

A decorative vertical bar on the left side of the page, consisting of two parallel dark blue lines.

Appendix D:

Planning Level Cost Estimate

Option 1 Cost

Collector Road Length:	14520 ft	Local Road Length:	8184 ft		
Average Width:	24 ft	Average Width:	20 ft		
				Rounded	Unit Price
Collector					Cost
3" Pavement:	6468.391 ton			6500	\$90.00
					\$585,000.00
Local					
3" Pavement:	3057.785 ton			3100	\$90.00
					\$279,000.00
Blacktail Creek Culverts (9' x 6' Box culvert), Inft				364	2000
Incidentals @ 75%:					
					\$728,000.00
					\$1,194,000.00
					Construction cost subtotal: \$2,786,000.00
Construction Engineering @ 15%					\$417,900.00
Preliminary Engineering @ 15%					\$417,900.00
					Option estimated cost (rounded): \$3,700,000

Option 2 Cost

Collector Road Length:	14520 ft	Local Road Length:	8184 ft		
Average Width:	24 ft	Average Width:	20 ft		
				Rounded	Unit Price
Collector					Cost
3" Pavement:	5488.332 ton			5500	\$ 90.00
					\$495,000.00
Local					
3" Pavement:	3057.785 ton			3100	\$ 90.00
					\$279,000.00
Blacktail Creek Culverts (9' x 6' Box culvert), Inft				305	\$ 2,000.00
					\$610,000.00
First curve (500' new road)					
Clearing and grubbing (300' x 75') (acre)				0.5	\$ 10,000.00
Subex (75' x 300' x 2') (cuyd)				1700	\$ 30.00
Geotextile (75' x 300') (sqyd)				2500	\$ 3.00
Geogrid (75' x 300') (sqyd)				2500	\$ 6.00
Unclassified borrow (50' x 300' x 8') (cuyd)				4500	\$ 15.00
6" Agg. Base (500' x 6") (ton)				500	\$ 25.00
3" Pavement (500' x 3") (ton)				225	\$ 90.00
Roadway obliteration (450' x 25') (sqyd)				1250	\$ 5.00
Blacktail Creek (9' x 6' Box culvert), Inft				75	\$ 2,000.00
Incidentals @ 25%					\$83,750.00
Trestle (400' grade raise)					
MSE Wall (5' x 100') (sqft)				500	\$ 50.00
Unclassified borrow (30' x 400' x 5' x 0.5) (cuyd)				1200	\$ 15.00
6" Agg. Base (400' x 6") (ton)				400	\$ 25.00
3" Pavement (400' x 3") (ton)				180	\$ 90.00
Guardrail (100') (Inft)				100	\$ 25.00
Terminal sections (2 each)				2	\$ 3,000.00
					\$6,000.00

Incidentals @ 25%			\$19,425.00
S-curves (1300' new road)			
Clearing and grubbing (1300' x 75') (acre)	2.2	\$ 10,000.00	\$22,000.00
Roadway excavation (Est 25' cut for 600') (cuyd)	38000	\$ 25.00	\$950,000.00
Subex (75' x 250' x 2') (cuyd)	1400	\$ 30.00	\$42,000.00
Geotextile (75' x 250') (sqyd)	2100	\$ 3.00	\$6,300.00
Geogrid (75' x 250') (sqyd)	2100	\$ 6.00	\$12,600.00
6" Agg. Base (1300' x 6") (ton)	1300	\$ 25.00	\$32,500.00
3" Pavement (1300' x 3") (ton)	580	\$ 90.00	\$52,200.00
Roadway obliteration (1300' x 25') (sqyd)	3700	\$ 5.00	\$18,500.00
Incidentals @ 25%			\$284,025.00
Intersection (300' improved road)			
6" Agg. Base (300' x 6") (ton)	260	\$ 25.00	\$6,500.00
3" Pavement (300' x 3") (ton)	115	\$ 90.00	\$10,350.00
Roadway obliteration (400' x 25') (sqyd)	1200	\$ 5.00	\$6,000.00
Grading (estimated) (lpsm)	1	\$ 5,000.00	\$5,000.00
Incidentals @ 25%			\$6,962.50
Incidentals @ 50%:			\$1,677,406.25
		Construction cost subtotal:	\$5,032,218.75
Construction Engineering @ 15%			\$754,832.81
Preliminary Engineering @ 15%			\$754,832.81
		Option estimated cost (rounded):	\$6,600,000

Option 3 Cost

Collector Road Length:	14520 ft	Local Road Length:	8184 ft			
Average Width:	24 ft	Average Width:	20 ft			
				Rounded	Unit Price	Cost
Collector						
3" Pavement:	5488.332 ton			5500	\$ 90.00	\$495,000.00
6" Agg. Base:	12225.09 ton			12300	\$ 25.00	\$307,500.00
Road exc (Est. 3 cuyd/ft) (cuyd)	36960 cuyd			37000	\$ 15.00	\$555,000.00
Local						
3" Pavement:	3057.785 ton			3100	\$ 90.00	\$279,000.00
6" Agg. Base:	6926.695 ton			7000	\$ 25.00	\$175,000.00
12" Select Borrow:	14808.8 ton			14900	\$ 20.00	\$298,000.00
Blacktail Creek Culverts (9' x 6' Box culvert), Inft				305	\$ 2,000.00	\$610,000.00
First curve (500' new road)						
Clearing and grubbing (300' x 75') (acre)				0.5	\$ 10,000.00	\$5,000.00
Subex (75' x 300' x 2') (cuyd)				1700	\$ 30.00	\$51,000.00
Geotextile (75' x 300') (sqyd)				2500	\$ 3.00	\$7,500.00
Geogrid (75' x 300') (sqyd)				2500	\$ 6.00	\$15,000.00
Unclassified borrow (50' x 300' x 8') (cuyd)				4500	\$ 15.00	\$67,500.00
6" Agg. Base (500' x 6") (ton)				500	\$ 25.00	\$12,500.00
3" Pavement (500' x 3") (ton)				225	\$ 90.00	\$20,250.00

Roadway obliteration (450' x 25') (sqyd)	1250	\$ 5.00	\$6,250.00
Blacktail Creek (9' x 6' Box culvert), Inft	75	\$ 2,000.00	\$150,000.00
Incidentals @ 25%			\$83,750.00
Trestle (400' grade raise)			
MSE Wall (5' x 100') (sqft)	500	\$ 50.00	\$25,000.00
Unclassified borrow (30' x 400' x 5' x 0.5) (cuyd)	1200	\$ 15.00	\$18,000.00
6" Agg. Base (400' x 6") (ton)	400	\$ 25.00	\$10,000.00
3" Pavement (400' x 3") (ton)	180	\$ 90.00	\$16,200.00
Guardrail (100') (Inft)	100	\$ 25.00	\$2,500.00
Terminal sections (2 each)	2	\$ 3,000.00	\$6,000.00
Incidentals @ 25%			\$19,425.00
S-curves (1300' new road)			
Clearing and grubbing (1300' x 75') (acre)	2.2	\$ 10,000.00	\$22,000.00
Roadway excavation (Est 25' cut for 600') (cuyd)	38000	\$ 25.00	\$950,000.00
Subex (75' x 250' x 2') (cuyd)	1400	\$ 30.00	\$42,000.00
Geotextile (75' x 250') (sqyd)	2100	\$ 3.00	\$6,300.00
Geogrid (75' x 250') (sqyd)	2100	\$ 6.00	\$12,600.00
6" Agg. Base (1300' x 6") (ton)	1300	\$ 25.00	\$32,500.00
3" Pavement (1300' x 3") (ton)	580	\$ 90.00	\$52,200.00
Roadway obliteration (1300' x 25') (sqyd)	3700	\$ 5.00	\$18,500.00
Incidentals @ 25%			\$284,025.00
Intersection (300' improved road)			
6" Agg. Base (300' x 6") (ton)	260	\$ 25.00	\$6,500.00
3" Pavement (300' x 3") (ton)	115	\$ 90.00	\$10,350.00
Roadway obliteration (400' x 25') (sqyd)	1200	\$ 5.00	\$6,000.00
Grading (estimated) (lpsm)	1	\$ 5,000.00	\$5,000.00
Incidentals @ 25%			\$6,962.50
Incidentals @ 50%:			\$2,345,156.25
		Construction cost subtotal:	\$7,035,468.75
Construction Engineering @ 15%			\$1,055,320.31
Preliminary Engineering @ 15%			\$1,055,320.31
		Option estimated cost (rounded):	\$9,200,000