

APPENDIX C



OPINIONS OF PROBABLE COST



ENGINEER'S OPINION OF PROBABLE COST - PRELIMINARY DESIGN ESTIMATE

DESCRIPTION: PRELIMINARY COST FOR PHASE 1 12' TRAIL
PHASE 1 LOCATION: LAKE MURRAY DAM TO SALUDA SHOALS PARK

LOCATION: Lexington Co
ESTIMATE BY: SRL
DATE: 2/11/2021
REVISED:
CHECKED BY: TN

Table with 7 columns: ITEM NO., DESCRIPTION, QUANTITY, UNIT, UNIT COST, COST. Rows include items A-1 through E-6, a subtotal, and a total cost estimate of \$3,408,000.

NOTES:

- 1. This cost estimate is based on 2019-2020 material/equipment/labor costs and should be adjusted to fit current year if needed.
2. Striping is assumed to be thermoplastic.
3. Estimate does not include construction surveying, engineering, or right-of-way acquisition.
4. Trail lengths calculated using professional judgement during site walks
5. Trailheads to include parking, signage, trash receptacles, potential restrooms & maintenance sheds
6. Estimate does not include stormwater treatment or permitting.
7. Typical trail road crossing includes traffic control, signal modifications, curb ramps, signs and pavement marking.
8. Trail, Boardwalk and Bridge estimates include materials and clearing and grubbing through installation.
9. Assume lighting to be leased by Dominion Energy and is not included in estimate.

DISCLAIMER:

Cost estimates were developed by identifying pay items and establishing rough quantities. Please note that the estimates include approximate costs for asphalt, concrete, drainage improvements, limited utility relocation, pavement markings, signs and traffic signal adjustments. The estimate does not include easement, right-of-way acquisition, construction management, surveying, geotechnical investigation, environmental documentation, special site remediation or the cost for ongoing maintenance. A cost range has been assigned to some general categories such as utility relocations; however, these costs can vary widely depending on the exact details and nature of the work. The overall estimates are intended to be general and used for planning purposes. Construction costs will vary based on the ultimate project scope (i.e. potential combination of projects), schedule, and economic conditions at the time of construction.



**ENGINEER'S OPINION OF PROBABLE COST -
PRELIMINARY DESIGN ESTIMATE**

DESCRIPTION: PRELIMINARY COST FOR PHASE 2 12' TRAIL
PHASE 2 LOCATION: SALUDA SHOALS PARK TO I-20

LOCATION: Lexington Co
ESTIMATE BY: SRL
DATE: 2/11/2021
REVISED:
CHECKED BY: TN

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
A-1	Mobilization	1	LS	\$499,500	\$499,500
A-2	Clearing & Grubbing - Includes all Demolition	1	LS	\$279,500	\$279,500
A-3	Erosion Control	1	LS	\$56,000	\$56,000
B-1	Grading Complete	1	LS	\$1,154,000	\$1,154,000
B-2	12' Concrete Trail	11540	LF	\$81	\$934,740
B-3	12' Low Boardwalk	850	LF	\$720	\$612,000
B-4	12' High Boardwalk	930	LF	\$900	\$837,000
B-5	12' Wood Bridge	100	LF	\$1,620	\$162,000
B-6	105' Contech-style prefab Bridge	1	LS	\$720,000	\$720,000
C-1	4" Topsoil Placement	230	SY	\$15	\$3,450
C-2	Landscape	2100	SF	\$4	\$8,400
D-1	8" DIP	165	LF	\$90	\$14,850
E-1	Furnish and Install Wayfinding Sign with Support	24	EA	\$810	\$19,440
E-2	Furnish and Install Interpretive Sign with Support	20	EA	\$2,700	\$54,000
E-3	Picnic Table	18	EA	\$2,160	\$38,880
E-4	Bench	24	EA	\$1,350	\$32,400
E-5	Trash Receptacle	27	EA	\$1,350	\$36,450
E-6	Electrical Service	4	LS	\$6,750	\$27,000
Subtotal Items					\$5,489,610
CONSTRUCTION CONTINGENCY				0%	\$0
Total Cost Estimate					\$5,490,000

NOTES:

1. This cost estimate is based on 2019-2020 material/equipment/labor costs and should be adjusted to fit current year if needed.
2. Striping is assumed to be thermoplastic.
3. Estimate does not include construction surveying, engineering, or right-of-way acquisition.
4. Trail lengths calculated using professional judgement during site walks
5. Trailheads to include parking, signage, trash receptacles, potential restrooms & maintenance sheds
6. Estimate does not include stormwater treatment or permitting.
7. Typical trail road crossing includes traffic control, signal modifications, curb ramps, signs and pavement marking.
8. Trail, Boardwalk and Bridge estimates include materials and clearing and grubbing through installation.
9. Assume lighting to be leased by Dominion Energy and is not included in estimate.

DISCLAIMER:

Cost estimates were developed by identifying pay items and establishing rough quantities. Please note that the estimates include approximate costs for asphalt, concrete, drainage improvements, limited utility relocation, pavement markings, signs and traffic signal adjustments. The estimate does not include easement, right-of-way acquisition, construction management, surveying, geotechnical investigation, environmental documentation, special site remediation or the cost for ongoing maintenance. A cost range has been assigned to some general categories such as utility relocations; however, these costs can vary widely depending on the exact details and nature of the work. The overall estimates are intended to be general and used for planning purposes. Construction costs will vary based on the ultimate project scope (i.e. potential combination of projects), schedule, and economic conditions at the time of construction.



ENGINEER'S OPINION OF PROBABLE COST - PRELIMINARY DESIGN ESTIMATE

DESCRIPTION: PRELIMINARY COST FOR PHASE 3 12' TRAIL
PHASE 3 LOCATION: I-20 TO I-26

LOCATION: Lexington Co
ESTIMATE BY: SRL
DATE: 2/11/2021
REVISED:
CHECKED BY: TN

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
A-1	Mobilization	1	LS	\$372,000	\$372,000
A-2	Clearing & Grubbing - Includes all Demolition	1	LS	\$208,000	\$208,000
A-3	Erosion Control	1	LS	\$42,000	\$42,000
B-1	Grading Complete	1	LS	\$851,500	\$851,500
B-2	8' Concrete Trail	600	LF	\$70	\$42,000
B-3	12' Concrete Trail	7915	LF	\$81	\$641,115
B-4	12' Low Boardwalk	600	LF	\$720	\$432,000
B-5	12' High Boardwalk	530	LF	\$900	\$477,000
B-6	12' Wood Bridge	80	LF	\$1,620	\$129,600
B-7	105' Contech-style prefab Bridge	1	LS	\$720,000	\$720,000
C-1	4" Topsoil Placement	130	SY	\$15	\$1,950
C-2	Landscape	1200	SF	\$4	\$4,800
D-1	8" DIP	112	LF	\$90	\$10,080
E-1	Furnish and Install Wayfinding Sign with Support	17	EA	\$810	\$13,770
E-2	Furnish and Install Interpretive Sign with Support	14	EA	\$2,700	\$37,800
E-3	Picnic Table	13	EA	\$2,160	\$28,080
E-4	Bench	17	EA	\$1,350	\$22,950
E-5	Trash Receptacle	20	EA	\$1,350	\$27,000
E-7	Electrical Service	4	LS	\$6,750	\$27,000
Subtotal Items					\$4,088,645
CONSTRUCTION CONTINGENCY				0%	\$0
Total Cost Estimate					\$4,089,000

NOTES:

1. This cost estimate is based on 2019-2020 material/equipment/labor costs and should be adjusted to fit current year if needed.
2. Striping is assumed to be thermoplastic.
3. Estimate does not include construction surveying, engineering, or right-of-way acquisition.
4. Trail lengths calculated using professional judgement during site walks.
5. Trailheads to include parking, signage, trash receptacles, potential restrooms & maintenance sheds.
6. Estimate does not include stormwater treatment or permitting.
7. Typical trail road crossing includes traffic control, signal modifications, curb ramps, signs and pavement marking.
8. Trail, Boardwalk and Bridge estimates include materials and clearing and grubbing through installation.
9. Assume lighting to be leased by Dominion Energy and is not included in estimate.

DISCLAIMER:

Cost estimates were developed by identifying pay items and establishing rough quantities. Please note that the estimates include approximate costs for asphalt, concrete, drainage improvements, limited utility relocation, pavement markings, signs and traffic signal adjustments. The estimate does not include easement, right-of-way acquisition, construction management, surveying, geotechnical investigation, environmental documentation, special site remediation or the cost for ongoing maintenance. A cost range has been assigned to some general categories such as utility relocations; however, these costs can vary widely depending on the exact details and nature of the work. The overall estimates are intended to be general and used for planning purposes. Construction costs will vary based on the ultimate project scope (i.e. potential combination of projects), schedule, and economic conditions at the time of construction.



**ENGINEER'S OPINION OF PROBABLE COST -
PRELIMINARY DESIGN ESTIMATE**

DESCRIPTION: PRELIMINARY COST FOR TYPICAL TYPE 1 TRAILHEAD

LOCATION: Lexington Co
ESTIMATE BY: SRL

TYPE 1 INCLUDES: 60 PARKING SPACES, RESTROOMS,
MAINTENANCE ROOM, TRASH RECEPTACLES,

DATE: 2/11/2021

REVISED:

CHECKED BY: TN

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
	Mobilization	1	LS	\$43,000	\$43,000
	Traffic Control	1	LS	\$10,000	\$10,000
	Clearing & Grubbing	1	LS	\$10,500	\$10,500
	Erosion Control	1	LS	\$2,500	\$2,500
	R&D Asphalt Pavement	250	SY	\$5	\$1,250
	Remove Thermoplastic Striping	75	LF	\$2	\$150
	Remove Pavement Markings	4	EA	\$50	\$200
	Grading Complete	1	LS	\$10,000	\$10,000
	Concrete Curb	200	LF	\$20	\$4,000
	Curb Ramps + Warning Strip	2	EA	\$3,500	\$7,000
	Stamped Concrete	3300	SF	\$20	\$66,000
	12' Concrete Trail	20	LF	\$81	\$1,620
	Concrete Wheel Stop	60	EA	\$45	\$2,700
	Pavement Mill & Overlay	4170	SY	\$30	\$125,100
	Accessible Parking Stall Pavement Marking	3	EA	\$30	\$90
	Thermoplastic Pavement Marking, White (24")	120	LF	\$15	\$1,800
	Thermoplastic Pavement Marking, White (4")	2000	LF	\$2	\$4,000
	4" Topsoil Placement	100	SY	\$15	\$1,500
	Landscape	650	SF	\$4	\$2,600
	Utility Allowance	1	LS	\$10,000	\$10,000
	Signal Modifications	1	LS	\$80,000	\$80,000
	Bollard	4	EA	\$250	\$1,000
	Furnish and Install Interpretative Sign with Support	1	EA	\$2,700	\$2,700
	Furnish and Install Wayfinding Sign with Support	2	EA	\$810	\$1,620
	Furnish and Install Standard Sign with Support	4	EA	\$270	\$1,080
	Picnic Table	2	EA	\$2,160	\$4,320
	Bench	2	EA	\$1,350	\$2,700
	Trash Receptacle	2	EA	\$1,350	\$2,700
	Call Box	1	EA	\$8,100	\$8,100
	Restroom Facility	1	EA	\$50,000	\$50,000
	Maintenance Shed	1	EA	\$10,000	\$10,000
Subtotal Items					\$468,230
CONSTRUCTION CONTINGENCY				0%	\$0
Total Cost Estimate					\$469,000

NOTES:

1. This cost estimate is based on 2019-2020 material/equipment/labor costs and should be adjusted to fit current year if needed.
2. Striping is assumed to be thermoplastic.
3. Estimate does not include construction surveying, engineering, or right-of-way acquisition.
4. Assumption of curbs to be constructed without a pavement sawcut.
5. Estimate does not include stormwater treatment or permitting.
6. Trail, Boardwalk and Bridge estimates include materials and clearing and grubbing through installation.
7. Assume lighting to be leased by Dominion Energy and is not included in estimate.

DISCLAIMER:

Cost estimates were developed by identifying pay items and establishing rough quantities. Please note that the estimates include approximate costs for asphalt, concrete, drainage improvements, limited utility relocation, pavement markings, signs and traffic signal adjustments. The estimate does not include easement, right-of-way acquisition, construction management, surveying, geotechnical investigation, environmental documentation, special site remediation or the cost for ongoing maintenance. A cost range has been assigned to some general categories such as utility relocations; however, these costs can vary widely depending on the exact details and nature of the work. The overall estimates are intended to be general and used for planning purposes. Construction costs will vary based on the ultimate project scope (i.e. potential combination of projects), schedule, and economic conditions at the time of construction.



ENGINEER'S OPINION OF PROBABLE COST - PRELIMINARY DESIGN ESTIMATE

DESCRIPTION: PRELIMINARY COST FOR TYPICAL TYPE 2 TRAILHEAD

LOCATION: Lexington Co

ESTIMATE BY: SRL

TYPE 2 INCLUDES: 30 PARKING SPACES, TRASH RECEPTACLES,

DATE: 2/11/2021

REVISED:

CHECKED BY: TN

Table with 7 columns: ITEM NO., DESCRIPTION, QUANTITY, UNIT, UNIT COST, COST. Rows include Mobilization, Traffic Control, Clearing & Grubbing, Erosion Control, Grading Complete, Curb Ramps + Warning Strip, 12' Concrete Trail, Concrete Wheel Stop, Pavement Mill & Overlay, Accessible Parking Stall Pavement Marking, 8" DIP, Utility Allowance, Signal Modifications, Furnish and Install Wayfinding Sign with Support, Furnish and Install Standard Sign with Support, Trash Receptacle, Call Box, Subtotal Items (\$174,850), CONSTRUCTION CONTINGENCY (0%), Total Cost Estimate (\$175,000).

NOTES:

- 1. This cost estimate is based on 2019-2020 material/equipment/labor costs and should be adjusted to fit current year if needed.
2. Striping is assumed to be thermoplastic.
3. Estimate does not include construction surveying, engineering, or right-of-way acquisition.
4. Assumption of curbs to be constructed without a pavement sawcut.
5. Estimate does not include stormwater treatment or permitting.
6. Trail, Boardwalk and Bridge estimates include materials and clearing and grubbing through installation.
7. Assume lighting to be leased by Dominion Energy and is not included in estimate.

DISCLAIMER:

Cost estimates were developed by identifying pay items and establishing rough quantities. Please note that the estimates include approximate costs for asphalt, concrete, drainage improvements, limited utility relocation, pavement markings, signs and traffic signal adjustments. The estimate does not include easement, right-of-way acquisition, construction management, surveying, geotechnical investigation, environmental documentation, special site remediation or the cost for ongoing maintenance. A cost range has been assigned to some general categories such as utility relocations; however, these costs can vary widely depending on the exact details and nature of the work. The overall estimates are intended to be general and used for planning purposes. Construction costs will vary based on the ultimate project scope (i.e. potential combination of projects), schedule, and economic conditions at the time of construction.



**ENGINEER'S OPINION OF PROBABLE COST -
PRELIMINARY DESIGN ESTIMATE**

DESCRIPTION: PRELIMINARY COST FOR THE AT GRADE CROSSINGS AT SC 6 AND SC 60

LOCATION: Lexington Co
ESTIMATE BY: SRL
DATE: 2/11/2021
REVISED:
CHECKED BY: TN

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
A-1	Mobilization	1	LS	\$21,500	\$21,500
A-2	Traffic Control	1	LS	\$10,000	\$10,000
A-3	Clearing & Grubbing	1	LS	\$5,000	\$5,000
A-4	Erosion Control	1	LS	\$1,000	\$1,000
B-1	R&D Asphalt Pavement	500	SY	\$5	\$2,500
B-2	R&D Existing Curb and Gutter	300	LF	\$5	\$1,500
B-3	R&D Concrete Walks	900	SF	\$2	\$1,800
B-4	Adjust Utility Box and Cover to Grade	4	EA	\$600	\$2,400
B-5	Remove Thermoplastic Striping	400	LF	\$2	\$800
B-6	Remove Pavement Markings	2	EA	\$50	\$100
C-1	Concrete Curb & Gutter (1'-6") Vertical Face	350	LF	\$25	\$8,750
C-2	Concrete Curb	210	LF	\$20	\$4,200
C-3	Raised Crosswalk	2	EA	\$20,000	\$40,000
C-4	Detectable Warning	150	SF	\$30	\$4,500
C-5	Concrete Sidewalk (4" Uniform)	500	SY	\$65	\$32,500
C-6	Curb Ramps + Warning Strip	12	EA	\$2,000	\$24,000
C-7	Thermoplastic Pavement Marking (ARROW)	1	EA	\$350	\$350
C-8	Thermoplastic Pavement Marking, White (24")	1000	LF	\$15	\$15,000
D-1	Furnish and Install Sign with Support	5	EA	\$300	\$1,500
D-2	Remove & Reset Existing Sign	5	EA	\$125	\$625
D-3	Landscape	1250	SF	\$4	\$5,000
D-4	Utility Allowance	1	LS	\$10,000	\$10,000
D-5	Signal Modifications	1	LS	\$40,000	\$40,000
Subtotal Items					\$233,025
CONSTRUCTION CONTINGENCY				0%	\$0
Total Cost Estimate					\$234,000

NOTES:

1. This cost estimate is based on 2019-2020 material/equipment/labor costs and should be adjusted to fit current year if needed.
2. Striping is assumed to be thermoplastic.
3. Estimate does not include construction surveying, engineering, or right-of-way acquisition.
4. Raised crossing includes pavement, markings & associated drainage.
5. Assumption of curbs to be constructed without a pavement sawcut.
6. Estimate does not include stormwater treatment or permitting.
7. Signal modifications expected to include pedestrian signals with push buttons that meet accessibility guidelines.
8. Assume lighting to be leased by Dominion Energy and is not included in estimate.

DISCLAIMER:

Cost estimates were developed by identifying pay items and establishing rough quantities. Please note that the estimates include approximate costs for asphalt, concrete, drainage improvements, limited utility relocation, pavement markings, signs and traffic signal adjustments. The estimate does not include easement, right-of-way acquisition, construction management, surveying, geotechnical investigation, environmental documentation, special site remediation or the cost for ongoing maintenance. A cost range has been assigned to some general categories such as utility relocations; however, these costs can vary widely depending on the exact details and nature of the work. The overall estimates are intended to be general and used for planning purposes. Construction costs will vary based on the ultimate project scope (i.e. potential combination of projects), schedule, and economic conditions at the time of construction



**ENGINEER'S OPINION OF PROBABLE COST -
PRELIMINARY DESIGN ESTIMATE**

DESCRIPTION: PRELIMINARY COST FOR TYPICAL UNCONTROLLED RAILROAD
CROSSING

LOCATION: Lexington Co.
ESTIMATE BY: SRL
DATE: 2/11/2021
REVISED:
CHECKED BY: TN

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
A-1	Mobilization	1	LS	\$5,500	\$5,500
A-2	Clearing & Grubbing - Includes all Demolition	1	LS	\$3,000	\$3,000
A-3	Erosion Control	1	LS	\$1,000	\$1,000
B-1	Grading Complete	1	LS	\$15,000	\$15,000
B-2	Curb Ramps + Warning Strip	2	EA	\$3,500	\$7,000
B-3	Rail Concrete Panel and Crossing Improvements	20	TF	\$500	\$10,000
B-4	12' Asphalt Trail	50	LF	\$68	\$3,375
B-5	12' Concrete Trail	100	LF	\$81	\$8,100
C-1	Furnish and Install Sign with Support	4	EA	\$750	\$3,000
Subtotal Items					\$55,975
CONSTRUCTION CONTINGENCY				0%	\$0
Total Cost Estimate					\$56,000

NOTES:

1. This cost estimate is based on 2019-2020 material/equipment/labor costs and should be adjusted to fit current year if needed.
3. Estimate does not include construction surveying, engineering, or right-of-way acquisition.
4. Assumption of curbs to be constructed without a pavement sawcut.
5. Estimate does not include stormwater treatment or permitting.
6. Estimate does not include utility or drainage work.
7. Estimate does not include railroad coordination or pedestrian scale crossing control.
8. Trail, Boardwalk and Bridge estimates include materials and clearing and grubbing through installation.
9. Assume lighting to be leased by Dominion Energy and is not included in estimate.

DISCLAIMER:

Cost estimates were developed by identifying pay items and establishing rough quantities. Please note that the estimates include approximate costs for asphalt, concrete, drainage improvements, limited utility relocation, pavement markings, signs and traffic signal adjustments. The estimate does not include easement, right-of-way acquisition, construction management, surveying, geotechnical investigation, environmental documentation, special site remediation or the cost for ongoing maintenance. A cost range has been assigned to some general categories such as utility relocations; however, these costs can vary widely depending on the exact details and nature of the work. The overall estimates are intended to be general and used for planning purposes. Construction costs will vary based on the ultimate project scope (i.e. potential combination of projects), schedule, and economic conditions at the time of construction.



**ENGINEER'S OPINION OF PROBABLE COST -
PRELIMINARY DESIGN ESTIMATE**

DESCRIPTION: PRELIMINARY COST FOR PHASE 1 14' TRAIL
PHASE 1 LOCATION: LAKE MURRAY DAM TO SALUDA SHOALS PARK

LOCATION: Lexington Co
ESTIMATE BY: SRL
DATE: 2/11/2021
REVISED:
CHECKED BY: TN

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
A-1	Mobilization	1	LS	\$363,500	\$363,500
A-2	Clearing & Grubbing - Includes all Demolition	1	LS	\$203,500	\$203,500
A-3	Erosion Control	1	LS	\$41,000	\$41,000
B-1	Grading Complete	1	LS	\$1,289,500	\$1,289,500
B-2	14' Concrete Trail	12895	LF	\$117	\$1,508,715
B-3	14' Low Boardwalk	225	LF	\$810	\$182,250
B-4	14' Wood Bridge	40	LF	\$1,980	\$79,200
C-1	4" Topsoil Placement	2200	SY	\$15	\$33,000
C-2	Landscape	19400	SF	\$4	\$77,600
D-1	8" DIP	160	LF	\$90	\$14,400
E-1	Furnish and Install Wayfinding Sign with Support	23	EA	\$810	\$18,630
E-2	Furnish and Install Interpretive Sign with Support	19	EA	\$2,700	\$51,300
E-3	Picnic Table	18	EA	\$2,160	\$38,880
E-4	Bench	23	EA	\$1,350	\$31,050
E-5	Trash Receptacle	27	EA	\$1,350	\$36,450
E-6	Electrical Service	4	LS	\$6,750	\$27,000
Subtotal Items					\$3,995,975
CONSTRUCTION CONTINGENCY				0%	\$0
Total Cost Estimate					\$3,996,000

NOTES:

1. This cost estimate is based on 2019-2020 material/equipment/labor costs and should be adjusted to fit current year if needed.
2. Striping is assumed to be thermoplastic.
3. Estimate does not include construction surveying, engineering, or right-of-way acquisition.
4. Trail lengths calculated using professional judgement during site walks
5. Trailheads to include parking, signage, trash receptacles, potential restrooms & maintenance sheds
6. Estimate does not include stormwater treatment or permitting.
7. Typical trail road crossing includes traffic control, signal modifications, curb ramps, signs and pavement marking.
8. Trail, Boardwalk and Bridge estimates include materials and clearing and grubbing through installation.
9. Assume lighting to be leased by Dominion Energy and is not included in estimate.

DISCLAIMER:

Cost estimates were developed by identifying pay items and establishing rough quantities. Please note that the estimates include approximate costs for asphalt, concrete, drainage improvements, limited utility relocation, pavement markings, signs and traffic signal adjustments. The estimate does not include easement, right-of-way acquisition, construction management, surveying, geotechnical investigation, environmental documentation, special site remediation or the cost for ongoing maintenance. A cost range has been assigned to some general categories such as utility relocations; however, these costs can vary widely depending on the exact details and nature of the work. The overall estimates are intended to be general and used for planning purposes. Construction costs will vary based on the ultimate project scope (i.e. potential combination of projects), schedule, and economic conditions at the time of construction.



**ENGINEER'S OPINION OF PROBABLE COST -
PRELIMINARY DESIGN ESTIMATE**

DESCRIPTION: PRELIMINARY COST FOR PHASE 2 14' TRAIL
PHASE 2 LOCATION: SALUDA SHOALS PARK TO I-20

LOCATION: Lexington Co
ESTIMATE BY: SRL
DATE: 2/11/2021
REVISED:
CHECKED BY: TN

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
A-1	Mobilization	1	LS	\$574,000	\$574,000
A-2	Clearing & Grubbing - Includes all Demolition	1	LS	\$321,000	\$321,000
A-3	Erosion Control	1	LS	\$64,500	\$64,500
B-1	Grading Complete	1	LS	\$1,154,000	\$1,154,000
B-2	14' Concrete Trail	11540	LF	\$117	\$1,350,180
B-3	14' Low Boardwalk	850	LF	\$810	\$688,500
B-4	14' High Boardwalk	930	LF	\$1,080	\$1,004,400
B-5	14' Wood Bridge	100	LF	\$1,980	\$198,000
B-6	105' Contech-style prefab Bridge	1	LS	\$720,000	\$720,000
C-1	4" Topsoil Placement	230	SY	\$15	\$3,450
C-2	Landscape	2100	SF	\$4	\$8,400
D-1	8" DIP	165	LF	\$90	\$14,850
E-1	Furnish and Install Wayfinding Sign with Support	24	EA	\$810	\$19,440
E-2	Furnish and Install Interpretive Sign with Support	20	EA	\$2,700	\$54,000
E-3	Picnic Table	18	EA	\$2,160	\$38,880
E-4	Bench	24	EA	\$1,350	\$32,400
E-5	Trash Receptacle	27	EA	\$1,350	\$36,450
E-6	Electrical Service	4	LS	\$6,750	\$27,000
Subtotal Items					\$6,309,450
CONSTRUCTION CONTINGENCY				0%	\$0
Total Cost Estimate					\$6,310,000

NOTES:

1. This cost estimate is based on 2019-2020 material/equipment/labor costs and should be adjusted to fit current year if needed.
2. Striping is assumed to be thermoplastic.
3. Estimate does not include construction surveying, engineering, or right-of-way acquisition.
4. Trail lengths calculated using professional judgement during site walks
5. Trailheads to include parking, signage, trash receptacles, potential restrooms & maintenance sheds
6. Estimate does not include stormwater treatment or permitting.
7. Typical trail road crossing includes traffic control, signal modifications, curb ramps, signs and pavement marking.
8. Trail, Boardwalk and Bridge estimates include materials and clearing and grubbing through installation.
9. Assume lighting to be leased by Dominion Energy and is not included in estimate.

DISCLAIMER:

Cost estimates were developed by identifying pay items and establishing rough quantities. Please note that the estimates include approximate costs for asphalt, concrete, drainage improvements, limited utility relocation, pavement markings, signs and traffic signal adjustments. The estimate does not include easement, right-of-way acquisition, construction management, surveying, geotechnical investigation, environmental documentation, special site remediation or the cost for ongoing maintenance. A cost range has been assigned to some general categories such as utility relocations; however, these costs can vary widely depending on the exact details and nature of the work. The overall estimates are intended to be general and used for planning purposes. Construction costs will vary based on the ultimate project scope (i.e. potential combination of projects), schedule, and economic conditions at the time of construction.



ENGINEER'S OPINION OF PROBABLE COST - PRELIMINARY DESIGN ESTIMATE

DESCRIPTION: PRELIMINARY COST FOR PHASE 3 14' TRAIL
PHASE 3 LOCATION: I-20 TO I-26

LOCATION: Lexington Co
ESTIMATE BY: SRL
DATE: 2/11/2021
REVISED:
CHECKED BY: TN

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
A-1	Mobilization	1	LS	\$421,500	\$421,500
A-2	Clearing & Grubbing - Includes all Demolition	1	LS	\$236,000	\$236,000
A-3	Erosion Control	1	LS	\$47,500	\$47,500
B-1	Grading Complete	1	LS	\$851,500	\$851,500
B-2	8' Concrete Trail	600	LF	\$70	\$42,000
B-3	14' Concrete Trail	7915	LF	\$117	\$926,055
B-4	14' Low Boardwalk	600	LF	\$810	\$486,000
B-5	14' High Boardwalk	530	LF	\$1,080	\$572,400
B-6	14' Wood Bridge	80	LF	\$1,980	\$158,400
B-7	105' Contech-style prefab Bridge	1	LS	\$720,000	\$720,000
C-1	4" Topsoil Placement	130	SY	\$15	\$1,950
C-2	Landscape	1200	SF	\$4	\$4,800
D-1	8" DIP	112	LF	\$90	\$10,080
E-1	Furnish and Install Wayfinding Sign with Support	17	EA	\$810	\$13,770
E-2	Furnish and Install Interpretive Sign with Support	14	EA	\$2,700	\$37,800
E-3	Picnic Table	13	EA	\$2,160	\$28,080
E-4	Bench	17	EA	\$1,350	\$22,950
E-5	Trash Receptacle	20	EA	\$1,350	\$27,000
E-7	Electrical Service	4	LS	\$6,750	\$27,000
Subtotal Items					\$4,634,785
CONSTRUCTION CONTINGENCY				0%	\$0
Total Cost Estimate					\$4,635,000

NOTES:

1. This cost estimate is based on 2019-2020 material/equipment/labor costs and should be adjusted to fit current year if needed.
2. Striping is assumed to be thermoplastic.
3. Estimate does not include construction surveying, engineering, or right-of-way acquisition.
4. Trail lengths calculated using professional judgement during site walks.
5. Trailheads to include parking, signage, trash receptacles, potential restrooms & maintenance sheds.
6. Estimate does not include stormwater treatment or permitting.
7. Typical trail road crossing includes traffic control, signal modifications, curb ramps, signs and pavement marking.
8. Trail, Boardwalk and Bridge estimates include materials and clearing and grubbing through installation.
9. Assume lighting to be leased by Dominion Energy and is not included in estimate.

DISCLAIMER:

Cost estimates were developed by identifying pay items and establishing rough quantities. Please note that the estimates include approximate costs for asphalt, concrete, drainage improvements, limited utility relocation, pavement markings, signs and traffic signal adjustments. The estimate does not include easement, right-of-way acquisition, construction management, surveying, geotechnical investigation, environmental documentation, special site remediation or the cost for ongoing maintenance. A cost range has been assigned to some general categories such as utility relocations; however, these costs can vary widely depending on the exact details and nature of the work. The overall estimates are intended to be general and used for planning purposes. Construction costs will vary based on the ultimate project scope (i.e. potential combination of projects), schedule, and economic conditions at the time of construction.



**ENGINEER'S OPINION OF PROBABLE COST -
PRELIMINARY DESIGN ESTIMATE**

DESCRIPTION: PRELIMINARY COST FOR TYPICAL TYPE 1 TRAILHEAD

LOCATION: Lexington Co
ESTIMATE BY: SRL

TYPE 1 INCLUDES: 60 PARKING SPACES, RESTROOMS, MAINTENANCE ROOM,
TRASH RECEPTACLES,

DATE: 2/11/2021

REVISED:

CHECKED BY: TN

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
	Mobilization	1	LS	\$43,000	\$43,000
	Traffic Control	1	LS	\$10,000	\$10,000
	Clearing & Grubbing	1	LS	\$10,500	\$10,500
	Erosion Control	1	LS	\$2,500	\$2,500
	R&D Asphalt Pavement	250	SY	\$5	\$1,250
	Remove Thermoplastic Striping	75	LF	\$2	\$150
	Remove Pavement Markings	4	EA	\$50	\$200
	Grading Complete	1	LS	\$10,000	\$10,000
	Concrete Curb	200	LF	\$20	\$4,000
	Curb Ramps + Warning Strip	2	EA	\$4,000	\$8,000
	Stamped Concrete	3300	SF	\$20	\$66,000
	14' Concrete Trail	20	LF	\$117	\$2,340
	Concrete Wheel Stop	60	EA	\$45	\$2,700
	Pavement Mill & Overlay	4170	SY	\$30	\$125,100
	Accessible Parking Stall Pavement Marking	3	EA	\$30	\$90
	Thermoplastic Pavement Marking, White (24")	140	LF	\$15	\$2,100
	Thermoplastic Pavement Marking, White (4")	2000	LF	\$2	\$4,000
	4" Topsoil Placement	100	SY	\$15	\$1,500
	Landscape	650	SF	\$4	\$2,600
	Utility Allowance	1	LS	\$10,000	\$10,000
	Signal Modifications	1	LS	\$80,000	\$80,000
	Bollard	4	EA	\$250	\$1,000
	Furnish and Install Interpretative Sign with Support	1	EA	\$2,700	\$2,700
	Furnish and Install Wayfinding Sign with Support	2	EA	\$810	\$1,620
	Furnish and Install Standard Sign with Support	4	EA	\$270	\$1,080
	Picnic Table	2	EA	\$2,160	\$4,320
	Bench	2	EA	\$1,350	\$2,700
	Trash Receptacle	2	EA	\$1,350	\$2,700
	Call Box	1	EA	\$8,100	\$8,100
	Restroom Facility	1	EA	\$50,000	\$50,000
	Maintenance Shed	1	EA	\$10,000	\$10,000
Subtotal Items					\$470,250
CONSTRUCTION CONTINGENCY				0%	\$0
Total Cost Estimate					\$471,000

NOTES:

1. This cost estimate is based on 2019-2020 material/equipment/labor costs and should be adjusted to fit current year if needed.
2. Striping is assumed to be thermoplastic.
3. Estimate does not include construction surveying, engineering, or right-of-way acquisition.
4. Assumption of curbs to be constructed without a pavement sawcut.
5. Estimate does not include stormwater treatment or permitting.
6. Trail, Boardwalk and Bridge estimates include materials and clearing and grubbing through installation.
7. Assume lighting to be leased by Dominion Energy and is not included in estimate.

DISCLAIMER:

Cost estimates were developed by identifying pay items and establishing rough quantities. Please note that the estimates include approximate costs for asphalt, concrete, drainage improvements, limited utility relocation, pavement markings, signs and traffic signal adjustments. The estimate does not include easement, right-of-way acquisition, construction management, surveying, geotechnical investigation, environmental documentation, special site remediation or the cost for ongoing maintenance. A cost range has been assigned to some general categories such as utility relocations; however, these costs can vary widely depending on the exact details and nature of the work. The overall estimates are intended to be general and used for planning purposes. Construction costs will vary based on the ultimate project scope (i.e. potential combination of projects), schedule, and economic conditions at the time of construction.



**ENGINEER'S OPINION OF PROBABLE COST -
PRELIMINARY DESIGN ESTIMATE**

DESCRIPTION: PRELIMINARY COST FOR TYPICAL TYPE 2 TRAILHEAD

LOCATION: Lexington Co

ESTIMATE BY: SRL

TYPE 2 INCLUDES: 30 PARKING SPACES, TRASH RECEPTACLES,

DATE: 2/11/2021

REVISED:

CHECKED BY: TN

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
	Mobilization	1	LS	\$16,500	\$16,500
	Traffic Control	1	LS	\$4,000	\$4,000
	Clearing & Grubbing - Includes all Demolition	1	LS	\$4,000	\$4,000
	Erosion Control	1	LS	\$1,000	\$1,000
	Grading Complete	1	LS	\$5,000	\$5,000
	Curb Ramps + Warning Strip	2	EA	\$4,000	\$8,000
	14' Concrete Trail	20	LF	\$117	\$2,340
	Concrete Wheel Stop	30	EA	\$50	\$1,500
	Pavement Mill & Overlay	2620	SY	\$30	\$78,600
	Accessible Parking Stall Pavement Marking	2	EA	\$30	\$60
	8" DIP	0	LF	\$90	\$0
	Utility Allowance	1	LS	\$5,000	\$5,000
	Signal Modifications	1	LS	\$40,000	\$40,000
	Furnish and Install Wayfinding Sign with Support	1	EA	\$810	\$810
	Furnish and Install Standard Sign with Support	3	EA	\$270	\$810
	Trash Receptacle	1	EA	\$1,350	\$1,350
	Call Box	1	EA	\$8,100	\$8,100
Subtotal Items					\$177,070
CONSTRUCTION CONTINGENCY				0%	\$0
Total Cost Estimate					\$178,000

NOTES:

1. This cost estimate is based on 2019-2020 material/equipment/labor costs and should be adjusted to fit current year if needed.
2. Striping is assumed to be thermoplastic.
3. Estimate does not include construction surveying, engineering, or right-of-way acquisition.
4. Assumption of curbs to be constructed without a pavement sawcut.
5. Estimate does not include stormwater treatment or permitting.
6. Trail, Boardwalk and Bridge estimates include materials and clearing and grubbing through installation.
7. Assume lighting to be leased by Dominion Energy and is not included in estimate.

DISCLAIMER:

Cost estimates were developed by identifying pay items and establishing rough quantities. Please note that the estimates include approximate costs for asphalt, concrete, drainage improvements, limited utility relocation, pavement markings, signs and traffic signal adjustments. The estimate does not include easement, right-of-way acquisition, construction management, surveying, geotechnical investigation, environmental documentation, special site remediation or the cost for ongoing maintenance. A cost range has been assigned to some general categories such as utility relocations; however, these costs can vary widely depending on the exact details and nature of the work. The overall estimates are intended to be general and used for planning purposes. Construction costs will vary based on the ultimate project scope (i.e. potential combination of projects), schedule, and economic conditions at the time of construction.



**ENGINEER'S OPINION OF PROBABLE COST -
PRELIMINARY DESIGN ESTIMATE**

DESCRIPTION: PRELIMINARY COST FOR THE AT GRADE CROSSINGS AT SC 6 AND SC 60

LOCATION: Lexington Co
ESTIMATE BY: SRL
DATE: 2/11/2021
REVISED:
CHECKED BY: TN

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
A-1	Mobilization	1	LS	\$21,500	\$21,500
A-2	Traffic Control	1	LS	\$10,000	\$10,000
A-3	Clearing & Grubbing	1	LS	\$5,000	\$5,000
A-4	Erosion Control	1	LS	\$1,000	\$1,000
B-1	R&D Asphalt Pavement	500	SY	\$5	\$2,500
B-2	R&D Existing Curb and Gutter	300	LF	\$5	\$1,500
B-3	R&D Concrete Walks	900	SF	\$2	\$1,800
B-4	Adjust Utility Box and Cover to Grade	4	EA	\$600	\$2,400
B-5	Remove Thermoplastic Striping	400	LF	\$2	\$800
B-6	Remove Pavement Markings	2	EA	\$50	\$100
C-1	Concrete Curb & Gutter (1'-6") Vertical Face	350	LF	\$25	\$8,750
C-2	Concrete Curb	210	LF	\$20	\$4,200
C-3	Raised Crosswalk	2	EA	\$20,000	\$40,000
C-4	Detectable Warning	150	SF	\$30	\$4,500
C-5	Concrete Sidewalk (4" Uniform)	500	SY	\$65	\$32,500
C-6	Curb Ramps + Warning Strip	12	EA	\$2,000	\$24,000
C-7	Thermoplastic Pavement Marking (ARROW)	1	EA	\$350	\$350
C-8	Thermoplastic Pavement Marking, White (24")	1000	LF	\$15	\$15,000
D-1	Furnish and Install Sign with Support	5	EA	\$300	\$1,500
D-2	Remove & Reset Existing Sign	5	EA	\$125	\$625
D-3	Landscape	1250	SF	\$4	\$5,000
D-4	Utility Allowance	1	LS	\$10,000	\$10,000
D-5	Signal Modifications	1	LS	\$40,000	\$40,000
Subtotal Items					\$233,025
CONSTRUCTION CONTINGENCY				0%	\$0
Total Cost Estimate					\$234,000

NOTES:

1. This cost estimate is based on 2019-2020 material/equipment/labor costs and should be adjusted to fit current year if needed.
2. Striping is assumed to be thermoplastic.
3. Estimate does not include construction surveying, engineering, or right-of-way acquisition.
4. Raised crossing includes pavement, markings & associated drainage.
5. Assumption of curbs to be constructed without a pavement sawcut.
6. Estimate does not include stormwater treatment or permitting.
7. Signal modifications expected to include pedestrian signals with push buttons that meet accessibility guidelines.
8. Assume lighting to be leased by Dominion Energy and is not included in estimate.

DISCLAIMER:

Cost estimates were developed by identifying pay items and establishing rough quantities. Please note that the estimates include approximate costs for asphalt, concrete, drainage improvements, limited utility relocation, pavement markings, signs and traffic signal adjustments. The estimate does not include easement, right-of-way acquisition, construction management, surveying, geotechnical investigation, environmental documentation, special site remediation or the cost for ongoing maintenance. A cost range has been assigned to some general categories such as utility relocations; however, these costs can vary widely depending on the exact details and nature of the work. The overall estimates are intended to be general and used for planning purposes. Construction costs will vary based on the ultimate project scope (i.e. potential combination of projects), schedule, and economic conditions at the time of construction



**ENGINEER'S OPINION OF PROBABLE COST -
PRELIMINARY DESIGN ESTIMATE**

DESCRIPTION: PRELIMINARY COST FOR TYPICAL UNCONTROLLED RAILROAD
CROSSING

LOCATION: Lexington Co.
ESTIMATE BY: SRL
DATE: 2/11/2021
REVISED:
CHECKED BY: TN

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT COST	COST
A-1	Mobilization	1	LS	\$6,000	\$6,000
A-2	Clearing & Grubbing - Includes all Demolition	1	LS	\$3,500	\$3,500
A-3	Erosion Control	1	LS	\$1,000	\$1,000
B-1	Grading Complete	1	LS	\$15,000	\$15,000
B-2	Curb Ramps + Warning Strip	2	EA	\$4,000	\$8,000
B-3	Rail Concrete Panel and Crossing Improvements	20	TF	\$500	\$10,000
B-4	14' Asphalt Trail	50	LF	\$90	\$4,500
B-5	14' Concrete Trail	100	LF	\$117	\$11,700
C-1	Furnish and Install Sign with Support	4	EA	\$750	\$3,000
Subtotal Items					\$62,700
CONSTRUCTION CONTINGENCY				0%	\$0
Total Cost Estimate					\$63,000

NOTES:

1. This cost estimate is based on 2019-2020 material/equipment/labor costs and should be adjusted to fit current year if needed.
3. Estimate does not include construction surveying, engineering, or right-of-way acquisition.
4. Assumption of curbs to be constructed without a pavement sawcut.
5. Estimate does not include stormwater treatment or permitting.
6. Estimate does not include utility or drainage work.
7. Estimate does not include railroad coordination or pedestrian scale crossing control.
8. Trail, Boardwalk and Bridge estimates include materials and clearing and grubbing through installation.
9. Assume lighting to be leased by Dominion Energy and is not included in estimate.

DISCLAIMER:

Cost estimates were developed by identifying pay items and establishing rough quantities. Please note that the estimates include approximate costs for asphalt, concrete, drainage improvements, limited utility relocation, pavement markings, signs and traffic signal adjustments. The estimate does not include easement, right-of-way acquisition, construction management, surveying, geotechnical investigation, environmental documentation, special site remediation or the cost for ongoing maintenance. A cost range has been assigned to some general categories such as utility relocations; however, these costs can vary widely depending on the exact details and nature of the work. The overall estimates are intended to be general and used for planning purposes. Construction costs will vary based on the ultimate project scope (i.e. potential combination of projects), schedule, and economic conditions at the time of construction.