

**SUPPLEMENTAL WORK AUTHORIZATION NO. 5
TO
WORK AUTHORIZATION NO. 2**

**WILLIAMSON COUNTY ROAD BOND PROJECT:
SH 29 at DB Wood Road Intersection Improvements**

This Supplemental Work Authorization No. 5 to Work Authorization No. 2 is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated October 16, 2014 ("Contract") and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and Unintech Consulting Engineering, Inc. (the "Engineer").

WHEREAS, the County and the Engineer executed Work Authorization No. 2 dated effective September 1, 2016 (the "Work Authorization");

WHEREAS, pursuant to Article 14 of the Contract, amendments, changes and modifications to a fully executed Work Authorization shall be made in the form of a Supplemental Work Authorization; and

WHEREAS, it has become necessary to amend, change and modify the Work Authorization.

AGREEMENT

NOW, THEREFORE, premises considered, the County and the Engineer agree that the Work Authorization shall be amended, changed and modified as follows:

- I. The Services to be provided by the Engineer that was set out in the original Attachment "B" of the Work Authorization are hereby amended, changed and modified as shown in the attached revised Attachment "B".
- II. The Work Authorization shall terminate on August 31, 2020. The Services to be Provided by the Engineer shall be fully completed on or before said date unless extended by an additional Supplemental Work Authorization.
- III. The maximum amount payable for services under the Work Authorization is hereby increased from \$1,129,612.37 to \$1,171,097.37. The revised Fee Schedule is attached hereto as Attachment "D".

Except as otherwise amended by prior or future Supplemental Work Authorizations, all other terms of the Work Authorization are unchanged and will remain in full force and effect.

This Supplemental Work Authorization does not waive the parties' responsibilities and obligations provided under the Contract.

IN WITNESS WHEREOF, the County and the Engineer have executed this Supplemental Work Authorization, in duplicate, to be effective as of the date of the last party's execution below.

ENGINEER:

By: KW Chan
Signature

Kum Wing (KW) Chan, P.E.
Printed Name

Vice President
Title

3-26-2020
Date

COUNTY:

By: Bill Gravell Jr.
Signature

Bill Gravell Jr.
Printed Name

Williamson County Judge
Title

4/21/2020
Date

my
04/03/2020

LIST OF ATTACHMENTS

Attachment B - Services to be Provided by Engineer

Attachment D - Fee Schedule

Attachment B

WILLIAMSON COUNTY

SH 29 at D.B. Wood Road Improvements

SUPPLEMENTAL AGREEMENT NO. 5 TO WORK AUTHORIZATION NO. 2 **SERVICES TO BE PROVIDED BY THE ENGINEER**

The SH 29 at D.B. Wood Road Improvement project ("Project") involves improvements to approximately 5,000 linear feet of SH 29 and 2,000 linear feet of D.B. Wood Road north of SH 29 and 1,000 linear feet south of SH 29. This intersection is in a high growth corridor for both Williamson County and the City of Georgetown. SH 29 is a major east-west corridor in central Williamson County, while DB Wood provides access along the west side of Georgetown in a north-south corridor. This area is within the study area for the future SW Bypass that will continue the SE Inner Loop from IH-35 around the southwest side of Georgetown connecting to DB Wood north of SH 29. Since the corridor has not been finalized, improvements to this intersection are critical to the efficient and safe movement of vehicles in the area.

Work Authorization No. 2, approved on September 1, 2016, was developed to implement a 4-lane raised median section with two turn lanes along SH 29, with concrete curb & gutter and open ditches behind the curb, utilizing swales for WPAP requirements. It will also include between a 5-lane and 6-lane section along DB Wood, with concrete curb & gutter, retaining walls, storm drain and open ditches behind the curb, utilizing both for WPAP.

The construction plan set (plan set) for this project shall contain the required drawings and details pertaining to grading, paving, signing, pavement marking, delineation, retaining walls, traffic signal modification, sequence of construction, traffic control, drainage and utility coordination. The plan set shall be prepared in English units and shall be suitable for the bidding and award of a contract through the County construction contracting system.

The tasks and products contained in this supplemental agreement are more fully described in the following TASK OUTLINE.

TASK OUTLINE

ADDITIONAL DESIGN & COORDINATION (BY UNINTECH)

There were several design changes listed below after Work Authorization No. 2 and Supplemental Work Authorization No. 4 executed that required a greater effort and different challenges that needed to be evaluated and designed in accordance with TxDOT, Williamson County and the City of Georgetown standards, including:

- I. PS&E Update due to the drainage inlet (CI – J05 Sta. 133+50.00) location change to avoid the utility conflict at the addition of the right turn lane into FPC church parking lot on SH 29.
- II. Traffic Control Plan Update:
 1. Update Traffic Control Sheets and Narrative to include additional TCP Phase II A & B to incorporate the additional utilities relocation construction information into our PS&E package.
 2. Update Construction Schedule to incorporate the additional TCP Phase II A & B.
- III. Utility Conflict Coordination:
 1. Coordinate between HNTB, CobbFendley and CP&Y (our drainage sub) on the vertical conflict between storm sewer system A & J and existing waterline, and adjust the storm sewer profiles (System A & J) to avoid the conflict and maintain the existing waterline in place.
 2. Incorporate utility information & construction note into Roadway P&P sheets.
 3. Modifies proposed sidewalk configuration to avoid the impact to the existing fire hydrant at the north-west end of SH 29.
- IV. Incorporate Pape-Dawson Engineers' plan as part of "Bluebonnet Plaza" project at the east end of SH 29 to our PS&E and WPAP Report and upload their estimate to TxDOT system.

- V. Additional tasks related to TxDOT's review:
 - 1. Add Asset Maintenance Sheets per TxDOT Request.
 - 2. Address TxDOT's additional review comments (Roadway, Typical Sections, WPAP, Drainage, Signal Design, etc.)
 - 3. Input engineering estimate to TxDOTCONNECT.
- VI. Additional Project Coordination and Management related to tasks I through V above and Intake Meeting with TCEQ.

ROADWAY PS&E PREPARATION (CP&Y)

I. ROADWAY DESIGN CONTROLS

A. GRADING AND CROSS SECTIONS

- 1. Model revisions for sidewalk, driveway profiles and retaining wall updates
- 2. Update earthwork quantities

II. DRAINAGE

A. DRAINAGE DESIGN

- 2. Storm Sewer Design, 10-yr design frequency
 - a. Re-delineation of drainage areas due TxDOT comments and efforts to avoid utilities
 - b. Additional area computation effort
 - c. Additional storm sewer computation effort for changes to project.
 - d. Additional effort on Drainage plan and profile sheets for changes to project.
 - e. Update quantities and summary sheet

V. PROJECT MANAGEMENT AND ADMINISTRATION

- A. Additional internal project coordination/meetings

ATTACHMENT D										
SH 29 AT DB WOOD ROAD										
Supplemental Work Authorization No. 5 to Work Authorization No. 2										
Williamson County										
Fee Schedule/Budget for Unintech Consulting Engineers, Inc.										
Task Description	Project Manager	Senior Engineer	Project Engineer	Design Engineer	E.I.T.	Drainage Engineer	Senior CADD Operator	Admin / Clerical	Total Labor Hours	Total Direct Labor Costs
	\$195.00	\$160.00	\$135.00	\$110.00	\$95.00	\$130.00	\$95.00	\$45.00		
I PS&E Update due to the drainage inlet (CI – J05 Sta. 133+50.00) change to avoid the utility conflict at the addition of the right turn lane into FBC church parking lot on SH										
1 Roadway Plan & Profile Sheet	2	3	-	-	-	-	4	-	9	\$ 1,250.00
2 SWPPP Sheet	2	3	2	-	-	-	4	-	11	\$ 1,520.00
TOTAL - I									20	\$ 2,770.00
II Traffic Control Plan Update										
1 Update TCP Plan & Narrative to include TCP Phase II A & B and Utiltiy relocation table	2	4	-	-	-	-	4	-	10	\$ 1,410.00
2 Update Construction Schedule to incorporate the additional TCP Phase II A & B.	2	4	2	-	-	-	4	-	12	\$ 1,680.00
TOTAL - II									22	\$ 3,090.00
III Utility Conflict Coordination										
1 Utility conflicts (Storm Sewer System A & J and existing WL) coordination	-	1	-	1	-	-	1	-	3	\$ 365.00
2 Incorporate utility information & construction note into Roadway P&P sheets.	-	2	2	-	-	-	2	-	6	\$ 780.00
3 Modifies proposed sidewalk configuration to avoid the impact to the existing fire hydrant &	1	1	1	-	-	-	2	-	5	\$ 680.00
TOTAL - III									14	\$ 1,825.00
IV Incorporate Pape-Dawson Engineers' Plan to our PS&E and upload their estimate to TxDOT system.										
1 Update Index Sheet to include Pape-Dawson's plan sheets	-	1	-	1	-	-	2	-	4	\$ 460.00
2 Update Summary Sheets (Roadway, SWPPP, Driveway)	-	2	2	-	-	-	4	-	8	\$ 970.00
3 Revise Roadway Plan and Profile sheets to match Pape-Dawson's design	2	2	1	-	-	-	4	-	9	\$ 1,225.00
4 Revise SWPPP sheets to match Pape-Dawson's design	2	1	2	-	-	-	4	-	9	\$ 1,200.00
5 Update WPAP Report to include Pape-Dawson's design	1	2	2	4	-	-	2	-	11	\$ 1,415.00
6 Input Pape-Dawson's engineer's estimate to TxDOTCONNECT	-	1	4	4	-	-	-	-	9	\$ 1,140.00
7 Update Spec List to include Pape-Dawson's design	-	1	-	1	-	-	-	-	2	\$ 270.00
TOTAL - IV									52	\$ 6,680.00
V Additional tasks related to TxDOT's review										
1 Add Two Asset Mainatenance Sheets to our plan set per TxDOT Request	1	2	2	-	-	-	2	-	7	\$ 975.00
2 Address TxDOT's additional review comments (Roadway, Typical Sections, WPAP, Drainage, Signal Design, etc.)	4	12	12	-	-	-	20	-	48	\$ 6,220.00
3 Input engineering's estimate to TxDOTCONNECT	2	2	8	-	-	-	4	-	16	\$ 2,170.00
TOTAL - V									71	\$ 9,365.00
VI Additional Project Coordination and Management related to tasks I & II above										
1 Coordinate with HNTB on the above tasks	2	-	-	-	-	-	-	-	2	\$ 390.00
2 Coordinate with TxDOT on the above tasks	4	20	-	-	-	-	-	-	24	\$ 3,980.00
3 QA/QC on task I through V	4	10	-	-	-	-	-	-	14	\$ 2,380.00
4 Intake Meeting with TCEQ for WPAP submittal and Address TCEQ's comments	4	4	-	-	-	-	2	-	10	\$ 1,610.00
TOTAL - VI									50	\$ 8,360.00
ADDITIONAL DESIGN & COORDINATION (UNINTECH Fee Proposal)									229	\$ 32,090.00
ADDITIONAL DESIGN & PROJECT MANAGEMENT (CP&Y, Inc.) - See separate fee schedule										\$ 9,395.00
SUBTOTAL SUPPLEMENTAL #5 FEE TASKS										\$ 41,485.00

SH 29 AT DB WOOD ROAD							
Williamson County							
Fee Schedule/Budget for CP&Y, Inc							
Task Description	Project Manager	Senior Engineer	Design Engineer	E.I.T.	Chief Hydrologist	Total Labor Hours	Total Direct Labor Costs
	\$225.00	\$155.00	\$115.00	\$96.00	\$185.00		
<u>PS&E Services</u>							
A Roadway Design Controls							
1 Grading & Design Cross Sections at 50-ft intervals	1	6				7	\$ 1,155.00
						7	\$ 1,155.00
B Drainage (A-1 through A-8)							
2 Storm sewer design, 10-yr frequency				8	-	8	\$ -
a Interior Drainage Areas				8	-	8	\$ 768.00
b Run-off Calculations				8	-	8	\$ 768.00
c Analyze Storm Sewer Systems		2		24	-	26	\$ 2,614.00
d Drainage Plan & Profile 1"=100' H and 1"=10' V	2	2		30	-	34	\$ 3,640.00
						76	\$ 7,790.00
V Project Management							
7 Misc. project coordination	2					2	\$ 450.00
						2	\$ 450.00
PS&E Services- SUBTOTAL							
HOURS SUB-TOTALS	5	10	0	70	0	85	\$ 9,395.00
SUBTOTAL	\$ 1,125.00	\$ 1,550.00	\$ -	\$ 6,720.00	\$ -		\$ 9,395.00
DIRECT EXPENSES							\$ -
TOTAL							\$ 9,395.00

Expense Item	Unit	Unit Cost	Amount	Total Cost
CADD Plotting	sf	\$ 1.50		\$ -
Mylar Plots (22x34 As-Builts)	lf	\$ 6.00		\$ -
Digital Ortho Plotting	lf	\$ 2.00		\$ -
11" X 17" Mylar	sheet	\$ 1.00		\$ -
8 1/2" X 11" B/W Paper Copies	sheet	\$ 0.10		\$ -
11" X 17" B/W Paper Copies	sheet	\$ 0.15		\$ -
8 1/2" X 11" Color Paper Copies	sheet	\$ 1.00		\$ -
11" X 17" Color Paper Copies	sheet	\$ 1.80		\$ -
Fax Copies	sheet	\$ 0.10		\$ -
Film and Development	roll	\$ 8.00		\$ -
4 X 6 Digital Color Prints	picture	\$ 0.50		\$ -
Oversized Digital Color Prints	picture	\$ 50.00		\$ -
Standard Postage	letter	\$ 0.44		\$ -
Express Mail (Standard)	each	\$ 15.00		\$ -
Express Mail (Oversized)	each	\$ 30.00		\$ -
Deliveries	each	\$ 25.00		\$ -
Airfare	each	\$ 200.00		\$ -
Rental Car	day	\$ 80.00		\$ -
Lodging	day	\$ 85.00		\$ -
Meals	day	\$ 36.00		\$ -
Mileage	mile	\$ 0.580		\$ -
GPS Rental	day	\$ 80.000		\$ -
HazMat Database Search	each	\$ 250.000		\$ -
				\$ -
Miscellaneous Project Related Expenses	NA	at cost		
SUBTOTAL DIRECT EXPENSES				\$ -