

ATTACHMENT D

Construction Cost Estimate

Lower King Street Multimodal Feasibility Study

Conceptual Design - Flush Street with Parking

Preliminary Construction Cost Estimate

LOWER KING STREET - FLUSH STREET WITH PARKING

Description: Conceptual Design of Flush Shared Street with parking on one block of S. King Street between Lee and Union Street. Intersections of Lee and Union are raised intersections.

| ITEM | UNIT | QUANTITY | UNIT COST | TOTAL COST |
|---|------|----------|---------------|------------|
| GENERAL | | | | |
| Remove and Reset Sign Panel and Post | EA | 2 | \$ 500.00 | \$ 1,000 |
| Remove Existing Light Pole | EA | 8 | \$ 500.00 | \$ 4,000 |
| Remove Existing Tree Boxes | EA | 16 | \$ 300.00 | \$ 4,800 |
| Remove and Replace Drainage Inlet | EA | 14 | \$ 3,000.00 | \$ 42,000 |
| Remove Existing Curb and Gutter | SY | 736 | \$ 3.50 | \$ 2,576 |
| Sawcut | LF | 736 | \$ 40.00 | \$ 29,440 |
| Demolition of Pavement (roadway) | SY | 1883 | \$ 4.00 | \$ 7,532 |
| Demolition of Pavement (sidewalk) | SY | 9394 | \$ 4.00 | \$ 37,576 |
| Concrete Pavement | SY | 179 | \$ 60.00 | \$ 10,733 |
| Milling | SY | 179 | \$ 6.00 | \$ 1,073 |
| PEDESTRIAN ZONE | | | | |
| Unit Pavers | SY | 1,084 | \$ 200.00 | \$ 216,756 |
| Aggregate Base Course for Unit Pavers | CY | 181 | \$ 30.00 | \$ 5,420 |
| PARKING ZONE | | | | |
| Unit Pavers | SY | 451 | \$ 180.00 | \$ 81,200 |
| Aggregate Base Course for Unit Pavers | CY | 226 | \$ 30.00 | \$ 6,767 |
| Pedestrian Scale Lighting Pole and Fixture | EA | 8 | \$ 6,000.00 | \$ 48,000 |
| Street Trees | EA | 16 | \$ 1,000.00 | \$ 16,000 |
| Tree Grate | EA | 16 | \$ 800.00 | \$ 12,800 |
| Suspended Pavement | CY | 133 | \$ 25.00 | \$ 3,333 |
| Remove and Replace Multi-Space Parking Meters | EA | 4 | \$ 10,000.00 | \$ 40,000 |
| CART PATH AND VALLEY GUTTER | | | | |
| Unit Pavers | SY | 1,348 | \$ 150.00 | \$ 202,250 |
| Concrete Base Course | SY | 1,348 | \$ 60.00 | \$ 80,900 |
| Valley Gutter | LF | 760 | \$ 30.00 | \$ 22,800 |
| Manual Pneumatic Retractable Bollards (10)* | LS | 1 | \$ 70,000.00 | \$ 70,000 |
| LUMP SUM ITEMS | | | | |
| Misc. Mobilization, Survey, Field Off. (5%) | LS | 1 | \$ 47,000.00 | \$ 47,000 |
| Utilities (10%) | LS | 1 | \$ 94,700.00 | \$ 94,700 |
| Erosion and Sediment Control (2%) | LS | 1 | \$ 18,900.00 | \$ 18,900 |
| Maintenance of Traffic (15%) | LS | 1 | \$ 142,000.00 | \$ 142,000 |
| Design (15%) | LS | 1 | \$ 142,000.00 | \$ 142,000 |
| Construction Management (15%) | LS | 1 | \$ 142,000.00 | \$ 142,000 |

SUBTOTAL \$ 1,533,556

CONTINGENCY 30% \$460,067

TOTAL \$ 1,993,623

USE \$ 2,000,000

*Automatic Pneumatic Retractable Bollards cost approximately \$12,000 per unit.

DISCLAIMER: Construction cost estimates were developed by identifying pay items and establishing rough quantities. Unit costs are based on 2014 dollars and were assigned based on historical cost data from VDOT, other state departments of transportation and other sources. Please note that the estimates do not include any costs for ongoing maintenance. Rough costs have 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 or use of City forces) or economic conditions at the time of construction.