### Engineering Cost Proposal

### **ARCADIS**

Panola Road Scoping Study

Summary

Task	Estimated Cost
Phase I - Traffic Analysis and Report	\$101,266.00
Phase II - Public Involvement	\$18,938.00
Phase III - Concept Design	\$168,789.00
Totals	\$288,993.00

Panola Road Scoping Study

**Hour Estimate** 

Phase I - Traffic Analysis and Report

#	Item/Task Description	No. of Dwgs.	Sr. P.M.	Proj. Mgr.	Proj Eng.	Design Eng.	Tech	Cler.	Total
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14	Coordination with roadway Collect crash data and analyze crash rates Coordinate field traffic counts Develop existing year traffic volumes Conduct growth rate analysis Project Open/Design Year No-Build & Build traffic volume Prepare traffic volume diagrams Develop existing year traffic models Develop Open/Design Year No-Build traffic models Conduct ICE Analysis for up to 12 intersections Develop Open/Design Year Build traffic models Summarize Existing/Open/Design Year traffic analysis Project Benefit Analysis Prepare Traffic Engineering Study Report QAQC	J		40	12 8 8 16 8 12 8 6 24 8 8 8 20	28 32 16 16 16 16 12 60 24 16 8 40			12 36 8 48 24 28 24 18 84 32 24 16 60 40
Total	·			40	154	284			478

Panola Road Scoping Study

Cost Estimate

Phase I - Traffic Analysis and Report

DIRECT LABOR					,	
Personnel	Est. Hours	Rat	te/Hour		Cost (\$)	Totals
Civil Design						
0			0.45.00			
Senior Project Manager		\$	245.00	\$	-	
Project Manager	40	\$	195.00	\$	7,800.00	
Project Engineer	154	\$	165.00	\$	25,410.00	
Design Engineer	284	\$	134.00	\$	38,056.00	
Drafter/Technician		\$	108.00	\$	-	
Clerical		\$	82.00	\$	-	
Total Direct Labor	478			\$	71,266.00	\$ 71,266.00
Overhead (Indirect Cost on Labor Above)						
Labor x Overhead Rate = Overhead (\$)						\$ 
Total Direct Labor plus Overhead						\$ 71,266.00
Direct Costs (Specify)						
Reproduction		She	eets/set	C	Cost/sheet	
CADD Mylars					\$9.00	\$ -
Roll Plots (Color)					\$4.50	\$ -
Blacklines					\$0.60	\$ -
Blacklines - Half size					\$0.30	\$ -
Photocopies		co	pies x		\$0.15	\$ -
Color Copies		co	pies x		\$1.50	\$ -
Supplies, Postage, Communication						
Travel		m	iles x		\$0.580	\$ -
Subcontractors (List)						
Traffic Count Vendor						\$ 30,000.00
Other Direct Expenses (List)						
Total Direct Costs						\$ 30,000.00
Total Estimated Costs						\$ 101,266.00
Profit (Labor only)						\$ -
Maximum Amount of Contract Proposal						\$ 101,266.00

Panola Road Scoping Study

**Hour Estimate** 

Phase II - Public Involvement

#	Item/Task Description	No. of Dwgs.	Sr. P.M.	Proj. Mgr.	Proj Eng.	Design Eng.	Tech	Cler.	Total
1.1	Organize Stake Holder Meetings		2	3	2				7
1.2	Prepare for and Attend Stake Holder Meetings (3-Meetings)		12	24	36	12			84
1.3	Prepare Stakeholder Summary Memo (3 - meetings)		2	2	9				13
Total	1		16	29	47	12			104

Panola Road Scoping Study

Cost Estimate

Phase II - Public Involvement

DIRECT LABOR						1	
Personnel	Est. Hours	R	ate/Hour		Cost (\$)		Totals
Civil Design							
Senior Project Manager	16	\$	245.00	\$	3,920.00		
Project Manager	29	\$	195.00	\$	5,655.00		
Project Engineer	47	\$	165.00	\$	7,755.00		
Design Engineer	12	\$	134.00	\$	1,608.00		
Drafter/Technician		\$	108.00	\$	-		
Clerical		\$	82.00	\$	-		
Total Direct Labor	104			\$	18,938.00	\$	18,938.00
Overhead (Indirect Cost on Labor Above)							
Labor x Overhead Rate = Overhead (\$)						\$	-
Total Direct Labor plus Overhead						\$	18,938.00
Direct Costs (Specify)							
Reproduction		Sł	neets/set	C	Cost/sheet		
CADD Mylars					\$9.00	\$	-
Roll Plots (Color)					\$4.50	\$	-
Blacklines					\$0.60	\$	-
Blacklines - Half size					\$0.30	\$	-
Photocopies		С	opies x		\$0.15	\$	-
Color Copies		С	opies x		\$1.50	\$	-
Supplies, Postage, Communication							
Travel		ı	miles x		\$0.580	\$	-
Subcontractors (List)							
Other Direct Expenses (List)							
Total Direct Costs						\$	-
Total Estimated Costs						\$	18,938.00
Profit (Labor only)						\$	
Maximum Amount of Contract Proposal						\$	18,938.00

Panola Road Scoping Study

**Hour Estimate** 

Phase III - Concept Design

		No. of	Sr.	Proj.	Proj	Design			
#	Item/Task Description  Concept Design	Dwgs.	P.M.	Mgr.	Eng.	Eng.	Tech	Cler.	Total
1.1	Develop plan view roadway improvement concept - 2 alternatives for 2.5 mile roadway with 2 roundabouts (Assume Single lane roundabouts, West Fairington & Panola Mill Dr. require a dual lane roundabout)		10	8	40	140	184		382
1.2	Determine Preferred alternative		1	2	4	4			11
2.1	Coordinate & Review Project Phasing and Prioritization plan with traffic group		2	6	6				14
2.2	Prepare intitial cost estimate for cost/benefit analysis (2 alternatives)				6		32		38
3.1	Prepare Concept Display for Preferred Alternative with 2 - Roundabouts (2.5 mi Roadway)		4		40	120	160		324
3.2	Prepare Typical Sections for Preferred Alternative with 2 - Roundabouts (2.5 mi Roadway)				4	8	24		36
3.3	Prepare Concept Report			6	40	24	16		86
4.1	Prepare project cost estimates for preferred alternative			2	4	8	16		30
4.2	Subdivide project cost estimates for preferred alternative by 5 segments (Include PE, Construction, ROW, Utility, Mitigation)				2	16	40		58
	Prepare Project Justification Statement MS4 Concept Report Summary			4 4	26	48			4 78
6.1 6.2 6.4	Environmental Survey Screening Field Visit Meetings QA / QC		12	8 4	8 8 8	20	8	8	28 16 16 24 16
	Respond to County & City Comments Project Management & Coordination		20	40		8	8	20	16 80
Total			49	84	196	396	488	28	1241

Panola Road Scoping Study

Cost Estimate

Phase III - Concept Design

DIRECT LABOR					
Personnel	Est. Hours	R	ate/Hour	Cost (\$)	Totals
Civil Design					
Senior Project Manager	49	\$	245.00	\$ 12,005.00	
Project Manager	84	\$	195.00	\$ 16,380.00	
Project Engineer	196	\$	165.00	\$ 32,340.00	
Design Engineer	396	\$	134.00	\$ 53,064.00	
Drafter/Technician	488	\$	108.00	\$ 52,704.00	
Clerical	28	\$	82.00	\$ 2,296.00	
Total Direct Labor	1241			\$ 168,789.00	\$ 168,789.00
Overhead (Indirect Cost on Labor Above)					
Labor x Overhead Rate = Overhead (\$)					\$ ,
Total Direct Labor plus Overhead					\$ 168,789.00
Direct Costs (Specify)					
Reproduction		SI	heets/set	Cost/sheet	
CADD Mylars				\$9.00	\$
Roll Plots (Color)				<i>\$4.50</i>	\$
Blacklines				\$0.60	\$
Blacklines - Half size				\$0.30	\$
Photocopies		C	opies x	\$0.15	\$
Color Copies		C	opies x	\$1.50	\$
Supplies, Postage, Communication					
Travel			miles x	\$0.580	\$
Subcontractors (List)					
Other Direct Expenses (List)					
Total Direct Costs					\$
Total Estimated Costs					\$ 168,789.00
Profit (Labor only)					\$
Maximum Amount of Contract Proposal					\$ 168,789.00