

WORK AUTHORIZATION NO. 2

PROJECT: Engineering Design Services for the Reconstruction of Walburg Heights and Bluebonnet Drive

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated **March 6, 2018** and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and **Alliance Transportation Group** (the "Engineer").

Part 1. The Engineer will provide the following Engineering Services set forth in Attachment "B" of this Work Authorization.

Part 2. The maximum amount payable for services under this Work Authorization without modification is **\$140,000.00**.

Part 3. Payment to the Engineer for the services established under this Work Authorization shall be made in accordance with the Contract.

Part 4. This Work Authorization shall become effective on the date of final acceptance and full execution of the parties hereto and shall terminate on **March 31, 2019**. The Engineering Services set forth in Attachment "B" of this Work Authorization shall be fully completed on or before said date unless extended by a Supplemental Work Authorization.

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

Part 6. County believes it has sufficient funds currently available and authorized for expenditure to finance the costs of this Work Authorization. Engineer understands and agrees that County's payment of amounts under this Work Authorization is contingent on the County receiving appropriations or other expenditure authority sufficient to allow the County, in the exercise of reasonable administrative discretion, to continue to make payments under this Contract. It is further understood and agreed by Engineer that County shall have the right to terminate this Contract at the end of any County fiscal year if the governing body of County does not appropriate sufficient funds as determined by County's budget for the fiscal year in question. County may effect such termination by giving written notice of termination to Engineer.

Part 7. This Work Authorization is hereby accepted and acknowledged below.

EXECUTED this ____ day of _____, 20__.

ENGINEER:

Alliance Transportation Group

COUNTY:

Williamson County, Texas

By: 

Signature

Chris Jumper

Printed Name

VP, Engineering

Title

By: _____

Signature

Printed Name

Title

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 County

Williamson County Road & Bridge Division personnel will provide:

- Project direction, review and oversight.
- Topographic and R.O.W Surveys.
- Geotechnical investigations, data and reports.
- ROW Documents and Drainage Reports.
- Conducting pre-bid meeting, responding to contractor questions during bidding, tabulating and evaluating bids after bid opening, and providing recommendation of award of contract.
- Construction oversight, administration and management.

Attachment B

Services to be Provided by the Engineer

Project Locations:

1. **Walburg Heights - From FM 1105 to Cul-de-Sac**
2. **Bluebonnet Drive - From Lantana Drive to Tiger Trail**

Task 1: Project Management

Attend Progress Review Meetings with County Road & Bridge department at 50%, 90% and Final.
Prepare monthly progress reports and invoices. Maintain project schedule and perform QA/QC.

Task 2: Topographic and R.O.W Surveys

To be provided by the County

Task 3: Preliminary Engineering

Conduct Site Visit and Field Reconnaissance to document existing conditions. Data collection including available as-builts for Bluebonnet Drive only. Develop a conceptual geometric layout on scroll plot (1"=20' H, 1"=2' V) showing roadway horizontal and vertical geometry and proposed typical section. Prepare preliminary cross sections (50' interval and Driveways). Develop preliminary drainage analysis including delineation of drainage areas, calculation of peak stormwater runoff rates for 25-yr and 100-yr for Walburg Heights only.

Task 4: Geotechnical Investigations

To be provided by the County

Task 5: Environmental Studies

N/A

Task 6: Utility Coordination

N/A

Task 7: FEMA Coordination

N/A

Task 8: Final Engineering

Prepare final detailed design and PS&E for proposed improvements. Calculate ditch capacity and size driveway pipes for Walburg Heights only. Existing drainage patterns and flows for Bluebonnet Drive are not anticipated to be affected.

Plan Sheets:

- Title Sheet
- Estimate & Quantity Sheet
- Typical Sections

- Horizontal Alignment Data Sheet
- Drainage Area Map – Walburg Heights only
- Erosion Control Plan
- Traffic Control Plan
- Driveway Details
- Driveway Summary
- Roadway Plan & Profile Sheets
- Miscellaneous Roadway Details
- Cross Sections (50' Interval and Driveways)
- Standards

Specifications

Cost Estimate

General Notes

Task 9: Bidding Phase Services

Prepare Bid-Tabs for processing by Purchasing Department.

Task 10: Construction Phase Services

Review shop drawings and respond to contractor RFIs. Prepare electronic as-built final drawings for the County based on construction red-lines provided by the County.

Deliverables:

50% Submittal:

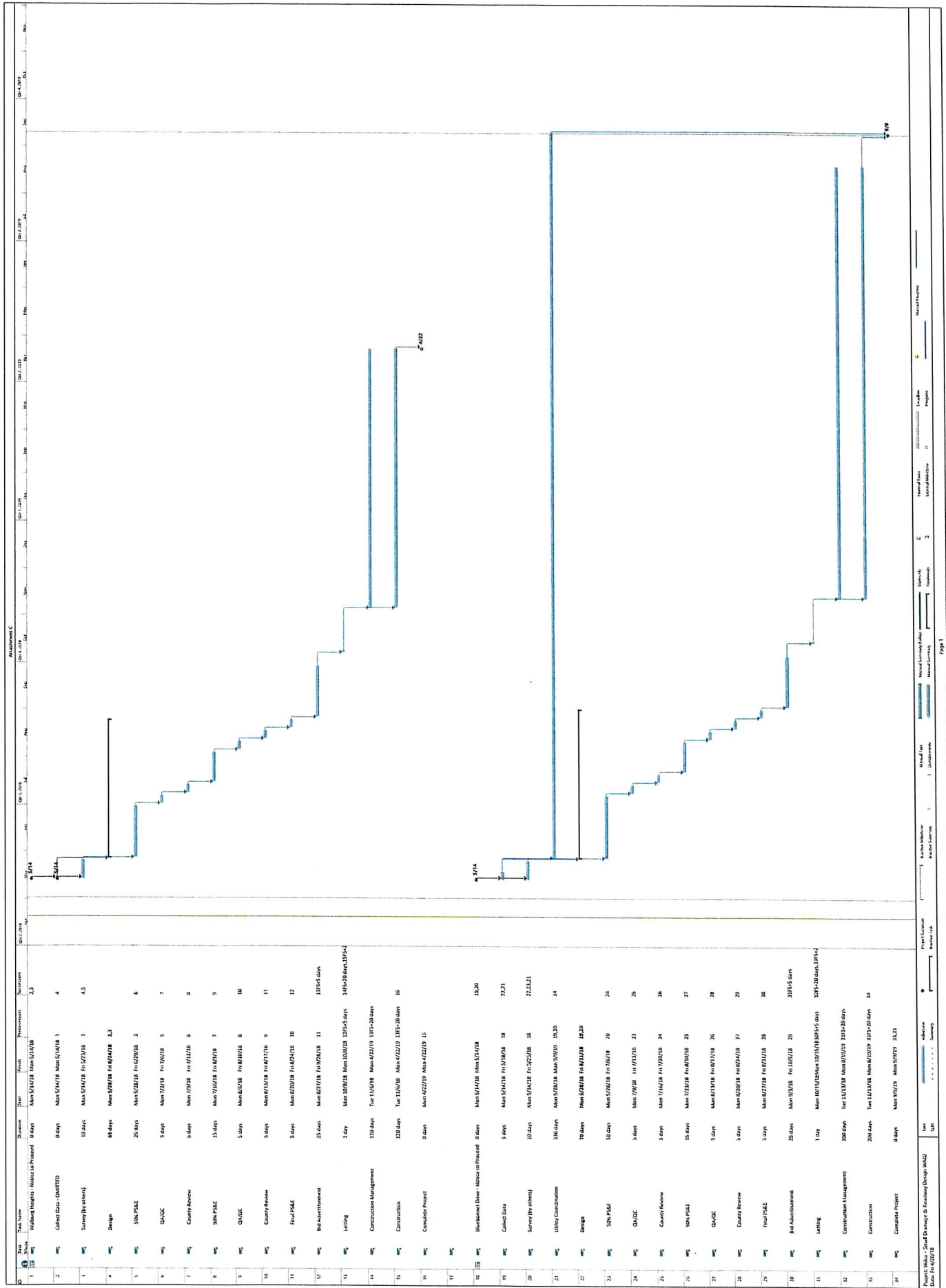
- 2 paper copies of 11" x 17" Plan Sheets
- Specifications
- Estimate of Construction Cost
- General Notes
- Engineer's internal QA/QC marked up set

90% Submittal:

- 2 paper copies of 11" x 17" Plan Sheets
- Specifications
- Estimate of Construction Cost
- General Notes
- Engineer's internal QA/QC marked up set

Final Submittal:

- 2 paper copies of 11" x 17" Plan Sheets
- Specifications
- Estimate of Construction Cost
- General Notes
- Engineer's internal QA/QC marked up set
- Electronic copy of submittal documents in PDF format on CD



ID	Task Name	Duration	Start	Finish	Predecessors	Resources
1	Waiting (Night) - Notice to Proceed	0 days	Mon 5/14/18	Mon 5/14/18	2,3	
2	Collect Data - QM/TD	0 days	Mon 5/14/18	Mon 5/14/18	4	
3	Survey (by others)	10 days	Mon 5/14/18	Mon 5/22/18	4,5	
4	Design	64 days	Mon 5/22/18	Mon 6/24/18	2,3	
5	SOW P&E	28 days	Mon 5/22/18	Mon 6/19/18	3	
6	QA/QC	5 days	Mon 5/22/18	Mon 5/29/18	5	
7	County Review	9 days	Mon 5/29/18	Mon 6/12/18	6	
8	SOW P&E	15 days	Mon 5/29/18	Mon 6/14/18	7	
9	QA/QC	5 days	Mon 6/14/18	Mon 6/20/18	8	
10	County Review	9 days	Mon 6/20/18	Mon 6/27/18	9	
11	Final P&E	5 days	Mon 6/27/18	Mon 7/3/18	10	
12	Bid Advertisement	25 days	Mon 6/27/18	Mon 7/24/18	11	13945 days
13	Letting	1 day	Mon 8/6/18	Mon 8/6/18	13945 days	149+20 days, 13945
14	Construction Management	120 days	Tue 11/6/18	Mon 4/22/19	13945+20 days	
15	Construction	120 days	Tue 11/6/18	Mon 4/22/19	13945+20 days	16
16	Complete Project	0 days	Mon 4/22/19	Mon 4/22/19	15	
17						
18	Bluebonnet Drive - Notice to Proceed	0 days	Mon 5/14/18	Mon 5/14/18	19,20	
19	Collect Data	5 days	Mon 5/14/18	Mon 5/21/18	18	72,21
20	Survey (by others)	10 days	Mon 5/14/18	Mon 5/22/18	18	22,21,21
21	Utility Construction	336 days	Mon 5/22/18	Mon 9/19/19	19,20	34
22	Design	78 days	Mon 5/22/18	Mon 8/13/18	19,20	
23	SOW P&E	30 days	Mon 5/22/18	Mon 7/9/18	20	24
24	QA/QC	5 days	Mon 5/22/18	Mon 5/29/18	23	25
25	County Review	9 days	Mon 5/29/18	Mon 6/12/18	24	26
26	SOW P&E	15 days	Mon 5/29/18	Mon 6/19/18	25	27
27	QA/QC	5 days	Mon 6/19/18	Mon 6/26/18	26	28
28	County Review	9 days	Mon 6/26/18	Mon 7/13/18	27	29
29	Final P&E	5 days	Mon 7/13/18	Mon 7/23/18	28	30
30	Bid Advertisement	25 days	Mon 7/23/18	Mon 8/13/18	29	31,35+5 days
31	Letting	1 day	Mon 8/13/18	Mon 8/13/18	31,35+5 days	32,35+20 days, 33,35+5
32	Construction Management	200 days	Tue 11/13/18	Mon 8/19/19	31,35+20 days	
33	Construction	200 days	Tue 11/13/18	Mon 8/19/19	31,35+20 days	34
34	Complete Project	0 days	Mon 8/19/19	Mon 8/19/19	31,31	

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer In Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 1: Project Management (Included in Bluebonnet Dr Task 1)												0
Labor Hours Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	
Labor Costs Subtotal	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer In Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 2: Topographic and R.O.W. Surveys N/A												0
Labor Hours Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	
Labor Costs Subtotal	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer In Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 3: Preliminary Engineering												
3.1 Site Visit & Field Recon				4		4	4					12
3.2 OMITTED												0
3.3 Conceptual Geometric Layout			1			8	16					25
Scroll Plot with Plan & Profile (H: 1"=20', V: 1"=2')			1			2	2	4				9
Typical Sections (Existing & Proposed)			2			6		8				16
Cross-Sections (50' Intervals and Driveways)												0
3.4 Preliminary Drainage				4			8					12
Deliniate Drainage Areas				4			12					16
Calculate Peak Stormwater Runoff Rates (25-yr, 100-yr)				12		20	42	0	12	0	0	90
Labor Hours Subtotal	0	0	4	12	0	20	42	0	12	0	0	90
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	
Labor Costs Subtotal	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer In Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 4: Geotechnical Investigation N/A												0
Labor Hours Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	
Labor Costs Subtotal	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer In Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 5: Environmental Studies												0
N/A												0
Labor Hours Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	\$
Labor Costs Subtotal	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer In Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 6: Utility Coordination												0
N/A												0
Labor Hours Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	\$
Labor Costs Subtotal	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer In Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 7: FEMA Coordination												0
N/A												0
Labor Hours Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	\$
Labor Costs Subtotal	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer In-Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 8: Final Engineering												
8.1 Plans												
Title Sheet			1			2			4			7
Index of Sheets			1			2			4			7
Estimate & Quantity Sheet			1			2	2		4			9
Typical Sections						1	4		2			7
Horizontal Alignment Data Sheet			1	4		2			4			4
Drainage Area Map			1	1		6	9		6			13
Erosion Control Plan (1"=50')			1	1		4	8		4			23
Traffic Control Plan			1			2	4		4			17
Driveway Details						2	4		4			10
Driveway Summary						12	18		9			41
Roadway Plan & Profile Sheets (1"=50')			2			6	4		12			24
Miscellaneous Roadway Details						2	2		4			9
Final Cross Sections (50' Intervals and driveways)			1	1		4	6		4			12
Standards			1	1		10	6		6			18
8.2 Specifications			2	2		6	4				2	16
8.3 Cost Estimate												
8.4 General Notes												
Labor Hours Subtotal	0	0	16	10	0	65	79	0	67	0	2	239
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	\$ 81,599.00
Labor Costs Subtotal	\$ -	\$ -	\$ 3,680.00	\$ 2,100.00	\$ -	\$ 10,400.00	\$ 9,085.00	\$ -	\$ 6,164.00	\$ -	\$ 170.00	\$ 81,599.00

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer In-Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 9: Bidding Phase Services												
9.1 Prepare Bid Tabs			1			4						11
Labor Hours Subtotal	0	0	1	0	0	4	4	0	0	0	2	11
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	\$ 1,500.00
Labor Costs Subtotal	\$ -	\$ -	\$ 230.00	\$ -	\$ -	\$ 640.00	\$ 460.00	\$ -	\$ -	\$ -	\$ 170.00	\$ 1,500.00

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer In-Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 10: Construction Phase Services												
10.1 Review Shop Drawings and RFIs			2		4	4	8				2	20
10.2 OMITTED			0			0	0					0
10.3 Project closeout, As-Builts and submittal of electronic files			1			4	4					9
Labor Hours Subtotal	0	0	3	0	4	8	12	0	0	0	2	29
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	\$ 43,400.00
Labor Costs Subtotal	\$ -	\$ -	\$ 690.00	\$ -	\$ 820.00	\$ 1,280.00	\$ 1,380.00	\$ -	\$ -	\$ -	\$ 170.00	\$ 43,400.00

DESCRIPTION	UNIT	COST/UNIT	QUANTITY	TOTAL COST
Task 1: Project Management				
Task 2: Topographic and R.O.W. Surveys				
Task 3: Preliminary Engineering				
Task 4: Geotechnical Investigation				
Task 5: Environmental Studies				
Task 6: Utility Coordination				
Task 7: FEMA Coordination				
Task 8: Final Engineering				
Task 9: Bidding Phase Services				
Task 10: Construction Phase Services				
SUBTOTAL LABOR COST			369	\$ 50,013.00

DIRECT EXPENSES

Description	Unit	Cost/Unit	Quantity	Total Cost
Mileage	mile	\$ 0.585		\$ -
Standard Postage - Letter	each	\$ 0.50		\$ -
Certified Letter Return Receipt	each	\$ 6.70		\$ -
Overnight Mail - Letter Size	each	\$ 25.00		\$ -
Overnight Mail - Oversized Box	each	\$ 30.00		\$ -
Courier Services	each	\$ 50.00		\$ -
Photocopies B/W (8 1/2" x 11")	each	\$ 0.25	50	\$ 12.50
Photocopies B/W (11" x 17")	each	\$ 0.50	216	\$ 108.00
Photocopies Color (8 1/2" x 11")	each	\$ 1.00		\$ -
Photocopies Color (11" x 17")	each	\$ 2.00		\$ -
Plots (B/W on Bond)	square foot	\$ 6.00		\$ -
Plots (Color on Bond)	square foot	\$ 8.00	96	\$ 768.00
CDs	each	\$ 0.50	1	\$ 0.50
SUBTOTAL DIRECT EXPENSES				\$ 409.00

SUMMARY	
SUBTOTAL LABOR COST	\$ 50,013.00
SUBTOTAL DIRECT EXPENSE	\$ 409.00
TOTAL	\$ 50,422.00

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer In-Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 1: Project Management												
1.1 Progress Review Meetings (3 meetings: 50%, 90% & Final)			9			9				4	3	21
1.2 Invoicing and Progress Reports (4 months)	2		4									10
1.3 Subconsultants			4									4
1.4 QA/QC of Deliverables at 50%, 90% and FINAL			12	3		9						24
Labor Hours Subtotal	2	0	29	3	0	18	0	0	0	4	3	59
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	
Labor Costs Subtotal	\$ 530.00	\$	\$ 6,670.00	\$ 630.00	\$	\$ 2,880.00	\$	\$	\$	\$ 416.00	\$ 255.00	\$ 11,381.00

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer In-Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 2: Topographic and R.O.M.C. Surveys												
N/A												0
Labor Hours Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	
Labor Costs Subtotal	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer In-Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 3: Preliminary Engineering												
3.1 Site Visit & Field Recon				6		6	8					20
3.2 Data Collection			1			8	8				2	19
3.3 Conceptual Geometric Layout						8	20					30
Scroll Plot with Plan & Profile (H: 1"=20', V: 1"=2')			2			2	2		4			9
Typical Sections			1			12			16			30
Cross-Sections (50' Intervals and driveways)			2									0
3.4 Preliminary Drainage - OMITTED												0
Labor Hours Subtotal	0	0	16	6	0	36	38	0	20	0	2	108
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	
Labor Costs Subtotal	\$	\$	\$ 1,380.00	\$ 1,260.00	\$	\$ 5,760.00	\$ 4,370.00	\$	\$ 1,840.00	\$	\$ 170.00	\$ 14,780.00

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer In-Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 4: Geotechnical Investigation												
N/A												0
Labor Hours Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	
Labor Costs Subtotal	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer In Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 5: Environmental Studies												0
N/A												0
Labor Hours Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	\$
Labor Costs Subtotal	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer In Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 6: Utility Coordination												0
N/A												0
Labor Hours Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	\$
Labor Costs Subtotal	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer In Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 7: FEMA Coordination												0
N/A												0
Labor Hours Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	\$
Labor Costs Subtotal	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$

Task & Final Engineering	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer in Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
8.1 Plans												0
Title Sheet			1			2			4			7
Index of Sheets			1			2			4			7
Estimate & Quantity Sheet			1		4	4	10		2			17
Typical Sections					2	2	6		8			16
Horizontal Alignment Data Sheet					2	2			2			4
Drainage Area Map - OMITTED												0
Erosion Control Plan (1"=50')			1	2		9	15		6			33
Traffic Control Plan			4		4	20	24		24			76
Driveway Details			1		10	6	6		12			29
Driveway Summary					4	4	12		4			20
Roadway Plan & Plan sheets (1"=50')			3		9	27	15		15			54
Miscellaneous Roadway Details			1		4	6	6		6			17
Final Cross Sections (50' Intervals and driveways)			2		12	10	10		20			44
Standards				2	2	2	4		4			12
8.2 Specifications			1	2	2	6	6		4			15
8.3 Cost Estimate			1	2	12	8	8		23			23
8.4 General Notes			2	2	16	6	6				4	30
Labor Hours Subtotal	0	0	19	10	4	116	140	0	111	0	4	404
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	\$ 52,502.00
Labor Costs Subtotal	\$	\$ 4,570.00	\$ 2,100.00	\$ 820.00	\$ 18,560.00	\$ 16,100.00	\$	\$	\$ 10,212.00	\$	\$ 340.00	\$

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer in Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 9: Bidding Phase Services												
9.1 Prepare Bid Tabs			1			4						11
Labor Hours Subtotal	0	0	1	0	0	4	4	0	0	0	2	11
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	\$ 1,590.00
Labor Costs Subtotal	\$	\$	\$ 230.00	\$	\$	\$ 640.00	\$ 450.00	\$	\$	\$	\$ 170.00	\$

Task Description	Project Principal	Senior Project Manager	Project Manager	Hydraulic Engineer	Senior Engineer	Project Engineer	Engineer in Training	Senior Engineering Technician	Engineering Technician	Project Administrator	Clerical	Total Labor Hours & Costs
Task 10: Construction Phase Services												
10.1 Review Shop Drawings and RFIs			2		4	6	8				2	22
10.2 OMITTED			0		0	0	0					0
10.3 Project closeout, As-Builts and submittal of electronic files			1		4	4	4					9
Labor Hours Subtotal	0	0	3	0	4	10	12	0	0	0	2	31
Contract Labor Rate Per Hour	\$ 265.00	\$ 244.00	\$ 230.00	\$ 210.00	\$ 205.00	\$ 160.00	\$ 115.00	\$ 133.00	\$ 92.00	\$ 104.00	\$ 85.00	\$ 4,560.00
Labor Costs Subtotal	\$	\$	\$ 690.00	\$	\$ 820.00	\$ 1,600.00	\$ 1,380.00	\$	\$	\$	\$ 170.00	\$

DESCRIPTION	TOTAL W/H BY TASK	TOTAL COST BY TASK
Task 1: Project Management	59	\$ 11,381.00
Task 2: Topographic and R.O.W. Surveys	0	\$ -
Task 3: Preliminary Engineering	108	\$ 14,780.00
Task 4: Geotechnical Investigation	0	\$ -
Task 5: Environmental Studies	0	\$ -
Task 6: Utility Coordination	0	\$ -
Task 7: FEMA Coordination	0	\$ -
Task 8: Final Engineering	404	\$ 52,502.00
Task 9: Bidding Phase Services	11	\$ 1,500.00
Task 10: Construction Phase Services	31	\$ 4,660.00
SUBTOTAL LABOR COST	613	\$ 85,263.00

DESCRIPTION	Unit	Cost/Unit	Quantity	Total Cost
Mileage	mile	\$ 0.595		\$ -
Standard Postage - Letter	each	\$ 0.50		\$ -
Certified Letter Return Receipt	each	\$ 6.70		\$ -
Overnight Mail - Letter Size	each	\$ 25.00		\$ -
Overnight Mail - Oversized Box	each	\$ 30.00		\$ -
Courier Services	each	\$ 50.00		\$ -
Photocopies B/W (8 1/2" x 11")	each	\$ 0.25	50	\$ 12.50
Photocopies B/W (11" x 17")	each	\$ 0.50	282	\$ 141.00
Photocopies Color (8 1/2" x 11")	each	\$ 1.00		\$ -
Photocopies Color (11" x 17")	each	\$ 2.00		\$ -
Plots (B/W on Bond)	square foot	\$ 6.00		\$ -
Plots (Color on Bond)	square foot	\$ 8.00	36	\$ 288.00
CDs	each	\$ 0.50	1	\$ 0.50
SUBTOTAL DIRECT EXPENSES				\$ 442.00

SUMMARY	
SUBTOTAL LABOR COST	\$ 85,263.00
SUBTOTAL DIRECT EXPENSE	\$ 442.00
TOTAL	\$ 85,705.00