

Alternative 1 Cinderbed Bikeway

Construction Cost Estimate

11/15/2016

<u>DESCRIPTION</u>	<u>Unit</u>	<u>Qty.</u>	<u>Unit Cost</u>	<u>Total Cost</u>
GRADING ITEMS				
Clearing and Grubbing	LS	1	\$ 275,000.00	\$ 275,000.00
Borrow Excavation	CY	13500	\$ 30.00	\$ 405,000.00
Common Excavation	CY	8550	\$ 30.00	\$ 256,500.00
PAVEMENT ITEMS				
Ashphalt Concrete TY. SM-9.5A	TON	2500	\$ 150.00	\$ 375,000.00
Ashphalt Concrete TY. BM-25.0A	TON	700	\$ 100.00	\$ 70,000.00
AGGR. Base Material TY. 1 No. 21B	TON	3000	\$ 35.00	\$ 105,000.00
Flexible Pavement Planning 0"-2"	SY	15000	\$ 4.00	\$ 60,000.00
Sawcut Concrete Sections	LF	4000	\$ 3.00	\$ 12,000.00
Curb and Gutter Per VDOT STDS. CG-6 or CG-7	LF	4000	\$ 30.00	\$ 120,000.00
Curb Ramp STD. CG-12A, 12B, 12C	SY	150	\$ 60.00	\$ 9,000.00
Curbs, Curb & Gutter Removal Disposal	LF	2000	\$ 5.00	\$ 10,000.00
Asphalt Pavement Removal and Disposal	SY	1200	\$ 10.00	\$ 12,000.00
Pavement Marking	LS	1	\$ 10,000.00	\$ 10,000.00
EROSION CONTROL ITEMS				
Seeding and Area Restoration	SY	8500	\$ 5.00	\$ 42,500.00
Erosion and Sediment Control	LS	1	\$ 50,000.00	\$ 50,000.00
Drainage and Stormwater Management	LS	1	\$ 750,000.00	\$ 750,000.00
Culvert Extension	LS	2	\$ 225,000.00	\$ 450,000.00
INCIDENTAL ITEMS				
Retaining Wall	SF	2600	\$ 150.00	\$ 390,000.00
Bridge Demolition/Removal	EA	1	\$ 250,000.00	\$ 250,000.00
Lighting	LS	1	\$ 1,000,000.00	\$ 1,000,000.00
Signage	LS	1	\$ 10,000.00	\$ 10,000.00
SUBTOTAL				\$ 4,662,000.00
CONSTRUCTION SURVEY (2%)				\$ 93,300.00
GEOTECHNICAL SERVICES (2%)				\$ 93,300.00
MAINTENANCE OF TRAFFIC (10%)				\$ 466,200.00
UTILITY RELOCATION (20%)				\$ 932,400.00
MOBILIZATION				\$ 342,400.00
CONTINGENCY (30%)				\$ 1,976,900.00
TOTAL				\$ 8,566,500.00

*Note: Estimated cost does not include Right-of-Way and Construction Engineering Inspection.

Alternative 2 Cinderbed Bikeway

Construction Cost Estimate

11/15/2016

<u>DESCRIPTION</u>	<u>Unit</u>	<u>Qty.</u>	<u>Unit Cost</u>	<u>Total Cost</u>
<u>GRADING ITEMS</u>				
Clearing and Grubbing	LS	1	\$ 250,000.00	\$ 250,000.00
Borrow Excavation	CY	1000	\$ 30.00	\$ 30,000.00
Common Excavation	CY	10400	\$ 30.00	\$ 312,000.00
<u>PAVEMENT ITEMS</u>				
Ashphalt Concrete TY. SM-9.5A	TON	4000	\$ 150.00	\$ 600,000.00
Ashphalt Concrete TY. BM-25.0A	TON	1500	\$ 100.00	\$ 150,000.00
AGGR. Base Material TY. 1 No. 21B	TON	4500	\$ 35.00	\$ 157,500.00
Flexible Pavement Planning 0"-2"	SY	39000	\$ 4.00	\$ 156,000.00
HYDR. CEMENT CONC. SIDEWALK 4"	SY	2000	\$ 40.00	\$ 80,000.00
Sawcut Concrete Sections	LF	5500	\$ 3.00	\$ 16,500.00
Curb and Gutter Per VDOT STDS. CG-6 or CG-7	LF	1100	\$ 30.00	\$ 33,000.00
Curb Ramp STD. CG-12A, 12B, 12C	SY	110	\$ 60.00	\$ 6,600.00
Curbs, Curb & Gutter Removal Disposal	LF	1100	\$ 5.00	\$ 5,500.00
Pavement Marking	LS	1	\$ 30,000.00	\$ 30,000.00
<u>EROSION CONTROL ITEMS</u>				
Seeding and Area Restoration	SY	4000	\$ 5.00	\$ 20,000.00
Erosion and Sediment Control	LS	1	\$ 50,000.00	\$ 50,000.00
Drainage and Stormwater Management	LS	1	\$ 600,000.00	\$ 600,000.00
Culvert Extension	LS	1	\$ 225,000.00	\$ 225,000.00
<u>INCIDENTAL ITEMS</u>				
Retaining Wall	SF	1800	\$ 150.00	\$ 270,000.00
Bridge Demolition	EA	1	\$ 250,000.00	\$ 250,000.00
Lighting	LS	1	\$ 1,000,000.00	\$ 1,000,000.00
Signage	LS	1	\$ 10,000.00	\$ 10,000.00
SUBTOTAL				\$ 4,252,100.00
CONSTRUCTION SURVEY (2%)				\$ 85,100.00
GEOTECHICAL SERVICES (2%)				\$ 85,100.00
MAINTENANCE OF TRAFFIC (10%)				\$ 425,300.00
UTILITY RELOCATION (20%)				\$ 850,500.00
MOBILIZATION				\$ 315,000.00
CONTINGENCY (30%)				\$ 1,804,000.00
TOTAL				\$ 7,817,100.00

*Note: Estimated cost does not include Right-of-Way and Construction Engineering Inspection.

Alternative 3A Cinderbed Bikeway

Construction Cost Estimate

11/15/2016

<u>DESCRIPTION</u>	<u>Unit</u>	<u>Qty.</u>	<u>Unit Cost</u>	<u>Total Cost</u>
<u>GRADING ITEMS</u>				
Clearing and Grubbing	LS	1	\$ 150,000.00	\$ 150,000.00
Borrow Excavation	CY	175	\$ 30.00	\$ 5,300.00
Common Excavation	CY	4000	\$ 30.00	\$ 120,000.00
<u>PAVEMENT ITEMS</u>				
Ashphalt Concrete TY. SM-9.5A	TON	3200	\$ 150.00	\$ 480,000.00
Ashphalt Concrete TY. BM-25.0A	TON	750	\$ 100.00	\$ 75,000.00
AGGR. Base Material TY. 1 No. 21B	TON	1700	\$ 35.00	\$ 59,500.00
Flexible Pavement Planning 0"-2"	SY	34000	\$ 4.00	\$ 136,000.00
Sawcut Concrete Sections	LF	1800	\$ 3.00	\$ 5,400.00
Curb Ramp STD. CG-12A, 12B, 12C	SY	65	\$ 60.00	\$ 3,900.00
Pavement Marking	LS	1	\$ 30,000.00	\$ 30,000.00
<u>EROSION CONTROL ITEMS</u>				
Seeding and Area Restoration	SY	3200	\$ 5.00	\$ 16,000.00
Erosion and Sediment Control	LS	1	\$ 50,000.00	\$ 50,000.00
Drainage and Stormwater Management	LS	1	\$ 350,000.00	\$ 350,000.00
<u>INCIDENTAL ITEMS</u>				
Bridge Demolition	EA	1	\$ 250,000.00	\$ 250,000.00
Lighting	LS	1	\$ 1,000,000.00	\$ 1,000,000.00
Signage	LS	1	\$ 10,000.00	\$ 10,000.00
SUBTOTAL				\$ 2,741,100.00
CONSTRUCTION SURVEY (2%)				\$ 54,900.00
GEOTECHICAL SERVICES (2%)				\$ 54,900.00
MAINTENANCE OF TRAFFIC (10%)				\$ 274,200.00
UTILITY RELOCATION (20%)				\$ 548,300.00
MOBILIZATION				\$ 213,700.00
CONTINGENCY (30%)				\$ 1,166,200.00
TOTAL				\$ 5,053,300.00

*Note: Estimated cost does not include Right-of-Way and Construction Engineering Inspection.

Alternative 3B Cinderbed Bikeway

Construction Cost Estimate

11/15/2016

<u>DESCRIPTION</u>	<u>Unit</u>	<u>Qty.</u>	<u>Unit Cost</u>	<u>Total Cost</u>
GRADING ITEMS				
Clearing and Grubbing	LS	1	\$ 150,000.00	\$ 150,000.00
Borrow Excavation	CY	500	\$ 30.00	\$ 15,000.00
Common Excavation	CY	4500	\$ 30.00	\$ 135,000.00
PAVEMENT ITEMS				
Ashphalt Concrete TY. SM-9.5A	TON	3200	\$ 150.00	\$ 480,000.00
Ashphalt Concrete TY. BM-25.0A	TON	820	\$ 100.00	\$ 82,000.00
AGGR. Base Material TY. 1 No. 21B	TON	2000	\$ 35.00	\$ 70,000.00
Flexible Pavement Planning 0"-2"	SY	32000	\$ 4.00	\$ 128,000.00
Sawcut Concrete Sections	LF	2800	\$ 3.00	\$ 8,400.00
Curb and Gutter Per VDOT STDS. CG-6 or CG-7	LF	560	\$ 30.00	\$ 16,800.00
Curb Ramp STD. CG-12A, 12B, 12C	SY	65	\$ 60.00	\$ 3,900.00
Curbs, Curb & Gutter Removal Disposal	LF	560	\$ 10.00	\$ 5,600.00
Pavement Marking	LS	1	\$ 30,000.00	\$ 30,000.00
EROSION CONTROL ITEMS				
Seeding and Area Restoration	SY	4200	\$ 5.00	\$ 150.00
Erosion and Sediment Control	LS	1	\$ 50,000.00	\$ 50,000.00
Drainage and Stormwater Management	LS	1	\$ 400,000.00	\$ 400,000.00
Culvert Extension	LS	1	\$ 225,000.00	\$ 225,000.00
INCIDENTAL ITEMS				
Retaining Wall	SF	1040	\$ 150.00	\$ 156,000.00
Bridge Demolition	EA	1	\$ 250,000.00	\$ 250,000.00
Lighting	LS	1	\$ 1,000,000.00	\$ 1,000,000.00
Signage	LS	1	\$ 10,000.00	\$ 10,000.00
SUBTOTAL				\$ 3,215,900.00
CONSTRUCTION SURVEY (2%)				\$ 64,400.00
GEOTECHICAL SERVICES (2%)				\$ 64,400.00
MAINTENANCE OF TRAFFIC (10%)				\$ 321,600.00
UTILITY RELOCATION (20%)				\$ 643,200.00
MOBILIZATION				\$ 245,500.00
CONTINGENCY (30%)				\$ 1,366,500.00
TOTAL				\$ 5,921,500.00

*Note: Estimated cost does not include Right-of-Way and Construction Engineering Inspection.