the bridge limit to provide a final design without bridge columns within the OHWM boundaries.

The ENGINEER shall modify the plans to change and add new sheets as well as redesign the three affected bridges.

Additional services to be provided are as follows:

1. Modify bridge layout and profiles.
2. Prepare beam report and bearing seat elevations (RDS).
3. Modify summary tables of bridge structure quantities.
4. Provide foundation layout.
5. Modify foundation detail sheet.
6. Provide new bent details.
7. Provide superstructure beam layout.
8. Provide bridge slab layout.
9. Provide prestressed concrete beam schedule.
10. Recalculating all affected quantities and changing the corresponding quantity summary plan sheets.

The 90% O'Connor and Ramp North-West Direct Connector plans will not be affected by the redesign and additional services will not be provided to revise them.

Traffic Design

Additional services to be provided are as follows:

1. Design changes to all signs and delineators affected by the redesign.
2. Design changes to all pavement markings affected by the redesign, specifically along the EBFR, RESDC, and the existing East-South Direct Connector.
3. Changes to all Traffic Management System, Illumination, Signing, and Pavement Marking sheets affected by the redesign.
4. Recalculating all affected pavement marking quantities and changing the corresponding quantity summary plan sheets.

The 90% signal design and overhead sign plans will not be affected by the redesign and additional services will not be provided to revise them.

Miscellaneous

Additional services to be provided are as follows:

1. Changes to miscellaneous sheets affected by the redesign, specifically the project layout, soil boring layout, and index of sheets.
2. Developing exhibits needed to communicate the design changes to TxDOT Austin District, and TxDOT-TTA for their approval.
3. Developing exhibits related to the environmental document and public meetings.
4. Recalculating the cost estimate based on all the quantity changes.
5. Compiling the new plan sets and cost estimates for submittal.

Deliverables

The Engineer shall make new copies of the 90% plan set for delivery to Williamson County, TxDOT Austin District, and TxDOT TTA. The submittals shall consist of a total of eight (8) 11"x17" paper sets in two volumes.

The Engineer shall develop exhibits for use in acquiring approval for the design changes from Williamson County, TxDOT Austin District, and TxDOT TTA.

The Engineer shall develop exhibits showing the revised design for inclusion in the environmental document.

EXHIBIT C WORK SCHEDULE

The Engineer shall complete the Work Authorization within 359 calendar days, commencing upon the issuance of Notice to Proceed and Receipt of documents to be provided by the COUNTY as specified in Exhibit A.

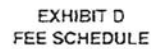
Schedule of Anticipated Milestones

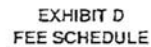
NTP	November 02, 2010
Revisions to 90% Plans	December 20
TxDOT 100% Plan Review	February 18, 2011
(they may skip to this)	
Final Submittal	March 11, 2011
Letting	June 2011

EXHIBIT D
FEE SCHEDULE



	Sheets	Hours	Labor Cost	Expenses	T
Project Management	N/A	154	\$26,887.02	\$250.00	\$2
Roadway Design	27	234	\$22,774.82	\$0.00	\$2
Drainage Design	22	369	\$39,996.07	\$0.00	\$3
Bridge Design	63	1,195	\$146,527.80	\$962.20	\$14
Traffic Design	10	74	\$9,084.82	\$0.00	\$
Miscellaneous	5	100	\$9,860.13	\$2,520.00	\$1
Total	127	2,126	\$255,130.66	\$3,732.20	\$25

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	Number of Sheets	Senior Project Manager	Project Manager	Admin / Clerical	Senior Engineer IV	Senior Engineer III	Senior Engineer II	Senior Engineer I	Engineer I, II, III	CADD Designer	Senior Technician
Task	Specified Rate - Contract Rate	\$152.73	\$129.24	\$67.56	\$208.54	\$155.67	\$140.99	\$108.68	\$93.99	\$105.74	\$71.00
ROADWAY DESIGN											
1. TCP Design											
a. Phase I Step 4 - Change Barrier Location and Tapers			0.5						2		
b. Phase I Step 4 - Change Work Zone Pavement Markings			0.5						2		
c. Phase II Step 1 - Change Barrier Location and Tapers			0.5						2		
d. Phase II Step 1 - Change Work Zone Pavement Markings			0.5						2		
e. Phase III Step 2 - Change Work Zone Pavement Markings			0.5						2		
f. TCP Quantities			0.5						4		
g. QC Design Changes							2				
h. Address QC Comments									2		
Subtotal			3				2		16		
2. TCP Sheet Changes											
a. Summary of Traffic Control Quantities	1		0.5								
b. Traffic Control Plan Overview	3		0.5								
c. Traffic Control Plan Advance Warning Signs	1		0.5								
d. Traffic Control Plan Phase I Step 2 SH 45	2		0.5								
e. Traffic Control Plan Phase I Step 4 SH 45	2		0.5								
f. Traffic Control Plan Phase II Step 1 SH 45	3		0.5								
g. Traffic Control Plan Phase III Step 1 SH 45	1		0.5								
h. Traffic Control Plan Phase III Step 2 SH 45	3		0.5								
i. QC Sheet Changes							4				
j. Address QC Comments									4		
Subtotal	16		4.0				4		4		
3. Roadway Design											
a. New RESDC Alignment			0.5						8		
b. New RESDC Profile			0.5						8		
c. New RESDC Superelevation			0.5						4		
d. New RESDC Sight Distance Calculations			0.5						4		
e. New RESDC Maintenance Area Design			0.5						4		
f. New RESDC Maintenance Area AutoTurn Analysis			0.5						4		
g. New RESDC Maintenance Area Sight Distance Analysis			0.5						4		
h. Roadway Quantities			0.5						4		
i. Removal Quantities			0.5						4		
j. QC Design Changes							8				
k. Address QC Comments									8		
Subtotal			4.5				8		52		
4. Roadway Sheet Changes											
a. Summary of Roadway Quantities	1		0.5								
b. Summary of Removal Quantities	1		0.5								
c. Horizontal Alignment Data Ramps	1		0.5								
d. EB Frontage Road Plan and Profile	2		0.5								
e. Ramp East-South OC Plan and Profile	1		0.5								
f. SH 45 Removal Layout	1		0.5								
g. QC Sheet Changes							8				
h. Address QC Comments									8		
Subtotal	7		3.0				8		8		
5. Retaining Wall Design											
a. Change Wall "09" Alignment			0.5						4		
b. Change Wall "09" Profile			0.5						4		
c. Retaining Wall Quantities			0.5						4		
d. QC Design Changes							4				
e. Address QC Comments									4		
Subtotal			1.5				4		16		
6. Retaining Wall Sheet Changes											
a. Summary of Retaining Wall Quantities	1		0.5								
b. Retaining Wall Location Map	1		0.5								
c. Retaining Wall Layout Wall "06"	1		0.5								
d. Retaining Wall Layout Wall "09"	1		0.5								
e. QC Sheet Changes							4				
f. Address QC Comments									4		
Subtotal	4		2.0				4		4		
Total	27	0	18.0	0	0	0	30	0	100	0	0
Total Labor Cost		\$0.00	\$2,326.32	\$0.00	\$0.00	\$0.00	\$4,229.70	\$0.00	\$9,389.00	\$0.00	\$6,710.00

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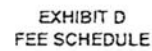
EXHIBIT D
FEE SCHEDULE

Task	Number of Sheets	Senior Project Manager	Project Manager	Admin / Clerical	Senior Engineer IV	Senior Engineer III	Senior Engineer II	Senior Engineer I	Engineer I, II, III	CADD Designer	Surveyor
Specified Rate - Contract Rate		\$152.73	\$129.24	\$67.56	\$208.54	\$155.67	\$140.99	\$108.68	\$93.99	\$105.74	
BRIDGE DESIGN											
1. ES Frontage Rd - Modify bridge unit from 3 to 4 spans											
a. Modify bridge layout and profiles	2				2		10				
b. Prepare beam report and bearing seat elevations (RDS)	3				4		24				
c. Modify summary tables of bridge structure quantities	1				4		16				
d. Modify foundation detail sheet	2				4		16				
e. Provide new bent details	1				10		24				
f. Provide superstructure beam layout	1				4		16				
g. Provide bridge slab layout	1				2		12				
h. Prestressed concrete beam schedule	1				1		3				
i. Quality Control and Quality Assurance					12						
Subtotal	12				43		121				
2. WB Frontage Rd - Modify bridge unit from 3 to 4 spans											
a. Modify bridge layout and profiles	2				2		10				
b. Prepare beam report and bearing seat elevations (RDS)	3				4		24				
c. Modify summary tables of bridge structure quantities	1				4		16				
d. Modify foundation detail sheet	2				4		16				
e. Provide new bent details	1				10		24				
f. Provide superstructure beam layout	1				2		16				
g. Provide bridge slab layout	1				2		12				
h. Prestressed concrete beam schedule	1				1		3				
i. Quality Control and Quality Assurance					12						
Subtotal	12				41		121				
3. Ramp East-South DC - New Bridge Design											
a. Bridge layout and profiles	3				3		36				
b. Prepare beam report and bearing seat elevations (RDS)	4				8		40				
c. Summary tables of bridge structure quantities	1				8		8				
d. Provide foundation layout	1				6		8				
e. Foundation detail sheet	3				6		32				
f. Bent details	18				12		96				
g. Superstructure beam layout	3				4		12				
h. Prestressed concrete beam units	5				4		20				
i. Prestressed concrete beam schedule	1				2		12				
j. Quality Control and Quality Assurance					22						
Subtotal	39				75		264				
Total	63	0	0	0	159	0	506	0	0	0	0
Total Labor Cost		\$0.00	\$0.00	\$0.00	\$33,157.86	\$0.00	\$71,340.94	\$0.00	\$0.00	\$0.00	\$0.00

DIRECT COST ITEMS	AMOUNT	UNIT	RATE	TOTAL
Mileage	400	mile	\$0.50	\$200.00
Airfare (in state/out of state)		round trip	\$300.00	\$0.00
Car Rental	2	day	\$80.00	\$160.00
Paper Roll Plot		plot	\$0.75	\$0.00
Paper Plot B&W (11x17)	378	plot	\$1.50	\$567.00
Paper Plot Color (11x17)		plot	\$2.00	\$0.00

to attend review meeting

to attend review meeting

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O'Connor Cost Plus Fixed Fee Rates

CATEGORY		HOURLY RATE	LOADED HOURLY RATE
Senior Project Manager		\$52.00	\$152.73
Project Manager		\$44.00	\$129.24
Admin / Clerical		\$23.00	\$67.56
Senior Engineer IV		\$71.00	\$208.54
Senior Engineer III		\$53.00	\$155.67
Senior Engineer II		\$48.00	\$140.99
Senior Engineer I		\$37.00	\$108.68
Engineer I, II, III		\$32.00	\$93.99
Senior Technichal Coordinator		\$43.00	\$126.30
Senior Scientist IV		\$58.00	\$170.36
Senior Scientist I & II		\$35.00	\$102.80
Senior Surveyor IV		\$54.50	\$160.08
Senior Surveyor III		\$44.50	\$130.71
Senior Estimator/ Scheduler II		\$40.00	\$117.49
CADD Designer		\$36.00	\$105.74
Senior CADD Technician		\$27.00	\$79.30
Senior Field Representative I & II		\$24.50	\$71.96
3-Person Field Crew		\$175.00	\$175.00
Overhead Multiplier	162.25%		
Profit	12%		
Multiplier	2.9372		

OK
my 11/03/2019



WILLIAMSON COUNTY
PROFESSIONAL SERVICES AGREEMENT
TRACKING SPREADSHEET

DESCRIPTION	CONTRACT				AMOUNT
	BASE	SUPP TO BASE	WORK AUTHORIZATION	SUPP TO WORK AUTHORIZATION	DOLLARS
O'Connor Interchange PS&E (Time & Money)	PSA		WA 1		\$1,439,860.5
Concept Report & Memorandum - Alternative Evaluations	PSA	S1	WA 1	S1	\$83,609.20
Time Extension			WA 1	S2	No Change
			WA 1	S3	No Change
O'Connor Interchange PS&E (Time & Money)	PSA	S2			
Identification of Ordinary High Water Mark - Scope added and Scope on hold			WA 2		\$4,659.03
Additional Design Services (Approved to submit to PSI - under development)			WA3		\$162,720.04
Modifications to plans to avoid ordinary high water mark			WA4		\$258,862.88
TOTALS					\$1,949,711.6