

**SUPPLEMENTAL WORK AUTHORIZATION NO. 3
TO
WORK AUTHORIZATION NO. 1**

**WILLIAMSON COUNTY ROAD BOND PROJECT:
CR 176 at RM 2243**

This Supplemental Work Authorization No. 3 to Work Authorization No. 1 is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated **February 23, 2016** ("Contract") and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and **WSB & Associates, Inc.** (the "Engineer").

WHEREAS, the County and the Engineer executed Work Authorization No. 1 dated effective **February 23, 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

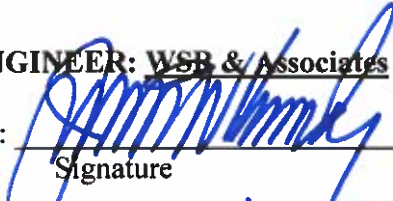
NOW, THEREFORE, premises considered, the County and the Engineer agree that the Work Authorization shall be amended, changed and modified as follows:

- I. The Services to be Provided by the Engineer that were 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" (must be attached).
- II. The Work Authorization shall terminate on **August 10, 2019**. 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. The revised Work Schedule is attached hereto as Attachment "C" (must be attached).
- III. The maximum amount payable for services under the Work Authorization is hereby increased from **\$509,026** to **\$641,875**. The revised Work Schedule is attached hereto as Attachment "D" (must be attached).

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: WSB & Associates
By: 
Signature
JAMES W KENNEDY
Printed Name

Principal / VICE PRES.
Title

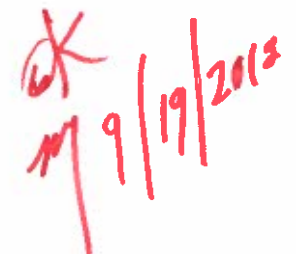
9-19-18
Date

COUNTY:
By: _____
Signature

Printed Name

Title

Date



LIST OF ATTACHMENTS

Attachment B - Services to be Provided by Engineer

Attachment C - Work Schedule

Attachment D - Fee Schedule

**Supplemental Agreement No.3
to
Work Authorization No. 1
County Road 176
RM 2243 to Parkside Parkway
Williamson County, TX**

ATTACHMENT B

SERVICES TO BE PROVIDED BY ENGINEER

MODIFIED SCOPE OF SERVICES

GENERAL

The project Scope of services identified in WA#1 scope of services have been revised. The limit revision undertaken by SA#2 required additional data acquisition, design services, and analysis. These need for these additional efforts was not apparent when SA#2 was executed; the following additional services will be provided.

I. PROJECT MANAGEMENT

The ENGINEER will provide project management services based on increased project limits, and the related extended project duration including the following:

- A. Provide Project Administration and Controls.
 1. Prepare and submit a monthly invoice package, which shall include the Engineer's invoice, subconsultant invoices, and a project development status report. All subconsultant invoices will be reviewed for accuracy prior to submission. The Engineer will submit monthly progress status reports to the GEC. Progress reports will include: tasks completed, tasks/objectives that are planned for upcoming periods, lists or descriptions of items or decisions needed from the County and its representatives. A copy of the monthly progress report will be uploaded to Projectwise.
 2. The engineer will manage project activities (including documenting emails, phone and conference calls, maintain project files for the length of the project, meeting agendas, meeting minutes, and schedule meetings), direct Engineer's team/staff, correspond with County and its representatives, and assist the County and its representatives in preparing responses to Project-related inquiries.
 3. Coordinate and communicate with Client
 4. Coordinate and communicate with project team and subconsultants. This task will include reviewing drainage design alternatives with drainage subconsultant and communicating recommendations to the County for review and approval.

5. Coordinate and communicate with project stakeholders including Williamson County, TxDOT, affected landowners, local neighborhoods, utility providers, project team and other stakeholders
 6. Develop and maintain project development schedule.
- B. Attend meeting with Williamson County to discuss project issues and review alternative solutions.

II. SURVEY

- 1) Cave Survey:
 - Prepare a topographic survey of an area approximately 300' by 300' centered on the opening of a cave located at the east side of C.R. 176.
 - Extend existing topographic survey south of cave limits to a curb inlet at east side Park Valley Drive.
- 2) Water Oak Tract:
 - Run a profile line on the Water Oak property north of F.M. 2243. Profile line to begin at the northern end of the previously cross sectioned portion of proposed right-of-way in future development across Water Oak tract and extend northerly to the flowline of a creek. Profile line approximately 900 feet in length.
- 3) Parcel Staking:
 - Stake proposed right-of-way lines of approximately five (5) parcels. 100d nails with wooden laths to be staked at +/-50' intervals along proposed right-of-way.
- 4) Parcel Exhibit Revisions/Addition:
 - Make revisions to approximately 4 Parcel exhibits as a result of proposed right-of-way changes and land transaction(s) that have occurred subsequent to initial Parcel submittals.
 - Additional parcel for right-of-way along north side of F.M. 2243.
 - Set/reset property corners as required by revisions.
- 5) Drainage & Slope Easements:
 - Prepare exhibits with accompanying metes and bounds descriptions for proposed drainage and slope easements.

III. PLANS, SPECIFICATIONS & ESTIMATES (PS&E)

- A. Revise existing design files to reflect updated drainage designs and cave related plan sheets
1. Revise ROW
 2. Coordinate with Developer's engineers
 3. Revise pond locations
 4. Develop ROW exhibits showing various details including driveways, trees, etc.
 5. Develop plan sheet with details for cave remediation

6. Develop driveway details and exhibits
7. Update cross sections
8. Revise TCP to construct from Deer Draw to Parkside Parkway in a two phase TCP instead of a three phase TCP.
9. Additional design and coordination efforts related to the pond on the north side and the culvert under RM 2243. Development of design details for three alternative design approaches and related preliminary cost estimates. Coordination of alternative design approaches through multiple meetings and reviews with the GEC. Coordination related to incorporating data from the snowmelt cave. Multiple site visits to confirm assumptions.

IV. Preliminary WQ/Detention Analysis

a. South Project Watershed WQ/Detention

Develop preliminary design of future pond

1. Determine water quality volume required for the ultimate CR 176 cross section based upon TCEQ criteria
2. Create HEC-HMS hydrology model to assess detention volume requirements
3. Develop preliminary WQ/detention pond geometry based upon volume requirements and site constraints including:
 - a. Ensuring positive roadway drainage from profile lows into pond
 - b. Minimizing conflicts with existing water lines
4. Recommend ROW requirements based on pond geometry including accessibility and downstream grading for positive outfall.
5. Prepare Report with exhibits and recommendations.

b. North Project Watershed WQ/Detention

Utilize previous preliminary pond design analyses and parameters to analyze and develop preliminary design of future pond at 2 alternative locations near north end of Project

1. Identify needed revisions to Culvert 1 design to accommodate gravity outfall from each alternative pond location
2. Prepare email report of findings and recommendations.

V. Drainage Design (PS&E)

a. Southward Project Extension Revisions Based on Cave Survey

1. Modify hydrology to incorporate drainage to cave
 - (a) Update Drainage Area Map
 - (b) Update HMS model and summary tables
 2. Off-Site Drainage Improvements to incorporate design to Parkside at Mayfield Ranch Subdivision conveyance system
 - (a) Finalize storm drain design based on the additional survey data
 - (b) Finalize storm drain plan & profile and details (Estimated at 1 Sheet)
- b. Culvert 1 revisions based upon alternative future north project watershed WQ/Detention pond locations

1. Develop redesign of culvert based upon gravity outfall parameters of each pond location
2. Revise design establishing new flowlines and downstream grading
3. Revise plans and details

IV. Update quantities table (Estimated at 1 Summary Sheet).

V. Assemble additional pertinent standard sheets and details

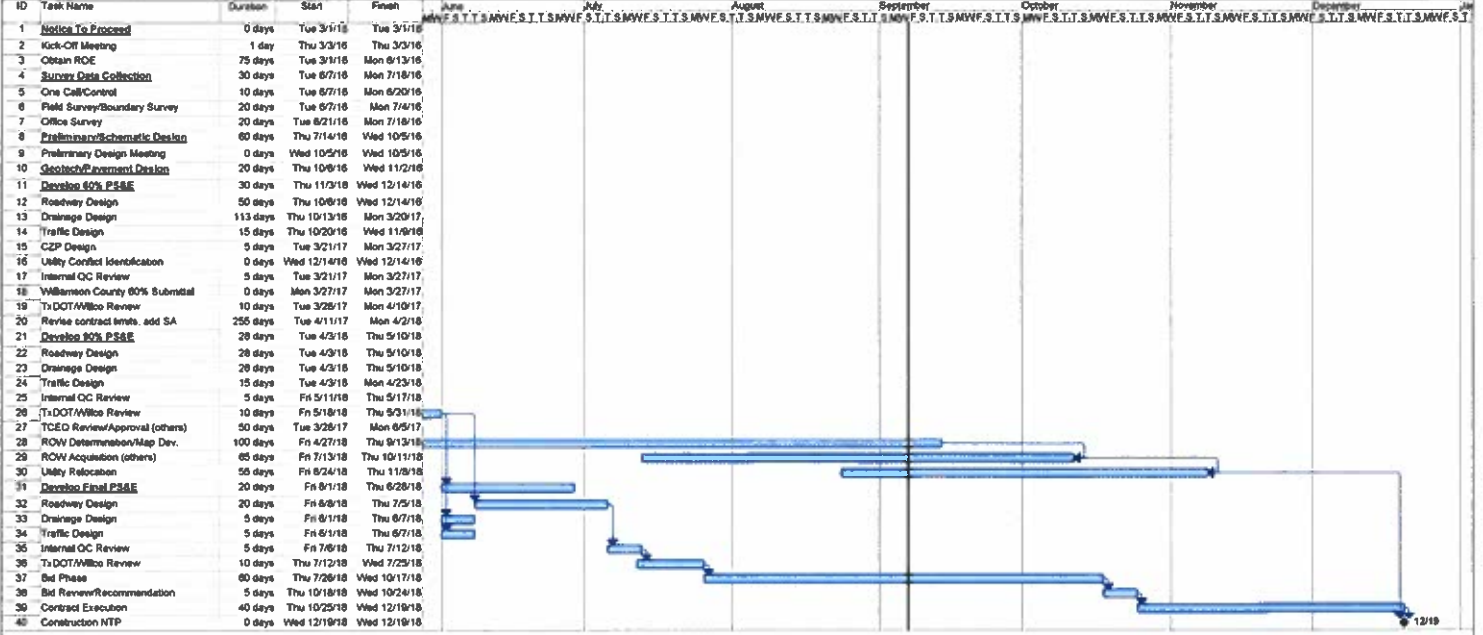
VI. WPAP

- a. Revise WPAP report to insert and add permit documents to address Snowmelt Cave

VII. DELIVERABLES

All Deliverables will comply with checklists provided by current version of Williamson County Design Criteria Manuals

Final Submittal - the final submittal will be updated to reflect revisions related to this



Project CR 176 at RM 2243 Date: Fri 9/7/18

Task	Project Summary	Inactive Milestone	Manual Summary Rollup	Progress
Split	External Tasks	Inactive Summary	Manual Summary	Deadline
Milestone	External Milestone	Manual Task	Start-only	Finish-only
Summary	Inactive Task	Duration-only	Finish-only	

ATTACHMENT D

SA #3

CR 176

From Parkside Parkway to RM 2243

DATE: Sept. 19, 2018

CR 176 WA#1 Attachment D Summary

Firm / Role	Labor	Direct Expense	Total Budget
WSB / PM, Roadway Design	\$76,575	\$0	\$76,575
OBES / Drainage, TCEQ, QC/QA	\$16,774		\$16,774
Pape Dawson / Survey, ROW Mapping	\$39,500	\$0	\$39,500
Project total			\$132,849

ATTACHMENT D							
SA #3		CR 176					
		From Parkside Parkway to RM 2243				DATE:	Sept. 19, 2018
WSB & Associates, Inc							
PROJECT: Preparation of PS&E							Sheet 1/2
TASK AND DESCRIPTION		PROJECT	SENIOR	SENIOR	CADD		TOTAL
		MANAGER	ENGINEER	TECH	TECH		
	HOURLY RATE	\$175.00	\$160.00	\$125.00	\$50.00		
I. PROJECT MANAGEMENT	TOTAL HOURS	139	0	0	0		139
	TOTALS	\$24,325	\$0	\$0	\$0		\$24,325
II. SURVEY COORDINATION	TOTAL HOURS		34	10	0		44
	TOTALS		\$5,440	\$1,250	\$0		\$6,690
III. PS&E PREPARATION	TOTAL HOURS		161	158	1		320
	TOTALS		\$25,760	\$19,750	\$50		\$45,560
TOTAL PROJECT LABOR	TOTAL HOURS	139	195	168	1		503
	TOTAL LABOR COST	\$24,325	\$31,200	\$21,000	\$50		\$76,575

ATTACHMENT D		CR 178							Williamson	
SA #3		From Parkside Parkway to RM 2243							County	
WSS & Associates, Inc									DATE: Sept. 19, 2018	
PROJECT: Preparation of PS&E									Sheet 2/2	
TASK AND DESCRIPTION	No. Sheets	Hours /Sheet	PROJECT MANAGER HOURS	Hours /Sheet	SENIOR ENGINEER	Hours /Sheet	SENIOR TECH HOURS	Hours /Sheet	CADD TECH HOURS	TOTAL HOURS
I. PROJECT MANAGEMENT										
1. Prepare monthly invoice package			12							12
2. Manage Project Activities			40							40
3. Coordinate With Client			18							18
4. Coordinate with drainage subconsultant			60							60
5. Coordinate with stakeholders			6							6
6. Update project schedule			3							3
SUBTOTAL			139		0		0		0	139
II. SURVEY										
1. Review new survey data/append into existing files					2		6			8
2. Coord. on parcel revisions, ROW staking, etc. review parcels					32		4			36
SUBTOTAL					34		10		0	44
III. PS&E PREPARATION										
1. Revise ROW limits					8		6			14
2. Coordinate with stakeholders' Engineer					4		0		0	4
3. Revise Filtration Pond locations					9		6		0	15
4. Develop ROW exhibits					40		40		0	80
5. Develop Cave detail plan sheet	1		5		5		6		1	12
6. Develop driveway exhibits	2		2		6		12			18
7. Update cross sections north and west of Parkside Parkway	8		0.5		4		1.5		0	18
8. Revise TCP	3		2		6		4		0	18
9. Additional efforts related to the pond on the north side and the culvert under RM 2243					80		60		0	140
					0		0		0	0
					0		0		0	0
					0		0		0	0
					0		0		0	0
SUBTOTAL					181		158		1	320
PROJECT TOTALS			139		195		166		1	603