

TYPICAL PROJECT ELEMENTS

MOBILIZATION
TRAFFIC CONTROL
EROSION CONTROL
CLEARING AND GRUBBING
CONSTRUCTION ENGINEERING
CONTINGENCY
SOFT COSTS (DESIGN ENGINEERING)
SOFT COSTS (DESIGN ENGINEERING, PERMITTING)
ROW

REMOVALS

REMOVE ASPHALT PAVEMENT
REMOVE CONCRETE CURB & GUTTER
REMOVE CONCRETE SIDEWALK
REMOVE LANE LINE STRIPE
REMOVE PAVEMENT MARKING
REMOVE LANDSCAPED MEDIAN
REMOVE CATCH BASIN
REMOVE SIGN

MODIFICATIONS

MODIFY EXISTING UNDERGROUND DRAINAGE SYSTEM
MODIFY BIKE/PED CONNECTIONS - MINOR INTERSECTION
MODIFY BIKE/PED CONNECTIONS - MAJOR INTERSECTION
WIDEN SHOULDER WITH AGGREGATE BASE
WIDEN EXISTING BRIDGE

INSTALLS - DRAINAGE

INSTALL UNDERGROUND PIPE/INLET DRAINAGE SYSTEM
INSTALL CATCH BASIN
INSTALL BIO-SWALE INFILTRATION

INSTALLS - CIVIL

INSTALL ASPHALT PAVEMENT
INSTALL CONCRETE SIDEWALK
INSTALL CONCRETE CURB & GUTTER
INSTALL CONCRETE MEDIAN
INSTALL CONCRETE CURB EXTENSION - PARTIAL CORNER
(INCLUSIVE OF ROAD/SIDEWALK/STORM RECONSTRUCTION COSTS)
INSTALL CONCRETE CURB EXTENSION - FULL CORNER
(INCLUSIVE OF ROAD/SIDEWALK/STORM RECONSTRUCTION COSTS)
INSTALL LANDSCAPED MEDIAN
INSTALL RETAINING WALL, 0-4 FT HEIGHT
INSTALL RETAINING WALL, 4-8 FT HEIGHT
INSTALL 30' WIDE RAILROAD UNDERPASS
INSTALL TRAIL EXTENSION

INSTALLS - CURB RAMPS

INSTALL ADA CURB RAMP
INSTALL ADA CURB RAMP
(INCLUSIVE OF ROAD/SIDEWALK RECONSTRUCTION COSTS)

INSTALLS - STRIPING

INSTALL LANE LINE STRIPE
INSTALL 8" INTERNAL BUFFER HATCH MARKING
INSTALL 1' WIDE STOP LINE
INSTALL BIKE LANE SYMBOL AND ARROW MARKING
INSTALL PEDESTRIAN LANE SYMBOL AND BI-DIRECTIONAL ARROW MARKING
INSTALL SHARED LANE MARKING
INSTALL TURN ARROW PAVEMENT MARKING
INSTALL MARKED CROSSWALK

INSTALLS - SIGNS, POSTS, BEACONS, SIGNALS, LIGHTING

INSTALL FLEXIBLE DELINEATOR
INSTALL STOP SIGN
INSTALL BIKE LANE SIGN
INSTALL NO PARKING SIGN
INSTALL CROSSWALK WARNING SIGN
INSTALL SET OF RRFBS
INSTALL HAWK/PHB - SIDE-MOUNTED
INSTALL HAWK/PHB - OVERHEAD MOUNTED
INSTALL TRAFFIC SIGNAL
INSTALL STREET LIGHTING - ONE LUMINAIRE
INSTALL STREET LIGHTING - ONE SIDED ALONG ROADWAY

ASSUMED %

10%
15%
2%
1%
15%
40%
15%
20%
5%

MEASUREMENT COST/UNIT

SF	\$ 5
LF	\$ 7
SF	\$ 7
LF	\$ 3
SF	\$ 5
SF	\$ 5
EA	\$ 500
EA	\$ 100

MEASUREMENT COST/UNIT

LF	\$ 80
EA	\$ 100,000
EA	\$ 200,000
CY	\$ 60
SF	\$ 200

MEASUREMENT COST/UNIT

LF	\$ 145
EA	\$ 10,000
SF	\$ 50

MEASUREMENT COST/UNIT

SF	\$ 10
SF	\$ 30
LF	\$ 50
SF	\$ 30
EA	\$ 5,000
EA	\$ 10,000
SF	\$ 45
SF	\$ 80
SF	\$ 100
SF	\$ 300
SF	\$ 20

MEASUREMENT COST/UNIT

EA	\$ 6,000
EA	\$ 10,000

MEASUREMENT	COST/UNIT
LF	\$ 2
LF	\$ 2
LF	\$ 10
EA	\$ 250
EA	\$ 300
EA	\$ 250
EA	\$ 250
SF	\$ 10

MEASUREMENT	COST/UNIT
EA	\$ 50
EA	\$ 250
EA	\$ 250
EA	\$ 150
EA	\$ 250
EA	\$ 20,000
EA	\$ 50,000
EA	\$ 100,000
EA	\$ 250,000
EA	\$ 6,000
LF	\$ 80