

**Project Limits: FM 2478 (Custer Rd) to US 75
NRCS Pond**

Task Description	Project Manager	QA/QC Manager	Senior Engineer	Project Engineer	Engineer-in-Training	CADD Operator	Total Labor Hours	Total Labor Costs
	\$260.00	\$197.00	\$195.00	\$152.00	\$125.00	\$160.00		
ROADWAY DESIGN								
Review NRCS drainage design criteria	4				8		12	\$2,040.00
Existing Conditions								
Existing Grading Analysis					40		40	\$5,000.00
Proposed Conditions								
Proposed Grading					40		40	\$5,000.00
Exhibit Production					40		40	\$5,000.00
QAQC	4	4					8	\$1,828.00
Construction Timeline								
Construction Timeline Production	8			40			48	\$8,160.00
QAQC		8		16			24	\$4,008.00
SWCD Application Resubmittal #1								
Address Comments	2	8	4	20	32		66	\$9,916.00
Resubmit Application	2	4			8		14	\$2,308.00
ROADWAY DESIGN Total Hours	20	24	4	76	168	0	292	
ROADWAY DESIGN Total Costs	\$5,200.00	\$4,728.00	\$780.00	\$11,552.00	\$21,000.00	\$0.00		\$43,260.00

DRAINAGE DESIGN								
Review NRCS drainage design criteria			8		8		16	\$2,560.00
Existing Conditions								
Hydrologic Analysis								
Acquire/develop contours, land uses, soil maps, rainfall intensity data			8		8		16	\$2,560.00
Develop Drainage Areas and Drainage Area Maps		4		4	8		16	\$2,396.00
Determine time of concentration flow paths		4		4	8		16	\$2,396.00
Determine runoff curve numbers		4		4	8		16	\$2,396.00
Build HEC-HMS model				4	8		12	\$1,608.00
Create existing hydrologic results tables for Drainage Study					4		4	\$500.00
Proposed Conditions								
Hydrologic Analysis								
Create proposed hydrologic results tables for Drainage Study					4		4	\$500.00
Retention pond resizing				4	4		8	\$1,108.00
Add retention pond to HMS model				4	4		8	\$1,108.00
Create proposed retention pond tables for Drainage Study				4	4		8	\$1,108.00
QAQC existing and proposed hydrologic design		8		8	4		20	\$3,292.00
Drainage Report								
Develop Drainage Report Narrative				8	32		40	\$5,216.00
QAQC Drainage Report		8			8		16	\$2,576.00
Create Drainage Report exhibits				8	16		24	\$3,216.00
Finalize Drainage Report				8	16		24	\$3,216.00
Compile application data and forms		4		8	16		28	\$4,004.00
WBFR Sheets								
Grading Sheet Production					32	16	48	\$6,560.00
QAQC		4			8	4	16	\$2,428.00
SWCD Application Resubmittal #1								
Address Comments		8		16	40		64	\$9,008.00
Resubmit Application					8		8	\$1,000.00
DRAINAGE DESIGN Total Hours	0	44	16	84	248	20	412	
DRAINAGE DESIGN Total Costs	\$0.00	\$8,668.00	\$3,120.00	\$12,768.00	\$31,000.00	\$3,200.00		\$58,756.00

PROJECT MANAGEMENT								
Meetings/Coordination								
Internal Meetings	8		16		32		56	\$9,200.00
External Meetings	4		8		16		28	\$4,600.00
Pre-Submittal SWCD Meeting	2		4		8		14	\$2,300.00
PROJECT MANAGEMENT Total Hours	14	0	28	0	56	0	98	
PROJECT MANAGEMENT Total Costs	\$3,640.00	\$0.00	\$5,460.00	\$0.00	\$7,000.00	\$0.00		\$16,100.00

Summary			
ROADWAY DESIGN		292	\$43,260.00
DRAINAGE DESIGN		412	\$58,756.00
PROJECT MANAGEMENT		98	\$16,100.00
		802	\$118,116.00