

**SUPPLEMENTAL WORK AUTHORIZATION NO. 3
TO
WORK AUTHORIZATION NO. 2**

**WILLIAMSON COUNTY ROAD BOND PROJECT:
Inner Loop @ Wilco Central Maintenance**

This Supplemental Work Authorization No. 3 to Work Authorization No. 2 is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated August 26, 2014 ("Contract") and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and Bridgefarmer & Associates, Inc. (the "Engineer").

WHEREAS, the County and the Engineer executed Work Authorization No. 2 dated effective April 28, 2015 (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 County that were set out in the original Attachment "A" of the Work Authorization are hereby amended, changed and modified as shown in the attached revised Attachment "A" (must be attached).
- II. 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).
- III. The Work Authorization shall terminate on January 31, 2017. 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).
- IV. The maximum amount payable for services under the Work Authorization is hereby increased from \$129,555.07 to \$158,655.57. The revised Fee 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:

By: 
Signature

Mansoor Ahsan, P. E.
Printed Name

Chief Executive Officer
Title

08/09/2016
Date

COUNTY:

By: _____
Signature

Printed Name

Title

Date

*OK
my 8/12/2016*

LIST OF ATTACHMENTS

Attachment A - Services to be Provided by County

Attachment B - Services to be Provided by Engineer

Attachment C - Work Schedule

Attachment D - Fee Schedule

Attachment A – Services to be Provided by the County

Inner Loop @ Wilco Central Maintenance

1. Obtain Rights of Entry from landowners that are unwilling to grant access to the Engineer.
2. Provide traffic growth rates and analysis package for development of open year, 20 year, and 30 year projected traffic data.
3. Make available appropriate data on file, plans and specifications that are deemed pertinent to the completion of the work required by the scope of services.
4. Make available existing Right-of-Way (ROW) maps of county owned buildings and roadway facilities in the project corridor.
5. Assistance to the Engineer, as necessary, with obtaining data and information from other local, regional, State and Federal agencies required for this project.
6. Provide timely reviews and decisions necessary for the Engineer to maintain the project work schedule.
7. Provide examples of acceptable format for the required deliverables.
8. Provide checklist for elements of a detailed highway schematic.
9. Provide City of Georgetown comments on draft deliverables.
10. Prepare applications for and obtain all necessary permits from the City of Georgetown for the expansion of the East Parking Lot.
11. Remove irrigation system equipment from the area impacted by the expansion of the East Parking Lot.

Attachment B – Services to be Provided by the Engineer

Inner Loop @ Wilco Central Maintenance

This Attachment “B” further defines the services to be performed by Bridgefarmer & Associates, Inc. in conjunction with the preparation of Work Authorization 2 (plan preparation) for Inner Loop @ Wilco Central Maintenance two-lane roadway. Services include the following:

- Project Management
- Roadway
- Hydraulic Analysis
- Traffic Control Plan

TASK 1: SURVEYING

1. Survey Project Limits: Williamson County Facilities East Parking Lot (Exhibit A).
2. The Survey Consultant shall re-establish horizontal and vertical control for the survey work performed for the County located adjacent to this project. The project control will be placed on horizontal and vertical datum [NAD83/93/NAVD88 values (Texas State Plane, Central Zone)] with a scale factor of 1.00011 or as provided by the county. Elevations will be derived from GPS observations using Geoid 2012A model. Digital levels will be run through all control points to confirm the established elevations.
3. The Survey Consultant will obtain design survey data within the project limits at approximate 50’ intervals and major grade breaks necessary to produce a one-foot interval contour DTM. This data will include: edge of pavement/gutter & back of curb, crown (physical centerline), parking striping, ditches, sidewalks, signs (with text), paved areas, buildings, driveways (with type noted), driveway pipes, visible utilities and visible evidence of underground utilities only.
4. The Survey Consultant will prepare Microstation V8 topographic file, points file, and DTM of survey data and provide an electronic copy of all the data to the Engineer.

TASK 2: GEOTECHNICAL INVESTIGATION – NO LONGER REQUIRED

TASK 3: ROADWAY DESIGN

1. The Consultant shall provide the design of expanding the East Parking lot to include both westward facing parking spaces, eastward facing parking spaces, handicap parking and a two-way drive aisle. The design will be consistent with Section 9.03, Parking Space and Parking Lot Design of the City of Georgetown’s Unified Development Code.

2. The Consultant will provide designs for salvaging, reusing and and relocating the two existing luminaires to locations satisfactory to the County.
3. The Consultant will adjust grading, vertical alignment and horizontal alignments of connecting driveways and update quantities of bid items and removals necessitated by the East Parking Lot expansion.
4. The Consultant will insert any necessary standards into the plan set and update the estimate, general notes, associated bid forms and construction manual.
5. The Consultant shall amend the Traffic Control Plan phases to include additional design and plans sheets from the southern limits of the project to south of Rockride Lane and the construction of the expanded East Parking Lot.

TASK 4: ENVIRONMENTAL REVIEWS - COMPLETE

TASK 5: DRAINAGE DESIGN

1. The Consultant will design parking grading to provide adequate drainage.
2. The Consultant will update Minor Drainage Areas impacted by the East Parking Lot expansion and check ditches that may be impacted by the design.
3. The Consultant shall amend the Storm Water Pollution Prevention Plan (SW3P) as necessary to accommodate the construction of the East Parking Lot expansion.

TASK 6: SIGNING AND PAVEMENT MARKINGS

1. The Consultant shall prepare drawings, specifications and details for all signs and pavement markings necessitated by the East Parking Lot expansion and amend existing summaries and estimates.

TASK 7: SPECIFICATIONS AND BID DOCUMENTS

1. The Consultant shall independently develop and report quantities in standard County bid format compatible to the County system at the final PS&E submittals.
2. The Consultant shall prepare technical specifications required for bidding and constructing the project. Only specifications amending or supplementing TxDOT specification need be furnished. The Consultant shall identify necessary standard specifications, special specifications, special provisions and the appropriate reference items.
3. Bid Documents for Roadway. The Consultant will prepare project construction manual (bid documents). The County will advertise for the bidders. The

Consultant will assist the County by addressing technical questions and preparing draft addenda for issuance by the County.

- a. All plan set deliverables are in 11"x17" format except where noted. At each submittal, the consultant will upload all DGN and other native files along with a copy of their internal QA markups.
 1. Interim Submittal: Submit four (4) paper sets, one (1) electronic set, and one (1) set of DGN's for review and comment and provide supporting paperwork as needed. The Interim submittal will include all newly generated designs and modified sheets necessitated by the East Parking Lot expansion including plans, specifications, general notes, special specifications, special provisions, construction cost estimate, project construction manual, and other supporting documentation as required by the County.
 2. Final Submittal: Submit one (1) full complete set of originals and three (3) paper copy sets of plans, specifications and estimates to the County. The Consultant will provide the County with an electronic deliverable zip file uploaded to PW of substantially complete design documents (excluding standard drawings) for this project. The electronic data shall be in MicroStation format.

TASK 8: PROJECT MANAGEMENT

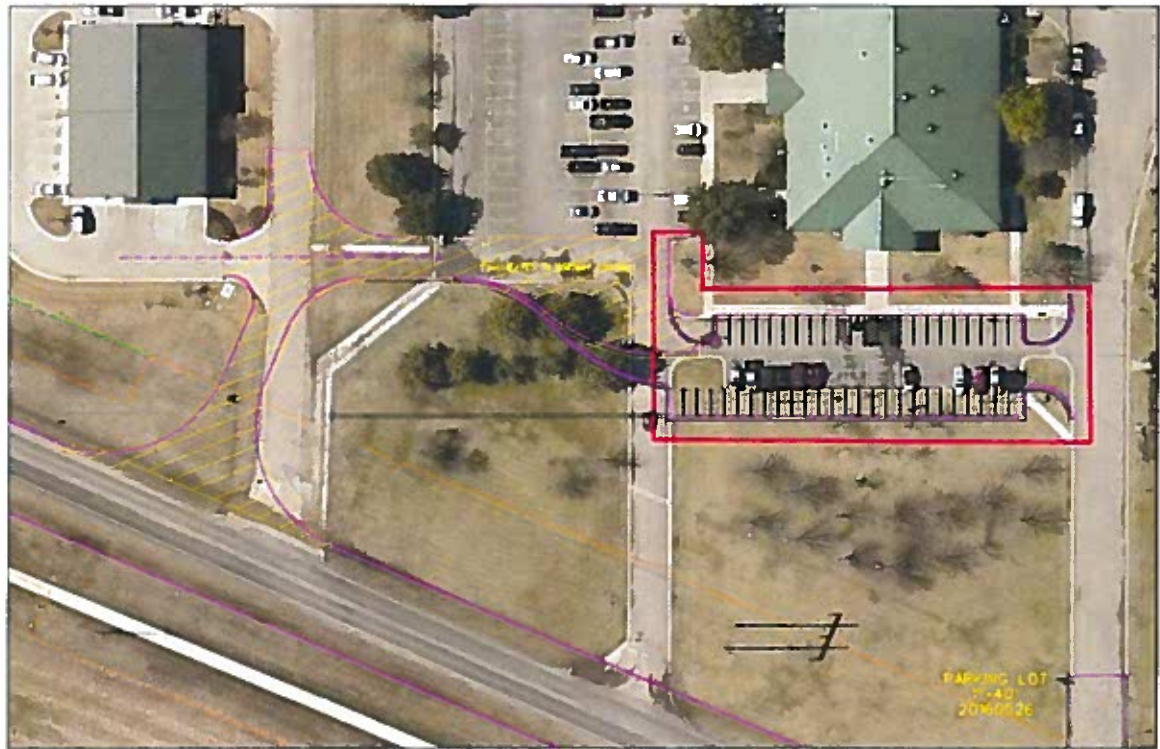
1. Collect Data. The Consultant shall collect, review and evaluate data including "as-built plans", right of way maps, SUE mapping, existing cross sections, existing planimetric mapping, environmental documents, documents for existing and proposed developments in the project vicinity, utility plans and documents.
2. Field Reconnaissance. The Consultant shall conduct field reconnaissance and collect data including a photographic record of notable existing features.
3. Design Criteria. The Consultant shall develop project specific design criteria (typical sections, drainage criteria, geometric criteria, etc.)
4. Meeting Attendance. The Consultant shall attend coordination meetings with the County and submittal review meetings.
5. Prepare Monthly Progress Reports. Reports will include progress documentations.
6. Administration. Invoicing, meeting minutes, documentation of correspondence, coordination with sub-consultants, maintain project schedule.

7. Project Schedule – Prepare, and update as needed, a design schedule for the East Parking Lot expansion with milestones in Microsoft Project. Submit in native format within 30 days of NTP and at each submittal.

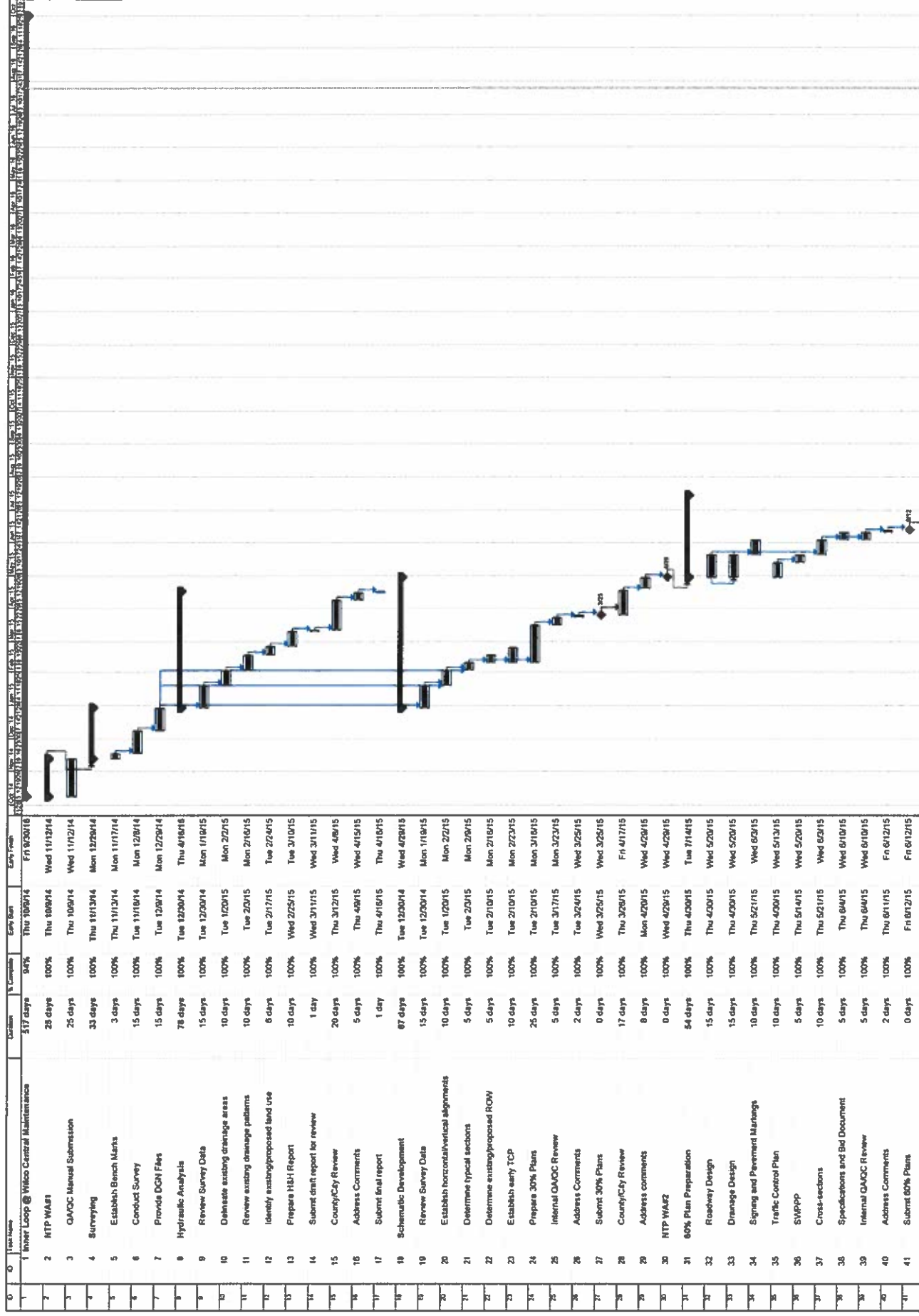
TASK 10: MISCELLANEOUS

1. Miscellaneous services not provided for herein and not generally associated with a project of this type will be paid for under an amendment to this Agreement for an additional fee.

Exhibit A



Attachment C - Work Schedule



ID	Item Name	Duration	% Complete	Early Start	Early Finish
42	County/City Review	20 days	100%	Mon 8/15/16	Fri 7/16/15
43	Address comments	2 days	100%	Mon 7/13/15	Tue 7/14/15
44	90% Plan Preparation	108 days	100%	Wed 7/15/15	Tue 12/8/15
45	Roadway Design	68 days	100%	Wed 7/15/15	Fri 10/16/15
46	Drainage Design	68 days	100%	Wed 7/15/15	Fri 10/16/15
47	Signing and Pavement Markings	3 days	100%	Wed 7/22/15	Mon 10/19/15
48	Traffic Control Plan	68 days	100%	Wed 7/15/15	Fri 10/16/15
49	SMPPP	4 days	100%	Mon 7/20/15	Wed 10/21/15
50	Cross-sections	8 days	100%	Mon 10/19/15	Mon 10/26/15
51	Specifications and Bid Document	7 days	100%	Wed 7/15/15	Wed 10/21/15
52	Internal QA/QC Review	3 days	100%	Tue 10/27/15	Thu 10/29/15
53	Address Comments	1 day	100%	Fri 10/30/15	Fri 10/30/15
54	Submit 80% Plans	2 days	100%	Mon 11/2/15	Tue 11/3/15
55	County/City Review	24 days	100%	Wed 11/4/15	Mon 12/7/15
56	Address comments	1 day	100%	Tue 12/8/15	Tue 12/8/15
57	Final Plan Preparation	58 days	100%	Wed 12/9/15	Wed 2/24/16
58	Roadway Design	8 days	100%	Wed 12/9/15	Fri 12/18/15
59	Drainage Design	8 days	100%	Wed 12/9/15	Fri 12/18/15
60	Signing and Pavement Markings	7 days	100%	Mon 12/21/15	Tue 12/29/15
61	Traffic Control Plan	7 days	100%	Wed 12/9/15	Thu 12/17/15
62	SMPPPP	7 days	100%	Fri 12/18/15	Mon 12/28/15
63	Cross-sections	8 days	100%	Mon 12/21/15	Wed 12/30/15
64	Specifications and Bid Document	5 days	100%	Thu 12/31/15	Wed 1/6/16
65	Internal QA/QC Review	10 days	100%	Thu 12/31/15	Wed 1/13/16
66	Address Comments	2 days	100%	Thu 1/14/16	Fri 1/15/16
67	Submit Final Plans	0 days	100%	Fri 1/15/16	Fri 1/15/16
68	County/City Review	20 days	100%	Mon 1/18/16	Fri 2/12/16
69	Address comments	7 days	100%	Mon 2/15/16	Tue 2/23/16
70	Submit Final Plans	1 day	100%	Wed 2/24/16	Wed 2/24/16
71	East Parking Lot Expansion	41 days	0%	Fri 8/5/16	Fri 9/30/16
72	NTP - VMA&2 S&M3	0 days	0%	Fri 8/5/16	Fri 8/5/16
73	Survey	8 days	0%	Fri 8/5/16	Fri 8/12/16
74	Conduct Survey	1 day	0%	Fri 8/5/16	Fri 8/5/16
75	Provide DGM Files	5 days	0%	Mon 8/8/16	Fri 8/12/16
76	Design Parking Lot Expansion	6 days	0%	Mon 8/15/16	Mon 8/22/16
77	Modify/Adjust Existing Designs	1 day	0%	Tue 8/23/16	Tue 8/23/16
78	Check Drainage/Ditches	1 day	0%	Wed 8/24/16	Wed 8/24/16
79	Update E&Q	1 day	0%	Thu 8/25/16	Thu 8/25/16
80	Update General Notes	1 day	0%	Fri 8/26/16	Fri 8/26/16
81	Internal QA/QC Review	1 day	0%	Mon 8/29/16	Mon 8/29/16
82	Address Comments	1 day	0%	Tue 8/30/16	Tue 8/30/16

Attachment C - Work Schedule

Task Name		Duration	% Complete	Early Start	Early Finish
83	Submit Inform Design	0 days	0%	Tue 8/30/16	Tue 8/30/16
84	County/City Review	20 days	0%	Wed 8/31/16	Tue 9/27/16
85	Address Comments	2 days	0%	Wed 9/28/16	Thu 9/29/16
86	Submit Final Plans	1 day	0%	Fri 9/30/16	Fri 9/30/16

Task Critical Task

Progress Milestone

Summary Related Up Task

Related Up Critical Task

Related Up Milestone

Related Up Progress

Extended Task Project Summary

Group By Summary

Outlines

Page 3

Attachment D - Fee Schedule

TASK	FIRM NAME	FEE
TASK 1: SURVEYING	SAM	\$2,110.00
TASK 2: GEOTECHNICAL INVESTIGATIONS	CORSAIR	\$0.00
TASK 3: ROADWAY DESIGN	BRIDGEFARMER	\$20,085.00
TASK 4: ENVIRONMENTAL REVIEWS	COX-MCLAIN	\$0.00
TASK 5: DRAINAGE DESIGN	BRIDGEFARMER	\$3,160.00
TASK 6: SIGNING AND PAVEMENT MARKINGS	BRIDGEFARMER	\$1,120.00
TASK 7 & 8: PROJECT MANAGEMENT	BRIDGEFARMER	\$2,150.00
SUBTOTAL		\$28,625.00
EXPENSES		
	BRIDGEFARMER	\$271.50
	SAM	\$204.00
	CORSAIR	\$0.00
	COX-MCLAIN	\$0.00
SUBTOTAL		\$475.50
GRAND TOTAL		\$29,100.50

Attachment D - Fee Schedule

Bridgefarmer & Associates - Williamson County Inner Loop at Central Maintenance

TASK 1: SURVEYING		Project Manager	Senior Engineer	Design Engineer	EIT	Senior CADD Operator	Admin / Clerical	Total	PROPOSED FEE
See subconsultant fee estimate (SAM)									
Review Sub-consultant plans		1	1					2	\$230.00
HOURS SUB-TOTALS									
LABOR RATE PER HOUR		1	1	0	0	0	0	2	\$230.00
SUBTOTAL Route & Design Studies		\$120.00	\$110.00	\$105.00	\$95.00	\$90.00	\$50.00		
		\$120.00	\$110.00	\$0.00	\$0.00	\$0.00	\$0.00	\$230.00	\$230.00

TASK 2: GEOTECHNICAL INVESTIGATION		Project Manager	Senior Engineer	Design Engineer	EIT	Senior CADD Operator	Admin / Clerical	Total	PROPOSED FEE
See subconsultant fee estimate (CORSAIR)									
Review Sub-consultant plans								0	\$0.00
HOURS SUB-TOTALS									
LABOR RATE PER HOUR		0	0	0	0	0	0	0	\$0.00
SUBTOTAL Route & Design Studies		\$120.00	\$110.00	\$105.00	\$95.00	\$90.00	\$50.00		
		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

TASK 3 ROADWAY DESIGN		Project Manager	Senior Engineer	Design Engineer	EIT	Senior CADD Operator	Admin / Clerical	Total	PROPOSED FEE
Modifications									
Modify Driveway Vertical Alignment			1			1		2	\$200.00
Modify Driveway Horizontal Alignment			1			1		2	\$200.00
Modify TCP (Parking Lot)		1	3		3	1		8	\$825.00
Modify TCP (To Include Section C)		2	24		40	24		90	\$8,840.00
Driveway Grading		1	4		8	2		15	\$1,500.00
Update Removals		1	2		2	1		6	\$620.00
Parking Lot Expansion									
Parking Lot Design		1	4		8	4		17	\$1,680.00
Illumination			4		18	8		28	\$2,680.00
HOURS SUB-TOTALS			43	0	77	42	0	188	\$16,545.00
LABOR RATE PER HOUR		\$120.00	\$110.00	\$105.00	\$95.00	\$90.00	\$50.00		
SUBTOTAL Roadway Design		\$720.00	\$4,730.00	\$0.00	\$7,315.00	\$3,780.00	\$0.00	\$16,545.00	\$16,545.00

Attachment D - Fee Schedule

Bridgefarmer & Associates - Williamson County Inner Loop at Central Maintenance

TASK 3A: Miscellaneous Roadway	Project Manager	Senior Engineer	Design Engineer	EIT	Senior CADD Operator	Admin / Clerical	Total	PROPOSED FEE
General Notes & Specifications								
Update Quantities	2	4		8	2		16	\$1,620.00
Amend General Notes	3	4					7	\$800.00
							0	\$0.00
Preparation / Plotting for Submittals								
100% QC (internal) Submittal Review	2	8					10	\$1,120.00
							0	\$0.00
							0	\$0.00
							0	\$0.00
HOURS SUB-TOTALS	7	16	0	8	2	0	33	\$3,540.00
LABOR RATE PER HOUR	\$120.00	\$110.00	\$105.00	\$95.00	\$90.00	\$50.00		
SUBTOTAL Miscellaneous Roadway	\$840.00	\$1,760.00	\$0.00	\$760.00	\$180.00	\$0.00		\$3,540.00

TASK 4: ENVIRONMENTAL REVIEWS	Project Manager	Senior Engineer	Design Engineer	EIT	Senior CADD Operator	Admin / Clerical	Total	PROPOSED FEE
See subconsultant fee estimate (COX-MCLAIN)								
Review Sub-consultant plans							0	\$0.00
HOURS SUB-TOTALS	0	0	0	0	0	0	0	\$0.00
LABOR RATE PER HOUR	\$120.00	\$110.00	\$105.00	\$95.00	\$90.00	\$50.00		
SUBTOTAL Route & Design Studies	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00

TASK 5: DRAINAGE DESIGN	Project Manager	Senior Engineer	Design Engineer	EIT	Senior CADD Operator	Admin / Clerical	Total	PROPOSED FEE
Hydrologic and Hydraulic Drainage Design								
Update Minor Drainage Areas	1	4		8	2		15	\$1,500.00
Check Ditches		2		8	2		12	\$1,160.00
							0	\$0.00
SWPPP:								
Update SWPPP		2		2	1		5	\$500.00
HOURS SUB-TOTALS	1	8	0	18	5	0	32	\$3,160.00
LABOR RATE PER HOUR	\$120.00	\$110.00	\$105.00	\$95.00	\$90.00	\$50.00		
SUBTOTAL Drainage Design	\$120.00	\$880.00	\$0.00	\$1,710.00	\$450.00	\$0.00		\$3,160.00

Attachment D - Fee Schedule

Bridgefarmer & Associates - Williamson County Inner Loop at Central Maintenance

TASK 6: SIGNING AND PAVEMENT MARKINGS	Project Manager	Senior Engineer	Design Engineer	EIT	Senior CADD Operator	Admin / Clerical	Total	PROPOSED FEE
Parking Lot Striping and Signing	1	4		4	2		11	\$1,120.00
HOURS SUB-TOTALS	1	4	0	4	2	0	11	\$1,120.00
LABOR RATE PER HOUR	\$120.00	\$110.00	\$105.00	\$95.00	\$90.00	\$50.00		
SUBTOTAL Signing and Pavement Marking	\$120.00	\$440.00	\$0.00	\$380.00	\$180.00	\$0.00		\$1,120.00

TASKS 7 & 8: SPECIFICATION, BID DOCUMENTS, AND PROJECT MANAGEMENT	Project Manager	Senior Engineer	Design Engineer	EIT	Senior CADD Operator	Admin / Clerical	Total	PROPOSED FEE
Meetings:								
Monthly Status / Coordination / Meeting Minutes	2	2		2			6	\$650.00
Internal Coordination & Subconsultants	1						1	\$120.00
Teleconferencing / Documentation	1						1	\$120.00
Administration:								
Prepare Monthly Progress Reports	2					2	4	\$340.00
Project Schedule - Prepare / Update	2						2	\$240.00
Prepare Modified Bid Package	2	4					6	\$680.00
HOURS SUB-TOTALS	10	6	0	2	0	2	20	\$2,150.00
LABOR RATE PER HOUR	\$120.00	\$110.00	\$105.00	\$95.00	\$90.00	\$50.00		
SUBTOTAL Project Management	\$1,200.00	\$660.00	\$0.00	\$190.00	\$0.00	\$100.00		\$2,150.00

Summary	Project Manager	Senior Engineer	Design Engineer	EIT	Senior CADD Operator	Admin / Clerical	Total	PROPOSED FEE
BRIDGEFARMER TOTAL HOURS BY CLASSIFICATION:	26	78	0	109	51	2	266	\$26,745.00
LABOR RATE PER HOUR	\$120.00	\$110.00	\$105.00	\$95.00	\$90.00	\$50.00		
BRIDGEFARMER ALL FUNCTION CODES	\$3,120.00	\$8,580.00	\$0.00	\$10,365.00	\$4,590.00	\$100.00		\$26,745.00

Other Direct Expenses	UNIT	CHARGE	DIRECT EXPENSE TOTAL COST
Mileage			
CD-ROM	100	\$0.54	\$ 54.00
Courier Services			\$ -
Photocopies BW (8 1/2" X 11")	100	\$0.15	\$ 15.00
Photocopies BW (11" X 17")	1350	\$0.15	\$ 202.50
Photocopies Color (11" X 17")			\$ -
			\$0.00
			\$271.50

TOTAL			\$27,016.50
--------------	--	--	--------------------

FEE SCHEDULE (SAM, LLC)

TASK DESCRIPTION	RPLS PROJECT MANAGER	RPLS STAFF SURVEYOR	SENIOR TECHNICIAN	SURVEY TECHNICIAN	SURVEY TECHNICIAN OPS	2 MAN SURVEY CREW	3 MAN SURVEY CREW	FIELD COORDINATOR	ADMIN CLERICAL	TOTAL LABOR HRS & COSTS
Re-establish Control			1			2				\$100.00
Transfer notes			1			7				\$75.00
Data Reduction, DTM & Approval to station or zoning	1		2							\$300.00
GAGE & Gravity										\$0.00
										\$0.00
										\$0.00
HOURS SUB-TOTALS	2	0	9	0	0	9	0	0	0	20
CONTRACT RATE PER HOUR	\$125.00	\$110.00	\$80.00	\$105.00	\$130.00	\$130.00	\$160.00	\$85.00	\$60.00	
TOTAL LABOR COSTS	\$250.00	\$0.00	\$720.00	\$0.00	\$0.00	\$1,170.00	\$0.00	\$0.00	\$0.00	\$1,940.00
% DISTRIBUTION OF STAFFING	10.0%	0.0%	45.0%	0.0%	0.0%	45.0%	0.0%	0.0%	0.0%	

[illegible]