

Project: KY 168 Ashland (Item 9-125)

Date: Sept. 2023

*R, U Provided by District Personnel

A: US 60					B: Bus Pulloff	C: 6th Street	
Concept	A.1 Tree Trimming	A.2a Algonquin West	A.2b Algonquin East	A.3 Lengthen Turn Lanes-US 60 EB	A.4 Lengthen Turn Lanes-US 168 SB	B.1 Pollard/Kirk Bus Pull Off	C.1 Add Turn Lanes: KY 168 SB/6th Street
D	\$0	\$60,000	\$100,000	\$100,000	\$140,000	\$40,000	\$390,000
*R	\$0	\$700,000	\$1,100,000	\$1,400,000	\$2,300,000	\$0	\$900,000
*U	\$0	\$300,000	\$80,000	\$500,000	\$1,100,000	\$0	\$1,300,000
C	\$10,000	\$200,000	\$600,000	\$1,000,000	\$1,400,000	\$110,000	\$3,900,000
TOTAL	\$10,000	\$1,260,000	\$1,880,000	\$3,000,000	\$4,940,000	\$150,000	\$6,490,000
Notes:	KYTC Maintenance Forces	Includes sidewalk	Includes sidewalk			Does not include bus shelter cost	Includes traffic signal

D: Roberts Drive				E: KY 168 Corridor Sidewalk			Corridor	
Concept	D.1 ICWS	D.2 3-way Stop	D.3 Raise Grade/Add Lanes	D.3a Raise Grade/Add Lanes/New Signal	E.1 South US 60 to Boone MP 5.7-6.1	E.1 Central Boone to Roberts MP 6.1-6.75	E.1 North Roberts to Hoods Crk. MP 6.75-7.5	E.2 Three-Lane
D	\$0	\$0	\$400,000	\$400,000	\$150,000	\$350,000	\$420,000	\$1,900,000
*R	\$0	\$0	\$1,700,000	\$1,700,000	\$230,000	\$370,000	\$420,000	\$15,000,000
*U	\$0	\$0	\$1,200,000	\$1,200,000	\$490,000	\$800,000	\$920,000	\$7,300,000
C	\$50,000	\$20,000	\$4,100,000	\$4,500,000	\$1,500,000	\$3,500,000	\$4,200,000	\$19,000,000
TOTAL	\$50,000	\$20,000	\$7,400,000	\$7,800,000	\$2,370,000	\$5,020,000	\$5,960,000	\$43,200,000
Notes:	FHWA Research Report	KYTC Maintenance Forces	Grade only	Signal and grade included	Urban with Commercial Businesses	Residential, includes retaining wall	Connects sidewalk gap, requires RR coordination. Includes new bridge	Includes retaining wall. Symmetric widening.

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Unit Price Assumptions

Category	Item	Unit Price	Per	Notes/Source
Modeled	2200 Roadway Excavation	\$36	CY	BidX
	2230 Embankment in Place	\$17	CY	BidX
	001 DGA	\$35	Ton	BidX; 115 lbs/SY
	2677 Asphalt Milling	\$21	Ton	BidX; 110 lbs/SY
	212 Asphalt Base	\$93	Ton	BidX; 110 lbs/SY
	301 Asphalt Surface	\$121	Ton	BidX; 110 lbs/SY
	1810 Curb & Gutter	\$35	LF	BidX
	2720 Concrete Sidewalk	\$225	SY	BidX
	Concrete CL B - Retaining Wall	\$780	CY	BidX
	Lighting	\$100	LF	
	Guardrail	\$35	LF	
	Guardrail Endtreatments	\$3,300	Ea	BidX
	526 Storm Sewer 30"	\$100	LF	BidX
	Curb Boxes	\$4,800	Ea	BidX
	Structure	\$150	SF	FHWA Range
Railroad	Flagger	\$1,500	Day	Boyd County US 60
	New Traffic Signal	\$200,000	LS	Ave Cost \$200-500k per research
Parametric	Mob/Demob	3%		
	Drainage	20%		
	MOT	3%		
	Misc	25%		
From District	ROW	-		
	Utilities	-		
Contingency	-	30%		
Escalation	-	0%		2023 dollars per D9

Bid Tab Analysis Search

<p>Items: <input type="text" value="Any"/></p> <p><input checked="" type="checkbox"/> Smart Item Search</p> <p>Description: <input type="text" value="excavation"/></p> <p>Proposal Items: <input type="text" value="Any"/></p> <p>County: <input type="text" value="Boyd, Carter, Greenup"/></p> <p>Units: <input type="text" value="Any"/></p> <p>Low Bidders: <input type="text" value="Any"/></p>	<p>Date Range:</p> <p>From: <input type="text" value="01/01/2021"/> To: <input type="text" value="09/04/2023"/></p> <p>Quantity Range:</p> <p>From: <input type="text" value="Any"/> To: <input type="text" value="Any"/></p> <p>Price Range:</p> <p>From: <input type="text" value="Any"/> To: <input type="text" value="Any"/></p>
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Concept: **Algonquin Connector West**
 Description: 28 ft-wide/curb & gutter/sidewalk

BMP:
 EMP:
 Length (ft): varies

	450	West	East		
		Length	Length (2)	Width (PR)	Notes
Bridge(s)					
Mainline/Paved	125	450	28		
Full Depth Pavement	125	450	28		
Surface	125	450	28		
Curb/Gutter	125	450	2	2	2 sides
Sidewalk	125	450	5	1	1 side

Calculations

Item	Unit	Unit Cost	Quantity	Cost	Totals
Mainline Pavement					\$ 39,881
West Connector					
2200	ROADWAY EXCAVATION (modeled)	CY	\$ 36.00	538	\$ 19,368
2230	EMBANKMENT IN PLACE (modeled)	CY	\$ 17.00		\$ -
1	DGA Base	TON	\$ 35.00	96	\$ 3,354
212	CL2 ASPH BASE 1.00D PG64-22	TON	\$ 93.00	150	\$ 13,924
301	CL2 ASPH SURF 0.38D PG64-22	TON	\$ 121.00	27	\$ 3,235
Concrete					\$ 29,175
01810	STANDARD CURB AND GUTTER	LF	\$ 35.00	250	\$ 8,750
	Curb Box	EA	\$ 4,800.00	1	\$ 4,800
2720	SIDEWALK-4IN CONCRETE	SY	\$ 225.00	69	\$ 15,625
Other					\$ 25,000
526	30" Storm Sewer	LF	\$ 100.00	125	\$ 12,500
	Lighting	LF	\$ 100.00	125	\$ 12,500
	Structure	SF	\$ 150.00		\$ -
	RR Flagger	Day	\$ 1,500.00		\$ -
Parametric					\$ 47,969
	DRAINAGE	LS	20%		\$ 18,811
2569	MOBILIZATION/DEMOBILIZATION	LS	3%		\$ 2,822
2650	MAINTAIN & CONTROL TRAFFIC	LS	3%		\$ 2,822
	MISCELLANEOUS	LS	25%		\$ 23,514
Contingency					\$ 42,608
	Contingency	LS	30%		\$ 42,608
Escalation					\$ -
	Factored for Future Implementation	LS			\$ -
Construction					\$ 184,633

Concept: **Algonquin Connector East**
 Description: 28 ft-wide/curb & gutter/sidewalk

BMP:
 EMP:
 Length (ft): varies

	450	Length	Length (2)	Width (PR)	Notes
Bridge(s)					
Mainline/Paved	125	450	28		
Full Depth Pavement	125	450	28		
Surface	125	450	28		
Curb/Gutter	125	450	2	2 sides	
Sidewalk	125	450	5	1 side	

Calculations

Item	Unit	Unit Cost	Quantity	Cost	Totals
Mainline Pavement					\$ 110,310
East Connector					
2200	ROADWAY EXCAVATION (modeled)	CY	\$ 36.00	1,010	\$ 36,360
2230	EMBANKMENT IN PLACE (modeled)	CY	\$ 17.00	6	\$ 102
1	DGA Base	TON	\$ 35.00	345	\$ 12,075
212	CL2 ASPH BASE 1.00D PG64-22	TON	\$ 93.00	539	\$ 50,127
301	CL2 ASPH SURF 0.38D PG64-22	TON	\$ 121.00	96	\$ 11,646
Concrete					\$ 102,150
01810	STANDARD CURB AND GUTTER	LF	\$ 35.00	900	\$ 31,500
	Curb Box	EA	\$ 4,800.00	3	\$ 14,400
2720	SIDEWALK-4IN CONCRETE	SY	\$ 225.00	250	\$ 56,250
Other					\$ 90,000
526	30" Storm Sewer	LF	\$ 100.00	450	\$ 45,000
	Lighting	LF	\$ 100.00	450	\$ 45,000
	Structure	SF	\$ 150.00		\$ -
	RR Flagger	Day	\$ 1,500.00		\$ -
Parametric					\$ 154,255
	DRAINAGE	LS	20%		\$ 60,492
2569	MOBILIZATION/DEMOBILIZATION	LS	3%		\$ 9,074
2650	MAINTAIN & CONTROL TRAFFIC	LS	3%		\$ 9,074
	MISCELLANEOUS	LS	25%		\$ 75,615
Contingency					\$ 137,014
	Contingency	LS	30%		\$ 137,014
Escalation					\$ -
	Factored for Future Implementation	LS			\$ -
Construction					\$ 593,729

Concept: **A.3 Lengthen US 60 Turn lanes**
 Description: Turn Lane/sidewalk/curb and gutter/storm sewer/lighting

BMP: 5.685
 EMP: 5.800
 Length (ft): 608

	KY 168	Asph Length:		
		Length	Width (EX)	Width 1 (PR) Width 2 (PR)
Bridge(s)			215	385
Mainline/Paved	608	20	60	48
Full Depth Pavement	608		20	14
Surface	608		60	48
Curb/Gutter	608		2	2
Sidewalk	608		5	5
Retaining Wall				

2 sides
2 sides

Calculations

Item	Unit	Unit Cost	Quantity	Cost	Totals
US 60 Mainline					\$ 157,366
2200	ROADWAY EXCAVATION (modeled)	CY	\$ 36.00	2,134	\$ 76,824
2230	EMBANKMENT IN PLACE (modeled)	CY	\$ 17.00	191	\$ 3,247
1	DGA Base (Width 1)	TON	\$ 35.00	121	\$ 4,231
1	DGA Base (Width 2)	TON	\$ 35.00	157	\$ 5,510
212	CL2 ASPH BASE 1.00D PG64-22 (Width 1)	TON	\$ 93.00	184	\$ 17,107
301	CL2 ASPH SURF 0.38D PG64-22 (Width 1)	TON	\$ 121.00	99	\$ 11,924
212	CL2 ASPH BASE 1.00D PG64-22 (Width 2)	TON	\$ 93.00	231	\$ 21,443
301	CL2 ASPH SURF 0.38D PG64-22 (Width 2)	TON	\$ 121.00	141	\$ 17,081
Concrete					\$ 228,160
01810	STANDARD CURB AND GUTTER	LF	\$ 35.00	1,216	\$ 42,560
	Curb Box	EA	\$ 4,800.00	7	\$ 33,600
2720	SIDEWALK-4IN CONCRETE	SY	\$ 225.00	676	\$ 152,000
Other					\$ 121,600
526	30" Storm Sewer	LF	\$ 100.00	608	\$ 60,800
	Lighting	LF	\$ 100.00	608	\$ 60,800
Parametric					\$ 258,634
	DRAINAGE	LS	20%		\$ 101,425
2569	MOBILIZATION/DEMOBILIZATION	LS	3%		\$ 15,214
2650	MAINTAIN & CONTROL TRAFFIC	LS	3%		\$ 15,214
	MISCELLANEOUS	LS	25%		\$ 126,782
Contingency					\$ 229,728
	Contingency	LS	30%		\$ 229,728
Escalation					\$ -
	Factored for Future Implementation	LS			\$ -
Construction					\$ 995,489

Concept: **A.4 Lengthen KY 168 Turn lanes**
 Description: Turn Lane/sidewalk/curb and gutter/storm sewer/lighting

BMP: 5.800
 EMP: 5.980
 Length (ft): 951

KY 168			
	Length	Width (EX)	Width 1 (PR)
Bridge(s)			
Mainline/Paved	951	20	36
Full Depth Pavement	951		12
Surface	951		36
Curb/Gutter	951		2
Sidewalk	951		5

2 sides
2 sides

Calculations

Item	Unit	Unit Cost	Quantity	Cost	Totals
US 60 Mainline					\$ 169,498
2200	ROADWAY EXCAVATION (modeled)	CY	\$ 36.00	2,124	\$ 76,464
2230	EMBANKMENT IN PLACE (modeled)	CY	\$ 17.00	240	\$ 4,080
1	DGA Base (Width 1)	TON	\$ 35.00	340	\$ 11,909
212	CL2 ASPH BASE 1.00D PG64-22 (Width 1)	TON	\$ 93.00	488	\$ 45,401
301	CL2 ASPH SURF 0.38D PG64-22 (Width 1)	TON	\$ 121.00	262	\$ 31,645
Concrete					\$ 352,320
01810	STANDARD CURB AND GUTTER	LF	\$ 35.00	1,902	\$ 66,570
	Curb Box	EA	\$ 4,800.00	10	\$ 48,000
2720	SIDEWALK-4IN CONCRETE	SY	\$ 225.00	1,057	\$ 237,750
Other					\$ 190,200
526	30" Storm Sewer	LF	\$ 100.00	951	\$ 95,100
	Lighting	LF	\$ 100.00	951	\$ 95,100
Parametric					\$ 363,129
	DRAINAGE	LS	20%		\$ 142,404
2569	MOBILIZATION/DEMobilIZATION	LS	3%		\$ 21,361
2650	MAINTAIN & CONTROL TRAFFIC	LS	3%		\$ 21,361
	MISCELLANEOUS	LS	25%		\$ 178,004
Contingency					\$ 322,544
	Contingency	LS	30%		\$ 322,544
Escalation					\$ -
	Factored for Future Implementation	LS			\$ -
Construction					\$ 1,397,691

Concept: **A.5 Realign West Leg of US 60**
 Description: Turn Lane/sidewalk/curb and gutter/storm sewer/lighting

BMP: 5.685
 EMP: 5.800
 Length (ft): 608

	KY 168	Asph Length:		
		Length	Width (EX)	Width 1 (PR) Width 2 (PR)
Bridge(s)			215	385
Mainline/Paved	608	20	60	48
Full Depth Pavement	608		20	14
Surface	608		60	48
Curb/Gutter	608		2	2
Sidewalk	608		5	5
Retaining Wall				

2 sides
2 sides

Calculations

Item	Unit	Unit Cost	Quantity	Cost	Totals
US 60 Mainline					\$ 157,366
2200	ROADWAY EXCAVATION (modeled)	CY	\$ 36.00	2,134	\$ 76,824
2230	EMBANKMENT IN PLACE (modeled)	CY	\$ 17.00	191	\$ 3,247
1	DGA Base (Width 1)	TON	\$ 35.00	121	\$ 4,231
1	DGA Base (Width 2)	TON	\$ 35.00	157	\$ 5,510
212	CL2 ASPH BASE 1.00D PG64-22 (Width 1)	TON	\$ 93.00	184	\$ 17,107
301	CL2 ASPH SURF 0.38D PG64-22 (Width 1)	TON	\$ 121.00	99	\$ 11,924
212	CL2 ASPH BASE 1.00D PG64-22 (Width 2)	TON	\$ 93.00	231	\$ 21,443
301	CL2 ASPH SURF 0.38D PG64-22 (Width 2)	TON	\$ 121.00	141	\$ 17,081
Concrete					\$ 228,160
01810	STANDARD CURB AND GUTTER	LF	\$ 35.00	1,216	\$ 42,560
	Curb Box	EA	\$ 4,800.00	7	\$ 33,600
2720	SIDEWALK-4IN CONCRETE	SY	\$ 225.00	676	\$ 152,000
Other					\$ 121,600
526	30" Storm Sewer	LF	\$ 100.00	608	\$ 60,800
	Lighting	LF	\$ 100.00	608	\$ 60,800
Parametric					\$ 258,634
	DRAINAGE	LS	20%		\$ 101,425
2569	MOBILIZATION/DEMOBILIZATION	LS	3%		\$ 15,214
2650	MAINTAIN & CONTROL TRAFFIC	LS	3%		\$ 15,214
	MISCELLANEOUS	LS	25%		\$ 126,782
Contingency					\$ 229,728
	Contingency	LS	30%		\$ 229,728
Escalation					\$ -
	Factored for Future Implementation	LS			\$ -
Construction					\$ 995,489

Concept: **Bus Pulloff**
 Description: 12 ft-wide bus pulloff lane/sidewalk

BMP:
 EMP:
 Length (ft): 100

	Length	Width (EX)	Width (PR)	Notes
Bridge(s)				Includes sidewalk
Mainline/Paved	100		14	
Full Depth Pavement	100		14	
Surface	100	20	34	
Curb/Gutter	100		2	1 side
Sidewalk	100		5	1 side
Retaining wall				

Calculations

Item	Unit	Unit Cost	Quantity	Cost	Totals
Mainline Pavement					\$ 13,343
2200	ROADWAY EXCAVATION (modeled)	CY	\$ 36.00	89	\$ 3,200
2230	EMBANKMENT IN PLACE (modeled)	CY	\$ 17.00		\$ -
1	DGA Base	TON	\$ 35.00	41	\$ 1,431
212	CL2 ASPH BASE 1.00D PG64-22	TON	\$ 93.00	60	\$ 5,570
301	CL2 ASPH SURF 0.38D PG64-22	TON	\$ 121.00	26	\$ 3,143
Concrete					\$ 20,800
01810	STANDARD CURB AND GUTTER	LF	\$ 35.00	100	\$ 3,500
	Curb Box	EA	\$ 4,800.00	1	\$ 4,800
2720	SIDEWALK-4IN CONCRETE	SY	\$ 225.00	56	\$ 12,500
Other					\$ 20,000
526	30" Storm Sewer	LF	\$ 100.00	100	\$ 10,000
	Lighting	LF	\$ 100.00	100	\$ 10,000
	Structure	SF	\$ 150.00		\$ -
	RR Flagger	Day	\$ 1,500.00		\$ -
Parametric					\$ 27,613
	DRAINAGE	LS	20%		\$ 10,829
2569	MOBILIZATION/DEMOBILIZATION	LS	3%		\$ 1,624
2650	MAINTAIN & CONTROL TRAFFIC	LS	3%		\$ 1,624
	MISCELLANEOUS	LS	25%		\$ 13,536
Contingency					\$ 24,527
	Contingency	LS	30%		\$ 24,527
Escalation					\$ -
	Factored for Future Implementation	LS			\$ -
Construction					\$ 106,284

Concept: **C.1 Add Turn Lanes on KY 168 and 6th Avenue and New Signal**
 Description: Turn Lane/sidewalk/curb and gutter/retaining wall/storm sewer/lighting/Signal

BMP: 6.470
 EMP: 6.700
 Length (ft): 1215

	KY 168	Asph Length:			Roberts Drive			
		Length	Width (EX)	Width 1 (PR)	Width 2 (PR)	Length	Width (EX)	Width 1 (PR)
Bridge(s)				45				
Mainline/Paved	1215	20	36	24	350	20	36	
Full Depth Pavement	1215		36	24	350		36	
Surface	1215		36	24	350		36	
Curb/Gutter	1215		2	2	350		2	
Sidewalk	1215		5	5	350		5	
Retaining Wall	1215							

Calculations

Item	Unit	Unit Cost	Quantity	Cost	Totals
KY 168 Mainline Pavement					\$ 677,829
2200	ROADWAY EXCAVATION (modeled)	CY	\$ 36.00	11,100	\$ 399,600
2230	EMBANKMENT IN PLACE (modeled)	CY	\$ 17.00	1,720	\$ 29,240
1	DGA Base (Width 1)	TON	\$ 35.00	1,180	\$ 41,297
1	DGA Base (Width 2)	TON	\$ 35.00	807	\$ 28,256
212	CL2 ASPH BASE 1.00D PG64-22 (Width 1)	TON	\$ 93.00	1,001	\$ 93,093
301	CL2 ASPH SURF 0.38D PG64-22 (Width 1)	TON	\$ 121.00	179	\$ 21,629
212	CL2 ASPH BASE 1.00D PG64-22 (Width 2)	TON	\$ 93.00	565	\$ 52,514
301	CL2 ASPH SURF 0.38D PG64-22 (Width 2)	TON	\$ 121.00	101	\$ 12,201
6th Street Mainline Pavement					\$ 103,087
2200	ROADWAY EXCAVATION (modeled)	CY	\$ 36.00	691	\$ 24,876
2230	EMBANKMENT IN PLACE (modeled)	CY	\$ 17.00	304	\$ 5,168
1	DGA Base	TON	\$ 35.00	322	\$ 11,270
212	CL2 ASPH BASE 1.00D PG64-22	TON	\$ 93.00	539	\$ 50,127
301	CL2 ASPH SURF 0.38D PG64-22	TON	\$ 121.00	96	\$ 11,646
Concrete					\$ 761,744
KY 168 Mainline Concrete					
2200	Retaining Wall Excavation	CY	\$ 36.00	814	\$ 29,306
	Retaining Wall - CL B Concrete	CY	\$ 780.00	535	\$ 416,988
01810	STANDARD CURB AND GUTTER	LF	\$ 35.00	1,215	\$ 42,525
	Curb Box	EA	\$ 4,800.00	7	\$ 33,600
2720	SIDEWALK-4IN CONCRETE	SY	\$ 225.00	675	\$ 151,875
6th Street Concrete					
01810	STANDARD CURB AND GUTTER	LF	\$ 35.00	700	\$ 24,500
	Curb Box	EA	\$ 4,800.00	4	\$ 19,200
2720	SIDEWALK-4IN CONCRETE	SY	\$ 225.00	194	\$ 43,750
Other					\$ 443,000
526	30" Storm Sewer	LF	\$ 100.00	1,215	\$ 121,500
	Lighting	LF	\$ 100.00	1,215	\$ 121,500
	Traffic Signal	LS	\$ 200,000.00	1	\$ 200,000
Parametric					\$ 1,012,686
	DRAINAGE	LS	20%		\$ 397,132
2569	MOBILIZATION/DEMOLITION	LS	3%		\$ 59,570
2650	MAINTAIN & CONTROL TRAFFIC	LS	3%		\$ 59,570
	MISCELLANEOUS	LS	25%		\$ 496,415
Contingency					\$ 899,504
	Contingency	LS	30%		\$ 899,504
Escalation					\$ -
	Factored for Future Implementation	LS			\$ -
Construction					\$ 3,897,850

Concept: **D.3 Roberts Drive: Raise Grade/Add Lanes**
 Description: Raise grade/add turn lanes on KY 168 and Roberts/sidewalk/c&g/new bridge

BMP: 6.610
 EMP: 6.880
 Length (ft): 1426

	KY 168				Roberts Drive		
	Length	Width (EX)	Width 1 (PR)	Width 2 (PR)	Length	Width (EX)	Width 1 (PR)
Bridge(s)	100		45				
Mainline/Paved	1326	20	36	24	200	20	36
Full Depth Pavement	1326		36	24	200		36
Surface	1326		36	24	200		36
Curb/Gutter	1326		2	2			
Sidewalk	1326		5	5			
Retaining wall	700						

Calculations

Item	Unit	Unit Cost	Quantity	Cost	Totals
KY 168 Mainline Pavement					\$ 507,681
2200	ROADWAY EXCAVATION (modeled)	CY	\$ 36.00	3,615	\$ 130,140
2230	EMBANKMENT IN PLACE (modeled)	CY	\$ 17.00	5,970	\$ 101,490
1	DGA Base (Width 1)	TON	\$ 35.00	1,288	\$ 45,069
1	DGA Base (Width 2)	TON	\$ 35.00	881	\$ 30,837
212	CL2 ASPH BASE 1.00D PG64-22 (Width 1)	TON	\$ 93.00	847	\$ 78,771
301	CL2 ASPH SURF 0.38D PG64-22 (Width 1)	TON	\$ 121.00	151	\$ 18,301
212	CL2 ASPH BASE 1.00D PG64-22 (Width 2)	TON	\$ 93.00	899	\$ 83,640
301	CL2 ASPH SURF 0.38D PG64-22 (Width 2)	TON	\$ 121.00	161	\$ 19,433
Roberts Drive					\$ 54,499
2200	ROADWAY EXCAVATION (modeled)	CY	\$ 36.00	345	\$ 12,420
2230	EMBANKMENT IN PLACE (modeled)	CY	\$ 17.00	20	\$ 340
1	DGA Base	TON	\$ 35.00	184	\$ 6,440
212	CL2 ASPH BASE 1.00D PG64-22	TON	\$ 93.00	308	\$ 28,644
301	CL2 ASPH SURF 0.38D PG64-22	TON	\$ 121.00	55	\$ 6,655
Concrete					\$ 502,884
2200	Retaining Wall Excavation	CY	\$ 36.00	469	\$ 16,884
	Retaining Wall - CL B Concrete	CY	\$ 780.00	308	\$ 240,240
01810	STANDARD CURB AND GUTTER	LF	\$ 35.00	1,326	\$ 46,410
	Curb Box	EA	\$ 4,800.00	7	\$ 33,600
2720	SIDEWALK-4IN CONCRETE	SY	\$ 225.00	737	\$ 165,750
Other					\$ 1,040,200
526	30" Storm Sewer	LF	\$ 100.00	1,326	\$ 132,600
	Lighting	LF	\$ 100.00	1,426	\$ 142,600
	Structure	SF	\$ 150.00	4,500	\$ 675,000
	RR Flagger	Day	\$ 1,500.00	60	\$ 90,000
Parametric					\$ 1,073,685
	DRAINAGE	LS	20%		\$ 421,053
2569	MOBILIZATION/DEMobilIZATION	LS	3%		\$ 63,158
2650	MAINTAIN & CONTROL TRAFFIC	LS	3%		\$ 63,158
	MISCELLANEOUS	LS	25%		\$ 526,316
Contingency					\$ 953,685
	Contingency	LS	30%		\$ 953,685
Escalation					\$ -
	Factored for Future Implementation	LS			\$ -
Construction					\$ 4,132,634

Concept: **D.3 Roberts Drive: Raise Grade/Add Lanes/New Signal**
 Description: Raise grade/add turn lanes on KY 168 and Roberts/sidewalk/c&g/new bridge

BMP: 6.610
 EMP: 6.880
 Length (ft): 1426

	KY 168				Roberts Drive		
	Length	Width (EX)	Width 1 (PR)	Width 2 (PR)	Length	Width (EX)	Width 1 (PR)
Bridge(s)	100		45				
Mainline/Paved	1326	20	36	24	200	20	36
Full Depth Pavement	1326		36	24	200		36
Surface	1326		36	24	200		36
Curb/Gutter	1326		2	2			
Sidewalk	1326		5	5			
Retaining wall	700						

Calculations

Item	Unit	Unit Cost	Quantity	Cost	Totals
KY 168 Mainline Pavement					\$ 507,681
2200	ROADWAY EXCAVATION (modeled)	CY	\$ 36.00	3,615	\$ 130,140
2230	EMBANKMENT IN PLACE (modeled)	CY	\$ 17.00	5,970	\$ 101,490
1	DGA Base (Width 1)	TON	\$ 35.00	1,288	\$ 45,069
1	DGA Base (Width 2)	TON	\$ 35.00	881	\$ 30,837
212	CL2 ASPH BASE 1.00D PG64-22 (Width 1)	TON	\$ 93.00	847	\$ 78,771
301	CL2 ASPH SURF 0.38D PG64-22 (Width 1)	TON	\$ 121.00	151	\$ 18,301
212	CL2 ASPH BASE 1.00D PG64-22 (Width 2)	TON	\$ 93.00	899	\$ 83,640
301	CL2 ASPH SURF 0.38D PG64-22 (Width 2)	TON	\$ 121.00	161	\$ 19,433
Roberts Drive					\$ 54,499
2200	ROADWAY EXCAVATION (modeled)	CY	\$ 36.00	345	\$ 12,420
2230	EMBANKMENT IN PLACE (modeled)	CY	\$ 17.00	20	\$ 340
1	DGA Base	TON	\$ 35.00	184	\$ 6,440
212	CL2 ASPH BASE 1.00D PG64-22	TON	\$ 93.00	308	\$ 28,644
301	CL2 ASPH SURF 0.38D PG64-22	TON	\$ 121.00	55	\$ 6,655
Concrete					\$ 502,884
2200	Retaining Wall Excavation	CY	\$ 36.00	469	\$ 16,884
	Retaining Wall - CL B Concrete	CY	\$ 780.00	308	\$ 240,240
01810	STANDARD CURB AND GUTTER	LF	\$ 35.00	1,326	\$ 46,410
	Curb Box	EA	\$ 4,800.00	7	\$ 33,600
2720	SIDEWALK-4IN CONCRETE	SY	\$ 225.00	737	\$ 165,750
Other					\$ 1,240,200
526	30" Storm Sewer	LF	\$ 100.00	1,326	\$ 132,600
	Lighting	LF	\$ 100.00	1,426	\$ 142,600
	Structure	SF	\$ 150.00	4,500	\$ 675,000
	RR Flagger	Day	\$ 1,500.00	60	\$ 90,000
	New Signal	LS	\$ 200,000.00	1	\$ 200,000
Parametric					\$ 1,175,685
	DRAINAGE	LS	20%		\$ 461,053
2569	MOBILIZATION/DEMobilIZATION	LS	3%		\$ 69,158
2650	MAINTAIN & CONTROL TRAFFIC	LS	3%		\$ 69,158
	MISCELLANEOUS	LS	25%		\$ 576,316
Contingency					\$ 1,044,285
	Contingency	LS	30%		\$ 1,044,285
Escalation					\$ -
	Factored for Future Implementation	LS			\$ -
Construction					\$ 4,525,234

Concept: **E.1 South Sidewalk**
 Description: 5 ft sidewalk/new curb & gutter - right side only/lighting
US 60 to Boone Street
 BMP: 5.700
 EMP: 6.100
 Length (ft): 2112

	Length	Width (EX)	Width (PR)	Notes
Bridge(s)				Includes sidewalk
Mainline/Paved		20	36	
Full Depth Pavement			16	
Surface			36	
Curb/Gutter	2112		2	1 side
Sidewalk	2112		5	1 side
Retaining wall				

Calculations

Item	Unit	Unit Cost	Quantity	Cost	Totals
Mainline Pavement					\$ 53,510
2200	ROADWAY EXCAVATION (modeled)	CY \$ 36.00	1,340	\$ 48,240	
2230	EMBANKMENT IN PLACE (modeled)	CY \$ 17.00	310	\$ 5,270	
Concrete					\$ 414,720
2200	Retaining Wall Excavation	CY \$ 36.00		\$ -	
	Retaining Wall - CL B Concrete	CY \$ 780.00		\$ -	
01810	STANDARD CURB AND GUTTER	LF \$ 35.00	2,112	\$ 73,920	
	Curb Box	EA \$ 4,800.00	11	\$ 52,800	
2720	SIDEWALK-4IN CONCRETE	SY \$ 225.00	1,173	\$ 264,000	
3287	SIDEWALK RAMP TYPE1	EA \$ 1,000.00	24	\$ 24,000	
Other					\$ 316,800
526	30" Storm Sewer	LF \$ 100.00	1,056	\$ 105,600	
	Lighting	LF \$ 100.00	2,112	\$ 211,200	
	Structure	SF \$ 150.00		\$ -	
	RR Flagger	Day \$ 1,500.00		\$ -	
Parametric					\$ 400,365
	DRAINAGE	LS 20%		\$ 157,006	
2569	MOBILIZATION/DEMobilIZATION	LS 3%		\$ 23,551	
2650	MAINTAIN & CONTROL TRAFFIC	LS 3%		\$ 23,551	
	MISCELLANEOUS	LS 25%		\$ 196,258	
Contingency					\$ 355,619
	Contingency	LS 30%		\$ 355,619	
Escalation					\$ -
	Factored for Future Implementation	LS		\$ -	
Construction					\$ 1,541,014

Concept: **E.1 Sidewalk Central**
 Description: 5 ft sidewalk/new curb & gutter - right side only/lighting
From Boone Street to Roberts

BMP: 6.100
 EMP: 6.750
 Length (ft): 3432

	Length	Width (EX)	Width (PR)	Notes
Bridge(s)				Includes sidewalk
Mainline/Paved		20	36	
Full Depth Pavement			16	
Surface			36	
Curb/Gutter	3432		2	1 side
Sidewalk	3432		5	1 side
Retaining wall	1500			

Calculations

Item	Unit	Unit Cost	Quantity	Cost	Totals
Mainline Pavement					\$ 53,510
2200	ROADWAY EXCAVATION (modeled)	CY \$ 36.00	1,340	\$ 48,240	
2230	EMBANKMENT IN PLACE (modeled)	CY \$ 17.00	310	\$ 5,270	
Concrete					\$ 1,216,500
2200	Retaining Wall Excavation	CY \$ 36.00	1,005	\$ 36,180	
	Retaining Wall - CL B Concrete	CY \$ 780.00	660	\$ 514,800	
01810	STANDARD CURB AND GUTTER	LF \$ 35.00	3,432	\$ 120,120	
	Curb Box	EA \$ 4,800.00	18	\$ 86,400	
2720	SIDEWALK-4IN CONCRETE	SY \$ 225.00	1,907	\$ 429,000	
3287	SIDEWALK RAMP TYPE1	EA \$ 1,000.00	30	\$ 30,000	
Other					\$ 514,800
526	30" Storm Sewer	LF \$ 100.00	1,716	\$ 171,600	
	Lighting	LF \$ 100.00	3,432	\$ 343,200	
	Structure	SF \$ 150.00		\$ -	
	RR Flagger	Day \$ 1,500.00		\$ -	
Parametric					\$ 910,253
	DRAINAGE	LS 20%		\$ 356,962	
2569	MOBILIZATION/DEMobilIZATION	LS 3%		\$ 53,544	
2650	MAINTAIN & CONTROL TRAFFIC	LS 3%		\$ 53,544	
	MISCELLANEOUS	LS 25%		\$ 446,203	
Contingency					\$ 808,519
	Contingency	LS 30%		\$ 808,519	
Escalation					\$ -
	Factored for Future Implementation	LS		\$ -	
Construction					\$ 3,503,582

Concept: **E.1 Sidewalk North**
 Description: 5 ft sidewalk/new curb & gutter - right side only/lighting/New bridge included
From Roberts Drive to Hoods
 BMP: 6.750
 EMP: 7.500
 Length (ft): 3960

	Length	Width (EX)	Width (PR)	Notes
Bridge(s)	100		36	Includes sidewalk
Mainline/Paved		20	36	
Full Depth Pavement			16	
Surface			36	
Curb/Gutter	3860		2	1 side
Sidewalk	3860		5	1 side
Retaining wall				

Calculations

Item	Unit	Unit Cost	Quantity	Cost	Totals
Mainline Pavement					\$ 66,280
2200	ROADWAY EXCAVATION (modeled)	CY \$ 36.00	670	\$ 24,120	
2230	EMBANKMENT IN PLACE (modeled)	CY \$ 17.00	2,480	\$ 42,160	
Concrete					\$ 765,600
2200	Retaining Wall Excavation	CY \$ 36.00		\$ -	
	Retaining Wall - CL B Concrete	CY \$ 780.00		\$ -	
01810	STANDARD CURB AND GUTTER	LF \$ 35.00	3,860	\$ 135,100	
	Curb Box	EA \$ 4,800.00	20	\$ 96,000	
2720	SIDEWALK-4IN CONCRETE	SY \$ 225.00	2,144	\$ 482,500	
3287	SIDEWALK RAMP TYPE1	EA \$ 1,000.00	52	\$ 52,000	
Other					\$ 1,299,000
526	30" Storm Sewer	LF \$ 100.00	1,930	\$ 193,000	
	Lighting	LF \$ 100.00	3,860	\$ 386,000	
	Structure	SF \$ 150.00	3,600	\$ 540,000	
	RR Flagger	Day \$ 1,500.00	120	\$ 180,000	
Parametric					\$ 1,086,749
	DRAINAGE	LS 20%		\$ 426,176	
2569	MOBILIZATION/DEMobilIZATION	LS 3%		\$ 63,926	
2650	MAINTAIN & CONTROL TRAFFIC	LS 3%		\$ 63,926	
	MISCELLANEOUS	LS 25%		\$ 532,720	
Contingency					\$ 965,289
	Contingency	LS 30%		\$ 965,289	
Escalation					\$ -
	Factored for Future Implementation	LS		\$ -	
Construction					\$ 4,182,917

Concept: **E.2 Three-Lane (Symmetric)**
 Description: 3-12 ft lanes/2 ft C&G/5 ft SW on Right/Bridge/full length-RR Flagger/street lighting

BMP: 5.700
 EMP: 7.500
 Length (ft): 9504

	Length	Width (EX)	Width (PR)	Notes
Bridge(s)	100		45	Includes sidewalk
Mainline/Paved	9404	20	36	
Full Depth Pavement	9404		16	
Surface	9404		36	
Curb/Gutter	9404		2	Both sides
Sidewalk	9404		5	1 side
Retaining Wall	2500			

Calculations

Item	Unit	Unit Cost	Quantity	Cost	Totals
Mainline Pavement					\$ 3,699,700
2200	ROADWAY EXCAVATION (modeled)	CY	\$ 36.00	61,000	\$ 2,196,000
2230	EMBANKMENT IN PLACE (modeled)	CY	\$ 17.00	15,000	\$ 255,000
2677	ASPHALT PAVE MILLING & TEXTURING	TON	\$ 21.00	8,046	\$ 168,959
1	DGA Base	TON	\$ 35.00	4,806	\$ 168,227
212	CL2 ASPH BASE 1.00D PG64-22	TON	\$ 93.00	6,437	\$ 598,596
301	CL2 ASPH SURF 0.38D PG64-22	TON	\$ 121.00	2,586	\$ 312,918
Concrete					\$ 3,328,080
2200	Retaining Wall Excavation	CY	\$ 36.00	1,675	\$ 60,300
	Retaining Wall - CL B Concrete	CY	\$ 780.00	1,100	\$ 858,000
01810	STANDARD CURB AND GUTTER	LF	\$ 35.00	18,808	\$ 658,280
	Curb Box	EA	\$ 4,800.00	95	\$ 456,000
2720	SIDEWALK-4IN CONCRETE	SY	\$ 225.00	5,224	\$ 1,175,500
3287	SIDEWALK RAMP TYPE1	EA	\$ 1,000.00	120	\$ 120,000
Other					\$ 2,655,800
526	30" Storm Sewer	LF	\$ 100.00	9,404	\$ 940,400
	Lighting	LF	\$ 100.00	9,504	\$ 950,400
	Structure	SF	\$ 150.00	4,500	\$ 675,000
	RR Flagger	Day	\$ 1,500.00	60	\$ 90,000
Parametric					\$ 4,938,626
	DRAINAGE	LS	20%		\$ 1,936,716
2569	MOBILIZATION/DEMOBILIZATION	LS	3%		\$ 290,507
2650	MAINTAIN & CONTROL TRAFFIC	LS	3%		\$ 290,507
	MISCELLANEOUS	LS	25%		\$ 2,420,895
Contingency					\$ 4,386,662
	Contingency	LS	30%		\$ 4,386,662
Escalation					\$ -
	Factored for Future Implementation	LS			\$ -
Construction					\$ 19,008,867