

SUMMARY
CH2M HILL, INC.
Collin County Outer Loop Segment 3: DNT to East of SH 289

<i>Collin County Outer Loop Segment 3 DNT to SH 289</i>	
Total CH2M HILL Fee **	520,085.82
Total Brown & Gay Fee **	75,752.50
Total Lamb Star Fee **	116,633.00
Total Alliance Fee **	\$47,702.50
Total CH2M HILL Team Fee * **	\$760,173.82
Total Incremental Services (Not to Exceed)	
\$38,400.00	

*Excludes Incremental Services

**Includes Direct Costs

FEE PROPOSAL
CH2M HILL, INC.
Collin County Outer Loop Segment 3A: DNT to E. of SH 289

Collin County Outer Loop DNT to E. of SH 289	Project Manager	Senior Engineer	Project Engineer	EIT	Senior Designer	Clerical	Totals
Rate	\$195.18	\$170.39	\$133.21	\$108.46	\$132.53	\$70.88	
BASIC SERVICES							
Task 1 - Assembly and Review of Data							
Collection of Data, Reports, and Maps			8				8
Review of Data			8				8
Project Design Criteria Tabulation			4	4			8
Task 1 Totals	0	0	20	4	0	0	24
Task 2 - Roadway Design							
A. GENERAL							
Title Sheet	1			4	4		9
Index of Sheets	1			4	4		9
Project Layout Sheets	1			7	7		15
Typical Sections (Existing & Proposed)	3		8	16	8		35
Quantity Summary Sheets	2		8	12	12		34
B. TRAFFIC CONTROL							
Traffic Control General Notes and Narrative							
Traffic Control Advance Warning Layout							
Traffic Control Typical Sections							
Traffic Control Plan Sheets							
Assembly of Traffic Control Standards							
REFER TO BROWN & GAY FEE							
C. ROADWAY DESIGN							
Horizontal Alignment Data Sheet	1		2		4		7
Removal Plan Sheets	2		24	24	8		58
Roadway Plan & Profile Sheets	12	8	40	100	80		240
Cross Street Plan & Profile Sheets	4	4	16	20	30		74
Intersection Layout Sheets	4	4	12	20	20		60
Driveway Profiles/Details/Summary	2			8	16		26
Miscellaneous Roadway Details	2	4	8	16			30
Roadway Cross Sections	4		40	20			64
Assembly of Roadway Standards	3		4				13
D. BID PREPARATION (ROADWAY)							
Determination of Roadway Quantities	3		8	14	14		39
Roadway General Notes (60%, 95%, Final)	2		16				18
Roadway Cost Estimates (60%, 95%, Final)	3		3	6			12
Roadway Specs, Bid Form and Contract Docs (95% and Final)	2		16	16		16	50
E. QUALITY CONTROL (ROADWAY)							
Roadway QA/QC Plan Review	4	30	12				46
Task 2 Totals	56	50	217	293	207	16	839
Task 3 - Drainage Design							
A. HYDROLOGY							
Offsite Drainage Area Map	2		16	12			30
Storm Sewer Drainage Area Map	2		24	24	8		58
Runoff Computations and Sheet Tabulations	2			8	8		18
B. HYDRAULIC DESIGN							
Culvert Hydraulic Data Sheet	1	2	6		8		17
Inlet Computations and Sheet Tabulations	1			8	8		17
Storm Sewer Hydraulic Data and Sheet Tabulations	1			8	8		17
Doe Branch Hydraulic Data Sheet	1	4		4	8		17
Doe Branch HEC-RAS Final Design	2	16	6		16		40
Doe Branch HEC-RAS Floodway Final Design	1	8			16		25
Doe Branch Scour Analysis	1	8			8		17
C. DRAINAGE STRUCTURE DESIGN							
Culvert Layouts (Non-Bridge Class)	4	16	24	24	20		88
Storm Sewer Plan & Profile Sheets	4	12	24	48	32		120
Miscellaneous Drainage Details	1		4	8			13
Assembly of Drainage Standards	1		4	6	4		15
D. OPEN CHANNEL DESIGN							
Ditch / Channel Layout Sheets	2	6	8	16			32
Doe Branch Channel Layout Sheets	2	8	10	16			36
E. SW3P							
SW3P Data Sheet							
SW3P Layouts							
REFER TO BROWN & GAY FEE							
F. BID PREPARATION (DRAINAGE)							
Determination of Drainage Quantities	1		4	10	8		23
Drainage General Notes (60%, 95%, Final)	2		16				18
Drainage Cost Estimates (60%, 95%, Final)	3		3	6			12
Drainage Specifications (95% and Final)	2		8				10
G. QUALITY CONTROL (DRAINAGE)							
Drainage QA/QC Plan Review	4	20	12				36
Task 3 Totals	40	100	169	198	152	0	659
Task 4 - Traffic Design							
A. SIGNING & PAVEMENT MARKING							
Signing & Pavement Marking Layout							
Summary of Small Signs							
Assembly of Sign and Marking Standards							
REFER TO BROWN & GAY FEE							
B. TRAFFIC SIGNALS							
Preston Road (SH 289) Signal Modification Layout	6	8	16	16			46
Assembly of Signal Standards	2		4	4			10
C. RAILROAD							
Exhibit A Preparation (At-Grade Crossing)	8		32	32			72
BNSF Coordination Meetings (3 Meetings)	8	8	8				24
BNSF Crossing Layout Plan and General Notes	4	8	16	12	8		48
Assembly of Railroad Standards	2		2	3	2		9
D. BID PREPARATION (TRAFFIC)							
Determination of Traffic Quantities	2		4	8	8		22
Traffic General Notes (60%, 95%, Final)	2		16				18
Traffic Cost Estimates (60%, 95%, Final)	2		8	24			34
Traffic Specifications (95% and Final)	2		8				10
E. QUALITY CONTROL (TRAFFIC)							
Traffic QA/QC Plan Review	12	20	12				44
Task 4 Totals	50	44	126	99	18	0	337

**FEE PROPOSAL (BROWN & GAY ENGINEERS)
CH2M HILL, INC.
Collin County Outer Loop Segment 3A: DNT to E. of SH 289**

Collin County Outer Loop to E. of SH 289		DNT	Sheets	Hours/Sheet	Project Manager	Senior Engineer	Project Engineer	EIT	Senior Designer	Clerical	Totals		
Rate					\$190.00	\$160.00	\$120.00	\$105.00	\$130.00	\$60.00			
Task 1 - Project Management													
Project Coordination											0		
Data Management											0		
Invoicing											0		
Meetings					6	2					8		
Creation of Construction Timeline using Microsoft Project					4	8					12		
Task 1 Totals					10	10	0	0	0	0	20		
Task 2 - Roadway Design													
B. TRAFFIC CONTROL													
Traffic Control General Notes and Narrative		1	20		1	2	8	4	4		19		
Traffic Control Advance Warning Layout (2 phases)		2	10		2	4	8	12	12		38		
Traffic Control Typical Sections (2 phases)		2	20		2	4	4	16	16		42		
Traffic Control Plan Sheets (5 intersections @ 2 phases each)		10	30		8	12	40	40	60		160		
Assembly of Traffic Control Standards		1	8		1	1		4	2		8		
Preparation of Quantities and Estimate (8 hours each (3) submittals)		3	8		2	2	4	12	4		24		
Task 2 Totals					16	25	64	88	98	0	291		
Task 3 - Drainage Design													
E. SW3P													
SW3P Data Sheet		1	10			2		4	2		8		
SW3P Layouts (200 scale)		4	15		2	4	12	32	12		62		
Temporary Drainage (no hydraulic computations)		5	8			2	4	24	12		42		
Task 3 Totals					2	8	16	60	26	0	112		
Task 4 - Traffic Design													
A. SIGNING & PAVEMENT MARKING													
Signing & Pavement Marking Layout (100 scale)		10	15		2	4	24	80	40		150		
Summary of Small Signs (assuming 2 sheets)		2	16		1	1	8	12	8		30		
Assembly of Sign and Marking Standards		1	8				2	4	2		8		
Task 4 Totals					3	5	34	96	50	0	188		
Total Hours					31	48	114	244	174	0	611		
					5.1%	7.9%	18.7%	39.9%	28.5%				
Total Labor Costs					\$5,890	\$7,680	\$13,680	\$25,620	\$22,620	\$0	\$75,490		
Reimbursable Direct Expenses													
								Unit	Quantity	Rate	Total		
8.5" x 11" Copies										EA	0	\$0.10	\$0
11" x 17" Copies										EA	100	\$0.15	\$15
Mileage										MILE	150	\$0.55	\$83
White Mylar (11" x 17")										EA	70	\$1.50	\$105
Postage (Express Mail)										EA	20	\$3.00	\$60
Total Reimbursable Direct Expenses												\$263	



EBFR Collin County Outer Loop
P14-0733E (revised)
August 15, 2014

ITEMIZED FEES

	Estimated Units	Estimated Unit Cost	Estimated Cost
FIELD INVESTIGATION			
ROE coordination, hr	23	\$125.00	\$2,875.00
Site Reconnaissance, hr	6	\$125.00	\$750.00
Boring Staking, hr	6	\$95.00	\$570.00
Trimble Tech GPS Rental, day	1	\$125.00	\$125.00
Utility Clearance Coordination, hr	10	\$95.00	\$950.00
Drilling Coordination, hr	4	\$95.00	\$380.00
	2	\$125.00	\$250.00
Trip Charges, ea	8	\$40.00	\$320.00
Mobilization of Truck Rig, ls	1	\$325.00	\$325.00
Mobilization of ATV Buggy, ls	1	\$450.00	\$450.00
Daily Crew Travel, day	3	\$175.00	\$525.00
Soil Drilling, ft	350	\$14.00	\$4,900.00
Rock Coring, ft	45	\$30.00	\$1,350.00
Hollow Stem Auger Casing, ft	120	\$6.00	\$720.00
Buggy Surcharge, ft	55	\$4.00	\$220.00
TCP Penetration Tests, ea.	33	\$35.00	\$1,155.00
SPT Penetration Tests, ea.	24	\$25.00	\$600.00
Pavement Penetrations, ea	2	\$85.00	\$170.00
Pavement Patching, ea.	2	\$55.00	\$110.00
Traffic Control	1	\$1,550.00	\$1,550.00
ESTIMATED FIELD SUBTOTAL			\$18,295.00
TREE CLEARING			
Tree Clearing for Middle Bridge Boring, ls	1	\$4,500.00	\$4,500.00
ESTIMATED TREE CLEARING SUBTOTAL			\$4,500.00
LABORATORY TESTING			
Moisture Content, ea.	75	\$7.50	\$562.50
Atterbergs, ea.	42	\$55.00	\$2,310.00
Sieve Analysis, ea.	33	\$45.00	\$1,485.00
Hydrometer, ea.	1	\$100.00	\$100.00
Percent Passing #200 Sieve, ea.	10	\$40.00	\$400.00
Swell Tests, ea.	10	\$85.00	\$850.00
Compressive Strength Testing - Soil, ea.	6	\$45.00	\$270.00
Compressive Strength Testing - Rock, ea.	12	\$55.00	\$660.00
Sulfate Testing, ea	16	\$85.00	\$1,360.00
Lime - PI Series Testing, ea.	2	\$265.00	\$530.00
CU Triaxial Testing, ea.	2	\$2,400.00	\$4,800.00
Editing Soil Samples, hr	4	\$125.00	\$500.00
ESTIMATED LABORATORY SUBTOTAL			\$13,827.50



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P14-0733E (revised)
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ENGINEERING, ANALYSES & REPORTING

Prepare WinCore Logs	10	\$55.00	\$550.00
	6	\$125.00	\$750.00
Bridge Recommendations	6	\$125.00	\$750.00
	2	\$165.00	\$330.00
PVR Calculations	6	\$95.00	\$570.00
	2	\$125.00	\$250.00
Pavement Recommendations	4	\$125.00	\$500.00
	2	\$165.00	\$330.00
Slope Stability Analyses	4	\$55.00	\$220.00
	6	\$125.00	\$750.00
	2	\$165.00	\$330.00
Embankment Recommendations	4	\$125.00	\$500.00
	2	\$165.00	\$330.00
Reporting	6	\$45.00	\$270.00
	12	\$125.00	\$1,500.00
	2	\$165.00	\$330.00
Meetings, QA/QC Review & Addressing Comments	12	\$125.00	\$1,500.00
	8	\$165.00	\$1,320.00
ESTIMATED ENGINEERING SUBTOTAL			\$11,080.00
ESTIMATED TOTAL			\$47,702.50